IMMEDIATE INVESTIGATION WORK ASSIGNMENT

FIELD INVESTIGATION LETTER REPORT

WORK ASSIGNMENT D003825-51

1ST AVENUE AND EAST 90TH STREET
UPPER EAST SIDE

SITE NO. 2-31-008
NEW YORK (C), NY

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York

Erin M. Crotty, Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION
BUREAU OF HAZARDOUS SITE CONTROL

URS Corporation
640 Ellicott Street
Buffalo, New York 14203

Final
January 2004

G3798

FIELD INVESTIGATION LETTER REPORT
FOR THE
IMMEDIATE INVESTIGATION WORK ASSIGNMENT
1ST AVENUE AND EAST 90TH STREET
SITE ID # 2-31-008
UPPER EAST SIDE, MANHATTAN, NEW YORK

Prepared For:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REMEDIAL BUREAU B
WORK ASSIGNMENT D003825-51

FINAL

Prepared By:

URS CORPORATION
640 ELLICOTT STREET
BUFFALO, NEW YORK 14203

JANUARY 2004

January 20, 2004

Mr. David K. Harrington, P.E., Project Manager
New York State Department of Environmental Conservation
Remedial Bureau B
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: NYSDEC Standby Contract, Immediate Investigation Work Assignment No. D003825-51
1st Avenue and East 90th Street, Site ID No. 2-31-008
Final Field Investigation Letter Report

Dear Mr. Harrington:

URS Corporation (URS) has completed the Immediate Investigation Work Assignment (IIWA) No. D003825-51 field investigation at the 1st Avenue and East 90th Street site, located in the Upper East Side of Manhattan, New York City, NY (Figure 1). In accordance with the NYSDEC Project Work Plan (NYSDEC, September 4, 2003), permanent conduits for soil gas sampling were installed at twenty-four locations. Soil gas samples were collected from each location to evaluate the condition of the soil gas beneath the area.

The field investigation included obtaining utility clearances, installation of 24 permanent conduits for soil gas sampling, sample analysis performed by Air Toxics, Limited, located in Folsom, CA and surveying. This letter report summarizes the field activities and analytical results. A site plan based on the survey performed by YEC, Inc. is presented in Figure 2. Soil gas monitoring point locations are shown on Figure 3. Figure 4 shows all detections from the analyses of soil gas samples collected on November 11 and 12, 2003. Figure 5 shows the detections for only tetrachloroethene and its breakdown products. Tables 1 and 2 provide a summary of all detections in the soil gas samples and field quality control (QC) samples, respectively. Table 3 lists the analytical parameters, with tetrachloroethene and its breakdown products identified by an asterisk. This report also includes: field notes, field logs, and site photographs (Attachment A); a Data Usability Summary Report containing complete validated analytical results (Attachment B); and the site survey notes and drawing (Attachment C and D, respectively) for the October 27 through November 12, 2003 field investigation.

FIELD ACTIVITIES

Twenty-four permanent soil gas conduits (SG-01 through SG-24) were installed by Zebra Environmental Corp. (Zebra), under the direction of NYSDEC and a URS geologist. The locations of these conduits are shown on Figure 3. All locations were installed through sidewalks. Rotary concrete drill bits were used to drill through the concrete sidewalk. Using a Geoprobe 6610DT® hydraulic push unit, a 2.125 inch outer diameter (OD), and 2.0 inch inner diameter (ID) macrocore sampler with a 1.85 inch diameter acetate liner was advanced to a depth of approximately 9 feet below ground surface (bgs). During installation of the first soil gas point at location SG-01, the hole collapsed into itself, limiting the amount of sand which could be placed around the implant. The anchor and implant for location SG-01 were directly driven to 8 feet bgs. After SG-01 was installed, the procedure was then modified, with NYSDEC approval, to collect a soil sample. Soil samples were collected for two reasons: 1) to classify and document subsurface material; and 2) to allow for backfilling the soil-gas conduits with new sand. An

anchor was set at the bottom of the boring. A six inch long stainless steel Geoprobe® vapor sampling implant was inserted down the borehole and connected to the anchor, positioning the implant between eight and nine feet bgs. Polyethylene tubing (3/8 inch OD) connected to the implant was extended to the top of each well, where it was cut above the ground surface. The boreholes were backfilled with clean sand to a depth of approximately 1.5 feet bgs, followed by approximately 6 inches of bentonite pellets. The conduits were completed with 2 inch diameter aluminum flush-mount protective casings, secured with approximately 1 foot of concrete. The end of the tubing was coiled to fit into the protective casing. The flush mount casing cover was secured with a 9/16 inch bolt. Between well locations, the downhole equipment was brush-cleaned by Zebra. The majority of the spoils were disposed of onsite, on top of the bentonite and below the sidewalk. The remaining amounts of spoils, along with used geoprobe acetate liners were taken by Zebra to their shop, for proper disposal. No other investigation-derived wastes (IDW) were generated during this investigation.

On October 31, 2003, an inventory of dry-cleaner and laundry service establishments was performed in the area surrounding the 1st Avenue and East 90th Street neighborhood. Of the 14 businesses identified, three currently provided onsite dry-cleaning services. A sketched map and listing from the inventory is provided with the field notes, field logs, and site photographs in Attachment A.

Soil Gas Sampling

Twenty-four soil-gas samples plus quality control (QC) were collected on November 11 and 12, 2003. Blind field-duplicate samples were collected at locations SG-01 and SG-22 using T-fittings provided by Air Toxics. An equipment blank and ambient blank were also collected for each day of sampling. Prior to sampling, a vacuum pump was used to purge the standing air in the soil-gas conduits for approximately five minutes. One-liter (L) Summa® canisters fitted with flow controllers were provided by Air Toxics. The flow controllers were pre-set by Air Toxics to collect the sample into the Summa canister over a twenty-minute period (i.e., at the rate of approximately 0.04 L per minute). Each Summa canister was filled by using the Summa canister's vacuum pressure to draw the sample. Copies of the completed Summa Canister Sampling Field Data Sheets from the sampling event are provided in Attachment A.

All samples were shipped under chain-of-custody (COC) via Federal Express to Air Toxics. A summary of detected analytes is presented in Table 1. Table 2 summarizes the Field QC samples. The samples were analyzed for volatile organic compounds (VOCs) listed in Table 3, following a modified USEPA Method TO-14A. The method was modified by utilizing a direct injection procedure in place of a sample concentration procedure. This modification was approved for use by the NYSDEC project manager prior to commencement of fieldwork. The detected compounds and concentrations are shown on Figure 4. Detected concentrations of only tetrachloroethene and its breakdown products are shown on Figure 5. The complete validated analytical results and Form Is are presented in the Data Usability Summary Report in Attachment B. The Form Is include the sample reporting limit for each compound.

Surveying

All permanent conduits for soil gas sampling were surveyed during the field investigation by YEC Inc. for location and elevation. All surveying was performed under the supervision of a New York State licensed land surveyor. Copies of survey field notes and site sketches are provided in Attachment C. A site survey drawing is provided in Attachment D.

2.0 TABLES, FIGURES, AND ATTACHMENTS

The following tables, figures and attachments are included as part of this IIWA field investigation letter report:

Tables

Table 1	Summary of Detected Analytes - Soil Gas Samples
Table 2	Summary of Detected Analytes - Field QC Samples
Table 3	Summary of Parameters Analyzed by Modified Method TO-14A

Figures

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Sampling Location Map
Figure 4	Soil Gas Analytical Results
Figure 5	Tetrachloroethene and Breakdown Products

Attachments

Attachment A	Field Notes/Field Logs/Site Photographs
Attachment B	Data Usability Summary Report - Including Form Is
Attachment C	Survey Field Notes and Site Sketches
Attachment D	Survey Drawing

Should you have any questions or comments, please do not hesitate to contact me at 716-856-5636.

Sincerely,

URS Corporation

Charles E. Dusel, Jr.
Senior Project Manager

cc: George Kisluk -URS
Edmund Berry - URS (Wayne, NJ)
File: 11173261 (C-1)

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-01	SG-01	SG-02	SG-03	SG-04
Sample ID		SG-01	SG-25	SG-02	SG-03	SG-04
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/11/03
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	PPBV					10 J
1,3,5-Trimethylbenzene (Mesitylene)	PPBV					4.5 J
Benzene	PPBV					2.9 J
Chloroform	PPBV			3.9 J		21
Ethylbenzene	PPBV					6.4 J
Methyl tert-butyl ether	PPBV					
Tetrachloroethene	PPBV					7.1 J
Toluene	PPBV			51		28
Trichloroethene	PPBV					
Xylene (total)	PPBV			4.2 J		41

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-05	SG-06	SG-07	SG-08	SG-09
Sample ID		SG-05	SG-06	SG-07	SG-08	SG-09
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/12/03
Parameter	**Units**					
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	PPBV					
1,3,5-Trimethylbenzene (Mesitylene)	PPBV					
Benzene	PPBV			16		
Chloroform	PPBV				4.8 J	
Ethylbenzene	PPBV					
Methyl tert-butyl ether	PPBV		66			
Tetrachloroethene	PPBV	6.7 J		33	34	
Toluene	PPBV	32		87	180	
Trichloroethene	PPBV					
Xylene (total)	PPBV			10 J		6.4 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-10	SG-11	SG-12	SG-13	SG-14
Sample ID		SG-10	SG-11	SG-12	SG-13	SG-14
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	**Units**					
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	PPBV	5.2 J				
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	3.7 J				
Benzene	PPBV					
Chloroform	PPBV	3.4 J	12 J	4.2 J	4.1 J	
Ethylbenzene	PPBV					
Methyl tert-butyl ether	PPBV		12 J			
Tetrachloroethene	PPBV				9.5 J	
Toluene	PPBV	330	110			62
Trichloroethene	PPBV					
Xylene (total)	PPBV	14.8				

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-15	SG-16	SG-17	SG-18	SG-19
Sample ID		SG-15	SG-16	SG-17	SG-18	SG-19
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/11/03	11/11/03
Parameter	**Units**					
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	PPBV					
1,3,5-Trimethylbenzene (Mesitylene)	PPBV					
Benzene	PPBV					3.4 J
Chloroform	PPBV	3.6 J	6.4 J	28		
Ethylbenzene	PPBV					
Methyl tert-butyl ether	PPBV					
Tetrachloroethene	PPBV	14			12 J	
Toluene	PPBV	41	70	290	22	150
Trichloroethene	PPBV					
Xylene (total)	PPBV		4.9 J	5.6 J		

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-20	SG-21	SG-22	SG-22	SG-23
Sample ID		SG-20	SG-21	SG-22	SG-26	SG-23
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	**Units**				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,2,4-Trimethylbenzene	PPBV					
1,3,5-Trimethylbenzene (Mesitylene)	PPBV					
Benzene	PPBV					
Chloroform	PPBV		9.2 J	3.8 J		
Ethylbenzene	PPBV					
Methyl tert-butyl ether	PPBV					
Tetrachloroethene	PPBV	9.1 J	64	12 J		
Toluene	PPBV	140	1,100	96	87	75
Trichloroethene	PPBV			24	8.5 J	
Xylene (total)	PPBV	8.3 J	7.6 J			

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 1
SUMMARY OF DETECTED ANALYTES - SOIL GAS SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-24
Sample ID		SG-24
Matrix		Soil Gas
Depth Interval (ft)		-
Date Sampled		11/12/03
Parameter	**Units**	
Volatile Organic Compounds		
1,2,4-Trimethylbenzene	PPBV	
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	
Benzene	PPBV	
Chloroform	PPBV	
Ethylbenzene	PPBV	
Methyl tert-butyl ether	PPBV	
Tetrachloroethene	PPBV	
Toluene	PPBV	160
Trichloroethene	PPBV	
Xylene (total)	PPBV	4.2 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED ANALYTES - FIELD QC SAMPLES
NOVEMBER 11 and 12, 2003 SAMPLING EVENT
1ST AVENUE AND EAST 90TH STREET

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		Ambient 1	Field Blank 1	Ambient 2	Field Blank 2
Matrix		Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix
Depth Interval (ft)		-	-	-	-
Date Sampled		11/11/03	11/11/03	11/12/03	11/12/03
Parameter	Units	Ambient Blank (1-1)	Field Blank (1-1)	Ambient Blank (1-1)	Field Blank (1-1)
Volatile Organic Compounds					
Methylene chloride	PPBV		3.0 J		
Toluene	PPBV	3.7 J	3.8 J	12	7.6 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
Blank - Not Detected
PPBV - Parts per billion by volume.

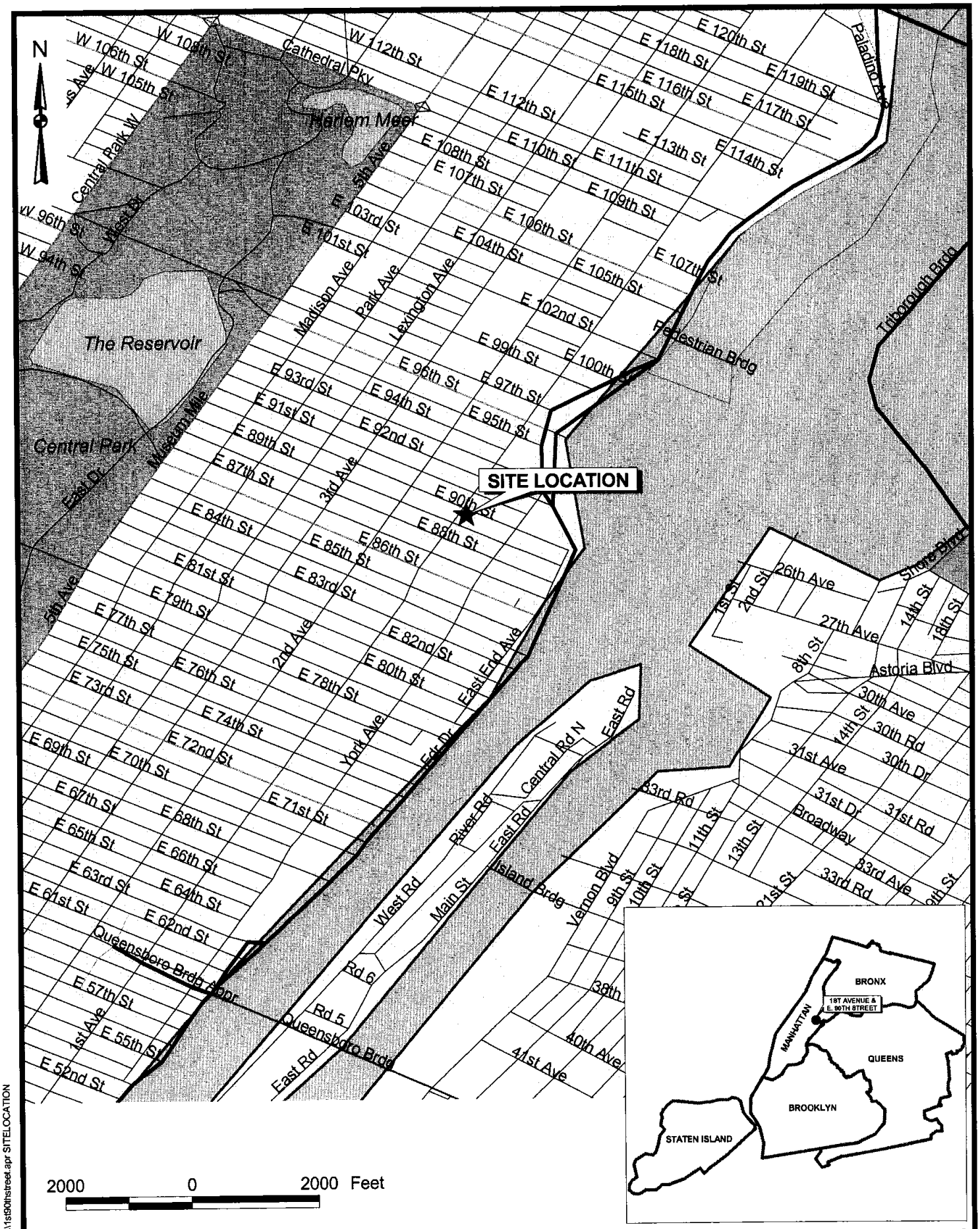
Only Detected Results Reported.

TABLE 3
SUMMARY OF PARAMETERS ANALYZED BY MODIFIED METHOD TO-14A
FIRST AVENUE AND EAST 90th STREET

1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)
1,1,2-Trichloroethane
*1,1-Dichloroethane
*1,1-Dichloroethene
1,2,4-Trimethylbenzene
1,2-Dibromoethane (Ethylene dibromide)
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)
1,2-Dichlorobenzene
*1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Propanol
Benzene
Bromomethane
Carbon tetrachloride
Chlorobenzene
*Chloroethane
Chloroform
Chloromethane
*cis-1,2-Dichloroethene
Dichlorodifluoromethane (Freon 12)
Ethylbenzene
Methyl tert-butyl ether
Methylene chloride
*Tetrachloroethene
Toluene
*trans-1,2-Dichloroethene
*Trichloroethene
Trichlorofluoromethane (Freon 11)
*Vinyl chloride
Xylene (total)

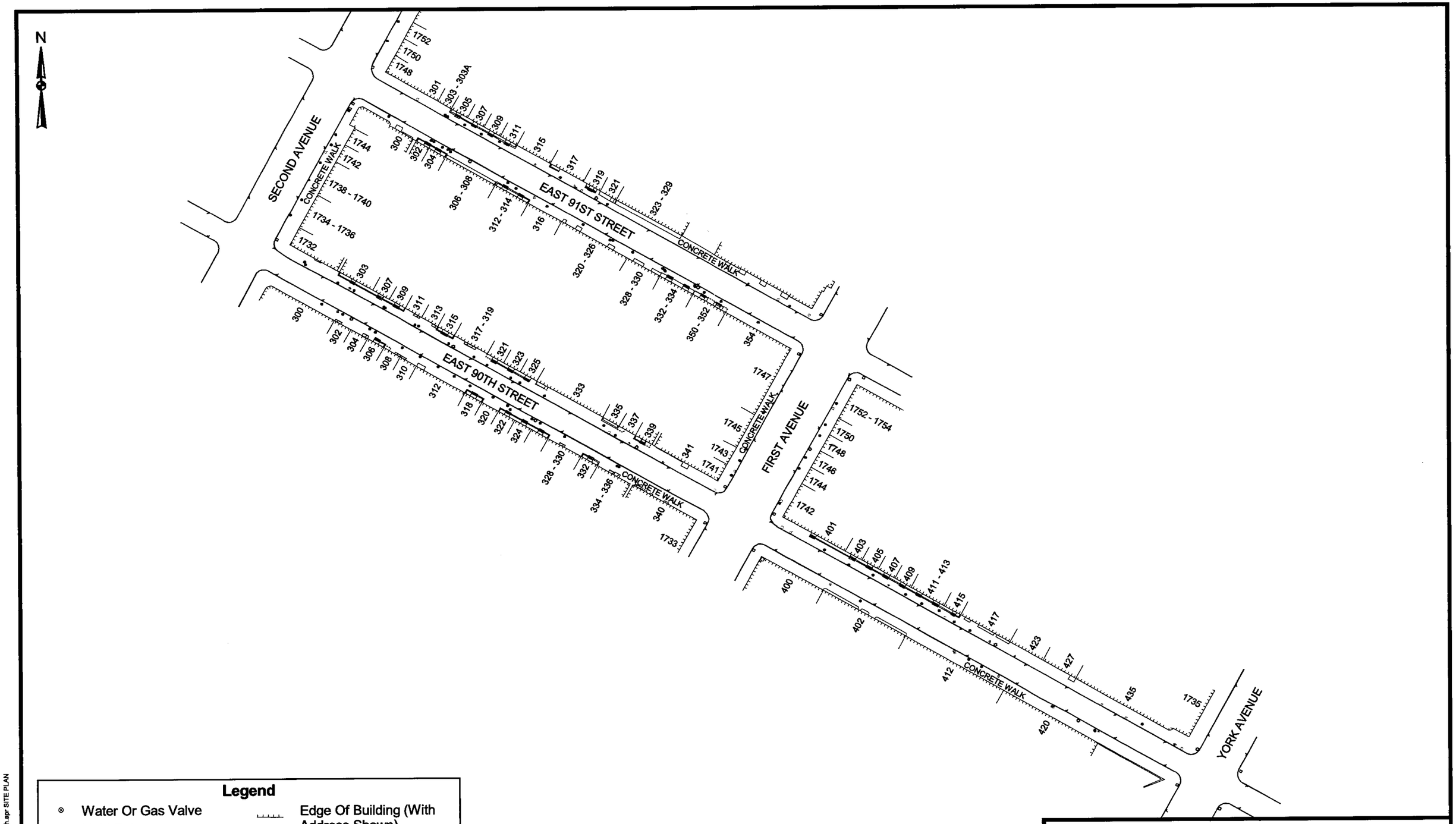
Samples analyzed by modified Compendium Method TO-14A, *Determination Of Volatile Organic Compounds (VOCs) In Ambient Air Using Specially Prepared Canisters With Subsequent Analysis By Gas Chromatography*, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition.

* - Tetrachloroethene and its breakdown products.



URS	1ST AVENUE & EAST 90TH STREET SITE LOCATION MAP	FIGURE 1

n:\11172362.00000\gis\1st90thstreet.apr SITELOCATION
9/19/2003



Legend

Water Or Gas Valve	Edge Of Building (With Address Shown)
Light Pole	Concrete Curb
Hydrant	Wire Fence
Traffic Signal Pole	Garbage Bin
Sewer Manhole	

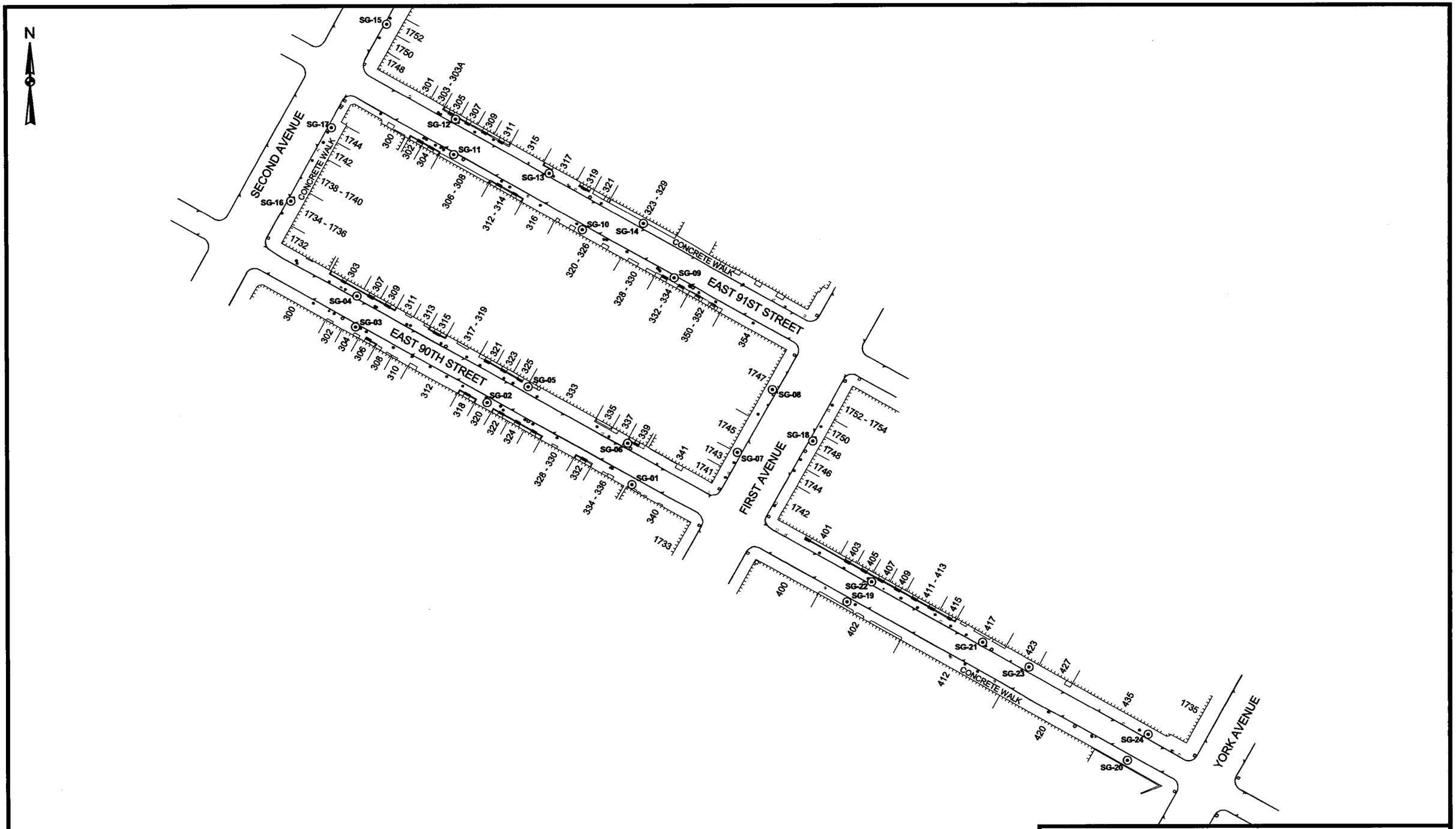
120 0 120 Feet

1ST AVENUE AND EAST 90TH STREET
SITE PLAN

URS

FIGURE 2

N:\11173261.00000\DB\GIS\90th.apr SITE PLAN
1/7/2004



Legend

⊙ Soil Gas Sampling Location

120 0 120 Feet

1ST AVENUE AND EAST 90TH STREET
SAMPLING LOCATION MAP

URS

FIGURE 3

N:\11173261.00000\DB\GIS\90th.apr SAMPLE LOCATION MAP
1/7/2004

N

SG-15
Chloroform, 3.6
Tetrachloroethene, 14
Toluene, 41

SG-12
Chloroform, 4.2

SG-11
Chloroform, 12
Methyl tert-butyl ether, 12
Toluene, 110

SG-13
Chloroform, 4.1
Tetrachloroethene, 9.5

SG-10
1,2,4-Trimethylbenzene, 5.2
1,3,5-Trimethylbenzene (Mesitylene), 3.7
Chloroform, 3.4
Toluene, 330
Xylene (total), 14.8

SG-17
Chloroform, 28
Toluene, 290
Xylene (total), 5.6

SG-14
Toluene, 62

SG-16
Chloroform, 6.4
Toluene, 70
Xylene (total), 4.9

SG-09
Xylene (total), 6.4

SG-08
Chloroform, 4.8
Tetrachloroethene, 34
Toluene, 180

SG-04
1,2,4-Trimethylbenzene, 10
1,3,5-Trimethylbenzene (Mesitylene), 4.5
Benzene, 2.9
Chloroform, 21
Ethylbenzene, 6.4
Tetrachloroethene, 7.1
Toluene, 28
Xylene (total), 41

SG-18
Tetrachloroethene, 12
Toluene, 22

SG-03
No Compounds Detected

SG-22
Chloroform, 3.8
Tetrachloroethene, 12
Toluene, 96
Trichloroethene, 24

SG-02
Chloroform, 3.9
Toluene, 51
Xylene (total), 4.2

SG-05
Tetrachloroethene, 6.7
Toluene, 32

SG-21
Chloroform, 9.2
Tetrachloroethene, 64
Toluene, 1100
Xylene (total), 7.6

SG-06
Methyl tert-butyl ether, 66

SG-23
Toluene, 75

SG-24
Toluene, 160
Xylene (total), 4.2

SG-01
No Compounds Detected

SG-07
Benzene, 16
Tetrachloroethene, 33
Toluene, 87
Xylene (total), 10

SG-19
Benzene, 3.4
Toluene, 150

SG-20
Tetrachloroethene, 9.1
Toluene, 140
Xylene (total), 8.3

SECOND AVENUE
CONCRETE WALK
EAST 91ST STREET
CONCRETE WALK
EAST 90TH STREET
FIRST AVENUE
CONCRETE WALK
YORK AVENUE

Legend

⊙ Soil Gas Sampling Point Location

Location ID — SG-05
Tetrachloroethene, 6.7 — Concentration- Parts Per Billion by Volume (PPBV)
Compound Detected

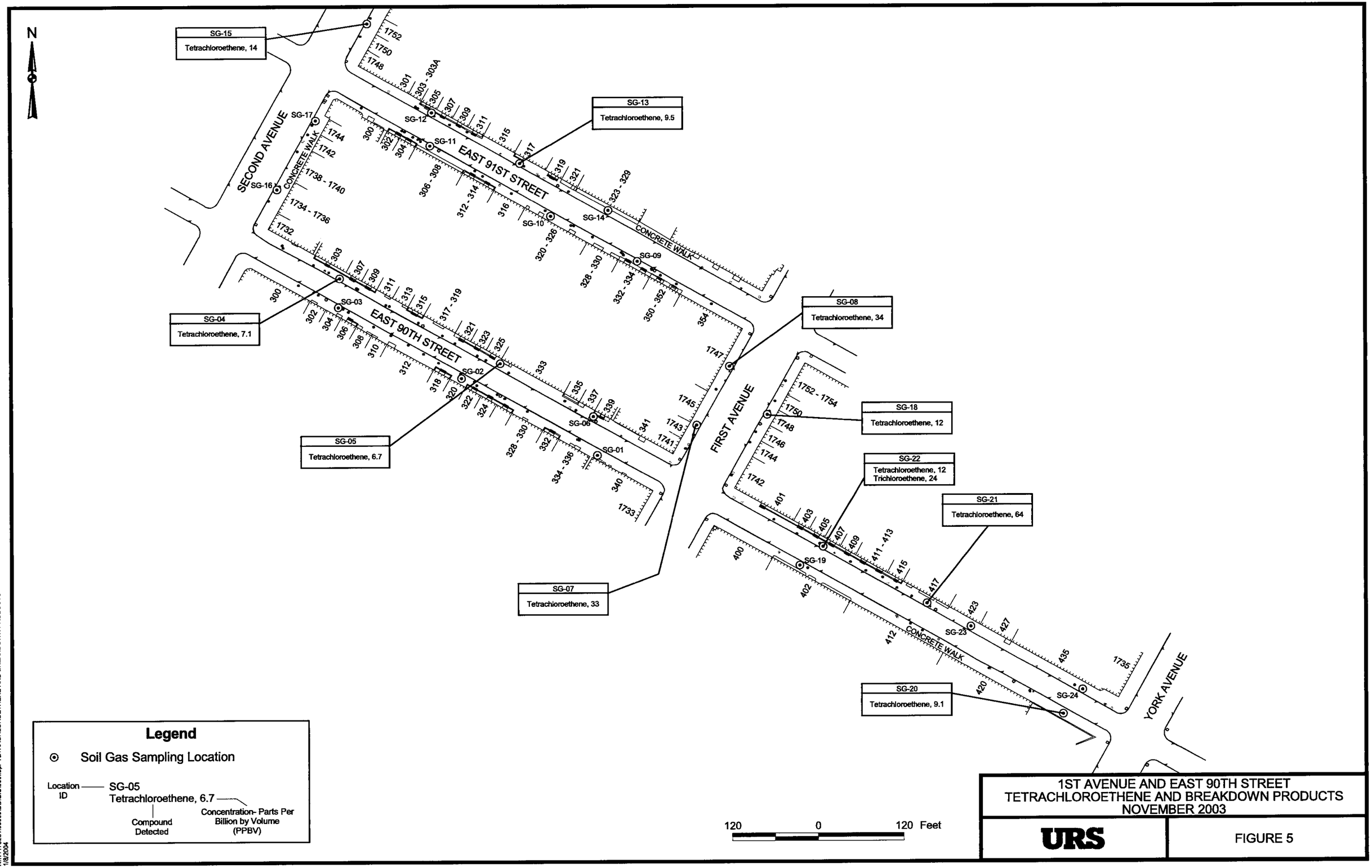
120 0 120 Feet

1ST AVENUE AND EAST 90TH STREET SOIL GAS ANALYTICAL RESULTS NOVEMBER 2003

URS

FIGURE 4

N:\11173261.00000\DBG\S\90th.apr SOIL GAS ANALYTICAL RESULTS
1/7/2004



Legend

⊙ Soil Gas Sampling Location

Location ID — SG-05
Tetrachloroethene, 6.7 — Concentration- Parts Per Billion by Volume (PPBV)
Compound Detected

1ST AVENUE AND EAST 90TH STREET
TETRACHLOROETHENE AND BREAKDOWN PRODUCTS
NOVEMBER 2003

URS

FIGURE 5

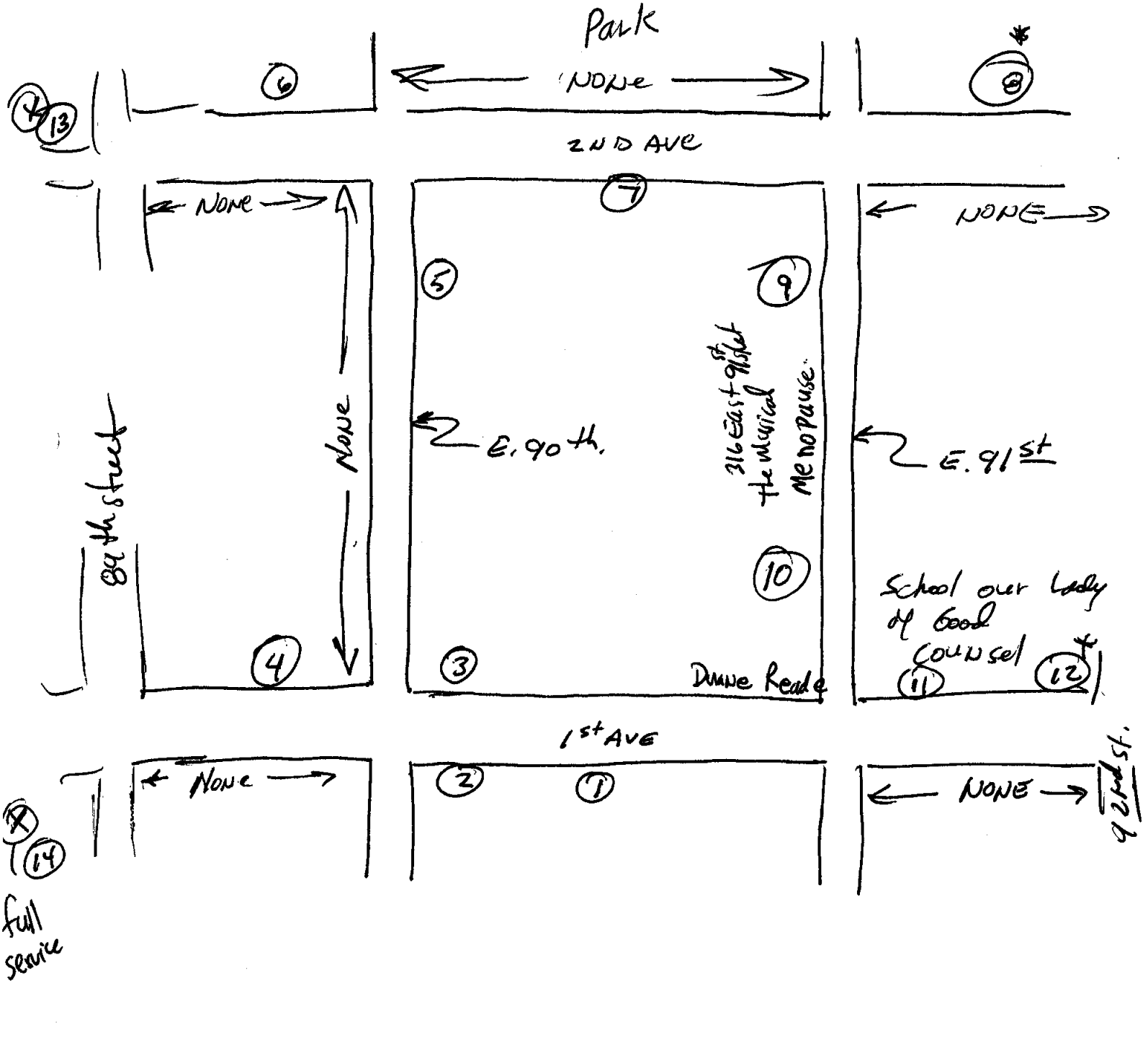
N:\11173281.00000\DBIGIS\90th.apr TETRACHLOROETHENE AND BREAKDOWN PRODUCTS
1/8/2004

ATTACHMENT A

FIELD NOTES/FIELD LOGS/SITE PHOTOGRAPHS

URS

Job 1st Ave & East 90th Street | Project No. | Page ___ of ___
Description Survey of Dry Cleaners/ Laundromats | Computed by CD. | Sheet 1 of 3
Checked by | Date 10/31/03
Reference



URS

Job 1st Ave & East 90th Street — Project No. — Page ___ of ___

Description Dry Cleaners / Laundromat survey — Computed by CD — Date 10/31/03 — Sheet 2 of 3

Checked by — Date — Reference

	Name	address	type of service provided	comment.
(1)	Neighborhood Laundry Cleaner	1776 1st Ave	No dry cleaning on premises (NDC) ONLY washer/dryers (W/D)	(212)-831-2807 small shop INTERVIEWED-worker never did on-site
(2)	H & V Cleaners ~~Expert~~ Expert tailoring.	1742 1st Ave	NDC ship everything out very small store front shop.	212 828-6949 No washers or dryers
(3)	Super Rich Laundromat	1741 1st Ave go 1st	ONLY W/D Send out all Dry cleaning (CD used)	860-7973
(4)	Ivory cleaners.	1729.31	send out all DC No W/D	small 348-0161
(5)	KC Dry Cleaning + Laundry	E 301 East 90th	drop off ONLY	tiny store front 876-4074
(6)	Yorkville Laundromat	1733 2nd Ave	Laundromat ONLY	no phone #
(7)	all american cleaners	1736 2nd Ave	tailors. drop off ONLY	722-0937 Very small
(8)	Knickerbocker cleaners	1767 2nd Ave.	1 Dry cleaning unit L.T. 4 yrs old pressing - commercial	212 831-0040 8-10 employees largest operation No evidence of spills
(9)	Apples cleaners	300 E. 91st	drop off Laundry	722-6024
(10)	MAYTAG Laundromat	324	W/D ONLY drop off service only	987-6683

URS

Page ____ of ____

Job _____ Project No. _____ Sheet 3 of 3

Description cont. Computed by CD Date _____

_____ Checked by _____ Date 10/31/03

a.m. Reference

(11) Chus Laundry | ← next to 1771-1773 1st Ave — Laundromat only — 212 876-8789

---

(12) East River cleaners, 1779 1st Ave — 1 Dry Cleaning unit; closed loop; 3 ~ 20gal waste containers. Very clean - concrete pad enclosed area.

---

in summary only ~~two~~ three for Hylan cleaners provided on-site dry cleaning #'s 8 + 12 + 14 by Taylor

revised 11/2003

(13) located on the west side of 2nd Ave and just to South of 89th St. — Laundromat only

(14) located on the east side of 1st Ave and just to the south of 89th street. — Dry cleaning on premises

Notes taken by Edmund Berry
Site Geologist
Doc 1/19/04

Chuck Dusel
C: 716-353-3016
O: 716-856-5636
F: 716-856-2545
O (toll-free): 800-850-9230

Mike Murphy
C: 631-834-5268
D: 212-609-8092

Curt Stokes
D: 212-609-8099

Zebra (Lynbrook)
O: 516-596-6300
f: 516-596-4422

YEC
Ed Chen
O: 845-268-3203
f: 845-268-5313

1st Ave + E 90 St (1)

10-27-03

0700: On-site. Check for mark-outs - only telephone is marked out (in street). Check for parking - none.

0630-0700: Travel time to site

0800: Meet driller * (Charlie). Check permits. DOS warns us that tickets will be issued from now on for parking violations.

Drill Rig: Geoprobe 6610 DT

* Zebra - Lynbrook, NY
(Driller's helper: Luke - Sean's brother)

10-27-03 (2)

0830: Calibrate the MULTIRAE PLUS multi gas monitor - oxygen sensor is malfunctioning. Notify Pine Env. (vendor) — they will deliver new one to office today. Disable Oxygen sensor and calibrate as normal.

0930: Call Chuck Dosel and notify him that mark-outs ~~appear~~ do not have not been completed. Chuck says that he + Dave H. will be on-site in approx. 1/2 hr. Sean T. is notified to contact locating cos.

10-27-03 (3)

1000: Meet w/ Chuck D. + Dave H. Complete a walk-through of some of the areas of investigation which include:

1) 90th bet. 2nd + 3rd
2) 3rd bet. 90th + 91st
3) 91st bet. 2nd + 3rd
4) 2nd bet 91st + 90th
5) Sidewalk in front of Starbucks

1000 to 1200: Waiting for mark-outs: Driller checked local garages for parking — none of the garages will accept a trailer. Driller says that the mark-outs will be completed by today or tonight. Work is cancelled.

1200 to 1245: Travel time from site

1st + E 90 St (4)

10-28-03

0630 to 0700 : Travel time to site.

0700 to 0730 : Attempt to locate parking.

0730 to 0800 : Check for mark outs - no mark-outs except for tele-phone.

0815 : Meet w/ check ID. + Dave H.

0830 : Drillers (Stem) arrives (with Helper Luke). He attempts to determine why the mark outs have not been completed.

(Verizon 6610DT)

0915 : Driller says that (26) the remaining mark outs will begin to be completed

10-28-03 (5)

in approx. 45 minutes.

0930 : Meet representative from Con-Ed. He has arrived to check the mark-outs. Some mark-outs have been completed except for:

1) 90th bet 1st + 2nd
2) 91st bet 1st + 2nd

1000 : Eastern Locating arrives & Thru center with Con-Ed + Stem to mark-out remaining areas.

1000 to 1045 : Driller is preparing for work in front of 340 E 90th St.

10-28-03

10.45 : Driller begins work* The hole collapsed + Scan was unable to place sand.

3/8" x 1/4" tubing

1/4 bag bentonite

* SG-01 ①

1115 to 1145 : set 2" riser with 9/16 bit and clean up. Spoke with Dave H. + set approval to take macrocore samples (this might help set sand).

no macro core samples at SG-01

1145 to 1215 : Prepare for work at SG-02 (in front of 320 E 9th St).

① Set a 6" stainless steel vapor sampling implant anchored at 6' bgs (flushmount).

10-28-03

1210* : Begin work at SG-02.

1215 to 1300 : Set a 6" stainless steel vapor sampling implant, anchored at 9' bgs. Set 2" riser with flushmount. Clean up. 1/4 bag bentonite + 1 bag of #2 sand.

flushmount

1/4 bag bentonite

1315* : Begin work at SG-03 (in front of 304 E 9th St).

1315 to 1430 : Set a 6" flushmount stainless steel vapor sampling implant,

* Macrocore samples taken at 0-4 (S-1) and 4-8 (S-2).

PICTURES (8)

1 SG-01 before work (Pavement)

2 SG-01 before work (Area)

3 SG-03 before work (Pavement)

4 SG-03 before work (Area)

5 SG-12 after we broke through (notice how thin the concrete is)

6 SG-12 Same as above (Area)

7 SG-15 : Area picture taken by Chuck D.

(see page 31)

10-28-03 (9)

anchored at 9' bgs. Set 2" manway + cleaning up. 1/4 bag bentonite + 1 bag of sand.

1445 : Begin work at SG-04 (in front of 303 + 307 E. 90th St)

(2nd fieldmark) 1500 to 1530 : set a 6" stainless steel vapor sampling implant anchored at 7' bgs. Anchor would not seat at 9' bgs. 1/4 bag bentonite + 3/4 bag sand.

~1545 : Work ends

1700 : Home

1st Avenue + 90th st. (10)

10-29-03

0630 - 0700 : Travel time.

0700 : Arrive + look for parking. Moderate rain, temp. = 55.

0800 : Driller arrives.* Heavy rain. Driller attempts to find parking - Sean is on his way.

0815 to 0830 : Calibrate the multigas detector.

0845 to 0915 : Prepare for work at SB-05 (bet. 325/333 E. 90th st)

~~0915 to 0945~~

(E)

* Joe + Chris (helper) Sean on-site too

(11)

10-29-03

0915 : S-1 ; ~3" Concrete, Weathered concrete + f-c gravel, some f-c sand, trace silt, REC = 15%, PID = 0, Dry, medium dense, dark brown

0920 : S-2 ; silt, some f-m sand + f gravel, trace m-c gravel + brick, Rec = 60%, PID = 0, moist, medium dense, brown

0920 to 0945 : Set a 6" (2" flush mount) stainless steel vapor sampling implant enclosed at 5' bgs. 3/4 bag of sand, 1/4 bag of bentonite.

1 hour clearance

0945 to 1000 : Prepare for work at SB-06 (bet 337/339 E. 90 st)

10-29-03

1015 : S-1; 3" concrete, weathered concrete, f-m sand + f-m gravel, some silt, trace c gravel + silt, rec = 40%, PID = 0, dry, medium dense, brown

1020 : S-2; silt, some f-m sand + f-m gravel, tr c gravel + brick, rec = 80%, moist, PID = 0, very dense, brown

1020 to 1100 : set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs. 1 bag of sand, 1/4 bent.

1100 to 1115 : Prepare for work at SB-07 (located at 1745 1st Ave)

10-29-03

1120 : S-1; 3" concrete, weathered concrete, silt + f-m sand, some clay + f gravel, trace m gravel, rec = 60%, PID = 0 dry, medium dense, brown.

1125 : S-2; silt, some clay, trace f-m sand + f gravel, rec = 95%, PID = 0 moist, medium dense, brown to 7" then grayish brown.

1125 to 1200 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

1200 to 1215 : Prepare for work at SB-08 (located in front of

10-29-03 (14)

Dump Reed Pharmacy - (EL) no valves ~~removed~~ 1749 1st Ave).

1220 : S1 ; 3" concrete, weathered concrete, silt + clay, some f-m sand, trace f-m gravel, rec = 50%, brown, medium dense, PID = 0, Dry.

1225 : S2 ; clay, some silt, trace f-m sand + f-m gravel, rec = 95%, medium dense, brown, PID = 0, moist.

1225 to 1300 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

10-29-03 (15)

1300 - 1330 : lunch

1330 to 1345 : prepare for work at SG-09 (located at ~~332~~ / ~~334~~ (EG) E91st).

1345 to 1350 : Macrocore samples S-1 (0-4), S-2 (4-8).

1350 to 1405 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

1405 to 1415 : Prepare for work at SG-10 (in EG 320 E91st).

1415 to 1420 : Refusal at ~ 2' bgs on brick or C gravel (?)

10-29-03 (16)

1425 to 1430 : Macrocore samples S1 (0-4) + S2 (4-8).

1430 to 1500 : set 6" (attachment) stainless steel vapor sampling implant anchored at 8' bgs.

1500 to 1545 : clean up and demobe.

1645 : Home

Weather: Rain, slight to moderate wind (variable).

1st Ave. + 90th St. (17)

10-30-03

0630 - 0700 : Travel time.

0700 : Arrive, look for parking and calibrate the multi-gas detector.

~0730 : Driller (Joe) arrives and I show him the location of SG-11 (306 - 8 E. 91st). [Kevin - helper] Since Joe received a ~~ticket~~ parking ticket yesterday (at same location) they have been previously given parking) he decides to double-park along E. 91st.

Weather: Clear temp = 50 Slight to moderate wind.

10-30-03 (18)

0745 - 0815 : Preparing for work at SG-11.

0820 - 0825 : Macrocore samples : S1 (0-4) + S2 (4-8).

0825 to 0845 : Set a 6" (2" flush mount) stainless steel vapor sampling implant anchored at 9' bgs.

0845 to 0900 : Preparing for work at SG-12 (305 / ~~307~~ E. 91 St)

0900 to 0905 : Macrocore samples S1 (0-4) + S2 (4-8). Very thin concrete at top (~ 1/4" thick). Very dense at ~ 7' bgs.

10-30-03 (19)

0905 to 0930 : Set a 6" (2" flush mount) stainless steel vapor sampling implant anchored at 8' bgs.

0930 to 0945 : Preparing for work at SG-13 (317 E. 91 St).

0950 to 1000 : Macrocore samples S1 (0-4) + S2 (4-8).

1000 to 1005 : Set a 6" (2" flush mount) stainless steel vapor sampling implant anchored at 9' bgs.

1005 to 1010 : Prepare for work at SG-14 (in front of school)

10-30-03

1010 to 1015: 1st Run*;
S1 (0-4) - VOID.
S2 (0-8') - Refusal at ~5' bgs: f-m sand + f-c gravel, some ash.

rec = 13%

1015 to 1020: 2nd Run*;
S1 (0-4) - 3½" void, f-m sand, some f-m gravel.
S2 (4-8) - f-m sand + f-m gravel, some ash.

rec = 19%

rec = 19%

1020 to 1045: Set a 6" (2" flushmount) stainless steel vapor sampling implant enclosure at 9' bgs.

* ~3" concrete + ~6" weathered concrete

10-30-03

1045 to 1100: Prepare for work at SB-15 (1752 2nd Ave)* (6)

1105 to 1110: Macrocore samples S-1 (0-4) + S-2 (4-8). Refusal at 6'. Run 1.*

1115 to 1120: Macrocore samples S-1 (0-4) + S-2 (4-8). Refusal at 4'. Run 2.**

1125 to 1130: Macrocore samples S-1 (0-4) + S-2 (4-8). Run 3.

1130 to 1145: Set a 6" (2" flushmount) stainless steel vapor sampling implant enclosure at 9' bgs.

* offset ~3' to west
** offset ~3' to west + ~3' to south.

10-30-03

1145 to 1200 : Patching holes + cleaning up.

1200 to 1220 : Preparing for work at SG-16 (1736 2nd Ave)

1230 to 1300 : lunch

1305 to 1310 : Macrocore samples S-1 (0-4) + S-2 (4-8).

1310 to 1340 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

1340 to 1345 : Prepare for work at SG-17 (1744 2nd Ave) EG

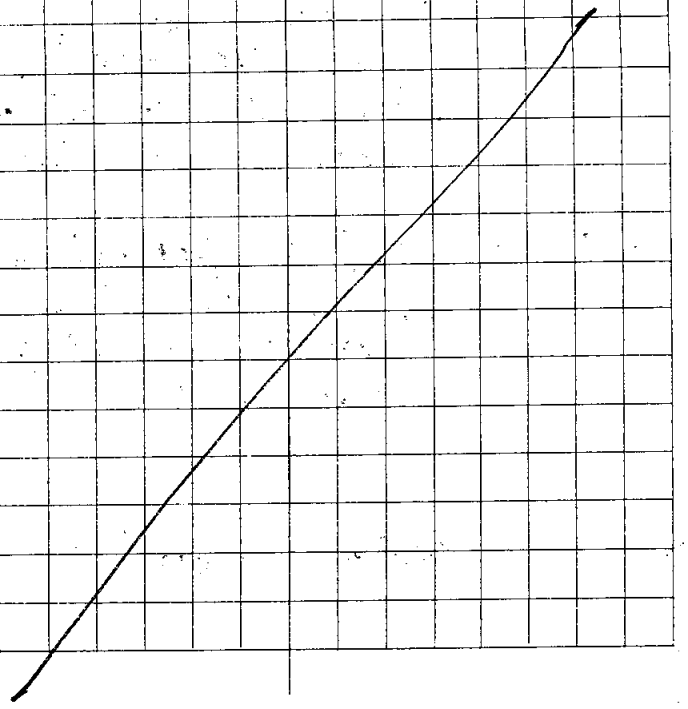
1350 to 1355 : Macrocore samples S-1 (0-4) + S-2 (4-8).

10-30-03

1355 to 1415 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

1415 to 1500 : EG clean up + demobe.

1600 : Home



10-31-03

1st Avenue & 90th St

0630 - 0700 : Travel time.

0700 : looking for parking.

0700 : Driller* on-site & he too tries to find parking / corner parking tickets.

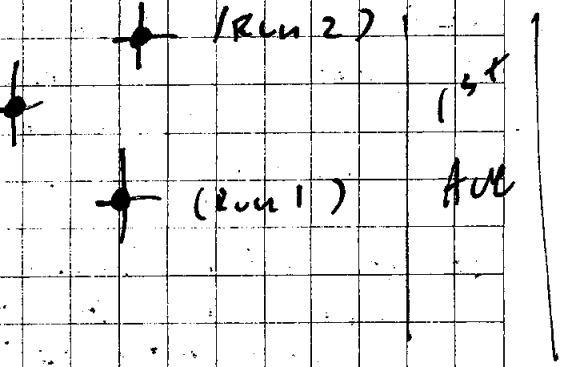
0730 to 0915 : Preparing for work at SG-18 (1748 1st Ave). Kevin is patching previous locations.

0915 to 0925 : Refusal at 3.5'. Run 1. offset ~ 3' to the south

* Joe (Kevin's helper)

10-31-03

0925 to 0935 : Run 2 - offset ~ 1.5' north & ~ 1.5' to the east:



0935 to 0955 : Macrocore samples S-1 (0-4) & S-2 (4-7).

0955 to 1015 : Macrocore sample S-2 (no recovery) metal & soil ~~stuck~~ lodged inside sampler.

1015 to 1045 : Set ~ 6" (2" flush mount) stain-

10-31-03

1ss steel vapor sampling implant anchored at 7 ft bgs.

1045 to 1130 : Waiting for seen to bring permits so work can continue. Cleaning up.

1130 to 1145 : Preparing for work at SG-19 (402 E 90 st).

1145 to 1155 : Macrocore samples S-1 (0-4) + S-2 (4-6.5). Refusal at ~6.5'. Run 1. offset ~ 3' to east.

1215 to 1225 : Macrocore samples S-1 (0-4) + S-2 (4-6.5). Refusal at ~6.5'. Run 2. Offset ~ 3' to northeast.

10-31-03

1230 to 1235 : Run 3 - Refusal at ~1'. Confer with Dave H.

1235 to 1300 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 6.5' bgs (in boring of Run 2).

1300 to 1315 : Prepare for ~~et~~ work at SG-20 (across from 435 E. 90 st [on south side]).

1315 to 1320 : Macrocore samples S-1 (0-4) + S-2 (4-8).

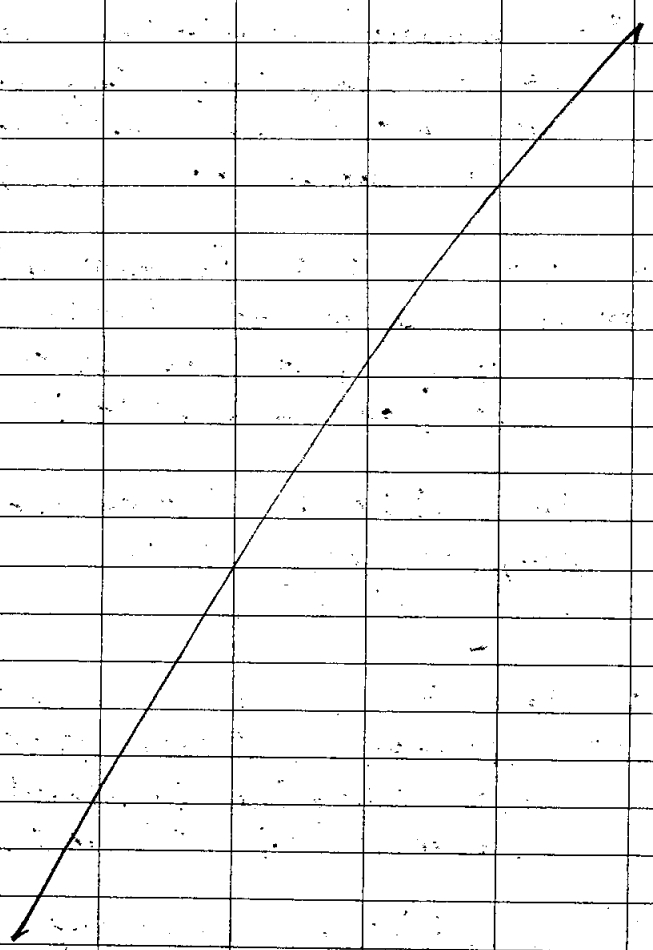
1320 to 1400 : Set a 6" (2" flushmount) stainless steel vapor sampling implant anchored at 7' bgs.

1400 to 1430 : cleanup + demobe.

10-31-03 28

1431 to 1445 - Drop Chucks off at hotel.

1445 to 1600 : Homeward bound -



1st Avenue + 90th St. 29

11-3-03

0630 - 0730 : Travel time / Parking.

0730 : Drilling curves. Preparing for work at SG-21 (417 E. 90st).

0805 to 0810 : Macro core samples S-1 (0-4) + S-2 (4-7).

0810 to 0830 : Set a 6" (3" flushmount) stainless steel vapor sampling implant anchored at 7' bgs

0830 to 0845 : Preparing for work at SG-22 (407 E. 90st).

0850 to 1455 : Macro core samples S-1 (0-4) + S-2 (4-8).

11-3-03 30

0855 to 0915: Set a 6" (2" finished grade) stainless steel vapor sampling implant at ~ 8.5' bgs.

0915 to 0920: Prepare for work at SG-23*

0920 to 0925: Macrocore samples S-1 (0-4) + S-2 (4-8).

0925 to 0945: Set a 6" (2" finished grade) stainless steel vapor sampling implant anchored at ~ 8.5' bgs.

0945 to 0950: Preparing for work at SG-24 (435 E. 90th St.)

* 423 E. 90th St

Pictures 31

(continued)

8 SG-21 — shows prior cracking of sidewalk (not a result of our work). (#6)

9 (720 Melrose Ave) SG-04 (before condition of sidewalk is poor [cracked] prior to drilling). (#6)

(See page 59)

11-3-03 32

0955 to 1000 : Macrocore samples S-1 (0-4) + S-2 (4-8).

1000 to 1015 : set a 6" (2" flush mount) stainless steel vapor sampling implant anchored at 9' bgs.

1015 to 1030 : Cleaning up + demob rig.

1030 to 1100 : Meet w/ Dave H. + Chuck D. Driller leaves.

1100 to 1215 : ~~Paint three~~ Cl vapor monitoring wells Paint a white dot by each of the vapor monitoring wells

1315 : office + complete a map showing their locations.

1st Ave + 90th St

0630 to 0700 : Travel time to site.

0700 to 0715 (EE) : Locate parking spot.

Weather : cloudy / slight rain, light + variable wind, temp = 50° (F).

0715 to 0745 : Preparing for work at SG-01 through SG-06.

0745 to 0900 : Purging vapor wells SG-01 through SG-06.

0900 to 1005 : Sampling vapors SG-01 through SG-06*.

* Duplicate sample of SG-01 designated as SG-25 (Canister ID = 14920)

SG-06*. SG-03 sampled for 15 minutes using - pressure at 2.5" when stopped.

1100 (EE)

1005 to ~~1205~~ : Preparing for work at SG-07, SG-08, SG-18 and SG-19.

~~1205~~ to 1100 (EE)

1100 to 1150 : Purging vapor wells SG-07, SG-08, SG-18 and SG-19.

1150 to 1237 : Sampling vapor wells SG-07, SG-08, SG18 and SG-19. Summa canister # 14935 / flow control # 34412 not working at SG-18. SG-18 re-sampled with different

11-11-03

Summa canister and flow controller.

1237 to 1320 : Preparing to collect QA/QC samples + cleaning up.

1320 to 1340 : Collect Ambient sample + Field Blank sample. *

1340 to 1400 : Beginning to rain. Preparing to leave.

1400 to 1500 : To office and pick up extra tubing (50 ft of 1/4" x 1/16") + (10) flow controllers.

* Dig(s) taking a pee nearby (obvious odor).

11-12-03

1st Ave. + 90th St.

Weather: Rain, slight + variable wind, temp = 50° (f).

0600 - 0630 : Travel time.

0630 - 0715 : Preparing for work at SG-07 through SG-14.

0715 - 0835 : Pursing vapor wells SG-09 through SG-14.

0835 - 0907 : Collect samples from vapor wells SG-09 through SG-14 and collect field blank ("Field Blank 2") and an ambient sample ("Ambient 2"). *

0907 - 1005 : Preparing for work at SG-15 through SG-17.

* Canister (ID = 34134) at low pressure before sampling - changed out canister / flow controller / filter.

11-12-03

1005 – 1040 : Purging vapor wells SG-15 through SG-17.

1040 – 1129 : Collect samples from vapor wells (SG-15 through SG-17).

1129 – 1200 : Preparing for work at SG-20 through SG-24.

1200 – 1245 : Purging vapor wells SG-20 through SG-24.

1245 – 1739 : Collect samples from vapor wells SG-20 through SG-24. Duplicate sample of SG-22 collected / designated as SG-26, Con. # 9540 at "time" 1239 – 1359.

1339 – 1430 : Cleaning up.

URS Corporation

TEST BORING LOG

BORING NO: SG-01
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 340 E. 90th St.
GROUND ELEVATION:
DATE STARTED: 10-28-03
DATE FINISHED: 10-28-03
DRILLER: Sean T.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE				
DIA.				
WT.				
FALL				

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
5	1045 to 1145			Direct push	NA	NA	Medium Dense	NA	PID = 0 (through tubing)
10								EOB @ 6'	
15									
20									
25									
30									

COMMENTS: Set a 6" (2" Flushmount) stainless steel vapor sampling implant anchored at 5' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-01

URS Corporation

TEST BORING LOG

BORING NO: SG-02
SHEET: 1 of 1
PROJECT: 1st Avenue + 90th St.
CLIENT: NYDEC
JOB NO.: 11173261.00001
BORING CONTRACTOR: Zebra
BORING LOCATION: 320 E. 90 St
GROUNDWATER:
GROUND ELEVATION:

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE		Macrocore		
				DIA.		1.5"		
				WT.		(Direct		
				FALL	4'	Push)		
				* POCKET PENETROMETER READING				

DATE STARTED: 10-28-03
DATE FINISHED: 10-28-03
DRILLER: Sean T.
GEOLOGIST: Ned Derry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	SAMPLE ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	1210	S-1	Macro	Direct Push	15%	Dark Brown	Medium Dense	~3" Concrete (~6" Weathered conc.) f-c sand, some silt + f-m gravel.	PID = 0 Dry
5	1215	S-2	Macro	Direct Push	25%	Brown		Silt, some f-m sand + f-m gravel, tr. c gravel + brick.	PID = 0 Moist
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-02

URS Corporation

TEST BORING LOG

BORING NO: SG-03
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 304 E. 90th St.
GROUND ELEVATION:
DATE STARTED: 10-28-03
DATE FINISHED: 10-28-03
DRILLER: Sean T.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct		
FALL	4' + Push)			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1315	S-1	Macro	direct push	40%	Brown ↓ Dark brown	Medium Dense ↓ Dense	~3" Concrete / (~6" Concrete - weathered) f-m sand + f-c gravel, moist some silt, tr. brick + conc.	PID=0
5	1330	S-2	Macro	direct push	40%			f-m sand + f-c gravel, some silt + concrete, tr. brick.	PID=0 Moist
10								EOB @ 8'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 6' bgl.

PROJECT NO. 11173261.00001
BORING NO. SG-03

Geoprobe 6610DT drill rig.

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		42 (Direct Push)		
FALL				

* POCKET PENETROMETER READING

BORING NO: SG-04
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 303/307 E. 90 St
GROUND ELEVATION:
DATE STARTED: 10-28-03
DATE FINISHED: 10-28-03
DRILLER: Sean T.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1445	S-1	Macro	direct push	50%	Brown	Medium Dense	~3" Concrete (1~6" weathered conc. f-m sand + silt, some f-m gravel.	PID = 0 Moist
5	1450	S-2	Macro	direct push	50%			f-m sand + silt, some f-m gravel.	PID = 0 Moist
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 7' bgs.

PROJECT NO. 11173261.00001
BORING NO. SG-04

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

BORING NO: SG-05
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: ~~325~~ 333 E. 90th St
GROUND ELEVATION: (6)
DATE STARTED: 10-29-03
DATE FINISHED: 10-29-03
DRILLER: Joe S.
GEOLOGIST: Neal Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0915	S-1	Macro	direct push	15%	Dark Brown	Medium Dense	3" Concrete (Weathered concrete) f-c gravel, some f-c sand, trace silt.	PID=0 Dry
5	0920	S-2	Macro	direct push	60%	Brown	↓	silt, some f-m sand + f gravel, trace m-c gravel + brick.	PID=0 Moist
				D. P.					
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 8' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-05

* ~ 6"

URS Corporation

TEST BORING LOG

BORING NO: SG-06
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: ~~339~~ 339 E. 90 st
GROUND ELEVATION: (6)
DATE STARTED: 10-29-03
DATE FINISHED: 10-29-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct		
FALL	4'	Push)		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1015	S-1	Macro	Direct Push	40%	Brown	Medium Dense	~3" Concrete * (Weathered concrete) f-m sand + f-m gravel, some silt, tr. C gravel + ash.	PID=0 Dry
5	1020	S-2	Macro	Direct Push	80%		Dense	Silt, some f-m sand + f-m gravel, tr. C gravel + brick.	PID=0 Moist
				D. P.					
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-06

* ~6"

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

BORING NO: SG-07
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1745 1st Ave.
GROUND ELEVATION:
DATE STARTED: 10-29-03
DATE FINISHED: 10-29-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1120	S-1	Macro	Direct push	60%	Brown	Medium * Dense	~3" Concrete (Weathered concrete) silt + f-m sand, some clay + f gravel, tr. m gravel.	PID=0 Dry
5	1125	S-2	Macro	Direct push	95%	Grayish Brown		Silt, some clay, trace f-m sand + f gravel.	PID=0 Moist
				D.P.					
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 7' bgs. Geoprobe 6610DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-07

* ~ 6"

URS Corporation

TEST BORING LOG

BORING NO: SG-08
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1749 1st Ave.
GROUND ELEVATION:
DATE STARTED: 10-29-03
DATE FINISHED: 10-29-03
DRILLER: Joe S.
GEOLOGIST: Ned Benn
REVIEWED BY:

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1220	S-1	Macro	Direct Push	50%	Brown	Medium Dense	~3" Concrete (Weathered concrete)* Silt + clay, some f-m sand, tr. f-m gravel.	PID=0 Dry
5	1225	S-2	Macro	Direct Push	95%			clay, some silt, tr. f-m sand + f-m gravel.	PID=0 Moist
				P. P.			Dense		
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6613 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-08

* ~6"

URS Corporation

TEST BORING LOG

BORING NO: SG-09
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 332/334 E. 91st (EB)
GROUND ELEVATION:
DATE STARTED: 10-29-03
DATE FINISHED: 10-29-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'±			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1345	S-1	Macro	Direct push	40%	Greenish Brown	Medium Dense	~3" Concrete / Weathered concrete & silt + f-m sand, some Dry brick, tr. f-m gravel	PID = 0
5	1350	S-2	Macro	Direct push	45%	↓	↓	Silt + f-m sand, some brick + f-m gravel, tr. clay	PID = 0 Moist
				D. P.					
10									
								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

PROJECT NO. 11173261.00001
BORING NO. SG-09

* ~ 6"

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th St	BORING NO: SG-10
CLIENT: NYDEC	SHEET: 1 of 1
BORING CONTRACTOR: Zebra	JOB NO.: 11173261.00001
GROUNDWATER:	BORING LOCATION: 320 E. 91st
	GROUND ELEVATION:
	DATE STARTED: 10-29-03
	DATE FINISHED: 10-29-03
	DRILLER: Joe S.
	GEOLOGIST: Ned Berry
	REVIEWED BY:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		MacroCore		
DIA.		1.5"		
WT.		(Direct		
FALL	4'	Push)		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1425	S-1	Macro	Direct Push	35%	light brown	Medium Dense	~3" Concrete (~6" weathered concrete) Silt + f-m sand, some f-c gravel, tr. brick	PID=0 DRY
5	1430	S-2	Macro	Direct Push	50%			Silt + f-m sand some f-c gravel + brick, trace clay	PID=0 moist
				P.P.					
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flush mount) stainless steel vapor sampling implant anchored at 8' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-10

URS Corporation

TEST BORING LOG

BORING NO: SG-11
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 306-8 E. 91 St.
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 5th Avenue + 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:				CAS.	SAMPLER	CORE	TUBE
DATE	TIME	LEVEL	TYPE	TYPE	Macrocore		
				DIA.	1.5"		
				WT.	(Direct		
				FALL	4' Push)		
				* POCKET PENETROMETER READING			

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0820	S-1	Macro	direct push	35%	Dark Brown	Medium Dense	~3" Concrete (~6" weathered concrete) moist f-m sand, some silt + f-m gravel, tr. bricks.	PID=0
5	0825	S-2	Macro	direct push	40%			f-m sand, some silt + f-m gravel, tr. C micaceous gravel.	PID=0 moist
				D. T.					
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs.
Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-11

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

BORING NO: SG-12
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 305/307E.91st.
GROUND ELEVATION: (E6)
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	SAMPLE ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	0900	S-1	Macro	Direct Push	60%	Brown	Medium Dense	~1/4" concrete (~6" weathered conc.) f-m sand + silt, some f gravel; tr.	PID=0 Dry m gravel
5	0905	S-2	Macro	Direct Push	45%		Very Dense	f-m sand + silt, some f-m gravel trace concrete.	PID=0, Dry
10								EOB @ 8'	
15									
20									
25									
30									

COMMENTS: set a 6" (flushmount) stainless steel vapor sampling implant at 6' bgs.

PROJECT NO. 11173261.00001
BORING NO. SG-12

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

BORING NO: SG-13
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 317 E. 91 St
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Neal Berry
REVIEWED BY:

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macro Core		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0950	S-1	Macro	Direct Push	50%	Brown	Medium Dense	~1/4" Concrete / (~6" weathered conc.) Dry f-m sand, some silt + f gravel, tr. ash + m gravel.	PID=0
5	0955	S-2	Macro	Direct Push	65%			f-m sand, some silt + f-m gravel, trace ash. Dry	PID=0 Dry
10								EOB @ 91	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel Vapor sampling implant anchored at 91 bgs. Geogrove 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-13

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue & 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

BORING NO: SG-14 (Run 1)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 323(?)E.915 *
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Charlie G.
GEOLOGIST: Ned Berry
REVIEWED BY:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct		
FALL	4'	Push)		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1010	S-1	Macro	dirt / rock	0%	Dark Brown	Dense	~3" Concrete (~6" weathered conc.) VOID	(no recovery)
5	1015	S-2	Macro	dirt / rock	13%			f-m sand + f-c gravel, some ash.	PID = 0 Dry
10								Refusal @ 5'	
15									
20									
25									
30									

COMMENTS: Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-14

* ~2' South of Run 2 (Run 1)

URS Corporation

TEST BORING LOG

BORING NO: SG - 14 (Run 2)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 323(?) E. 91st *
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Neil Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'	↓		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1015	S-1	Macro	Direct push	13 ≈0%	Dark brown	Dense	~3" Concrete (~6" Weathered conc.) f-m sand, some f-m gravel.	PID=0 DRY
5	1020	S-2	Macro	Direct push	13%	↓	↓	f-m sand + f-m gravel, some ash.	PID=0 DRY
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (2" flush mount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-14

* in front of school on ~~south~~ north side of E. 91st (Run 2)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

BORING NO: SG-15 (Run 1)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1752 2nd Ave
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Charlie G.
GEOLOGIST: Ned Berger
REVIEWED BY:

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct		
FALL	4'	Push)		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	SAMPLE ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	1105	S-1	Macro	direct push	13%	Dark Brown	Dense	~3" Concrete (~6" weathered conc. f-m sand + silt, some f-m gravel.	PID = 0 Dry
5	1110	S-2	Macro	Direct push	5%			(Same as above)	
10								Refusal @ 6' (on concrete)	
15									
20									
25									
30									

COMMENTS: offset ~ 3' to west. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-15 (Run 1)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 70th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

BORING NO: SG-15 (Run 2)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: ≈ 1752 2nd Ave
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Charlie G.
GEOLOGIST: Ned Berry
REVIEWED BY:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4' ↓			

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1115	S-1	Macro	Direct Push	20%	Dark Brown	Dense	~3" Concrete (~6" weathered conc.) f-m sand + f-m gravel, some silt + C gravel.	PID = 0 Dry
5	1120	S-2	Macro	Direct Push	5%	↓	↓	(Same as above)	
10								Refusal @ 4'	
15									
20									
25									
30									

COMMENTS: Offset ~ 3' west + ~3' south. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-15 (Run 2)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

BORING NO: SG-15 (Run 3)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1752 2nd Ave.
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1125	S-1	Macro	Direct Push	15%	Dark Brown	Dense	~3" Concrete (~6" weathered conc.) f-m sand + f gravel, some silt + m-c gravel.	PID = 0 moist
5	1130	S-2	Macro	Direct Push	10%			f-m sand + f gravel, some silt + concrete.	PID=0 moist
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-15

(Run 3)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th St
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct		
FALL	4'	Push)		

* POCKET PENETROMETER READING

BORING NO: SG-16
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1736 2nd Ave
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Ned Derr
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	1305	S-1	Macro	direct push	50%	Brown	Medium Dense	~3" Concrete (~6" weathered conc.) Silt, some f-m sand + f-m gravel, tr. clay.	PID=0 Dry
5	1310	S-2	Macro	direct push	25%	↓	slightly Dense	Silt + clay, some f-m sand, trace f gravel.	PID=0 Dry
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9'bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-16

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue & 20th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		(Direct Push)		
FALL	4'			

* POCKET PENETROMETER READING

BORING NO: SG-17
SHEET: 1 of 1
JOB NO.: 11179261.00001 (66)
BORING LOCATION: 746(?)2 2nd Ave
GROUND ELEVATION:
DATE STARTED: 10-30-03
DATE FINISHED: 10-30-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1350	S-1	Macro	direct push	20%	Dark Brown	Dense	~3" Concrete (~6" weathered conc.) f-m sand + silt, some f-c gravel, tr. rec gravel.	PID=0 Dry
5	1355	S-2	Macro	direct push	15%	↓	Medium Dense	f-m sand + f-c gravel, trace silt + concrete.	PID=0 Dry
10									
								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs.

PROJECT NO. 11179261.00001
BORING NO. SG-17

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macro core		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

BORING NO: SG-18 (Run 1)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1748 1st AVE.
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Ned Derry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0915	S-1	Macro	direct push	70%	Grayish Brown	Dense	~3" Concrete (~6" weathered conc.) fm sand, some f gravel + silt, tr. csh + m gravel.	PID = 0 Dry
5								Refusal @ 3.5'	
10									
15									
20									
25									
30									

COMMENTS: Offset ~ 3' to the south. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-18

(Run 1)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

BORING NO: SG-18 (Run 2)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1748 1st Ave.
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0925	S-1	Macro	Direct push	90%	Grayish Brown	Dense	~3" Concrete (~6" weathered conc.) f-m sand + silt, some f gravel, tr. ash + m gravel.	PID = 0 Dry
5								Refusal @ 4'	
10									
15									
20									
25									
30									

COMMENTS: offset ~ 1.5' to east + ~ 1.5' to north.

PROJECT NO. 11173261.00001
BORING NO. SG-18 (Run 2)

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

BORING NO: SG-18 (Run 3)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 1748 1st Ave.
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Neil Berry
REVIEWED BY:

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		41		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0935	S-1	Macro	direct push	90%	grayish brown	Dense	~3" Concrete (~6" weathered conc.) f-m sand, some silt + f gravel, tr. m gravel + ash.	PID=0 DRY
5	0945	S-2	Macro	Direct push	NA		very Dense	(No Recovery)	
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 7½' bgs.

PROJECT NO. 11173261.00001
BORING NO. SG-18

Geoprobe 6610 DT drill rig.

(Run 3)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + E. 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

BORING NO: SG-19 (RUN 1)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 402 E. 90 St.
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	NO.	TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1145	S-1	Macro	~~direct push~~	75%	light brown (to 6')	Medium Dense	~3" concrete (~6" weathered conc.) F-m sand, some silt, tr. f gravel + ash.	PID=0 Dry
5	1155	S-2	Macro	~~direct push~~	90%	Dark brown	↓	f-m sand, some silt, tr F-m gravel + pea gravel.	PID=0 Moist
10								Refusal @ ~6.5'	
15									
20									
25									
30									

COMMENTS: Offset ~3' to east. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-19

(Run 1)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + E. 90 St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

BORING NO: SB-19 (Run 2)
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 402 E. 90 st.
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Neal Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1215	S-1	Macro	direct push	75%	light brown (to 6')	Medium Dense	~3" Concrete / (~6" weathered conc.) f-m sand, some silt, tr. f gravel + ash.	PID = 0 dry
5	1225	S-2	Macro	direct push	65%	Dark Brown	↓	f-m sand, some silt, tr. f-m gravel + brick	PID = 0 moist + gravel.
								EOB @ 6.5'	
10									
15									
20									
25									
30									

COMMENTS: Offset ~ 3' to northeast (refusal at ~1'). Set a 6" (flush mount) stainless steel vapor sampling implant anchored at ~6.5' bgs. Geoprobe 6610DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SB-19 (Run 2)

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + E. 90th street
CLIENT: NYDEC
BORING CONTRACTOR: ZEBRA
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macro core		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

BORING NO: SG-20
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: (across from) 435 E. 90 St
GROUND ELEVATION:
DATE STARTED: 10-31-03
DATE FINISHED: 10-31-03
DRILLER: Joe S.
GEOLOGIST: Ned Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	1315	S-1	Macro	direct push	60%	Brown	Medium Dense	~3" Concrete (~6" reinforced conc.) f-m sand, some silt + f gravel, tr. brick	PID=0 Dry
5	1320	S-2	Macro	direct push	50%	↓	↓	(Same as above)	PID=0 Moist
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9'bgs.

PROJECT NO. (11173261.00001
BORING NO. SG-20

Geoprobe 6610 DT drill rig.

URS Corporation

TEST BORING LOG

BORING NO: SG-21
SHEET: 1 of 1
JOB NO.: 11732261.00001
BORING LOCATION: 417 E. 90 st
GROUND ELEVATION:
DATE STARTED: 11-3-03
DATE FINISHED: 11-3-03
DRILLER: Charlie G.
GEOLOGIST: Ned Berry
REVIEWED BY:

PROJECT: 1st Avenue + 90th street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macro core		
DIA.		1.5"		
WT.		D.P.		
FALL		41		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0805	S-1	Macro	Direct Push	60%	Dark Brown	Medium Dense	~3" Concrete (~6" weathered conc.) f-m sand, some silt + f gravel, tr. m gravel + conc.	PID=0 Dry
5	0810	S-2	Macro	Direct Push	60%	↓	Dense	f-m sand + f-m gravel, some concrete	PID=0 Dry
								EOB @ 7'	
10									
15									
20									
25									
30									

COMMENTS: Set a 6" (flush mount) stainless steel vapor sampling implant anchored at 7' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11732261.00001
BORING NO. SG-21

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		41		

* POCKET PENETROMETER READING

BORING NO: SG-22
SHEET: 1 of 1
JOB NO.: 117326 1.00001
BORING LOCATION: 407 E. 90th St
GROUND ELEVATION:
DATE STARTED: 11-3-03
DATE FINISHED: 11-3-03
DRILLER: Charlie G.
GEOLOGIST: Neel Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	0850	S-1	Macro	Direct Push	55%	Brown	Medium Dense	~ 2" Concrete (~ 6" weathered conc.) f-m sand, some f-m gravel, tr. silt	PID=0 Dry
5	0855	S-2	Macro	Direct Push	70%	↓	↓	f-m sand, some f-m gravel, tr. silt + brick	PID=0 Dry
10								EOB @ 6.5'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at ~ 5.5', Geoprobe 6610 DT drill rig.

PROJECT NO. 117326 1.00001
BORING NO. SG-22

URS Corporation

TEST BORING LOG

PROJECT: 1st Avenue + 90th Street
CLIENT: NYDEC
BORING CONTRACTOR: Zebra
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		41		

* POCKET PENETROMETER READING

BORING NO: SB-23
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 423 E. 90th St.
GROUND ELEVATION:
DATE STARTED: 11-3-03
DATE FINISHED: 11-3-03
DRILLER: Charlie G.
GEOLOGIST: Neal Berry
REVIEWED BY:

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	REMARKS
	0920	S-1	Macro	Direct Push	75%	Brown / Dark Brown	Medium Dense	~3" Concrete / (~6" weathered conc.) Dry f-m sand, some silt + f-m gravel, tr. asph.	PID=0
5	0925	S-2	Macro	Direct Push	75%	Grayish Brown	Dense	f-m sand, some f gravel, tr. silt + m gravel.	PID=0
10								EOB @ 6.5'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at ~ 5.5' ugs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SB-23

URS Corporation

TEST BORING LOG

BORING NO: SG-24
SHEET: 1 of 1
JOB NO.: 11173261.00001
BORING LOCATION: 435 E. 90th st
GROUND ELEVATION:
DATE STARTED: 11-3-03
DATE FINISHED: 11-3-03
DRILLER: Charlie G.
GEOLOGIST: Ned Bera
REVIEWED BY:

PROJECT: 1st Avenue + 90th St.
CLIENT: NYDEC
BORING CONTRACTOR: Zebra

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Macrocore		
DIA.		1.5"		
WT.		D.P.		
FALL		4'		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE TIME	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"	ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	REMARKS
	0955	S-1	Mac Core	Direct Push	60%	Brown	Medium Dense	~3" Concrete	PID=0
								Silt, some f-m sand, tr. clay + f gravel. *	Moist
5	1000	S-2	Mac Core	Direct Push	65%			f-m sand + silt some f gravel, tr. roots.	PID=0
									Moist
10								EOB @ 9'	
15									
20									
25									
30									

COMMENTS: Set a 6" (flushmount) stainless steel vapor sampling implant anchored at 9' bgs. Geoprobe 6610 DT drill rig.

PROJECT NO. 11173261.00001
BORING NO. SG-24

* ~6" unthereed concrete.

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Sean T.

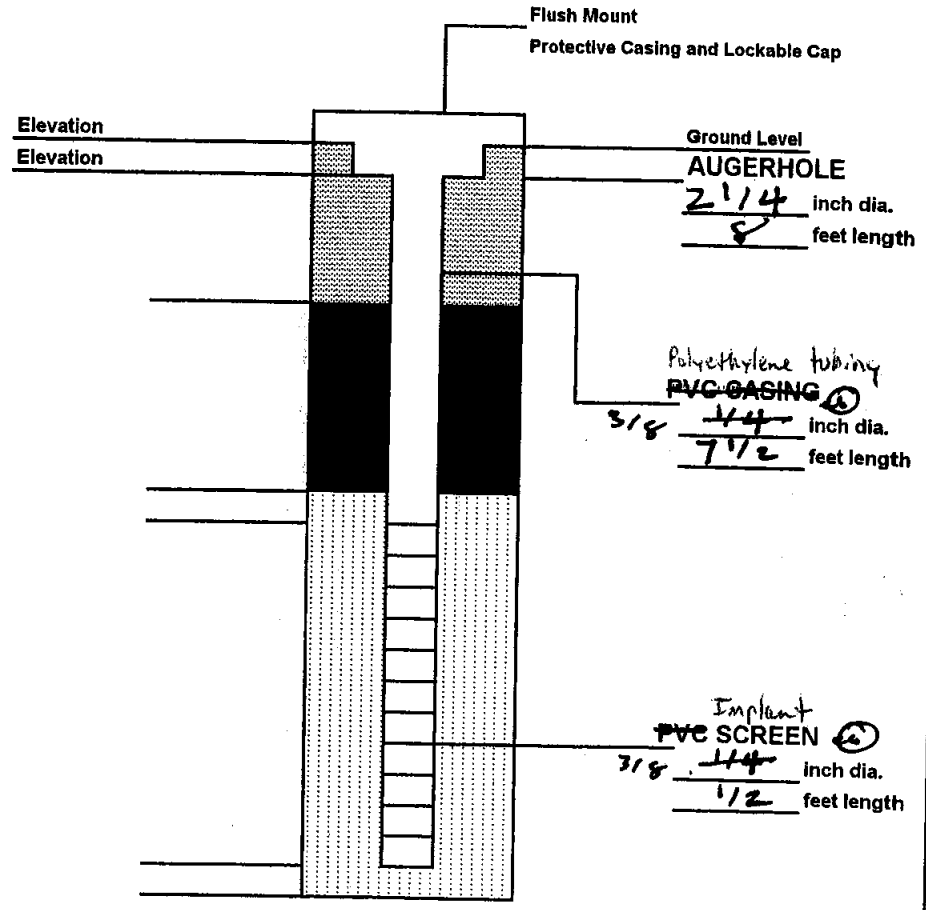
Rig Make/Model: Geoprobe 6610DT

Date: 10-28-03

GEOLOGIC LOG

Depth(ft.)	Description
	NA

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box (e6)	Type: ~~4" PVC~~ ~~1/4~~" 3/8" Stainless steel (e6)	Type: ~~#2 Sand~~ Setting: (Borehole Collapsed)
Monitor: ~~4" PVC~~ 1/4" polyethylene (3/8" O.D.)	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1' bgs

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 340 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-01

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Sean T.

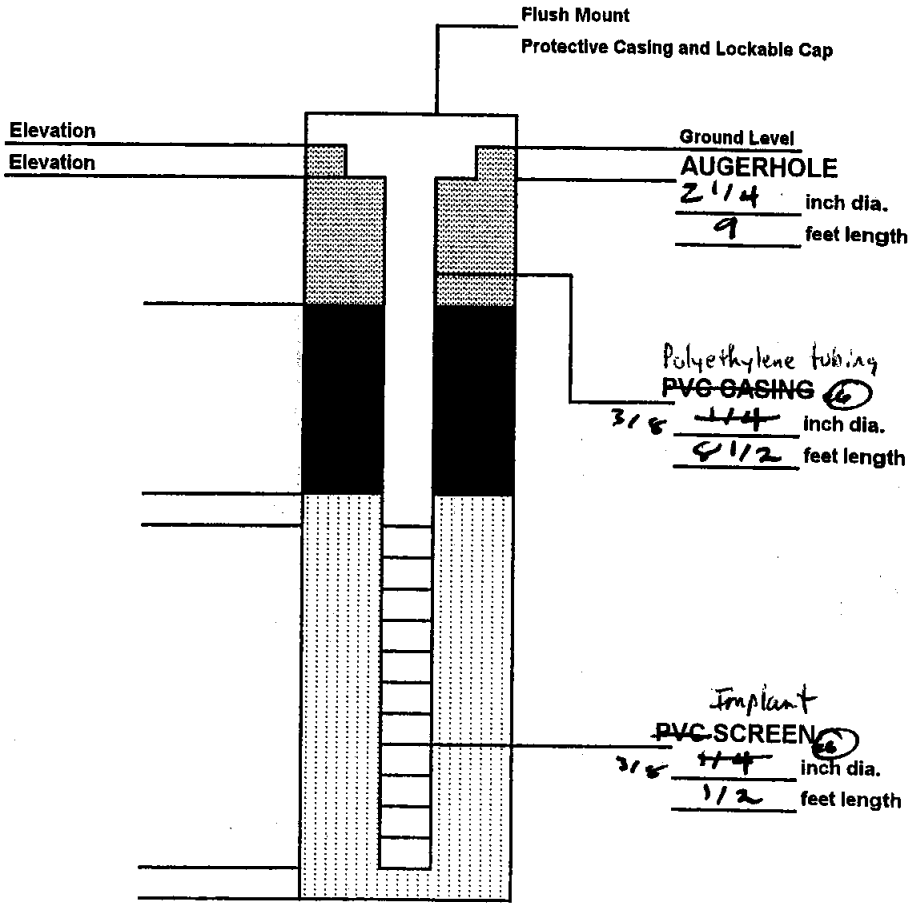
Rig Make/Model: Geoprobe 6610DT

Date: 10-28-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-c sand, some silt + f-m gravel
8	Silt, some f-m sand + f-m gravel, tr. c gravel + brick

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ (6) 1/4" stainless steel 3/8"	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ 1/4" polyethylene (3/8" O.D.)	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1' bgs

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 320 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-02

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Scott T.

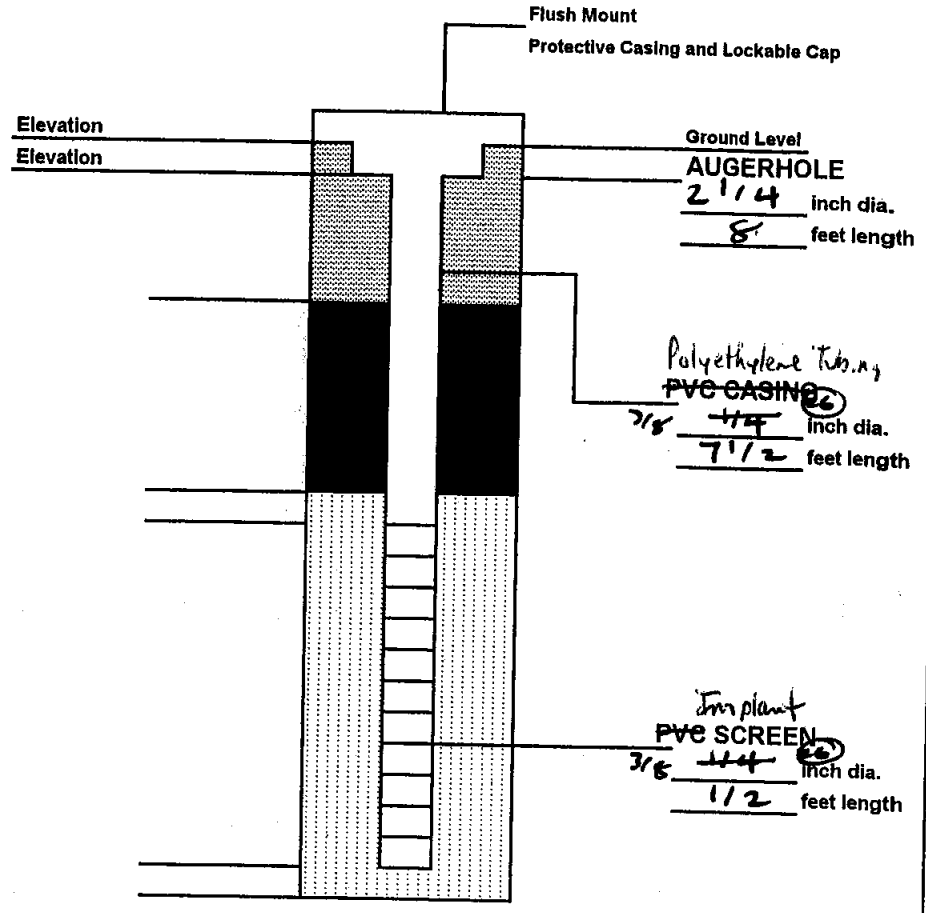
Rig Make/Model: Geoprobe 6610DT

Date: 10-28-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered concrete
4	f-m sand + f-c gravel, some silt, tr. brick + concrete
8	f-m sand + f-c gravel, some silt + concrete, tr. brick

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 1/4" 3/8" stainless steel	Type: #2 Sand Setting: 8' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 304 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-03

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Sean T.

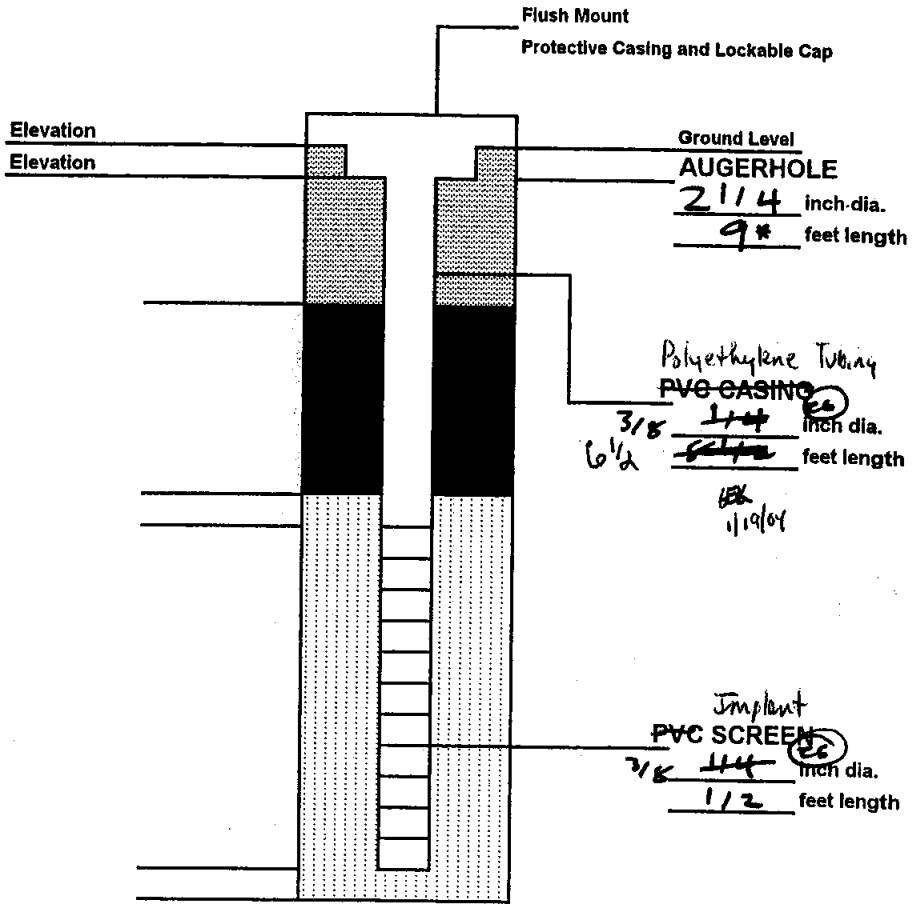
Rig Make/Model: Geoprobe 6610DT

Date: 10-28-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand + silt, some f-m gravel
8	f-m sand + silt, some f-m gravel

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 4" PVC 3/8" stainless steel	Type: #2 Sand Setting: 7' to 1 1/2'
Monitor: 4" PVC (3/8" O.D.) 1/4" polyethylene	Slot Size: .020"	SEAL MATERIAL GEK 1/19/04 Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

*Anchor for Implant set at 7' bgs.

GEK 1/19/04

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 363 E. 90th St.	Project No.: 111722261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-04

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

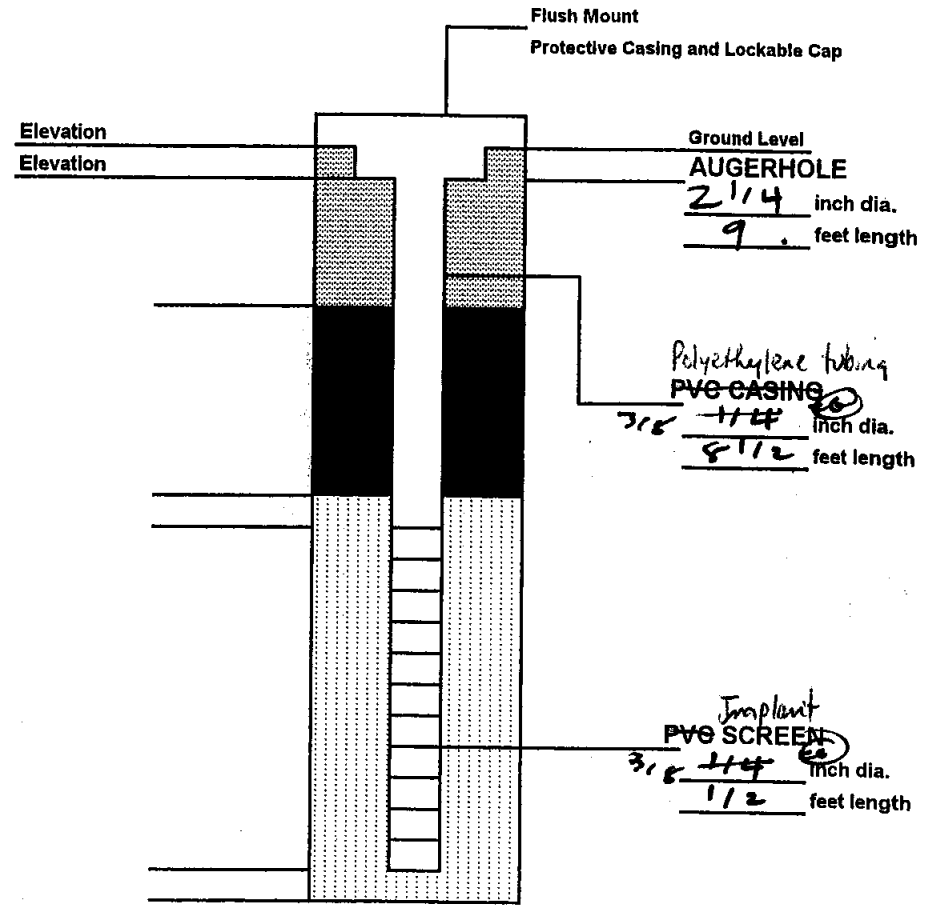
Rig Make/Model: Geoprobe 6610DT

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered concrete
4	f-c gravel, some f-c sand, tr. silt
8	silt, some f-m sand + f gravel, tr. m-c gravel + brick

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 4" PVC ~~1/4"~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 333 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-05

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

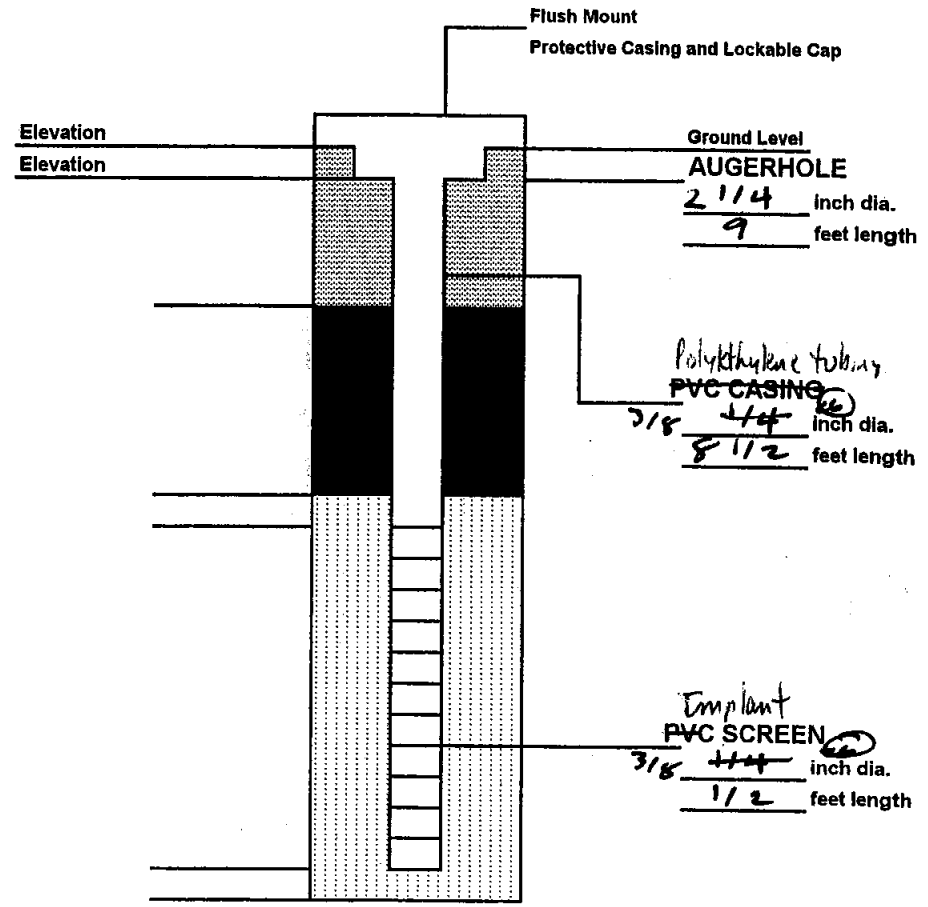
Rig Make/Model: Geoprobe 6610D

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand + f-m gravel, some silt, tr. c gravel + ash
8	silt, some f-m sand + f-m gravel, tr. c gravel + brick

DEPTH



WELL DESIGN

CASING MATERIAL

Surface: Steel grade box

Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene

SCREEN MATERIAL

Type: ~~4" PVC~~ ~~1/4"~~ 3/8" Stainless steel

Slot Size: ~~.020"~~

FILTER MATERIAL

Type: #2 Sand Setting: 9' to 1 1/2'

SEAL MATERIAL

Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 339 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-06

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

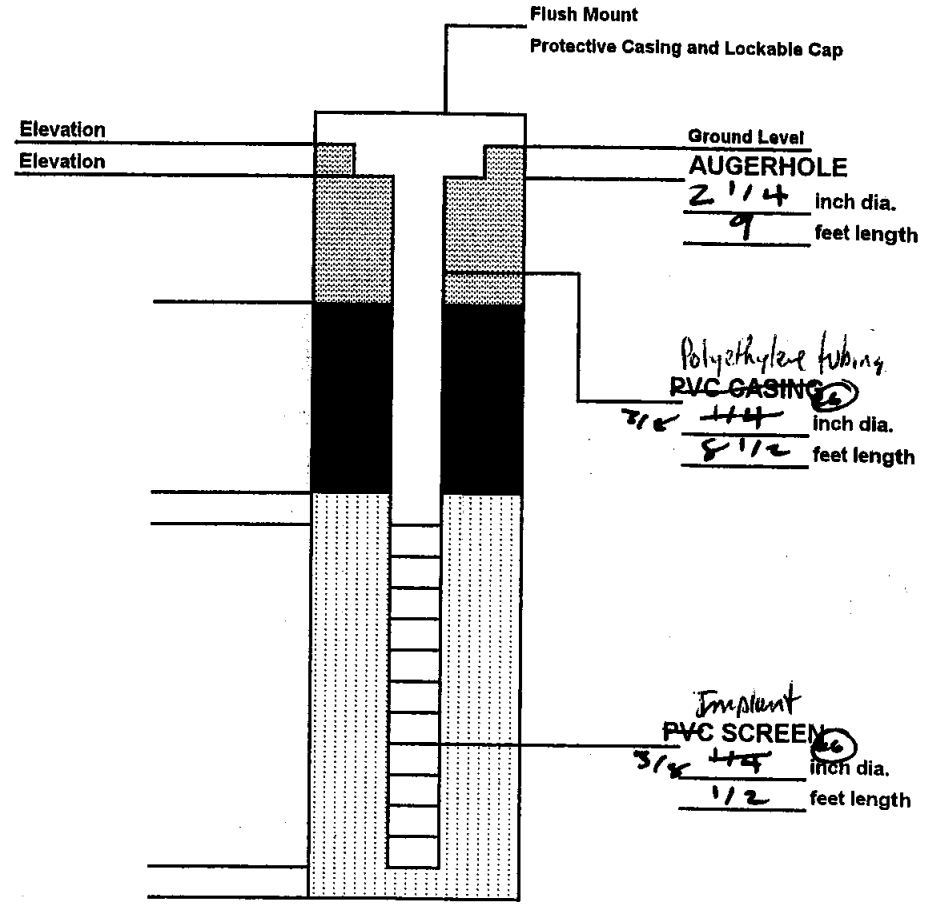
Rig Make/Model: Geoprobe 6610DT

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered concrete
4	Silt + f-m sand, some clay + f gravel, tr. m gravel
8	Silt, some clay, tr. f-m sand + f gravel

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 4" PVC ~~4" PVC~~ stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~ 3/8"	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 1745 1st Ave.	Project No.: 11173261.0000
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-07

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

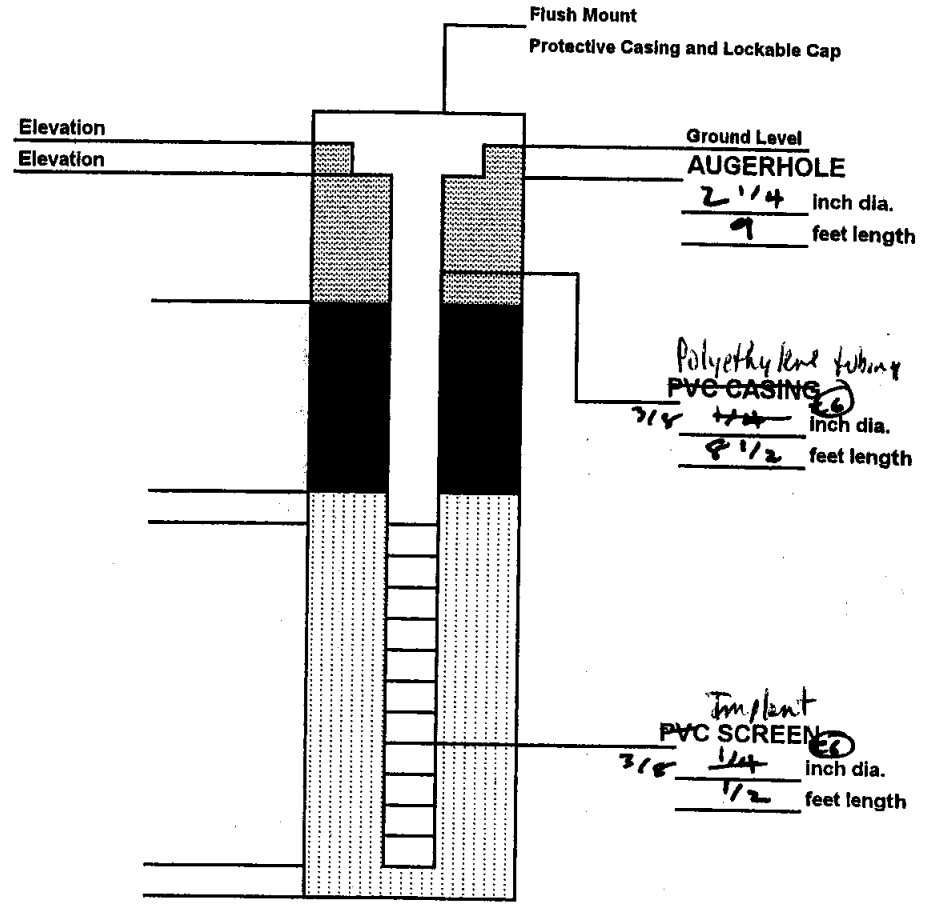
Rig Make/Model: Geoprobe 6610 DT

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered concrete
4	Silt + clay, some f-m sand, tr. f-m gravel.
8	clay, some silt, tr. f-m sand + f-m gravel.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: (6) ~~4" PVC~~ ~~1/4"~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 1749 1st Ave.	Project No.: 117326 1.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-08

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

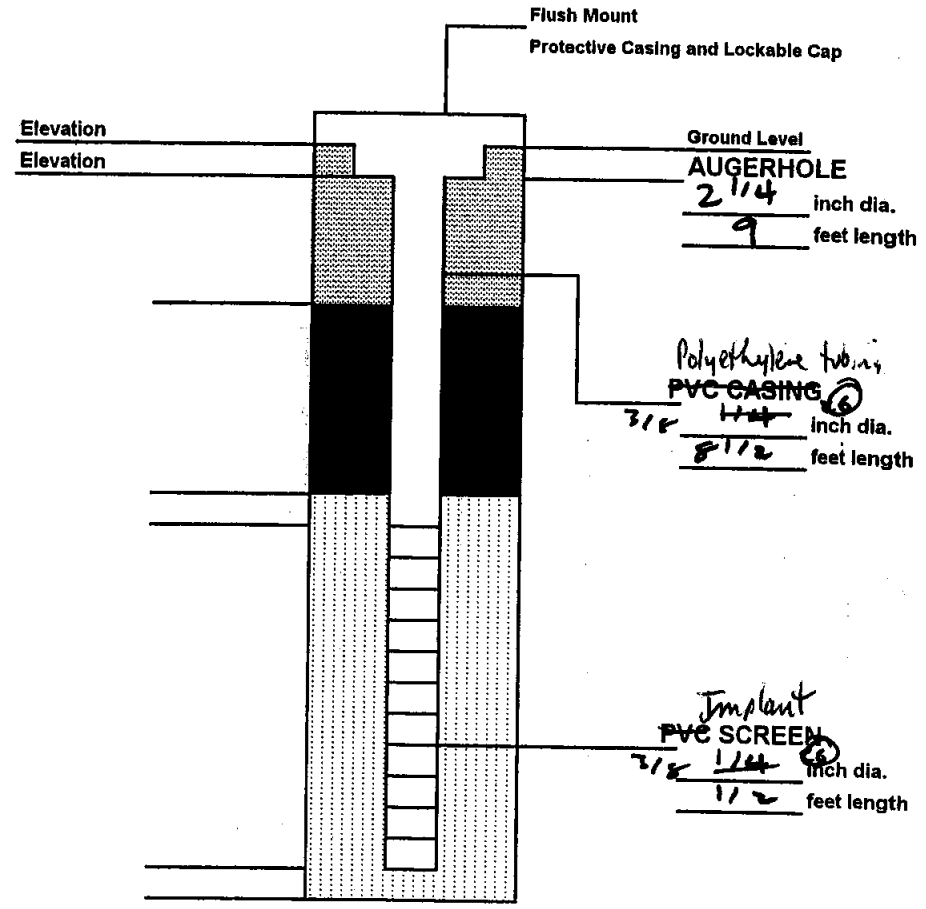
Rig Make/Model: Geoprobe 6610DT

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	silt + f-m sand, some brick, tr. f-m gravel.
8	silt + f-m sand, some brick + f-m gravel, tr. clay.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: 4" PVC 1/4" stainless steel 3/8"	Type: #2 Sand Setting: 9' to 11/2'
Monitor: 4" PVC (3/8" O.D.) 1/4" polyethylene	Slot Size: .020"	SEAL MATERIAL Type: Bentonite Setting: 11/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 332 E. 91 St	Project No.: 117326 1.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-09

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

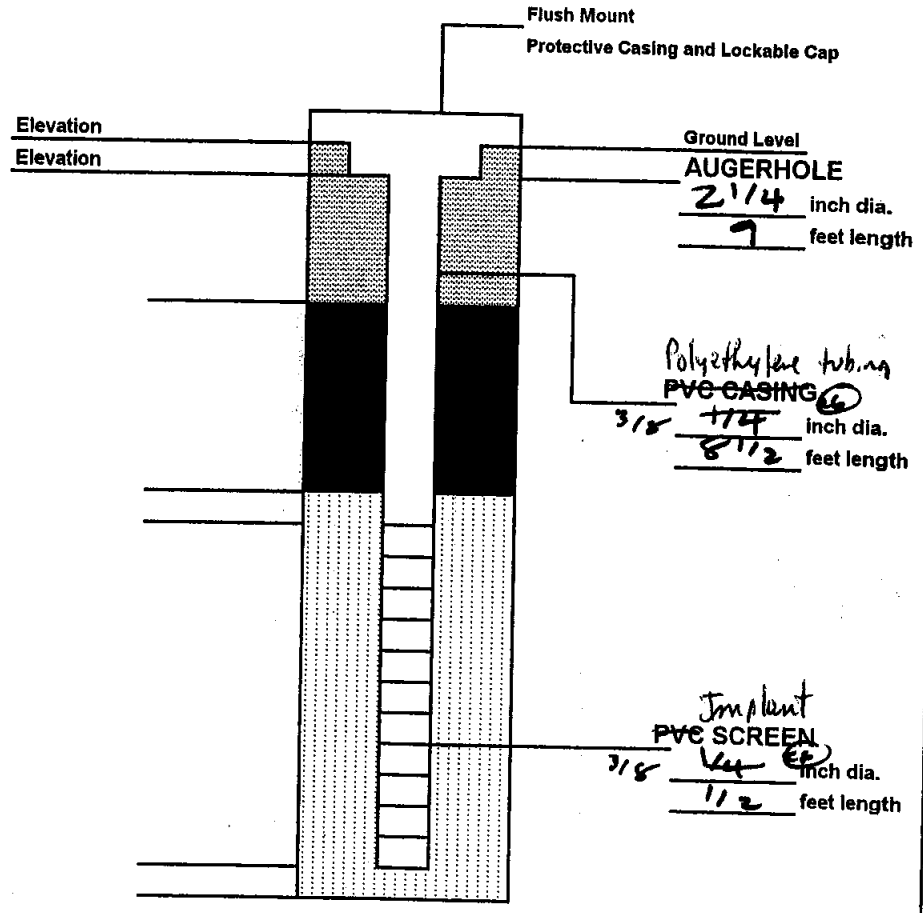
Rig Make/Model: Geoprobe 6610DT

Date: 10-29-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	Silt + f-m Sand, some f-c gravel, tr. brick.
8	Silt + f-m Sand, some f-c gravel + brick, tr. clay.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Type: (EP) ~~4" PVC~~ 1/4" 3/8" stainless steel Slot Size: ~~.020"~~	Type: #2 Sand Setting: 9' to 1 1/2' **SEAL MATERIAL** Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 320 E. 91 St.	Project No.: 11772261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-10

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

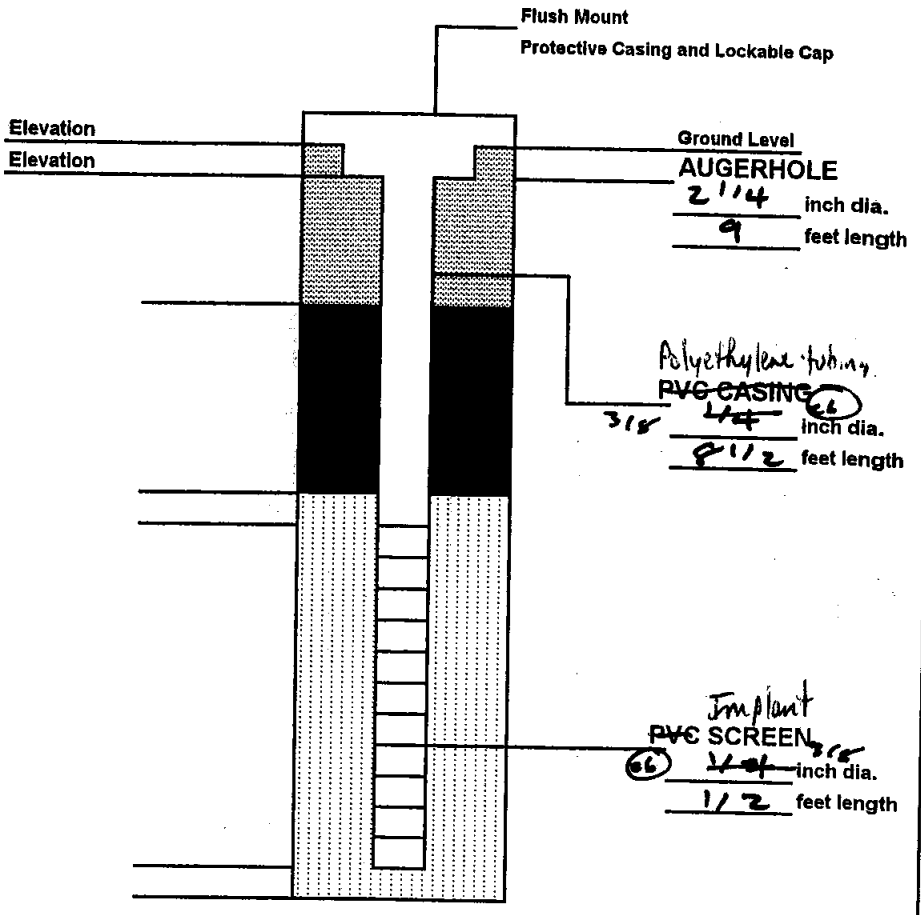
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered concrete
4	f-m sand, some silt + f-m gravel, tr. brick.
8	f-m sand some silt + f-m gravel, tr. micaceous gravel.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: (EE) ~~4" PVC~~ ~~1/4~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 306-8 E. 91 St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-11

DRILLING SUMMARY

Geologist: Neal Berry

Drilling Company: Zebra

Driller: Joe S.

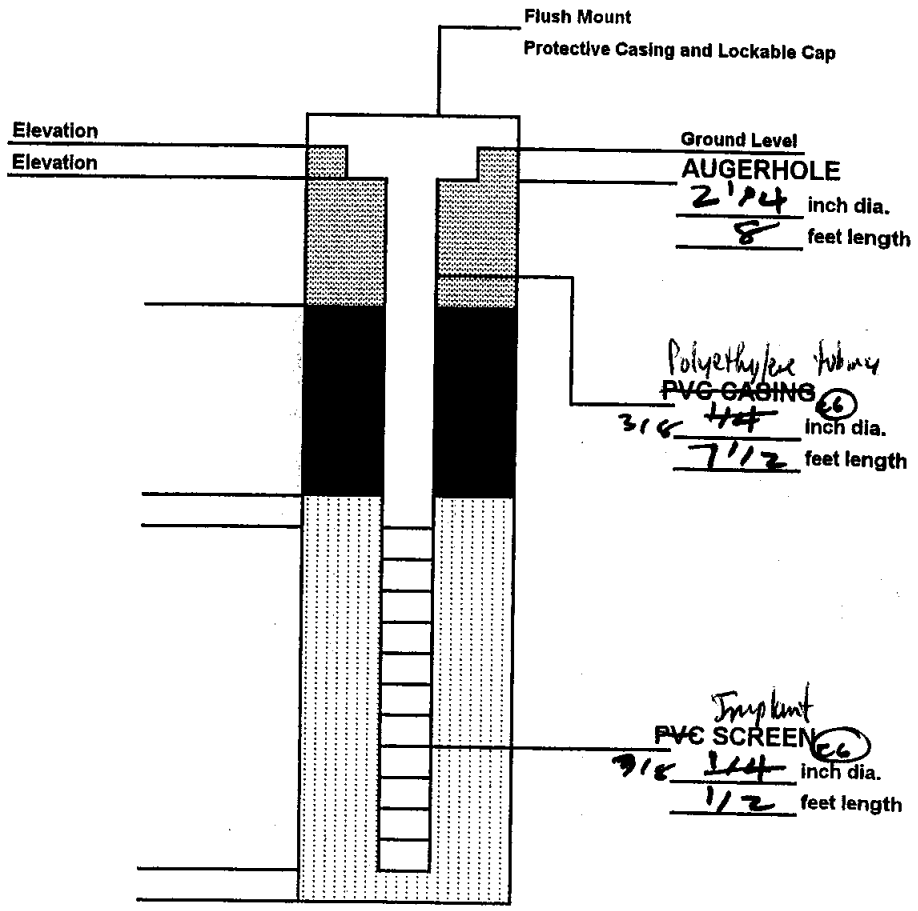
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand + silt, some f gravel, tr. m gravel.
8	f-m sand + silt, some f-m gravel, tr. concrete.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: #6 ~~4" PVC~~ 1/4" 3/8" stainless steel	Type: #2 Sand Setting: 8' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 305 E. 91 St.	Project No.: 11173261.0001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SB-12

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Geoprobe 6610 DT

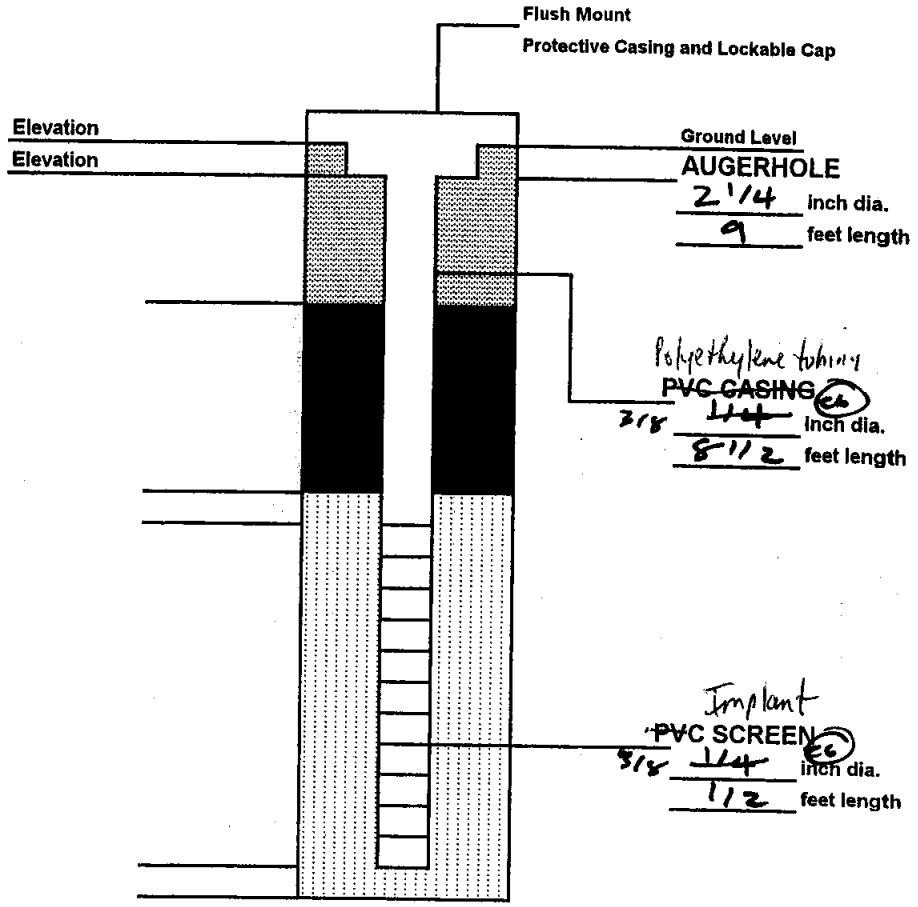
Rig Make/Model: Joe S.

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered concrete
4	f-m sand, some silt + f gravel, tr. ash + m gravel.
8	f-m sand, some silt + f-m gravel, tr. ash.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 317 E. 91 St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-13

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

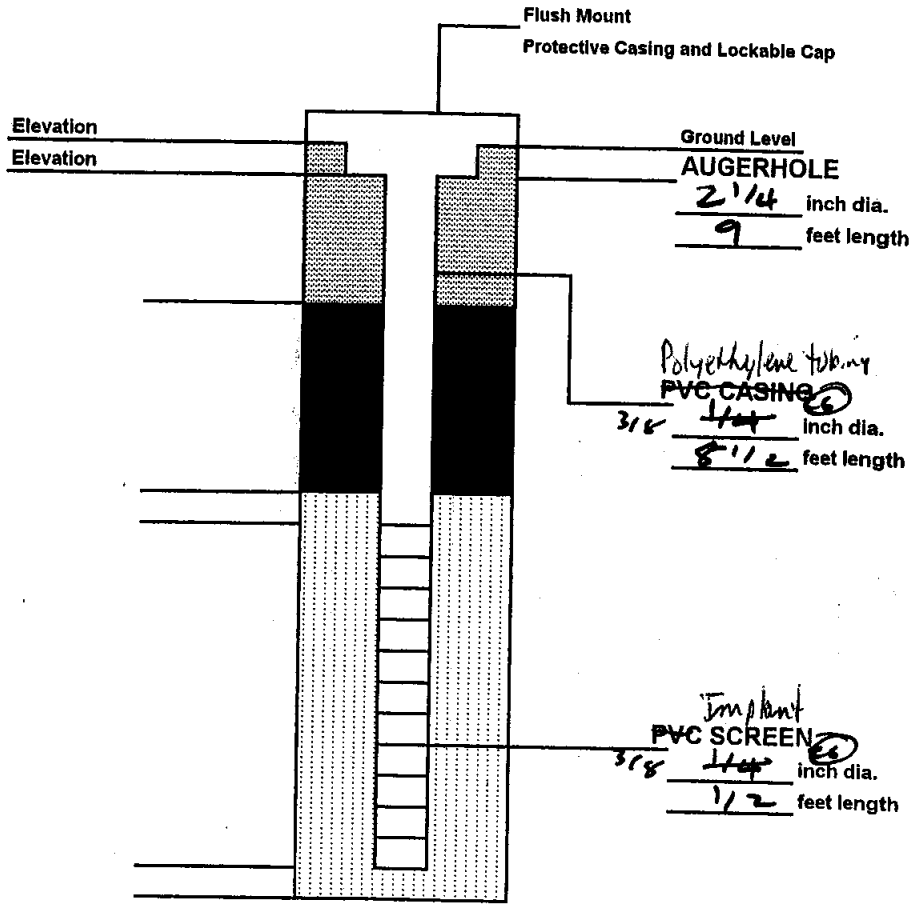
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered Concrete
4	f-m sand, some f-m gravel.
5	f-m sand + f-m gravel, some ash.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: (E6) ~~4" PVC~~ ~~1/4"~~ 3/8" Stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 323 E. 91 St.	Project No.: 111732 61.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SO-14

DRILLING SUMMARY

Geologist: Ned Terry

Drilling Company: Zebra

Driller: Joe S.

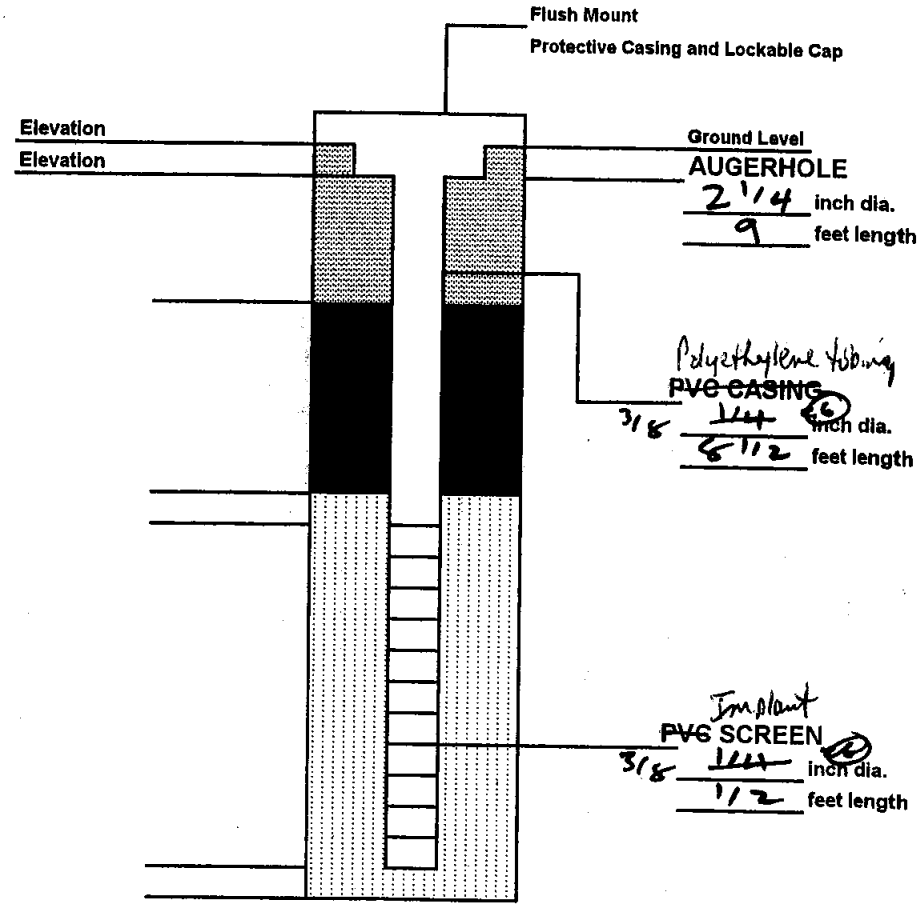
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered concrete
4	f-m sand + f gravel, some silt + m-c gravel.
5	f-m sand + f gravel, some silt + concrete.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: (6) ~~4" PVC~~ 1/4" 3/8" Stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 1752 2nd Ave.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-15

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

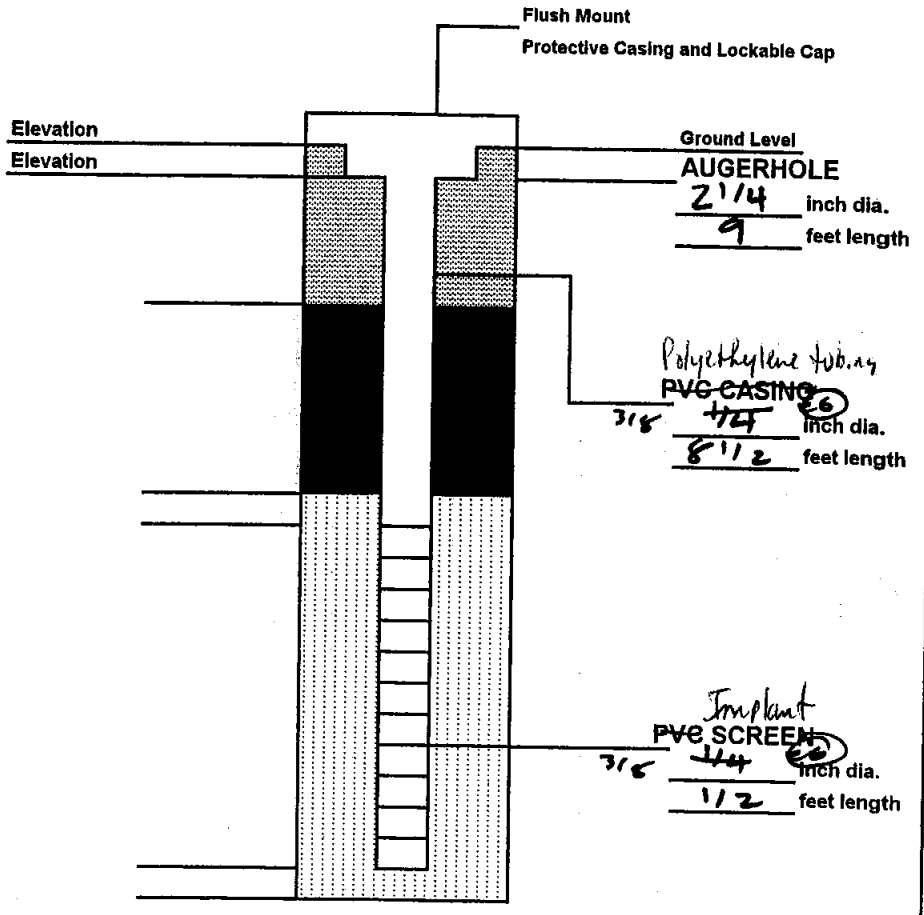
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	concrete
3/4	weathered concrete
4	silt, some f-m sand + f-m gravel, tr. clay.
8	silt + clay, some f-m sand, tr. f gravel.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: (E6) ~~4" PVC~~ ~~1/4"~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYSDEC	Location: 1736 2nd Ave.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SO-16

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

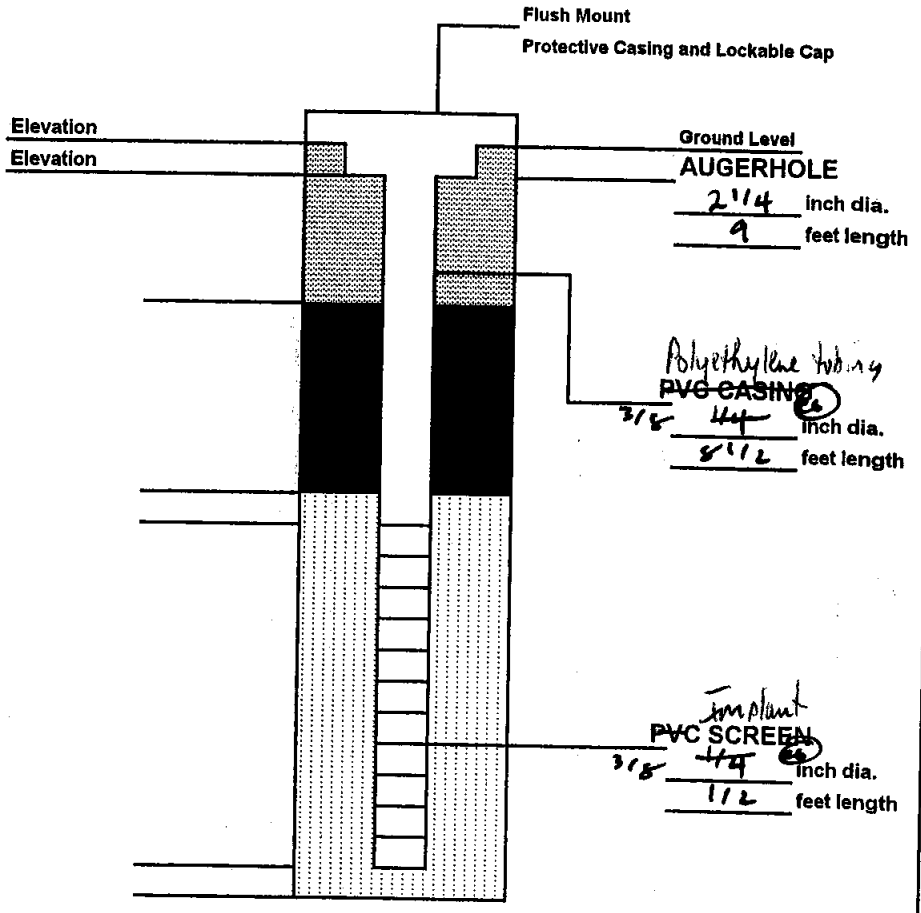
Rig Make/Model: Geoprobe 6610 DT

Date: 10-30-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered concrete
4	f-m sand + silt, some f-c gravel, tr. pea gravel.
8	f-m sand + f-c gravel, tr. silt + concrete.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 9 to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 1744 2nd Ave.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-17

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

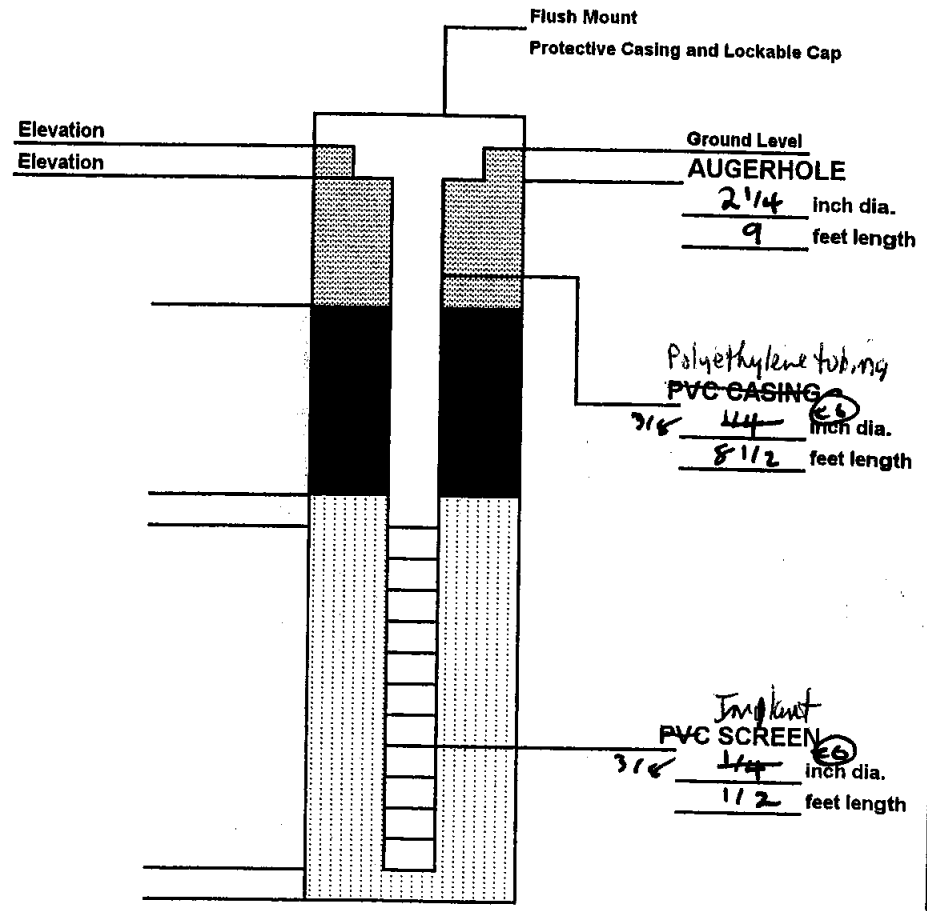
Rig Make/Model: Geoprobe 6610 DT

Date: 10-31-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand, some silt + f gravel, tr. m gravel + ash.
8	(No Recovery)

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (3/8" O.D.) 1/4" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 1748 1st Ave.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-18

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

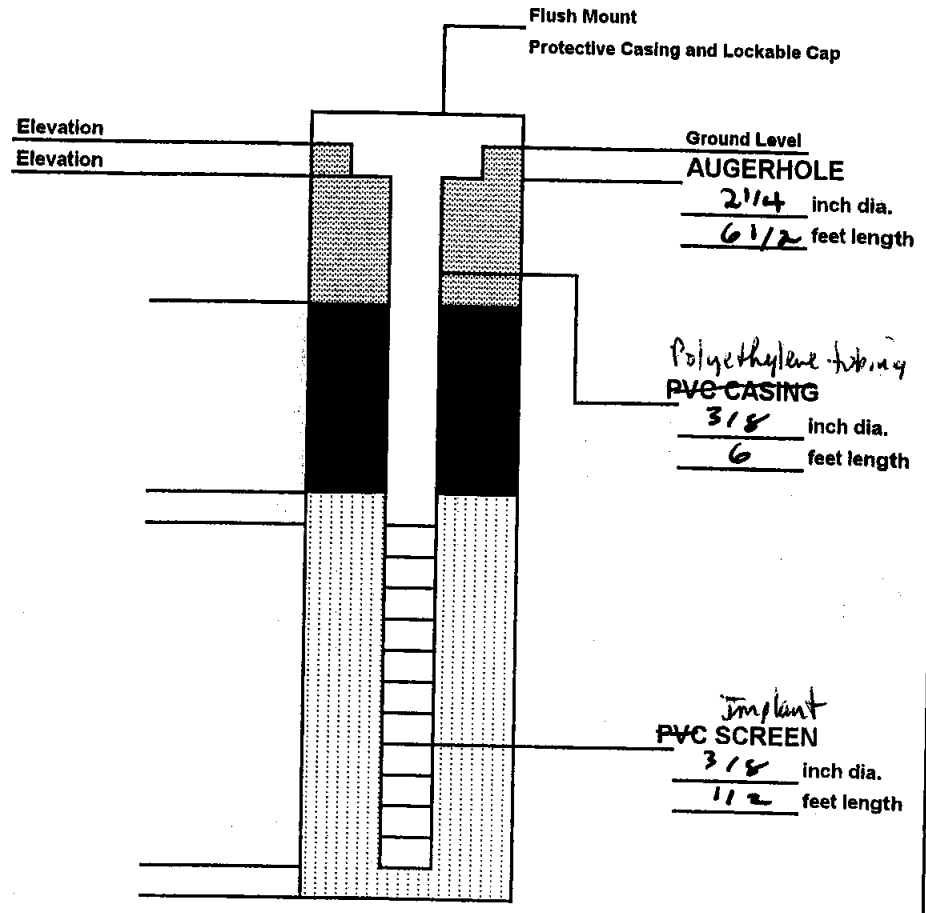
Rig Make/Model: Geoprobe 6610 DT

Date: 10-31-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	weathered Concrete
4	f-m sand, some silt to f gravel + ash.
8	f-m sand, some silt, to f-m gravel + pea gravel.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 6 1/2' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: .020"	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 402 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-19

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Joe S.

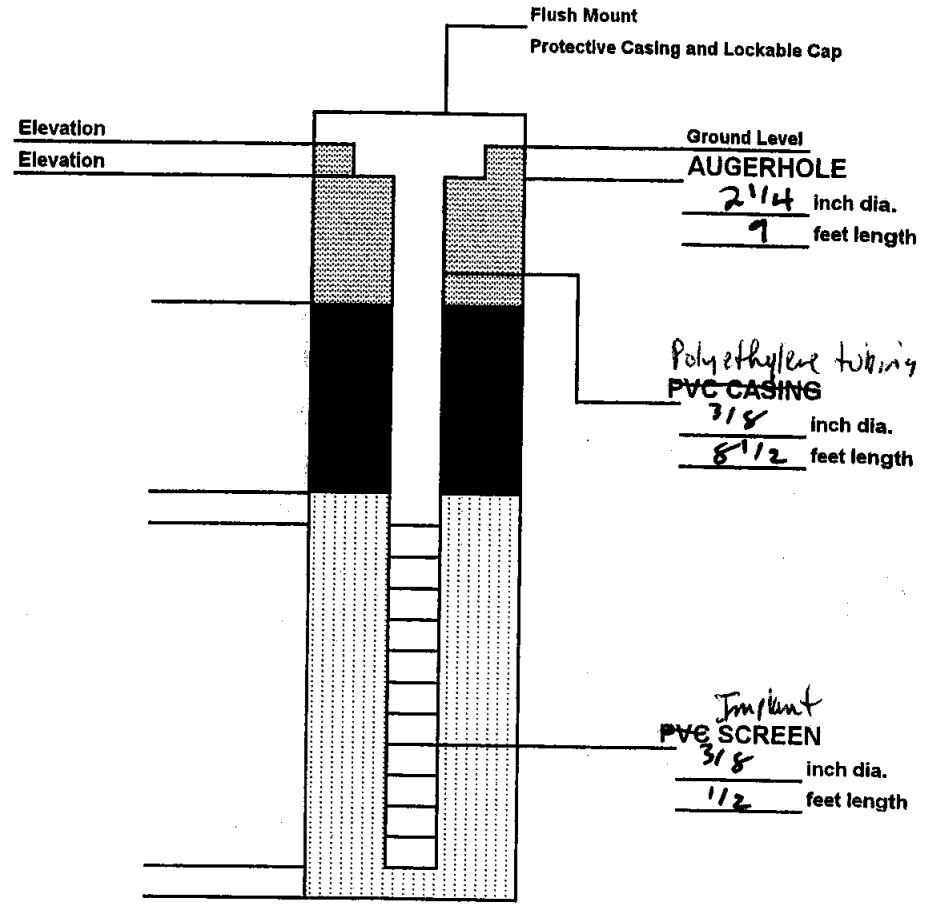
Rig Make/Model: Geoprobe 6610 DT

Date: 10-31-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	Fine sand, some silt + f gravel, to brick.
8	(same as above)

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: (across from) 435 E. 90 St	Project No.: 111732 61.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-20

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Charles G.

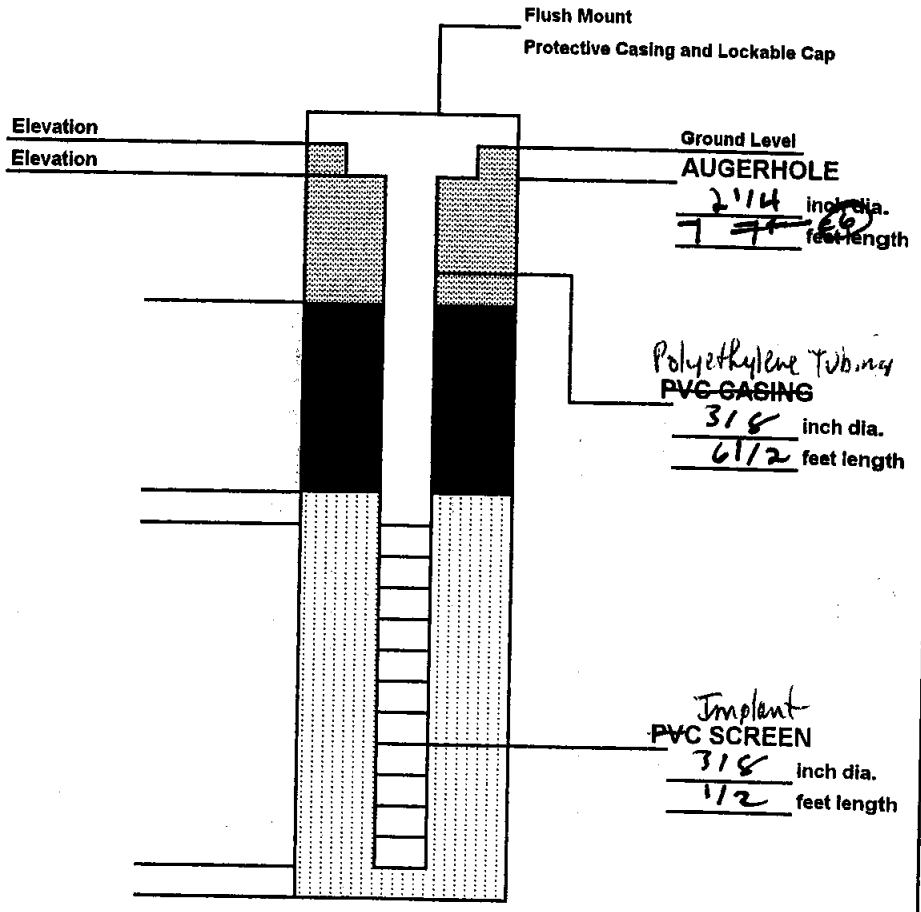
Rig Make/Model: Geoprobe 6610 DT

Date: 11-3-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand, some silt + f gravel, tr m gravel + concrete.
8	f-m sand + f-m gravel, some concrete.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 7' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 417 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-21

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Charles G.

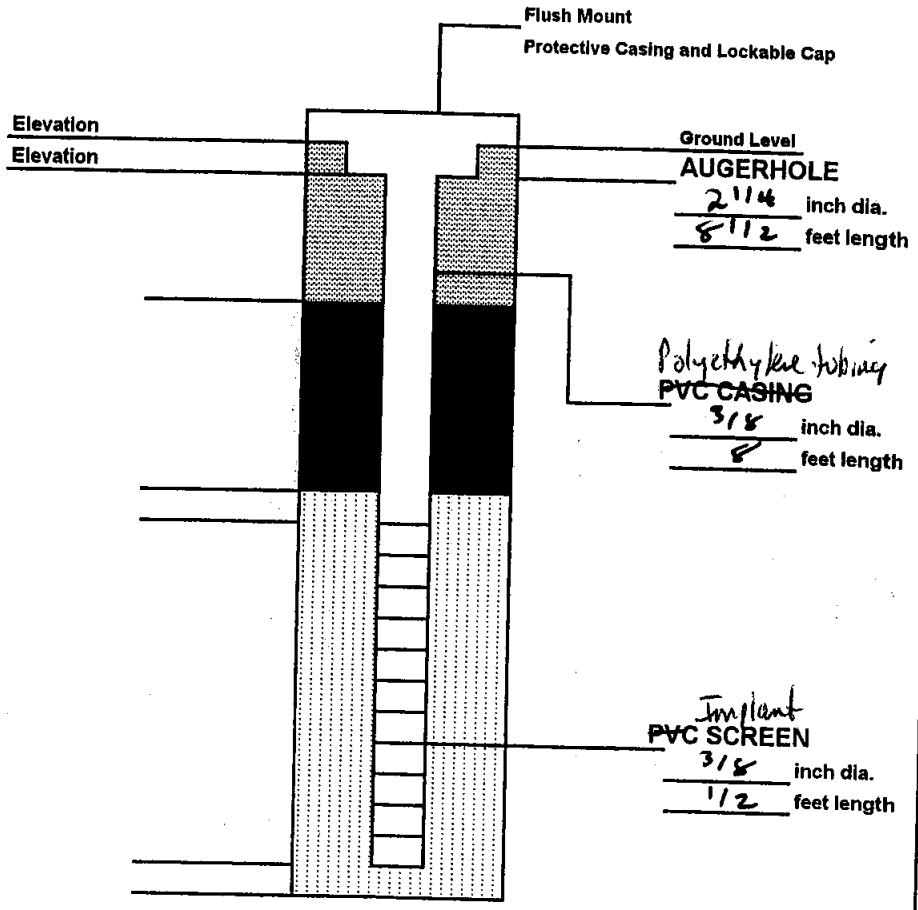
Rig Make/Model: Geoprobe 6610 DT

Date: 11-3-03

GEOLOGIC LOG

Depth(ft.)	Description
1/6	Concrete
2/3	Weathered Concrete
4	f-m sand, some f-m gravel, tr silt.
6	f-m sand, some f-m gravel, tr silt + brick.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 8 1/2' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 407 E. 90th St.	Project No.: 11173261.0001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-22

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Charles G.

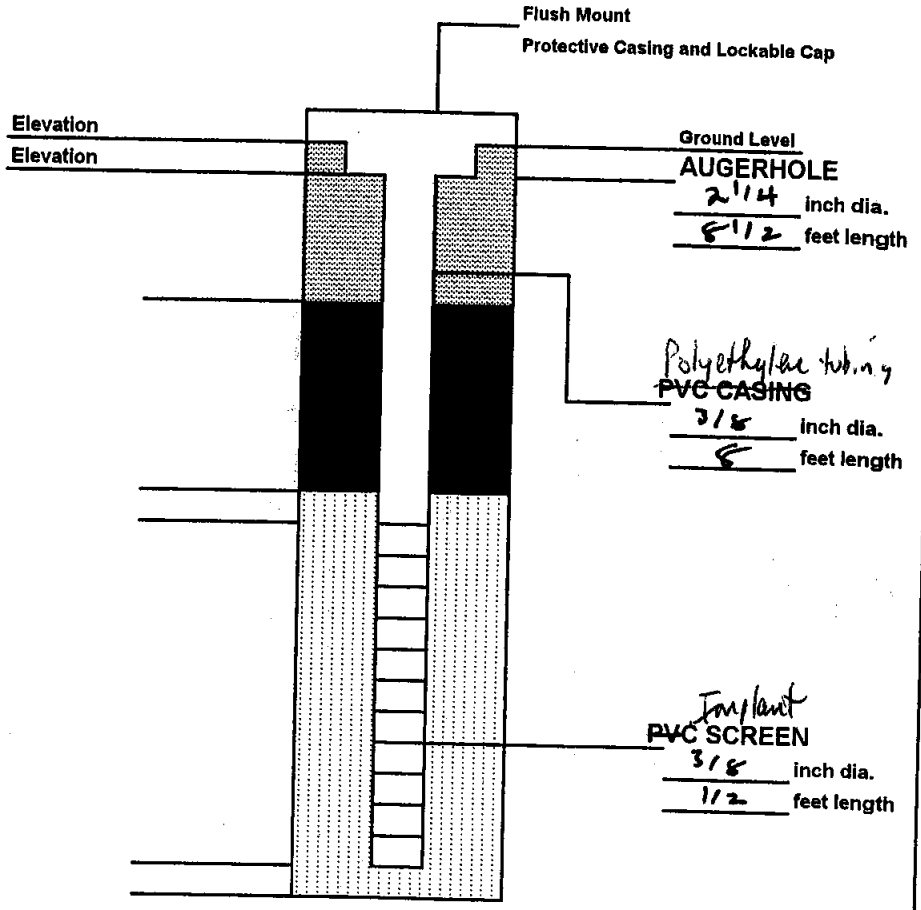
Rig Make/Model: Geoprobe 6610 DT

Date: 11-3-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	f-m sand, some silt + f-m gravel, tr ash.
8	f-m sand, some f gravel, silt + m gravel.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" stainless steel	Type: #2 Sand Setting: 8 1/2' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: ~~.020"~~	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 423 E. 90th St.	Project No.: 11973261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-23

DRILLING SUMMARY

Geologist: Ned Berry

Drilling Company: Zebra

Driller: Charles G.

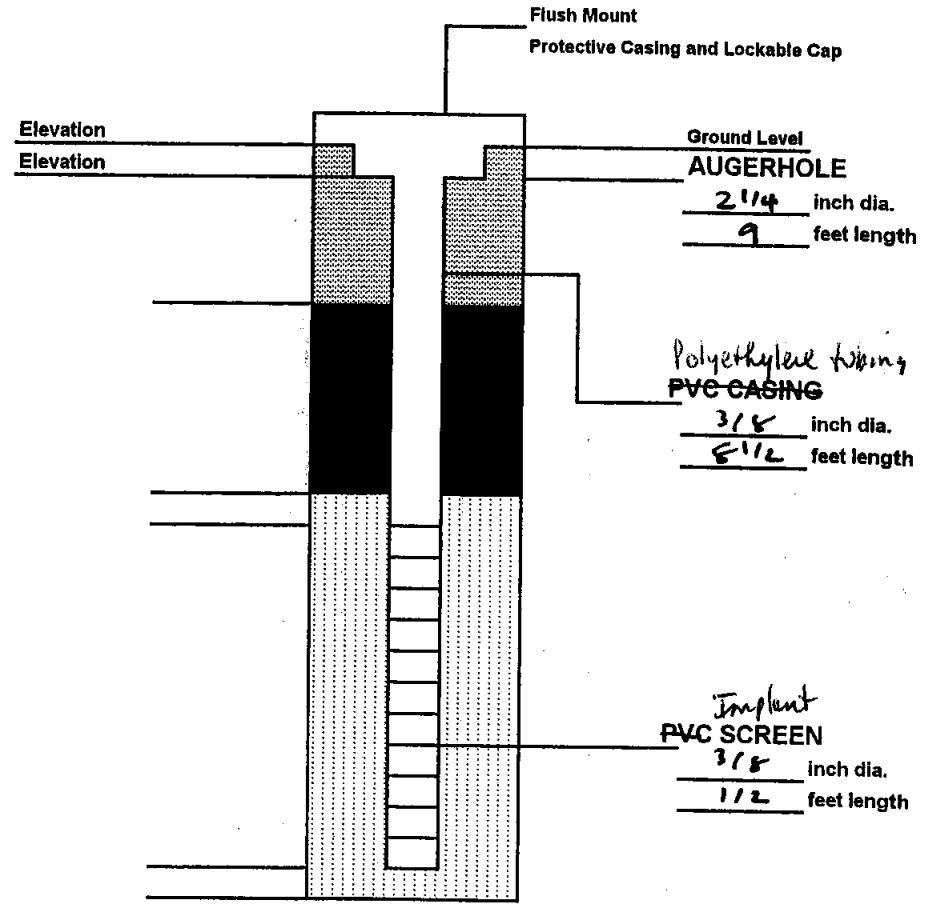
Rig Make/Model: Geoprobe 6610 DT

Date: 11-3-03

GEOLOGIC LOG

Depth(ft.)	Description
1/4	Concrete
3/4	Weathered Concrete
4	silt, some f-m sand, tr clay + f gravel.
8	f-m sand + silt, some f gravel, tr roots.

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: Steel grade box	Type: ~~4" PVC~~ 3/8" Stainless steel	Type: #2 Sand Setting: 9' to 1 1/2'
Monitor: ~~4" PVC~~ (1/4" I.D.) 3/8" polyethylene	Slot Size: .020"	SEAL MATERIAL Type: Bentonite Setting: 1 1/2' to 1'

COMMENTS:

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: NYDEC	Location: 435 E. 90th St.	Project No.: 11173261.00001
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	Well Number: SG-24

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 10-27-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0800	1200	4.0	Driller arrives (Charlize G.). Waiting for markouts. Work is cancelled for the day - driller says that the markouts will not be completed until later in the day. Driller leaves.
TOTAL PRODUCTIVE HOURS		4.0	LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:		MATERIALS / SUPPLIES:	
UNITS		UNITS	
4	Standby time (hrs)	1	Geoprobe 6610 DT
		1	Van + Trailer

WEATHER:

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date 10/27/03

ZEBRA Office LYNBROOK Crew Base _____ Z# _____ ZEBRA Unit #/Type #00

CLIENT / OFFICE URS. Client Project # _____

PROJECT NAME _____

PROJECT LOCATION CORNER of 90 ST + 15 AVE N.Y.C.

Client PM: _____ Client Site Contact: _____

ZEBRA PERSONNEL ON SITE:

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
LUKE RUSS	6:00	8:00	12:00				
CHARLES GREEN	6:00	8:00	12:00				
Other Personnel On Site:							

Description of Work (detailed):

STANDBY TIME (5:00 AM - 12:00 PM)
WAITED FOR MARKOUTS to come, never showed up.

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners		Liners	Drill Steel	
LB Liners		Liners	Core Drill	
_____ Expendable Points		Points	Generator	
_____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
_____" x 5' PVC Riser		PC's	Steam Genny	
_____ PVC points		Points	Rupe Pump	
_____ Flush Mount Well Box		Boxes	Water Level Indicator	
			P.I.D.	
			Trailer (Decon/Utility)	

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.

Field Verification:

ZEBRA: _____ CLIENT: (Print) _____

(Sign) _____

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 10-28-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0830	1000	1.5	Driller arrives (Sean T.).
			Waiting for markouts.
1000	1545	5.75	Set vapor wells SG-1, SG-2,
			SG-3 and SG-4.
			Driller leaves.
TOTAL PRODUCTIVE HOURS		7.25	LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:

UNITS	
1	Vapor Well SG-01 (9'bgs)
1	Vapor Well SG-02 (9'bgs)
1	Vapor Well SG-03 (8'bgs)
1	Vapor Well SG-04 (7'bgs)

MATERIALS / SUPPLIES:

UNITS	
1	Geoprobe 6610 DT
1	Van + Trailer
6	4' Macrocore Sampler
4	Expendable Point
4	6" Stainless Steel Implant
34'	Polyethylen Tubing (3/8 x 1/4)
3	Sand (Bag)
1/2	Bentonite (Bag)
1	Cement (Bag)
4	2" Flushmount Well Box

WEATHER:

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date _____

ZEBRA Office _____ Crew Base _____ Z# _____ ZEBRA Unit #/Type #20

CLIENT / OFFICE USRS Client Project # _____

PROJECT NAME 1st Ave + E 90th St

PROJECT LOCATION New York, NY

Client PM: Chuck Duse Client Site Contact: Alex Berry

ZEBRA PERSONNEL ON SITE:

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
Shaun Lissette	6:30	8:30	3:45				
Lucas Reiss	6:00	8:30	3:45				
Other Personnel On Site:							
Dave Hallington NYDEC							

Description of Work (detailed):

Installed 5S SV Implants to 9' BG
Collected soil samples from 0 +- 8'
waited for utility markouts to be complete (10:30 AM)

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners		Liners	Drill Steel	
LB Liners		Liners	Core Drill	
_____ Expendable Points		Points	Generator	
_____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
_____" x 5' PVC Riser		PC's	Steam Genny	
_____ PVC points		Points	Rupe Pump	
_____ Flush Mount Well Box		Boxes	Water Level Indicator	
			P.I.D.	
			Trailer (Decon/Utility)	

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.
4	6	6						4

Field Verification:

ZEBRA: _____ CLIENT: (Print) C. Dusel Jr.

(Sign) _____

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 10-29-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0800	0845	0.75	Driller arrives (Joe S.) and finds parking.
0845	1300	4.25	Set vapor wells SG-5, SG-6, SG-7 and SG-8.
1300	1330	0.5	Lunch.
1330	1545	2.25	Set vapor wells SG-9 and SG-10. Driller leaves.
TOTAL PRODUCTIVE HOURS		7.75	LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:

UNITS	
1	Vapor Well SG-05 (8'bgs)
1	Vapor Well SG-06 (9'bgs)
1	Vapor Well SG-07 (9'bgs)
1	Vapor Well SG-08 (9'bgs)
1	Vapor Well SG-09 (9'bgs)
1	Vapor Well SG-10 (8'bgs)

MATERIALS / SUPPLIES:

UNITS	
1	Geoprobe 6610 DT
1	Van + Trailer
12	4' Macrocore Sampler
6	Expendable Point
6	6" Stainless Steel Implant
55'	Polyethylene Tubing (3/4"x1/4")
6	Sand (Bag)
3/4	Bentonite (Bag)
1 1/2	Cement (Bag)
6	2" Flushmount Well Box

WEATHER: Rain, Slight / Moderate and variable wind

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date 10/29/03

ZEBRA Office Lynbrook Crew Base JS/CB Z# ____ ZEBRA Unit #/Type #20

CLIENT / OFFICE URS/Buffalo Client Project # ____

PROJECT NAME URS/NYC

PROJECT LOCATION 1 Ave + E90 st

Client PM: ____ Client Site Contact: Edmund R. Berry

ZEBRA PERSONNEL ON SITE:

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
Joseph Sakellis	6:00	8:00	3:45				
Chris Beratti	6:00	8:00	3:45				
Other Personnel On Site:							

Description of Work (detailed): 6 pts - soil samples and - Soil Vapor Extraction Wells

pt#1 Collect continuous soil samples to 8' bg - Install 1 soil Vapor extraction well to 8' bg.
pt#2 - " " " " " " - " " " " " " to 9' bg
pt#3 " " " " " " - " " " " " " to 9' bg
pt#4 " " " " " " - " " " " " " to 9' bg
pt#5 " " " " " " - " " " " " " to 9' bg
pt#6 " " " " " " - " " " " " " to 8' bg.

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners	12	Liners	Drill Steel (circled)	✓
LB Liners		Liners	Core Drill	
SV Expendable Points	6	Points	Generator	
____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
____" x 5' PVC Riser		PC's	Steam Genny	
____ PVC points		Points	Rupe Pump	
____ Flush Mount Well Box	6	Boxes	Water Level Indicator	
			P.I.D.	
Sand			Trailer (Decon/Utility)	
Bentonite				
Cement.				

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.
6	12	12	—	—	~~6~~	6	"	—

Field Verification:

ZEBRA: Joseph Sakellis (signature) CLIENT: (Print) Edmund Berry

(Sign) Edmund R. Berry (signature)

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 10-30-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0730	0745	0.25	Driller arrives (Joe S.) and parks.
0745	1230	4.75	Set vapor wells SG-11 through SG-15.
1230	1300	0.5	Lunch.
1300	1500	2.0	Set vapor wells SG-16 and SG-17. Driller leaves.
TOTAL PRODUCTIVE HOURS		7.5	LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:

UNITS	
1	Vapor well SG-11 (9'bgs)
1	" " SG-12 (8'bgs)
1	" " SG-13 (9'bgs)
2*	" " SG-14 (9'bgs)
3**	" " SG-15 (9'bgs)
	" " SG-16 (9'bgs)
	" " SG-17 (9'bgs)
	* Run 1 to 5' bgs.
	** Run 1 to 6' bgs + Run 2 to 4' bgs.

MATERIALS / SUPPLIES:

UNITS	
1	Geoprobe 6610 DT
1	Van + Trailer
20	4' Macrocore Sampler
7	Expendable Point
7	6" Stainless Steel Implant
65 1/2	Polyethylene Tubing (3/8" x 1/4")
10	Sand (Bag)
1 1/4	Bentonite (Bag)
2 1/2	Cement (Bag)
7	2" Flushmount Well Box

WEATHER: Clear, Slight / Moderate variable Wind, Temp = 50

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date 10/30/03

ZEBRA Office Lynbrook Crew Base JS/EM Z# _____ ZEBRA Unit #/Type #20 66DT

CLIENT / OFFICE URS Client Project # _____

PROJECT NAME URS/NYC

PROJECT LOCATION 1st Ave + E90 st

Client PM: _____ Client Site Contact: _____

ZEBRA PERSONNEL ON SITE:

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
Joseph Sarelli's	6:00	7:30	3:00		7.5		
Evan Meraitis	6:00	7:30	3:00		7.5		
Other Personnel On Site:							

Description of Work (detailed): 7 pts - continuous soils to 8' and Install SVE wells @ each

pt#1 continuous soils to 8' bg - Installed 1 soil vapor extraction well to 9' bg
pt#2 continuous soils to 8' bg - Installed 1 soil vapor extraction well to 8' bg
pt#3-7 → Continuous soils to 8' bg - Installed 1 soil vapor extraction well @ each location to a final depth of 9' bg

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners	14	Liners	Drill Steel	✓
LB Liners		Liners	Core Drill	
7 Expendable Points SVE	7	Points	Generator	
____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
____" x 5' PVC Riser		PC's	Steam Genny	
____ PVC points		Points	Rupe Pump	
7 Flush Mount Well Box		Boxes	Water Level Indicator	
			P.I.D.	
Bentonite			Trailer (Decon/Utility)	
Sand				
Cement				

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.
7	14	14	—	—	7	—	7	—

Field Verification:

ZEBRA: Joseph Sarelli's CLIENT: (Print) Edmund Berry

(Sign) Edmund Berry

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 10-31-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0800	0830	0.5	Driller arrives (Joe S.) and finds parking.
0830	1045	2.25	Set vapor well SG-18.
1045	1130	0.75	Waiting for permits / cleaning up.
1130	1430	3.0	Set vapor wells SG-19 and SG-20. Driller leaves.
TOTAL PRODUCTIVE HOURS		6.5	LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:		MATERIALS / SUPPLIES:	
UNITS		UNITS	
3 ①	Vapor Well SG-18 (7.5'bgs)	1	Geoprobe 6610 DT
2 ②	Vapor Well SG-19 (6.5'bgs)	1	Van + Trailer
1	Vapor Well SG-20 (9'bgs)	10	4' Macrocore Sampler
		3	Expendable Point
	① Run 1 to 3.5' bgs +	3	6" Stainless Steel Implant
	Run 2 to 4' bgs.	24 1/2	Polyethylene Tubing (3/8 x 1/4)
	② Run 1 to 6.5' bgs.	6	Sand (Bag)
		3/4	Bentonite (Bag)
		1 1/2	Cement (Bag)
		3	2" Flushmount Well Box

WEATHER:

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date 10/31/03

ZEBRA Office Lynbrook Crew Base JS/EM Z# _____ ZEBRA Unit #/Type #20 66DT

CLIENT / OFFICE URS Client Project # _____

PROJECT NAME URS/NYC

PROJECT LOCATION 1st Ave + E 90 st NYC

Client PM: _____ Client Site Contact: Edmund Berry

ZEBRA PERSONNEL ON SITE:

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
Joseph Sarcellis	6:00	7:30	2:30		7		
Evan Moraitis	6:00	7:30	2:30		7		
Other Personnel On Site:							

Description of Work (detailed):

pt #1 Continuous soils to 7 1/2' bg. Install 1 SVE well to 7 1/2' bg → 3 Attempts — Wait for DOT Permits —

pt #2 Continuous soils to 6 1/2' bg. Install 1 SVE well to 6 1/2' bg → 3 Attempts

pt #3 continuous soils to 8' bg. Install 1 SVE well to 9' bg

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners	13	Liners	Drill Steel	✓
LB Liners		Liners	Core Drill	
SVE Expendable Points	4	Points	Generator	
____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
____" x 5' PVC Riser		PC's	Steam Genny	
____ PVC points		Points	Rupe Pump	
3 Flush Mount Well Box	3	Boxes	Water Level Indicator	
			P.I.D.	
Sand			Trailer (Decon/Utility)	
Bentonite				
Cement				

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.
3	6	6	—	—	3	—	3	—

Field Verification:

ZEBRA: Joseph Sarcellis CLIENT: (Print) Edmund Berry

(Sign) Edmund Berry

DAILY DRILLING RECORD

URS Corporation

PROJECT TITLE: 1st Avenue + 90th St. DATE: 11-3-03

CLIENT: NYDEC CONTRACTOR: Zebra

FROM	TO	PRODUCTIVE HOURS	ACTIVITIES/COMMENTS
0730	0800	0.5	Driller arrives (Charles G.)
			and prepares for work.
0800	1100	3.0	Set vapor wells SG-21
			through SG-24.
			Driller leaves.
TOTAL PRODUCTIVE HOURS			LEVEL B / LEVEL C / LEVEL D (CIRCLE ONE SELCTION)

LABOR:

UNITS	
1	SG-21 (7' bgs)
1	SG-22 (8.5' bgs)
1	SG-23 (8.5' bgs)
1	SG-24 (9' bgs)

MATERIALS / SUPPLIES:

UNITS	
1	Geoprobe 6610 DT
1	Van + Trailer
8	4' Macrocore Sampler
4	Expendable Point
4	6" Stainless Steel Implant
35'	Polyethylene Tubing (3/8x1/4)
4	Sand (Bag)
1/2	Bentonite (Bag)
1	Cement (Bag)
4	2" Flushmount Well Box

WEATHER:

Ned Berry
URS ONSITE COORDINATOR

CONTRACTOR REPRESENTATIVE

ZEBRA

DAILY PROJECT REPORT

Project Day & Date 11/3/03

ZEBRA Office Lynbrook Crew Base _____ Z# _____ ZEBRA Unit #/Type #

CLIENT / OFFICE URS Client Project # _____

PROJECT NAME _____

PROJECT LOCATION NYC

Client PM: _____ Client Site Contact: _____

ZEBRA PERSONNEL ON SITE: 9th & York Ave.

Name/Company	Start	Arrive	Leave	Finish	Total Site Time	OT	Client Init.
Charles Green	6:30	7:30					
Evan Mullins	6:30	7:30					
Other Personnel On Site:							

Description of Work (detailed): Collect soil & install Vapor Points

SB-01 0-4 4-8 Sand 8½ T' w Box (el)
02 0-4 4-8 5½
03 0-4 4-8 5½
04 0-4 4-8 9

APP. DGW:

MATERIALS	QTY. USED	UNIT	EQUIPMENT	
MC Liners		Liners	Drill Steel	
LB Liners		Liners	Core Drill	
_____ Expendable Points		Points	Generator	
_____" x 5' PVC Screen		PC's	GS 1000/2000 Grout Pump	
_____" x 5' PVC Riser		PC's	Steam Genny	
_____ PVC points		Points	Rupe Pump	
_____ Flush Mount Well Box		Boxes	Water Level Indicator	
			P.I.D.	
			Trailer (Decon/Utility)	
Sand	4 bgs			

Probe Tools Damaged / Lost:

Number of Points	Number of Samples	Soil MC	Soil LB	GW	Wells Installed	Soil Gas	Sparge Points	Misc.
4	12	8			4			

Field Verification:

ZEBRA: _____ CLIENT: (Print) Edmund Berry

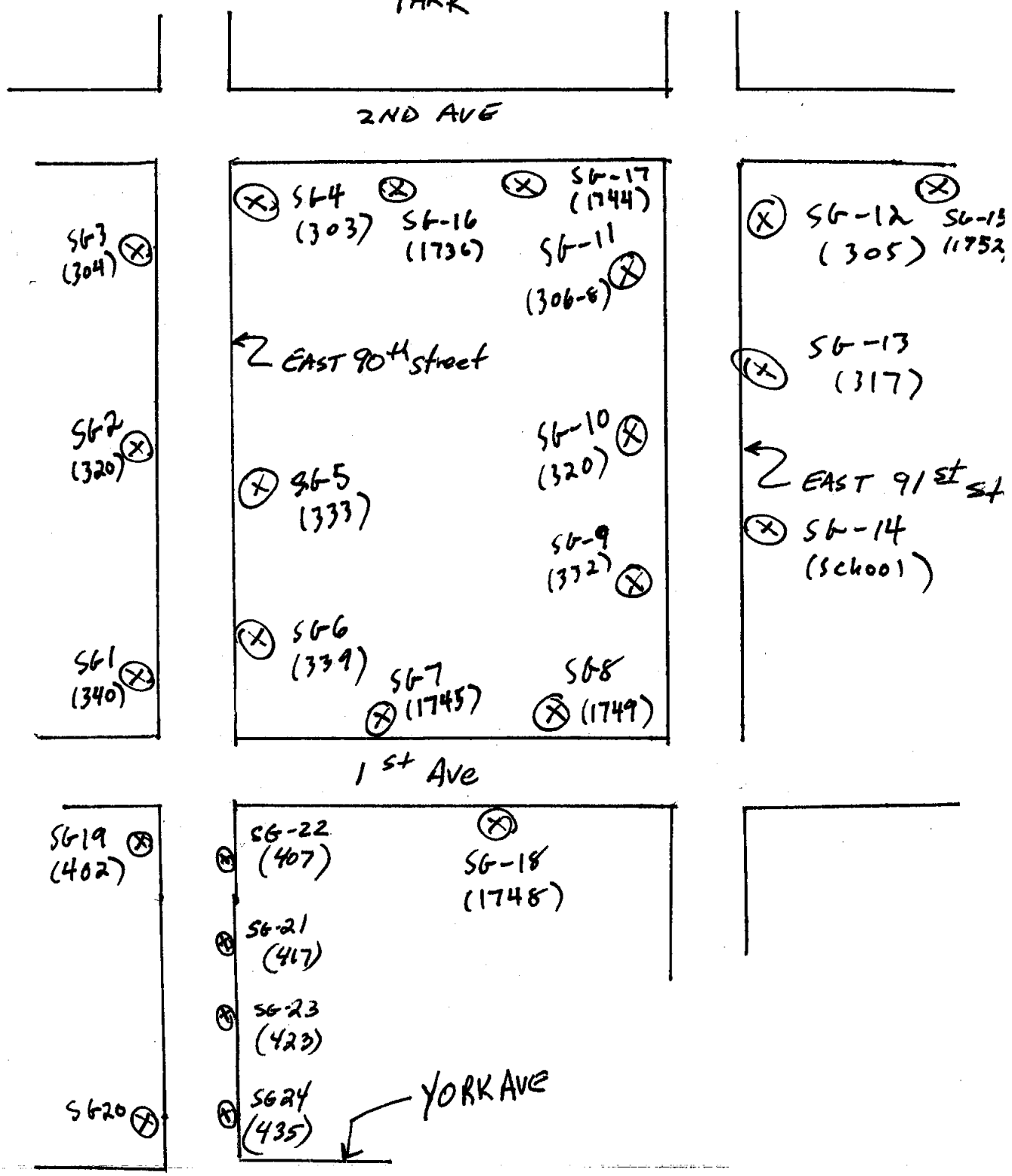
(Sign) _____

URS

Job 1st AVE & EAST 90th street | Project No. | Page ___ of ___
Description NYSDEC | Computed by cp | Date 11/3/03 | Sheet ___ of ___
SOIL GAS POINT LOCATION MAP | Checked by | Date | Reference SOIL GAS (SG)

Legend
Soil gas pt.
⊗ SG-22-# (407)
↑ address

NOTES - 1) All POINTS are located in sidewalks
2) All SG pts are labled with a white paint dot
3) NTS 4) All pts. are 2"ϕ Al. Flush Mount caps



Summa Canister Sampling Field Data Sheet

94105 (605)

Site: 1st Avenue + 90th Street
Samplers: Ned Berry
Date: 11-11-03

Sample #	SG-01*	SG-02	SG-03	SG-04	SG-05
Location	340 E. 90th St.	320 E. 90th St.	304 E. 90th St.	303 E. 90th St.	333 E. 90th St.
Summa Canister ID (Lab ID, if provided)	9515 (1127)**	~~14420~~ (2209)	9433 (1904)	9349 (708)	9490 (2035)
Additional Tubing Added	NO/ (YES) - How much 3"	NO/ (YES) - How much 3"	NO/ (YES) - How much 3"	NO/ (YES) - How much 3"	NO/ (YES) - How much 3"
Purge Time (Start)	0745	0800	0815	0825	0835
Purge Time (Stop)	0750	0805	0820	0830	0840
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	5	5	5	5
Pressure Gauge - before sampling	30	30	29	30	28
Sample Time (Start)	0940	0941	0942	0943	0944
Sample Time (Stop)	1000	1001	0957	1003	1004
Total Sample Time (min)	20	20	15	20	20
Pressure Gauge - after sampling	8	6	2.5	6	6.5
Canister Pressure Went To Ambient Pressure?	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)

General Comments: Picture of purging at SG-02.

* SG-05 duplicate sample of SG-01 (time = 0946 - 1006)

ID = 14420 (2209)

** Bar code #

Summa Canister Sampling Field Data Sheet

Site: 1st Avenue + 90th Street
Samplers: Ned Berry
Date: 11-11-03

Sample #	SG-06	SG-07	SG-08	SG-18	SG-19
Location	339 E. 90th St.	1745 1st Ave.	1749 1st Ave.	1748 1st Ave.	402 E. 90th St.
Summa Canister ID (Lab ID, if provided)	92905	SC97	SC87	639 (3270)*	9311 (606)
Additional Tubing Added	NO/ (YES) - How much 6"	NO/ (YES) - How much 3"	NO/ (YES) - How much 6"	NO/ (YES) - How much 3"	NO/ (YES) - How much 6"
Purge Time (Start)	0855	1100	1115	1130	1145
Purge Time (Stop)	0900	1105	1120	1135	1150
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	5	5	5	5
Pressure Gauge - before sampling	30	28	29	29.5	30
Sample Time (Start)	0945	1208	1209	1217	1211
Sample Time (Stop)	1005	1228	1229	1237	1231
Total Sample Time (min)	20	20 ~~7~~ (20)	20	20	20
Pressure Gauge - after sampling	7	7	8	12	6.5
Canister Pressure Went To Ambient Pressure?	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)
General Comments:	Weather = ~~mostly~~ cloudy + slight rain, light + variable winds) temp = 50				

* low code #

Summa Canister Sampling Field Data Sheet

Site: 1st Ave + 90th St.
Samplers: Neil Berry
Date: 11-11-03

Sample #	Field Blank	Ambient			
Location	326 * E. 90th St	326 * E. 90th St			
Summa Canister ID (Lab ID, if provided)	12366	34087			
Additional Tubing Added	NO/ YES - How much 6"	NO/ YES - How much	NO/ YES - How much	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	—	—			
Purge Time (Stop)	—	—			
Total Purge Time (min) [recommended time is 20 min for 1L canister]	—	—			
Pressure Gauge - before sampling	25	30			
Sample Time (Start)	1320	1320			
Sample Time (Stop)	1340	1340			
Total Sample Time (min)	20	20			
Pressure Gauge - after sampling	4	9			
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO

General Comments:

Dog truck & pee near GH.

* sidewalk

Summa Canister Sampling Field Data Sheet

Site: 1st Avenue + 90th St.
Samplers: Neil Berry
Date: 11-12-03

Sample #	SG-09	SG-10	SG-11	SG-12	SG-13
Location	332 E. 91st	320 E. 91 St.	306-8 E. 91st.	305 E. 91 St.	317 E. 91 St
Summa Canister ID (Lab ID, if provided)	34113	14513	34624	34091	34585
Additional Tubing Added	NO/ YES - How much 6"	NO/ YES - How much 6"	NO/ YES - How much 6"	NO/ YES - How much 6"	NO/ YES - How much 6"
Purge Time (Start)	0715	0710	0745	0800	0815
Purge Time (Stop)	0720	0735	0750	0805	0820
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	5	5	5	5
Pressure Gauge - before sampling	21	28	29	29	30
Sample Time (Start)	0842	0843	0844	0845	0846
Sample Time (Stop)	0902	0903	0904	0905	0906
Total Sample Time (min)	20	20	20	20	20
Pressure Gauge - after sampling	7.5	8	8	7.5	8
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
General Comments:	People standing around + smoking by SG-11.				

Summa Canister Sampling Field Data Sheet

Site: 1st Avenue + 90th St
Samplers: Neil Berry
Date: 11-12-03

Sample #	SG-14	Ambient 2 ~~SG-15~~	Field Blank 2		
Location	School E. 91 St	~~175 E. 91 St~~ 317 E. 91 St ~~2nd Ave.~~	317 E. 91 St		
Summa Canister ID (Lab ID, if provided)	13389	33411	34601		
Additional Tubing Added	NO/ YES - How much 6"	NO/ YES - How much	NO/ YES - How much 6"	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	0830	—	—		
Purge Time (Stop)	0835	—	—		
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	—	—		
Pressure Gauge - before sampling	29	15 ~~45~~ *	30		
Sample Time (Start)	0847	0850 ~~0946~~ *	0846		
Sample Time (Stop)	0907	0907	0906		
Total Sample Time (min)	20	17	20		
Pressure Gauge - after sampling	8	4	10		
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
General Comments:					

* Canister very low pressure at beginning — changed out canister / flow meter / filter.

Summa Canister Sampling Field Data Sheet

Site: 1st Ave + 40th St
Samplers: Neil Berry
Date: 11-12-03

Sample #	SG-15	SG-17	SG-16		
Location	1752 2nd Ave	1744 2nd Ave.	1736 2nd Ave		
Summa Canister ID (Lab ID, if provided)	34125	34581	11429		
Additional Tubing Added	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	1005	1020	1035		
Purge Time (Stop)	1010	1025	1040		
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	5	5		
Pressure Gauge - before sampling	28	27	28		
Sample Time (Start)	1111	1110	1109		
Sample Time (Stop)	1117	1130	1124		
Total Sample Time (min)	6	20	20		
Pressure Gauge - after sampling	2	7	6.5		
Canister Pressure Went To Ambient Pressure?	YES / (NO)	YES / (NO)	YES / (NO)	YES / NO	YES / NO
General Comments:					

- 3 summas / flow / fittings shipped on NOV 3rd (2nd day) (1st "extra" delivery)
- 2nd "extra" delivery was tubing & flow controls

Summa Canister Sampling Field Data Sheet

Site: 1st Ave + 90th St.
Samplers: Ned Barry
Date: 11-12-03

Sample #	SG-20	SG-24	SG-23	SG-21	SG-22*
Location	E. 90 St + York Ave	435 E. 90 St	423 E. 90 St	417 E. 90 St	407 E. 90 St.
Summa Canister ID (Lab ID, if provided)	94924	9472	94938	9437	9489
Additional Tubing Added	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"	NO/ (YES) - How much 6"
Purge Time (Start)	1200	1210	1220	1230	1240
Purge Time (Stop)	1205	1215	1225	1235	1245
Total Purge Time (min) [recommended time is 20 min for 1L canister]	5	5	5	5	5
Pressure Gauge - before sampling	29	28	28.5	28	28
Sample Time (Start)	1315	1316	1317	1318	1319
Sample Time (Stop)	1335	1336	1337	1338	1339
Total Sample Time (min)	20	20	20	20	20
Pressure Gauge - after sampling	8	6	5.5	5.5	14.5
Canister Pressure Went To Ambient Pressure?	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)	YES / (NO)

General Comments:

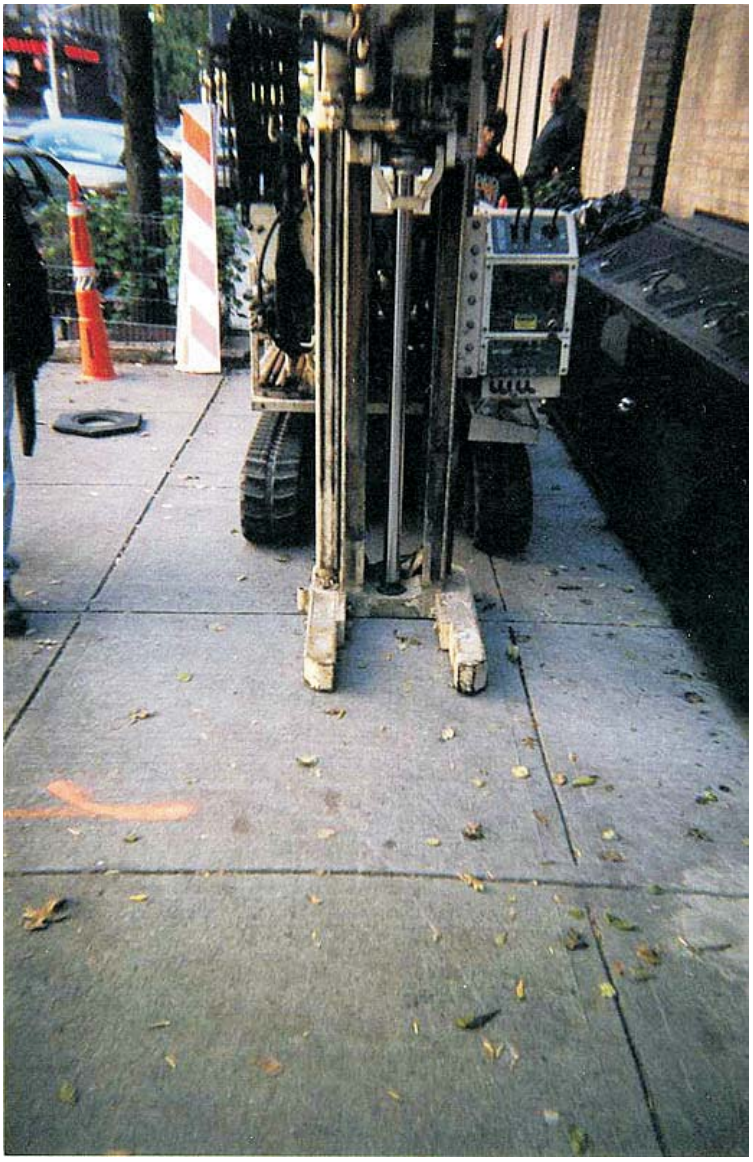
* Duplicate sample collected (SG-26)
time 1339 - 1359
Can. # 9540

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51

Site:	**1st Avenue and East 90th Street**
	Site ID No. 2-31-008
Location:	**SG-01 in front of 340 East 90th Street**
Date:	**10/28/2003**
Description:	**Setup of Geoprobe 661DT prior to performing direct-push borings for the installation of soil-gas conduits.**

PHOTO LOG SHEET



URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Location: **SG-01 in front of 340 East 90th Street**
Date: **10/28/2003**
Description: **Typical setup of Geoprobe 661DT performing direct-push borings for the installation of soil-gas conduits.**

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51

Site:	**1st Avenue and East 90th Street**
	Site ID No. 2-31-008
Location:	**SG-03 in front of 304 East 90th Street**
Date:	**10/28/2003**
Description:	**Typical setup of Geoprobe 661DT performing direct-push borings for the installation of soil-gas conduits.**

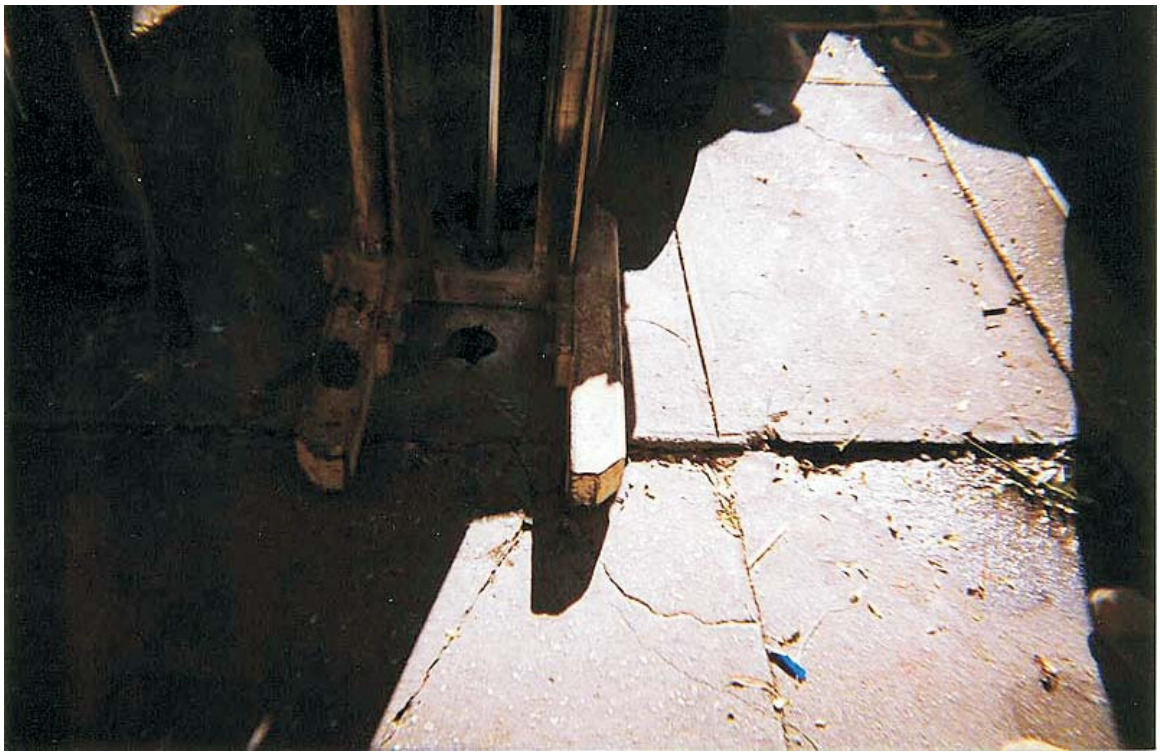
PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Location: **SG-03 in front of 304 East 90th Street**
Date: **10/28/2003**
Description: **Typical setup of Geoprobe 661DT performing direct-push borings for the installation of soil-gas conduits. Noted existing cracks in concrete sidewalks.**

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Location: **SG-12 in front of 305 East 91st Street**
Date: **10/28/2003**
Description: **Thinness of concrete noted after drilling through sidewalk.**

PHOTO LOG SHEET



URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Location: **SG-12 in front of 305 East 91st Street**
Date: **10/28/2003**
Description: **Noted existing cracks in sidewalk in work area.**

PHOTO LOG SHEET

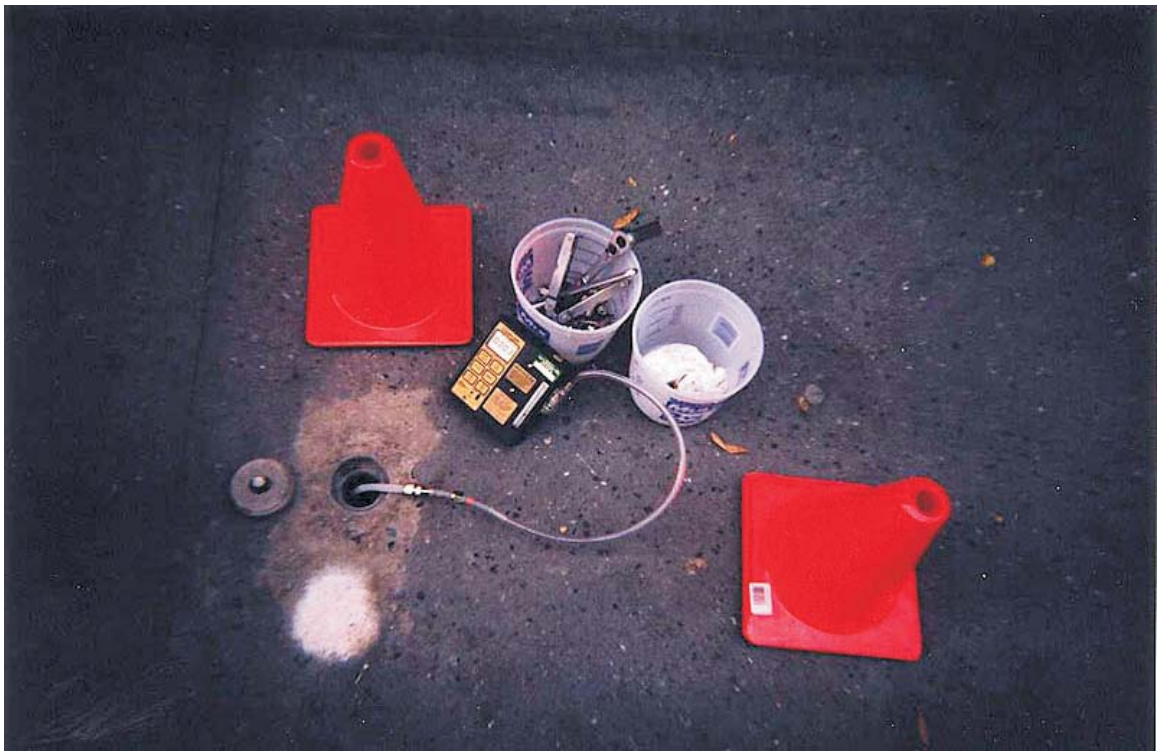
URS Corporation
NYSDEC Work Assignment D003825-51

Site:	**1st Avenue and East 90th Street**
	Site ID No. 2-31-008
Location:	**SG-15 in front of 1752 2nd Avenue**
Date:	**10/28/2003**
Description:	**Typical setup of Geoprobe 661DT performing direct-push borings for the installation of soil-gas conduits.**

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Location: **SG-21 in front of 417 East 90th Street**
Date: **11/03/2003**
Description: **Noted existing cracks in sidewalk in work area.**

PHOTO LOG SHEET



URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Description: **Typical setup of sampling pump used to purge standing air from soil-gas conduits.**

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Description: **Close up of connection to flow controller used in sampling soil-gas conduits.**

PHOTO LOG SHEET

URS Corporation
NYSDEC Work Assignment D003825-51
Site: **1st Avenue and East 90th Street**
Site ID No. 2-31-008
Description: **Typical setup of summa canister connection used to sample soil-gas conduits.**

ATTACHMENT B

DATA USABILITY SUMMARY REPORT
Including FORM Is

DATA USABILITY SUMMARY REPORT

1st AVENUE AND EAST 90th STREET
SITE NO. 2-31-008
WORK ASSIGNMENT D003825-51

Analyses Performed by:

AIR TOXICS LTD.

Prepared by:

URS CORPORATION
640 ELLICOTT STREET
BUFFALO, NY 14203

JANUARY 2004

TABLE OF CONTENTS

TABLES
(Following Text)

APPENDICES

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999.

II. ANALYTICAL METHODOLOGIES

The data being evaluated is from the November 11-12, 2003 sampling of 24 soil gas samples, 2 field duplicates, 2 ambient blank samples, and 2 equipment field blanks (EB). The analytical laboratory that performed the analyses is Air Toxics, Ltd. (Folsom, CA). The samples were analyzed for volatile organic compounds (VOCs) following modified USEPA Compendium Method TO-14A, *Determination of VOCs in Ambient Air Using Specially Prepared Canisters With Subsequent Analysis By Gas Chromatography.* The method was modified by directly injecting a 40 milliliter (mL) sample aliquot into a gas chromatograph/mass spectrometer (GC/MS) system instead of a 400 mL sample aliquot concentrated in a cryogenically cooled trap. Consequently, the practical quantitation limit (PQL) is 10 times higher. Compounds detected above the method detection limit (MDL) but below the PQL (i.e., "J" values) have been reported. Table 1 summarizes the samples collected and the requested analytical parameters. The validated analytical results are presented in Table 2 and Table 3.

A limited data validation was performed following the guidelines in USEPA Region II *Validating Canisters of Volatile Organics in Ambient Air, Rev. 0,* April 1994. Qualifications applied to the data include "J/UJ" (estimated concentration/estimated quantitation limit) and "U" (not detected). Documentation supporting the qualification of data is presented in Appendix A. Copies of the validated laboratory results (i.e., Form I's) are presented in Appendix B. Only problems affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

The laboratory deliverable data packages were in accordance with NYSDEC Analytical Services Protocol (ASP) Category B requirements.

IV. PRESERVATION/HOLDING TIMES/SAMPLE RECEIPT

All samples were analyzed within the holding time.

V. QUALITY CONTROL DATA

A. QC Blanks

An EB and an ambient blank sample were collected for each day during the soil gas sampling events. The ambient blank is considered to be representative of background ambient air conditions. The ambient blank sample is similar to the EB, except that the ambient air was not collected through tubing. Rather, the valve on the collection canister was simply opened and ambient air drawn into the canister by way of the vacuum initially present in the canister. Results of the ambient blank samples have not been used to qualify the samples.

Toluene was detected in the EBs collected on 11/11/03 and 11/12/03. The following samples had detections for toluene at values that were below five times the level detected in the associated EB: SG-01, SG-03, SG-06, SG-09, SG-12, SG-13, and SG-25. The results for toluene in these samples have been qualified "U" at the detected value.

B. Initial and Continuing Calibrations

The percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and continuing calibration (CCAL) RRF exceeded 25% for 1,1,1-trichloroethane, carbon tetrachloride, and 1,2-dichloroethane in the CCAL standard analyzed on November 19, 2003. In accordance with USEPA Region II validation guidelines, the non-detect results for these compounds in samples SG-07, SG-08, SG-15, SG-18, SG-25, SG-26, Ambient 1, Ambient 2, Field Blank 1, and Field Blank 2 have been qualified as estimated (UJ).

Documentation supporting the qualification of data (i.e., Continuing Calibration Form 10A, run log) is presented in Appendix A.

VII. SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified "UJ" (estimated reporting limit) are considered conditionally usable. Those results qualified "U" are considered non-detect. All other sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

TABLE 1

SAMPLE AND ANALYSIS SUMMARY

1st AVENUE AND EAST 90th STREET

Sample ID	Sample Date	VOCs (TO-14A) [1]	Comments
SOIL GAS SAMPLES			
SG-01	11/11/03	X	---
SG-02	11/11/03	X	---
SG-03	11/11/03	X	---
SG-04	11/11/03	X	---
SG-05	11/11/03	X	---
SG-06	11/11/03	X	---
SG-07	11/11/03	X	---
SG-08	11/11/03	X	---
SG-09	11/12/03	X	---
SG-10	11/12/03	X	---
SG-11	11/12/03	X	---
SG-12	11/12/03	X	---
SG-13	11/12/03	X	---
SG-14	11/12/03	X	---
SG-15	11/12/03	X	---
SG-16	11/12/03	X	---
SG-17	11/12/03	X	---
SG-18	11/11/03	X	---
SG-19	11/11/03	X	---
SG-20	11/12/03	X	---
SG-21	11/12/03	X	---
SG-22	11/12/03	X	---
SG-23	11/12/03	X	---
SG-24	11/12/03	X	---
SG-25	11/11/03	X	Field Duplicate of SG-01
SG-26	11/12/03	X	Field Duplicate of SG-22
FIELD QC SAMPLES			
AMBIENT AIR 1	11/11/03	X	---
AMBIENT AIR 2	11/12/03	X	---
FIELD BLANK 1	11/11/03	X	---
FIELD BLANK 2	11/12/03	X	---

X - Analysis required

1 - USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, January 1997

VOC - Volatile Organic Compound
SG - Soil Gas

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-01	SG-01	SG-02	SG-03	SG-04
Sample ID		SG-01	SG-25	SG-02	SG-03	SG-04
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/11/03
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	PPBV	13 U	13 UJ	12 U	11 U	12 U
1,1,2,2-Tetrachloroethane	PPBV	13 U	13 U	12 U	11 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	13 U	13 U	12 U	11 U	12 U
1,1,2-Trichloroethane	PPBV	13 U	13 U	12 U	11 U	12 U
1,1-Dichloroethane	PPBV	13 U	13 U	12 U	11 U	12 U
1,1-Dichloroethene	PPBV	13 U	13 U	12 U	11 U	12 U
1,2,4-Trimethylbenzene	PPBV	13 U	13 U	12 U	11 U	10 J
1,2-Dibromoethane (Ethylene dibromide)	PPBV	13 U	13 U	12 U	11 U	12 U
1,2-Dichlorobenzene	PPBV	13 U	13 U	12 U	11 U	12 U
1,2-Dichloroethane	PPBV	13 U	13 UJ	12 U	11 U	12 U
1,2-Dichloroethene (cis)	PPBV	13 U	13 U	12 U	11 U	12 U
1,2-Dichloroethene (trans)	PPBV	13 U	13 U	12 U	11 U	12 U
1,2-Dichloropropane	PPBV	13 U	13 U	12 U	11 U	12 U
1,2-Dichlorotetrafluoroethane	PPBV	13 U	13 U	12 U	11 U	12 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	13 U	13 U	12 U	11 U	4.5 J
1,3-Dichlorobenzene	PPBV	13 U	13 U	12 U	11 U	12 U
1,4-Dichlorobenzene	PPBV	13 U	13 U	12 U	11 U	12 U
2-Propanol	PPBV	13 U	13 U	12 U	11 U	12 U
Benzene	PPBV	13 U	13 U	12 U	11 U	2.9 J
Bromomethane	PPBV	13 U	13 U	12 U	11 U	12 U
Carbon tetrachloride	PPBV	13 U	13 UJ	12 U	11 U	12 U
Chlorobenzene	PPBV	13 U	13 U	12 U	11 U	12 U
Chloroethane	PPBV	13 U	13 U	12 U	11 U	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

N:\11173281.00000\DB\Program\Program.mdb
Printed: 1/19/04 1:34:48 PM
[MATRIX] = 'GS'

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-01	SG-01	SG-02	SG-03	SG-04
Sample ID		SG-01	SG-25	SG-02	SG-03	SG-04
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/11/03
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Chloroform	PPBV	13 U	13 U	3.9 J	11 U	21
Chloromethane	PPBV	13 U	13 U	12 U	11 U	12 U
Dichlorodifluoromethane	PPBV	13 U	13 U	12 U	11 U	12 U
Ethylbenzene	PPBV	13 U	13 U	12 U	11 U	6.4 J
Methyl tert-butyl ether	PPBV	13 U	13 U	12 U	11 U	12 U
Methylene chloride	PPBV	13 U	13 U	12 U	11 U	12 U
Tetrachloroethene	PPBV	13 U	13 U	12 U	11 U	7.1 J
Toluene	PPBV	13 U	13 U	51	11 U	28
Trichloroethene	PPBV	13 U	13 U	12 U	11 U	12 U
Trichlorofluoromethane	PPBV	13 U	13 U	12 U	11 U	12 U
Vinyl chloride	PPBV	13 U	13 U	12 U	11 U	12 U
Xylene (total)	PPBV	13 U	13 U	4.2 J	11 U	41

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-05	SG-06	SG-07	SG-08	SG-09
Sample ID		SG-05	SG-06	SG-07	SG-08	SG-09
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/12/03
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	PPBV	12 U	12 U	13 UJ	13 UJ	13 U
1,1,2,2-Tetrachloroethane	PPBV	12 U	12 U	13 U	13 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	12 U	12 U	13 U	13 U	13 U
1,1,2-Trichloroethane	PPBV	12 U	12 U	13 U	13 U	13 U
1,1-Dichloroethane	PPBV	12 U	12 U	13 U	13 U	13 U
1,1-Dichloroethene	PPBV	12 U	12 U	13 U	13 U	13 U
1,2,4-Trimethylbenzene	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dichlorobenzene	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dichloroethane	PPBV	12 U	12 U	13 UJ	13 UJ	13 U
1,2-Dichloroethene (cis)	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dichloroethene (trans)	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dichloropropane	PPBV	12 U	12 U	13 U	13 U	13 U
1,2-Dichlorotetrafluoroethane	PPBV	12 U	12 U	13 U	13 U	13 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	12 U	12 U	13 U	13 U	13 U
1,3-Dichlorobenzene	PPBV	12 U	12 U	13 U	13 U	13 U
1,4-Dichlorobenzene	PPBV	12 U	12 U	13 U	13 U	13 U
2-Propanol	PPBV	12 U	12 U	13 U	13 U	13 U
Benzene	PPBV	12 U	12 U	16	13 U	13 U
Bromomethane	PPBV	12 U	12 U	13 U	13 U	13 U
Carbon tetrachloride	PPBV	12 U	12 U	13 UJ	13 UJ	13 U
Chlorobenzene	PPBV	12 U	12 U	13 U	13 U	13 U
Chloroethane	PPBV	12 U	12 U	13 U	13 U	13 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-05	SG-06	SG-07	SG-08	SG-09
Sample ID		SG-05	SG-06	SG-07	SG-08	SG-09
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/11/03	11/11/03	11/11/03	11/11/03	11/12/03
Parameter	**Units**					
Volatile Organic Compounds						
Chloroform	PPBV	12 U	12 U	13 U	4.8 J	13 U
Chloromethane	PPBV	12 U	12 U	13 U	13 U	13 U
Dichlorodifluoromethane	PPBV	12 U	12 U	13 U	13 U	13 U
Ethylbenzene	PPBV	12 U	12 U	13 U	13 U	13 U
Methyl tert-butyl ether	PPBV	12 U	66	13 U	13 U	13 U
Methylene chloride	PPBV	12 U	12 U	13 U	13 U	13 U
Tetrachloroethene	PPBV	6.7 J	12 U	33	34	13 U
Toluene	PPBV	32	12 U	87	180	13 U
Trichloroethene	PPBV	12 U	12 U	13 U	13 U	13 U
Trichlorofluoromethane	PPBV	12 U	12 U	13 U	13 U	13 U
Vinyl chloride	PPBV	12 U	12 U	13 U	13 U	13 U
Xylene (total)	PPBV	12 U	12 U	10 J	13 U	6.4 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-10	SG-11	SG-12	SG-13	SG-14
Sample ID		SG-10	SG-11	SG-12	SG-13	SG-14
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,1,2,2-Tetrachloroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,1,2-Trichloroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,1-Dichloroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,1-Dichloroethene	PPBV	13 U	13 U	13 U	13 U	13 U
1,2,4-Trimethylbenzene	PPBV	5.2 J	13 U	13 U	13 U	13 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichlorobenzene	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichloroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichloroethene (cis)	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichloroethene (trans)	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichloropropane	PPBV	13 U	13 U	13 U	13 U	13 U
1,2-Dichlorotetrafluoroethane	PPBV	13 U	13 U	13 U	13 U	13 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	3.7 J	13 U	13 U	13 U	13 U
1,3-Dichlorobenzene	PPBV	13 U	13 U	13 U	13 U	13 U
1,4-Dichlorobenzene	PPBV	13 U	13 U	13 U	13 U	13 U
2-Propanol	PPBV	13 U	13 U	13 U	13 U	13 U
Benzene	PPBV	13 U	13 U	13 U	13 U	13 U
Bromomethane	PPBV	13 U	13 U	13 U	13 U	13 U
Carbon tetrachloride	PPBV	13 U	13 U	13 U	13 U	13 U
Chlorobenzene	PPBV	13 U	13 U	13 U	13 U	13 U
Chloroethane	PPBV	13 U	13 U	13 U	13 U	13 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

N:\11173261.00000\DB\Program\Program.mde
Printed: 1/19/04 1:34:49 PM
[MATRIX] = 'GS'

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-10	SG-11	SG-12	SG-13	SG-14
Sample ID		SG-10	SG-11	SG-12	SG-13	SG-14
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	**Units**					
Volatile Organic Compounds						
Chloroform	PPBV	3.4 J	12 J	4.2 J	4.1 J	13 U
Chloromethane	PPBV	13 U	13 U	13 U	13 U	13 U
Dichlorodifluoromethane	PPBV	13 U	13 U	13 U	13 U	13 U
Ethylbenzene	PPBV	13 U	13 U	13 U	13 U	13 U
Methyl tert-butyl ether	PPBV	13 U	12 J	13 U	13 U	13 U
Methylene chloride	PPBV	13 U	13 U	13 U	13 U	13 U
Tetrachloroethene	PPBV	13 U	13 U	13 U	9.5 J	13 U
Toluene	PPBV	330	110	13 U	13 U	62
Trichloroethene	PPBV	13 U	13 U	13 U	13 U	13 U
Trichlorofluoromethane	PPBV	13 U	13 U	13 U	13 U	13 U
Vinyl chloride	PPBV	13 U	13 U	13 U	13 U	13 U
Xylene (total)	PPBV	14.8	13 U	13 U	13 U	13 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-15	SG-16	SG-17	SG-18	SG-19
Sample ID		SG-15	SG-16	SG-17	SG-18	SG-19
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/11/03	11/11/03
Parameter	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	PPBV	11 UJ	13 U	13 U	13 UJ	12 U
1,1,2,2-Tetrachloroethane	PPBV	11 U	13 U	13 U	13 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	11 U	13 U	13 U	13 U	12 U
1,1,2-Trichloroethane	PPBV	11 U	13 U	13 U	13 U	12 U
1,1-Dichloroethane	PPBV	11 U	13 U	13 U	13 U	12 U
1,1-Dichloroethene	PPBV	11 U	13 U	13 U	13 U	12 U
1,2,4-Trimethylbenzene	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dichlorobenzene	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dichloroethane	PPBV	11 UJ	13 U	13 U	13 UJ	12 U
1,2-Dichloroethene (cis)	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dichloroethene (trans)	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dichloropropane	PPBV	11 U	13 U	13 U	13 U	12 U
1,2-Dichlorotetrafluoroethane	PPBV	11 U	13 U	13 U	13 U	12 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	11 U	13 U	13 U	13 U	12 U
1,3-Dichlorobenzene	PPBV	11 U	13 U	13 U	13 U	12 U
1,4-Dichlorobenzene	PPBV	11 U	13 U	13 U	13 U	12 U
2-Propanol	PPBV	11 U	13 U	13 U	13 U	12 U
Benzene	PPBV	11 U	13 U	13 U	13 U	3.4 J
Bromomethane	PPBV	11 U	13 U	13 U	13 U	12 U
Carbon tetrachloride	PPBV	11 UJ	13 U	13 U	13 UJ	12 U
Chlorobenzene	PPBV	11 U	13 U	13 U	13 U	12 U
Chloroethane	PPBV	11 U	13 U	13 U	13 U	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-15	SG-16	SG-17	SG-18	SG-19
Sample ID		SG-15	SG-16	SG-17	SG-18	SG-19
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/11/03	11/11/03
Parameter	**Units**					
Volatile Organic Compounds						
Chloroform	PPBV	3.6 J	6.4 J	28	13 U	12 U
Chloromethane	PPBV	11 U	13 U	13 U	13 U	12 U
Dichlorodifluoromethane	PPBV	11 U	13 U	13 U	13 U	12 U
Ethylbenzene	PPBV	11 U	13 U	13 U	13 U	12 U
Methyl tert-butyl ether	PPBV	11 U	13 U	13 U	13 U	12 U
Methylene chloride	PPBV	11 U	13 U	13 U	13 U	12 U
Tetrachloroethene	PPBV	14	13 U	13 U	12 J	12 U
Toluene	PPBV	41	70	290	22	150
Trichloroethene	PPBV	11 U	13 U	13 U	13 U	12 U
Trichlorofluoromethane	PPBV	11 U	13 U	13 U	13 U	12 U
Vinyl chloride	PPBV	11 U	13 U	13 U	13 U	12 U
Xylene (total)	PPBV	11 U	4.9 J	5.6 J	13 U	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-20	SG-21	SG-22	SG-22	SG-23
Sample ID		SG-20	SG-21	SG-22	SG-26	SG-23
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	PPBV	13 U	12 U	19 U	18 UJ	12 U
1,1,2,2-Tetrachloroethane	PPBV	13 U	12 U	19 U	18 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	13 U	12 U	19 U	18 U	12 U
1,1,2-Trichloroethane	PPBV	13 U	12 U	19 U	18 U	12 U
1,1-Dichloroethane	PPBV	13 U	12 U	19 U	18 U	12 U
1,1-Dichloroethene	PPBV	13 U	12 U	19 U	18 U	12 U
1,2,4-Trimethylbenzene	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dichlorobenzene	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dichloroethane	PPBV	13 U	12 U	19 U	18 UJ	12 U
1,2-Dichloroethene (cis)	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dichloroethene (trans)	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dichloropropane	PPBV	13 U	12 U	19 U	18 U	12 U
1,2-Dichlorotetrafluoroethane	PPBV	13 U	12 U	19 U	18 U	12 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	13 U	12 U	19 U	18 U	12 U
1,3-Dichlorobenzene	PPBV	13 U	12 U	19 U	18 U	12 U
1,4-Dichlorobenzene	PPBV	13 U	12 U	19 U	18 U	12 U
2-Propanol	PPBV	13 U	12 U	19 U	18 U	12 U
Benzene	PPBV	13 U	12 U	19 U	18 U	12 U
Bromomethane	PPBV	13 U	12 U	19 U	18 U	12 U
Carbon tetrachloride	PPBV	13 U	12 U	19 U	18 UJ	12 U
Chlorobenzene	PPBV	13 U	12 U	19 U	18 U	12 U
Chloroethane	PPBV	13 U	12 U	19 U	18 U	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-20	SG-21	SG-22	SG-22	SG-23
Sample ID		SG-20	SG-21	SG-22	SG-26	SG-23
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/12/03	11/12/03	11/12/03	11/12/03	11/12/03
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Chloroform	PPBV	13 U	9.2 J	3.8 J	18 U	12 U
Chloromethane	PPBV	13 U	12 U	19 U	18 U	12 U
Dichlorodifluoromethane	PPBV	13 U	12 U	19 U	18 U	12 U
Ethylbenzene	PPBV	13 U	12 U	19 U	18 U	12 U
Methyl tert-butyl ether	PPBV	13 U	12 U	19 U	18 U	12 U
Methylene chloride	PPBV	13 U	12 U	19 U	18 U	12 U
Tetrachloroethene	PPBV	9.1 J	64	12 J	18 U	12 U
Toluene	PPBV	140	1,100	96	87	75
Trichloroethene	PPBV	13 U	12 U	24	8.5 J	12 U
Trichlorofluoromethane	PPBV	13 U	12 U	19 U	18 U	12 U
Vinyl chloride	PPBV	13 U	12 U	19 U	18 U	12 U
Xylene (total)	PPBV	8.3 J	7.6 J	19 U	18 U	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

N:\11173261.00000\DB\Program\Program.mde
Printed: 1/19/04 1:34:50 PM
[MATRIX] = 'GS'

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-24
Sample ID		SG-24
Matrix		Soil Gas
Depth Interval (ft)		-
Date Sampled		11/12/03
Parameter	**Units**	
Volatile Organic Compounds		
1,1,1-Trichloroethane	PPBV	12 U
1,1,2,2-Tetrachloroethane	PPBV	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	12 U
1,1,2-Trichloroethane	PPBV	12 U
1,1-Dichloroethane	PPBV	12 U
1,1-Dichloroethene	PPBV	12 U
1,2,4-Trimethylbenzene	PPBV	12 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	12 U
1,2-Dichlorobenzene	PPBV	12 U
1,2-Dichloroethane	PPBV	12 U
1,2-Dichloroethene (cis)	PPBV	12 U
1,2-Dichloroethene (trans)	PPBV	12 U
1,2-Dichloropropane	PPBV	12 U
1,2-Dichlorotetrafluoroethane	PPBV	12 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	12 U
1,3-Dichlorobenzene	PPBV	12 U
1,4-Dichlorobenzene	PPBV	12 U
2-Propanol	PPBV	12 U
Benzene	PPBV	12 U
Bromomethane	PPBV	12 U
Carbon tetrachloride	PPBV	12 U
Chlorobenzene	PPBV	12 U
Chloroethane	PPBV	12 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 2
VALIDATED SOIL GAS SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		SG-24
Sample ID		SG-24
Matrix		Soil Gas
Depth Interval (ft)		-
Date Sampled		11/12/03
Parameter	**Units**	
Volatile Organic Compounds		
Chloroform	PPBV	12 U
Chloromethane	PPBV	12 U
Dichlorodifluoromethane	PPBV	12 U
Ethylbenzene	PPBV	12 U
Methyl tert-butyl ether	PPBV	12 U
Methylene chloride	PPBV	12 U
Tetrachloroethene	PPBV	12 U
Toluene	PPBV	160
Trichloroethene	PPBV	12 U
Trichlorofluoromethane	PPBV	12 U
Vinyl chloride	PPBV	12 U
Xylene (total)	PPBV	4.2 J

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

N:\11173261.00000\DB\Program\Program.mde
Printed: 1/19/04 1:34:60 PM
[MATRIX] = 'GS'

TABLE 3
VALIDATED FIELD QC SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		Ambient 1	Field Blank 1	Ambient 2	Field Blank 2
Matrix		Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix
Depth Interval (ft)		-	-	-	-
Date Sampled		11/11/03	11/11/03	11/12/03	11/12/03
Parameter	Units	Ambient Blank (1-1)	Field Blank (1-1)	Ambient Blank (1-1)	Field Blank (1-1)
Volatile Organic Compounds					
1,1,1-Trichloroethane	PPBV	13 UJ	13 UJ	12 UJ	13 UJ
1,1,2,2-Tetrachloroethane	PPBV	13 U	13 U	12 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	PPBV	13 U	13 U	12 U	13 U
1,1,2-Trichloroethane	PPBV	13 U	13 U	12 U	13 U
1,1-Dichloroethane	PPBV	13 U	13 U	12 U	13 U
1,1-Dichloroethene	PPBV	13 U	13 U	12 U	13 U
1,2,4-Trimethylbenzene	PPBV	13 U	13 U	12 U	13 U
1,2-Dibromoethane (Ethylene dibromide)	PPBV	13 U	13 U	12 U	13 U
1,2-Dichlorobenzene	PPBV	13 U	13 U	12 U	13 U
1,2-Dichloroethane	PPBV	13 UJ	13 UJ	12 UJ	13 UJ
1,2-Dichloroethene (cis)	PPBV	13 U	13 U	12 U	13 U
1,2-Dichloroethene (trans)	PPBV	13 U	13 U	12 U	13 U
1,2-Dichloropropane	PPBV	13 U	13 U	12 U	13 U
1,2-Dichlorotetrafluoroethane	PPBV	13 U	13 U	12 U	13 U
1,3,5-Trimethylbenzene (Mesitylene)	PPBV	13 U	13 U	12 U	13 U
1,3-Dichlorobenzene	PPBV	13 U	13 U	12 U	13 U
1,4-Dichlorobenzene	PPBV	13 U	13 U	12 U	13 U
2-Propanol	PPBV	13 U	13 U	12 U	13 U
Benzene	PPBV	13 U	13 U	12 U	13 U
Bromomethane	PPBV	13 U	13 U	12 U	13 U
Carbon tetrachloride	PPBV	13 UJ	13 UJ	12 UJ	13 UJ
Chlorobenzene	PPBV	13 U	13 U	12 U	13 U
Chloroethane	PPBV	13 U	13 U	12 U	13 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

TABLE 3
VALIDATED FIELD QC SAMPLE RESULTS
1ST AVENUE AND EAST 90TH STREET

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		Ambient 1	Field Blank 1	Ambient 2	Field Blank 2
Matrix		Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix	Gaseous QC Matrix
Depth Interval (ft)		-	-	-	-
Date Sampled		11/11/03	11/11/03	11/12/03	11/12/03
Parameter	Units	Ambient Blank (1-1)	Field Blank (1-1)	Ambient Blank (1-1)	Field Blank (1-1)
Volatile Organic Compounds					
Chloroform	PPBV	13 U	13 U	12 U	13 U
Chloromethane	PPBV	13 U	13 U	12 U	13 U
Dichlorodifluoromethane	PPBV	13 U	13 U	12 U	13 U
Ethylbenzene	PPBV	13 U	13 U	12 U	13 U
Methyl tert-butyl ether	PPBV	13 U	13 U	12 U	13 U
Methylene chloride	PPBV	13 U	3.0 J	12 U	13 U
Tetrachloroethene	PPBV	13 U	13 U	12 U	13 U
Toluene	PPBV	3.7 J	3.8 J	12	7.6 J
Trichloroethene	PPBV	13 U	13 U	12 U	13 U
Trichlorofluoromethane	PPBV	13 U	13 U	12 U	13 U
Vinyl chloride	PPBV	13 U	13 U	12 U	13 U
Xylene (total)	PPBV	13 U	13 U	12 U	13 U

Flags assigned during chemistry validation are shown.

J - The reported concentration is an estimated value.
U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.
PPBV - Parts per billion by volume.
Made By: AMK 01/06/04 Checked By: GEK 01/06/04

Detection Limits shown are PQL

N:\11173261.00000\DB\Program\Program.mde
Printed: 1/19/04 1:36:52 PM
[MATRIX] = 'GQ'

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

APPENDIX A

SUPPORT DOCUMENTATION

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

0497

Contact Person: Chuck Dusel
Company: WRS Corporation
Address: 640 Ellicott St. City: Buffalo State: NY Zip: 14203
Phone: (716) 856-5636 FAX: (716) 856-2545
Collected By: Signature:

Project Info:
P.O. #: 11173211.0000
Project #: 11173262.0000
Project Name: 1st Ave. + 90th St. and 720 Melrose Ave.

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

3344 17603

Lab I.D.	Field Sample I.D. (1st Ave + 90th St) (720 Melrose Ave)	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	SG-07	11-11-03/1208-1228	EPA Method TO-15	28" Hg	7" Hg	6.5" Hg
02A	SG-06	11-11-03/1209-1229		29	8	7.5" Hg
03A	SG-15	11-12-03/1111-1117		28	2	1.5" Hg
04A	SG-18	11-11-03/1217-1237		29.5	12	7.5" Hg
05A	SG-01	11-10-03/1339-1359		30	16	16.5" Hg
06A	SG-02	11-10-03/1340-1400		30	10	8.0" Hg
07A	SG-03	11-10-03/1341-1401		29.5	10	9.0" Hg
08A	SG-04	11-10-03/1342-1402		34	14	9.0" Hg
09A	SG-05	11-10-03/1037-1057		29	7.5	7.0" Hg
10A	SG-06	11-10-03/1038-1058		29	5.5	6.5" Hg

Relinquished By: (Signature) Date/Time: 11-13-03/1500
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: 11/14/03 950 ATL
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
Fedex	824476435273		—	Good	Yes No None	0311274

Form 1258 rev. 00

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

0388

Contact Person: Chuck Dusel
Company: URS Corporation
Address: 640 Ellicott St City: Buffalo State: NY Zip: 14203
Phone: (716) 856-5636 FAX: (716) 856-2545
Collected By: Signature: Edward Murray

Project info:
P.O. #:
Project #: 11173261.00001
Project Name: 1st Avenue + 90th St.

Turn Around Time:
☒ Normal
☐ Rush ____ Specify

MW 11-15-03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	SG-01	11-11-03/0940-1000	EPA Method To-15	30" Hg	8" Hg	6.5" Hg
02A	SG-02	11-11-03/0941-1001		30	6	5.0" Hg
03A	SG-03	11-11-03/0942-0957		29	2.5	2.5" Hg
04A	SG-04	11-11-03/0943-1003		30	6	5.5" Hg
05A	SG-05	11-11-03/0944-1004		28	6.5	5.0" Hg
06A	SG-06	11-11-03/0945-1005		30	7	5.5" Hg
07A	SG-09	11-12-03/0842-0902		21	7.5	7.0" Hg
08A	SG-10	11-12-03/0843-0903		28	8	7.0" Hg
09A	SG-11	11-12-03/0844-0904		29	8	7.0" Hg
10A	SG-12	11-12-03/0845-0905		29	7.5	7.5" Hg

Relinquished By: (Signature) Date/Time: Edward Murray 11-13-03/1500
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Samuel Thomas ATL 11/14/03 1000
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only:

Shipper Name	Air Bill #	Opened By	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	8244 4764 3573	SB	—	Good	Yes No None	0311272A

Form 1259 rev. 09

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

0389

Contact Person: Chuck Dusel
Company: URS Corporation
Address: 640 Ellicott St. City: Buffalo State: NY Zip: 14203
Phone: (716) 856-5636 FAX: (716) 856-2545
Collected By: Signature: Edward Thomas

Project info:
P.O. #:
Project #: 11173261.0000
Project Name: 1st Avenue 90th St.

Turn Around Time:
☒ Normal
☐ Rush ____ Specify
Due 11-15-03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
11A	SG-13	11-12-03/0846-0906	EPA Method TO-15	30" Hg	8" Hg	7.0"Hg
12A	SG-14	11-12-03/0847-0907		29	8	7.0"Hg
13A	SG-16	11-12-03/1109-1129		28	4.5	6.0"Hg
14A	SG-17	11-12-03/1110-1130		27	7	6.0"Hg
15A	SG-19	11-11-03/1211-1231		30	6.5	5.0"Hg
16A	SG-20	11-12-03/1315-1335		29	8	7.5"Hg
17A	SG-21	11-12-03/1318-1338		28	5.5	5.0"Hg
18A	SG-22	11-12-03/1319-1339		28	14.5	14"Hg
19A	SG-23	11-12-03/1317-1337		28.5	5.5	5.0"Hg
20A	SG-24	11-12-03/1316-1336		28	6	5.5"Hg

Relinquished By: (Signature) Date/Time: Edward Thomas 11-13-03/1500
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Samuel Thomas ATL 11/14/03 1000
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only

Shipper Name	Air Bill #	Opened By	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	8244 4764 3523	—	Good	Yes No (None)		0311272A

Form 1233 rev. 3B

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

0196

Contact Person: Chuck Dusel
Company: URS Corporation
Address: 640 Ellicott St. City: Buffalo State: NY Zip: 14203
Phone: (716) 856-5636 FAX: (716) 856-2545
Collected By: Signature: [signature]

Project info:
P.O. #:
Project #: 11173261-00001
Project Name: 1st Avenue 90th St.

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

11-15-03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
21A	SG-25	11-11-03/0946-1006	EPA Method TO-15	30" Hg	8" Hg	6.5" Hg
22A	SG-26	11-12-03/1339-1359		28	14.5	13.5" Hg
23A	Field Blank 1	11-11-03/1320-1340		25	4	6.0" Hg
24A	Field Blank 2	11-12-03/0546-0706		30	10	7.5" Hg
25A	Ambient 1	11-11-03/1320-1340		30	9	7.5" Hg
26A	Ambient 2	11-12-03/0050-0907		15	4	4.0" Hg

Relinquished By: (Signature) Date/Time: 11-13-03/1500
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: 11/14/03 AIR 1000
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	8244 4764 3528		—	Good	Yes No (None)	0311272B

Form 1252 rev 03

Instrument RunLog

@Air Toxics Ltd.

Log Book #: 827 | 120

GC/MS Tuning and Mass Calibration (BFB) Ion 176 / Ion 174 *100 = 95.32%

BFB File ID: 3111901
BFB Injection Date: 11/19/03
BFB Injection Time: 0723

Tekmar Purge Flow: 13.2ml/min
Vacuum: 8.0 x 10^-5

m/e	Ion Abundance Criteria	% Relative Abundance
50	15 - 40% of the base peak	28.58
75	30 - 60% of the base peak	59.91
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.71
173	Less than 2% of mass 174	0.37 (0.71)1
174	Greater than 50% of mass 95	52.38
175	5.0 - 9.0% of mass 174	3.90 (7.45)1
176	Greater than 95% but less than 101% of mass 174	49.93 (95.32)1 ✓
177	5.0 - 9.0% of mass 176	2.68 (5.37)2

1 - value in parenthesis is % mass 174 2 - value in parenthesis is % mass 176

#	I.S.	Area counts
BCM		
1,4-DFB		
CB-d_5		

THIS TUNE CHECK APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

Use	File #	Sample Name/Client	Can #	Pressure	Amount	Dilution Factor	Date Analyzed	Time Analyzed	Init.	Comments
1 ✓	3111901	1053-44A-100ppbv	33671	5psig	0.70 mL	1.00	11/19/03	0723	JJ	BFB
2 ✓	02	978-113-250ppbv	33594	NA	40 mL			0754	TC	CCV
3 ✓	03	1053-308-250ppbv	25314					0823		LCS 1out
4 ✓	04	Lab Blank	12010	↓		↓		0855		
5 ✓	05	Parsons 0311283-01A	33715	5.5"Hg→15psi		2.47		0929		
6 ✓	06	URS 0311278B-26A	33411	4.0"Hg→15psi		2.33		0957		
7 ✓	07	-25A -27A	34087	7.5"Hg→15psi		2.69		1022		
8 ✓	08	-24A	34601	11		11		1109		
9 ✓	09	-23A	12306	6.0"Hg→15psi		2.53		1132		
10 ✓	10	-22A	9540	13.5"Hg→15psi		3.67		1220		Dup
11 ✓	11	-22AA	↓	↓		↓		1259		
12 ✓	12	-21A	94920	6.5"Hg→15psi		2.58		1326		Dup
13 ✓	13	-21AA	↓	↓	↓	↓		1352		
14 ✓	14	ENSR 0311309A-01A	9911	7.0"Hg→5psi	0.39 mL	1.79		1429	↓	
15 ✓	15	↓ -02A	34362	9.0"Hg→5psi	12.5 mL	6.11	↓	1504	TC	

Calculation Check: File ID: 3111902 Compound: Chloroform Initials: JJ

ppbv in sample = Area of Compound in Sample x Conc. Int. Standard (ppbv) x Dilution Factor / (Area of Int. Standard in Sample x ICAL RRF)

2411135 / 2088749 x 500 x 1.00 = 287.82 ppbv

(502699) (0.83332)

Reported Result: 287.82 ppbv

Signed

11/19/03
Date

Revised: 06/29/99

Instrument RunLog

@Air Toxics Ltd.

Log Book #: 827 | 121

GC/MS Tuning and Mass Calibration (BFB) Continued from Previous Page

BFB File ID:
BFB Injection Date:
BFB Injection Time:

Tekmar Purge Flow:
Vacuum:

m/e	Ion Abundance Criteria	% Relative Abundance
50	15 - 40% of the base peak	
75	30 - 60% of the base peak	
95	Base peak, 100% relative abundance	
96	5.0 - 9.0% of mass 95	
173	Less than 2% of mass 174	( )1
174	Greater than 50% of mass 95	
175	5.0 - 9.0% of mass 174	( )1
176	Greater than 95% but less than 101% of mass 174	( )1
177	5.0 - 9.0% of mass 176	( )2

1 - value in parenthesis is % mass 174 2 - value in parenthesis is % mass 176

#	I.S.	Area counts
BCM		
1,4-DFB		
CB-d_5		

TC 11/19/03

THIS TUNE CHECK APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

Use	File #	Sample Name/Client	Can #	Pressure	Amount	Dilution Factor	Date Analyzed	Time Analyzed	Init.	Comments
1 ✓	3111916	ENSR 0311309B-03A	6996	7.5"Hg→5psi	40 mL	1.79	11/19/03	1532	TC	
2 ✓	17	URS 0311274-01A	SC97	6.5"Hg→15psi		2.58		1601		Dup of 3111927
3 ✓	18	-02A	SC87	7.5"Hg→15psi		2.69		1630		
4 ✓	19	-03A	34125	1.5"Hg→15psi		2.13		1652		
5 ✓	20	-04A	639	7.5"Hg→15psi		2.69		1720		
6 ✓	21	-05A	SC62	16.5"Hg→15psi		4.49		1745		
7 ✓	22	-06A	SC25	8.0"Hg→15psi		2.76		1814		
8 ✓	23	-07A	SC76	9.0"Hg→15psi		2.99		1837		
9 ✓	24	-08A	14524	↓		↓		1900		
10 ✓	25	-09A	33714	7.0"Hg→15psi		2.64		1932		
11 ✓	26	-10A	34595	6.5"Hg→15psi		2.58		2008	↓	
12 ✓	↓ 27	-01AA	SC97	↓	↓	↓	↓	2102	TC	Dup w/3111917
13										
14										
15										TC 11/19/03

Calculation Check: File ID: Compound: Initials:

ppbv in sample = Area of Compound in Sample x Conc. Int. Standard (ppbv) x Dilution Factor / (Area of Int. Standard in Sample x ICAL RRF)

ppbv in sample = ( ) x ( ) x ( ) =

Reported Result:

TC 11/19/03

Signed

11/19/03
Date

Revised: 06/29/99

9185

Data File: /chem/msd3.i/3-19nov.b/3111902.d
Report Date: 19-Nov-2003 08:18

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd3.i Injection Date: 19-NOV-2003 07:56
Analysis Type: AIR Init. Cal. Times: 11:11 14:30
Lab Sample ID: 978-113-250ppbv Quant Type: ISTD
Method: /var/chem/msd3.i/3-19nov.b/to141023.m

	COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	2 Dichlorodifluoromethane/Frl	1.58802	1.65814	0.010	-4.41548	30.00000	Averaged
	4 Freon 114	1.19163	1.34441	0.010	-12.82101	30.00000	Averaged
	7 Chloromethane	0.49189	0.53725	0.010	-9.22247	30.00000	Averaged
	10 Vinyl Chloride	0.52983	0.44303	0.010	16.38323	30.00000	Averaged
	14 Bromomethane	0.33179	0.38108	0.010	-14.85481	30.00000	Averaged
	15 Chloroethane	0.22908	0.20579	0.010	10.16527	30.00000	Averaged
	17 Trichlorofluoromethane/Frl1	1.50466	1.69293	0.010	-12.51221	30.00000	Averaged
	23 Freon 113	0.82665	0.94949	0.010	-14.86029	30.00000	Averaged
	24 1,1-Dichloroethene	0.90305	0.92839	0.010	-2.80630	30.00000	Averaged
	25 2-Propanol	0.80798	0.77978	0.010	3.49015	30.00000	Averaged
	26 Methylene Chloride	0.57682	0.59348	0.010	-2.88826	30.00000	Averaged
	27 MTBE	0.72386	0.56819	0.010	21.50501	30.00000	Averaged
	28 trans-1,2-Dichloroethene	0.64557	0.69074	0.010	-6.99616	30.00000	Averaged
	30 1,1-Dichloroethane	0.83783	0.87504	0.010	-4.44112	30.00000	Averaged
	31 cis-1,2-Dichloroethene	0.57326	0.61091	0.010	-6.56676	30.00000	Averaged
	32 Chloroform	0.83332	0.95940	0.010	-15.13037	30.00000	Averaged
	33 1,1,1-Trichloroethane	0.77100	0.96952	0.010	-25.74775	30.00000	Averaged
	34 Carbon Tetrachloride	0.76088	0.97764	0.010	-28.48763	30.00000	Averaged
	35 Benzene	1.04528	1.06852	0.010	-2.22287	30.00000	Averaged
	36 1,2-Dichloroethane	0.55256	0.71185	0.010	-28.82733	30.00000	Averaged
	38 Trichloroethene	0.42451	0.49312	0.010	-16.16297	30.00000	Averaged
	39 1,2-Dichloropropane	0.37190	0.40085	0.010	-7.78531	30.00000	Averaged
$	40 Toluene-d8	0.83403	0.80768	0.010	3.15980	30.00000	Averaged
	41 Toluene	1.15453	1.32924	0.010	-15.13247	30.00000	Averaged
	42 1,1,2-Trichloroethane	0.41428	0.48325	0.010	-16.64640	30.00000	Averaged
	43 Tetrachloroethene	0.44981	0.55153	0.010	-22.61363	30.00000	Averaged
	44 1,2-Dibromoethane	0.56307	0.64007	0.010	-13.67544	30.00000	Averaged
	45 Chlorobenzene	0.76403	0.86934	0.010	-13.78385	30.00000	Averaged
	46 Ethyl Benzene	0.38815	0.45110	0.010	-16.21748	30.00000	Averaged
	47 m,p-Xylene	0.49491	0.60636	0.010	-22.51713	30.00000	Averaged
	48 o-Xylene	0.43714	0.43023	0.010	1.58221	30.00000	Averaged
	49 1,1,2,2-Tetrachloroethane	0.71033	0.67850	0.010	4.48151	30.00000	Averaged
	50 1,3,5-Trimethylbenzene	1.10105	1.23025	0.010	-11.73425	30.00000	Averaged
	51 1,2,4-Trimethylbenzene	1.12520	1.18003	0.010	-4.87233	30.00000	Averaged
	52 1,3-Dichlorobenzene	0.73304	0.70123	0.010	4.33877	30.00000	Averaged

APPENDIX B

VALIDATED FORM I's

AIR TOXICS LTD.

1st Rec.

SAMPLE NAME: SG-01

ID#: 0311272AR1-01A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111806**	**Date of Collection:**	**11/11/03**
Dil. Factor:	**2.58**	**Date of Analysis:**	**11/18/03 10:11 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	65	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	64	Not Detected
1,1,1-Trichloroethane	13	Not Detected	72	Not Detected
Carbon Tetrachloride	13	Not Detected	82	Not Detected
Trichloroethene	13	Not Detected	70	Not Detected
Tetrachloroethene	13	Not Detected	89	Not Detected
1,1-Dichloroethene	13	Not Detected	52	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	52	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	52	Not Detected
Benzene	13	Not Detected	42	Not Detected
Toluene	13	10 J U	49	38 J U
Ethyl Benzene	13	Not Detected	57	Not Detected
m,p-Xylene	13	Not Detected	57	Not Detected
o-Xylene	13	Not Detected	57	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	53	Not Detected
Chlorobenzene	13	Not Detected	60	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
Freon 11	13	Not Detected	74	Not Detected
Chloromethane	13	Not Detected	27	Not Detected
1,2-Dichloroethane	13	Not Detected	53	Not Detected
Freon 114	13	Not Detected	92	Not Detected
Bromomethane	13	Not Detected	51	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	47	Not Detected
1,2-Dichloropropane	13	Not Detected	60	Not Detected
1,1,2-Trichloroethane	13	Not Detected	72	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	64	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	64	Not Detected
1,3-Dichlorobenzene	13	Not Detected	79	Not Detected
1,4-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	90	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

Rmk 12/2/03

0007

1st Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-02

ID#: 0311272AR1-02A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111807**	**Date of Collection:**	**11/11/03**
Dil. Factor:	**2.42**	**Date of Analysis:**	**11/18/03 10:39 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	61	Not Detected
Freon 113	12	Not Detected	94	Not Detected
Chloroform	12	3.9 J	60	19 J
1,1,1-Trichloroethane	12	Not Detected	67	Not Detected
Carbon Tetrachloride	12	Not Detected	77	Not Detected
Trichloroethene	12	Not Detected	66	Not Detected
Tetrachloroethene	12	Not Detected	83	Not Detected
1,1-Dichloroethene	12	Not Detected	49	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	49	Not Detected
Benzene	12	Not Detected	39	Not Detected
Toluene	12	51	46	190
Ethyl Benzene	12	Not Detected	53	Not Detected
m,p-Xylene	12	4.2 J	53	18 J
o-Xylene	12	Not Detected	53	Not Detected
Vinyl Chloride	12	Not Detected	31	Not Detected
1,1-Dichloroethane	12	Not Detected	50	Not Detected
Chlorobenzene	12	Not Detected	57	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Freon 11	12	Not Detected	69	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
1,2-Dichloroethane	12	Not Detected	50	Not Detected
Freon 114	12	Not Detected	86	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
1,2-Dichloropropane	12	Not Detected	57	Not Detected
1,1,2-Trichloroethane	12	Not Detected	67	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	60	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	60	Not Detected
1,3-Dichlorobenzene	12	Not Detected	74	Not Detected
1,4-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	94	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	84	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0014

17TH AVE.

AIR TOXICS LTD.

SAMPLE NAME: SG-03

ID#: 0311272AR1-03A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111808**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.20**	**Date of Analysis: 11/18/03 11:06 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	11	Not Detected	55	Not Detected
Freon 113	11	Not Detected	86	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
Carbon Tetrachloride	11	Not Detected	70	Not Detected
Trichloroethene	11	Not Detected	60	Not Detected
Tetrachloroethene	11	Not Detected	76	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Benzene	11	Not Detected	36	Not Detected
Toluene	11	4.4 J U	42	17 J U
Ethyl Benzene	11	Not Detected	48	Not Detected
m,p-Xylene	11	Not Detected	48	Not Detected
o-Xylene	11	Not Detected	48	Not Detected
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
Chlorobenzene	11	Not Detected	51	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
Freon 11	11	Not Detected	63	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
Freon 114	11	Not Detected	78	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	11	Not Detected	30	Not Detected
2-Propanol	11	Not Detected	27	Not Detected
Methyl tert-butyl ether	11	Not Detected	40	Not Detected
1,2-Dichloropropane	11	Not Detected	52	Not Detected
1,1,2-Trichloroethane	11	Not Detected	61	Not Detected
1,3,5-Trimethylbenzene	11	Not Detected	55	Not Detected
1,2,4-Trimethylbenzene	11	Not Detected	55	Not Detected
1,3-Dichlorobenzene	11	Not Detected	67	Not Detected
1,4-Dichlorobenzene	11	Not Detected	67	Not Detected
1,2-Dichlorobenzene	11	Not Detected	67	Not Detected
1,2-Dibromoethane (EDB)	11	Not Detected	86	Not Detected
1,1,2,2-Tetrachloroethane	11	Not Detected	77	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0024

4th Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-04

ID#: 0311272AR1-04A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111809**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.47**	**Date of Analysis: 11/18/03 11:32 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	62	Not Detected
Freon 113	12	Not Detected	96	Not Detected
Chloroform	12	21	61	100
1,1,1-Trichloroethane	12	Not Detected	68	Not Detected
Carbon Tetrachloride	12	Not Detected	79	Not Detected
Trichloroethene	12	Not Detected	67	Not Detected
Tetrachloroethene	12	7.1 J	85	49 J
1,1-Dichloroethene	12	Not Detected	50	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	50	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	50	Not Detected
Benzene	12	2.9 J	40	9.3 J
Toluene	12	28	47	110
Ethyl Benzene	12	6.4 J	54	28 J
m,p-Xylene	12	26	54	120
o-Xylene	12	15	54	68
Vinyl Chloride	12	Not Detected	32	Not Detected
1,1-Dichloroethane	12	Not Detected	51	Not Detected
Chlorobenzene	12	Not Detected	58	Not Detected
Methylene Chloride	12	Not Detected	44	Not Detected
Freon 11	12	Not Detected	70	Not Detected
Chloromethane	12	Not Detected	26	Not Detected
1,2-Dichloroethane	12	Not Detected	51	Not Detected
Freon 114	12	Not Detected	88	Not Detected
Bromomethane	12	Not Detected	49	Not Detected
Chloroethane	12	Not Detected	33	Not Detected
2-Propanol	12	Not Detected	31	Not Detected
Methyl tert-butyl ether	12	Not Detected	45	Not Detected
1,2-Dichloropropane	12	Not Detected	58	Not Detected
1,1,2-Trichloroethane	12	Not Detected	68	Not Detected
1,3,5-Trimethylbenzene	12	4.5 J	62	23 J
1,2,4-Trimethylbenzene	12	10 J	62	51 J
1,3-Dichlorobenzene	12	Not Detected	75	Not Detected
1,4-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	96	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	86	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0031

1st Rec.

AIR TOXICS LTD.

SAMPLE NAME: SG-05

ID#: 0311272AR1-05A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111810**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.42**	**Date of Analysis: 11/18/03 11:58 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	61	Not Detected
Freon 113	12	Not Detected	94	Not Detected
Chloroform	12	Not Detected	60	Not Detected
1,1,1-Trichloroethane	12	Not Detected	67	Not Detected
Carbon Tetrachloride	12	Not Detected	77	Not Detected
Trichloroethene	12	Not Detected	66	Not Detected
Tetrachloroethene	12	6.7 J	83	46 J
1,1-Dichloroethene	12	Not Detected	49	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	49	Not Detected
Benzene	12	Not Detected	39	Not Detected
Toluene	12	32	46	120
Ethyl Benzene	12	Not Detected	53	Not Detected
m,p-Xylene	12	Not Detected	53	Not Detected
o-Xylene	12	Not Detected	53	Not Detected
Vinyl Chloride	12	Not Detected	31	Not Detected
1,1-Dichloroethane	12	Not Detected	50	Not Detected
Chlorobenzene	12	Not Detected	57	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Freon 11	12	Not Detected	69	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
1,2-Dichloroethane	12	Not Detected	50	Not Detected
Freon 114	12	Not Detected	86	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
1,2-Dichloropropane	12	Not Detected	57	Not Detected
1,1,2-Trichloroethane	12	Not Detected	67	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	60	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	60	Not Detected
1,3-Dichlorobenzene	12	Not Detected	74	Not Detected
1,4-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	94	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	84	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0047

1st Rus.

AIR TOXICS LTD.

SAMPLE NAME: SG-06

ID#: 0311272AR1-06A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111811**	**Date of Collection:**	**11/11/03**
Dil. Factor:	**2.47**	**Date of Analysis:**	**11/18/03 12:27 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	62	Not Detected
Freon 113	12	Not Detected	96	Not Detected
Chloroform	12	Not Detected	61	Not Detected
1,1,1-Trichloroethane	12	Not Detected	68	Not Detected
Carbon Tetrachloride	12	Not Detected	79	Not Detected
Trichloroethene	12	Not Detected	67	Not Detected
Tetrachloroethene	12	Not Detected	85	Not Detected
1,1-Dichloroethene	12	Not Detected	50	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	50	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	50	Not Detected
Benzene	12	Not Detected	40	Not Detected
Toluene	12	6.2 J	47	24 J
Ethyl Benzene	12	Not Detected	54	Not Detected
m,p-Xylene	12	Not Detected	54	Not Detected
o-Xylene	12	Not Detected	54	Not Detected
Vinyl Chloride	12	Not Detected	32	Not Detected
1,1-Dichloroethane	12	Not Detected	51	Not Detected
Chlorobenzene	12	Not Detected	58	Not Detected
Methylene Chloride	12	Not Detected	44	Not Detected
Freon 11	12	Not Detected	70	Not Detected
Chloromethane	12	Not Detected	26	Not Detected
1,2-Dichloroethane	12	Not Detected	51	Not Detected
Freon 114	12	Not Detected	88	Not Detected
Bromomethane	12	Not Detected	49	Not Detected
Chloroethane	12	Not Detected	33	Not Detected
2-Propanol	12	Not Detected	31	Not Detected
Methyl tert-butyl ether	12	66	45	240
1,2-Dichloropropane	12	Not Detected	58	Not Detected
1,1,2-Trichloroethane	12	Not Detected	68	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	62	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	62	Not Detected
1,3-Dichlorobenzene	12	Not Detected	75	Not Detected
1,4-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	96	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	86	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

Rpt'd 12/2/03

0056

AIR TOXICS LTD.

SAMPLE NAME: 1st Ave + 90th St SG-07

ID#: 0311274R1-01A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111917**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.58**	**Date of Analysis: 11/19/03 04:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	65	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	64	Not Detected
1,1,1-Trichloroethane	13	Not Detected	72	Not Detected
Carbon Tetrachloride	13	Not Detected	82	Not Detected
Trichloroethene	13	Not Detected	70	Not Detected
Tetrachloroethene	13	33	89	230
1,1-Dichloroethene	13	Not Detected	52	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	52	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	52	Not Detected
Benzene	13	16	42	51
Toluene	13	87	49	330
Ethyl Benzene	13	Not Detected	57	Not Detected
m,p-Xylene	13	10 J	57	46 J
o-Xylene	13	Not Detected	57	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	53	Not Detected
Chlorobenzene	13	Not Detected	60	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
Freon 11	13	Not Detected	74	Not Detected
Chloromethane	13	Not Detected	27	Not Detected
1,2-Dichloroethane	13	Not Detected	53	Not Detected
Freon 114	13	Not Detected	92	Not Detected
Bromomethane	13	Not Detected	51	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	47	Not Detected
1,2-Dichloropropane	13	Not Detected	60	Not Detected
1,1,2-Trichloroethane	13	Not Detected	72	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	64	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	64	Not Detected
1,3-Dichlorobenzene	13	Not Detected	79	Not Detected
1,4-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	90	Not Detected

J = Estimated value.

Container Type: 1 Liter Silonite Canister

AIR TOXICS LTD.

1st Avenue

SAMPLE NAME: SG-08

ID#: 0311274R1-02A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111918**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/19/03 04:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	4.8 J	67	24 J
1,1,1-Trichloroethane	13	Not Detected U5	74	Not Detected
Carbon Tetrachloride	13	Not Detected U5	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	34	93	230
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	180	52	700
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	Not Detected	59	Not Detected
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected U5	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

Container Type: 1 Liter Silonite Canister

AMK 12/26/03

0029

1ST AVE.

AIR TOXICS LTD.

SAMPLE NAME: SG-09

ID#: 0311272AR1-07A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111812**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.64**	**Date of Analysis: 11/18/03 12:57 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	66	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	66	Not Detected
1,1,1-Trichloroethane	13	Not Detected	73	Not Detected
Carbon Tetrachloride	13	Not Detected	84	Not Detected
Trichloroethene	13	Not Detected	72	Not Detected
Tetrachloroethene	13	Not Detected	91	Not Detected
1,1-Dichloroethene	13	Not Detected	53	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Benzene	13	Not Detected	43	Not Detected
Toluene	13	28 U	50	110 U
Ethyl Benzene	13	Not Detected	58	Not Detected
m,p-Xylene	13	6.4 J	58	28 J
o-Xylene	13	Not Detected	58	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	54	Not Detected
Chlorobenzene	13	Not Detected	62	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	75	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	54	Not Detected
Freon 114	13	Not Detected	94	Not Detected
Bromomethane	13	Not Detected	52	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	33	Not Detected
Methyl tert-butyl ether	13	Not Detected	48	Not Detected
1,2-Dichloropropane	13	Not Detected	62	Not Detected
1,1,2-Trichloroethane	13	Not Detected	73	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	66	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	66	Not Detected
1,3-Dichlorobenzene	13	Not Detected	81	Not Detected
1,4-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	92	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

Rm 1K 11/22/03

15th Ave

AIR TOXICS LTD.

SAMPLE NAME: SG-10

ID#: 0311272AR1-08A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111813**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.64**	**Date of Analysis: 11/18/03 01:20 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	66	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	3.4 J	66	17 J
1,1,1-Trichloroethane	13	Not Detected	73	Not Detected
Carbon Tetrachloride	13	Not Detected	84	Not Detected
Trichloroethene	13	Not Detected	72	Not Detected
Tetrachloroethene	13	Not Detected	91	Not Detected
1,1-Dichloroethene	13	Not Detected	53	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Benzene	13	Not Detected	43	Not Detected
Toluene	13	330	50	1300
Ethyl Benzene	13	Not Detected	58	Not Detected
m,p-Xylene	13	11 J	58	48 J
o-Xylene	13	3.8 J	58	17 J
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	54	Not Detected
Chlorobenzene	13	Not Detected	62	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	75	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	54	Not Detected
Freon 114	13	Not Detected	94	Not Detected
Bromomethane	13	Not Detected	52	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	33	Not Detected
Methyl tert-butyl ether	13	Not Detected	48	Not Detected
1,2-Dichloropropane	13	Not Detected	62	Not Detected
1,1,2-Trichloroethane	13	Not Detected	73	Not Detected
1,3,5-Trimethylbenzene	13	3.7 J	66	18 J
1,2,4-Trimethylbenzene	13	5.2 J	66	26 J
1,3-Dichlorobenzene	13	Not Detected	81	Not Detected
1,4-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	92	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0074

4th Rec.

AIR TOXICS LTD.

SAMPLE NAME: SG-11

ID#: 0311272AR1-09A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111814**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.64**	**Date of Analysis: 11/18/03 01:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	66	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	12 J	66	59 J
1,1,1-Trichloroethane	13	Not Detected	73	Not Detected
Carbon Tetrachloride	13	Not Detected	84	Not Detected
Trichloroethene	13	Not Detected	72	Not Detected
Tetrachloroethene	13	Not Detected	91	Not Detected
1,1-Dichloroethene	13	Not Detected	53	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Benzene	13	Not Detected	43	Not Detected
Toluene	13	110	50	420
Ethyl Benzene	13	Not Detected	58	Not Detected
m,p-Xylene	13	Not Detected	58	Not Detected
o-Xylene	13	Not Detected	58	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	54	Not Detected
Chlorobenzene	13	Not Detected	62	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	75	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	54	Not Detected
Freon 114	13	Not Detected	94	Not Detected
Bromomethane	13	Not Detected	52	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	33	Not Detected
Methyl tert-butyl ether	13	12 J	48	42 J
1,2-Dichloropropane	13	Not Detected	62	Not Detected
1,1,2-Trichloroethane	13	Not Detected	73	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	66	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	66	Not Detected
1,3-Dichlorobenzene	13	Not Detected	81	Not Detected
1,4-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	92	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0087

12th Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-12

ID#: 0311272AR1-10A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111815**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/18/03 02:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	4.2 J	67	21 J
1,1,1-Trichloroethane	13	Not Detected	74	Not Detected
Carbon Tetrachloride	13	Not Detected	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	Not Detected	93	Not Detected
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	15 U	52	56 U
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	Not Detected	59	Not Detected
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

Rec'd 12/23/03

Container Type: 1 Liter Summa Canister

0097

15th Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-13

ID#: 0311272AR1-11A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111816**	**Date of Collection:**	**11/12/03**
Dil. Factor:	**2.64**	**Date of Analysis:**	**11/18/03 02:38 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	66	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	4.1 J	66	20 J
1,1,1-Trichloroethane	13	Not Detected	73	Not Detected
Carbon Tetrachloride	13	Not Detected	84	Not Detected
Trichloroethene	13	Not Detected	72	Not Detected
Tetrachloroethene	13	9.5 J	91	66 J
1,1-Dichloroethene	13	Not Detected	53	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Benzene	13	Not Detected	43	Not Detected
Toluene	13	22 J	50	83 J
Ethyl Benzene	13	Not Detected	58	Not Detected
m,p-Xylene	13	Not Detected	58	Not Detected
o-Xylene	13	Not Detected	58	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	54	Not Detected
Chlorobenzene	13	Not Detected	62	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	75	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	54	Not Detected
Freon 114	13	Not Detected	94	Not Detected
Bromomethane	13	Not Detected	52	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	33	Not Detected
Methyl tert-butyl ether	13	Not Detected	48	Not Detected
1,2-Dichloropropane	13	Not Detected	62	Not Detected
1,1,2-Trichloroethane	13	Not Detected	73	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	66	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	66	Not Detected
1,3-Dichlorobenzene	13	Not Detected	81	Not Detected
1,4-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	92	Not Detected

J = Estimated value.

Rmk 18/18/03

Container Type: 1 Liter Summa Canister

0106

15th Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-14

ID#: 0311272AR1-12A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111817**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.64**	**Date of Analysis: 11/18/03 03:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	66	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	66	Not Detected
1,1,1-Trichloroethane	13	Not Detected	73	Not Detected
Carbon Tetrachloride	13	Not Detected	84	Not Detected
Trichloroethene	13	Not Detected	72	Not Detected
Tetrachloroethene	13	Not Detected	91	Not Detected
1,1-Dichloroethene	13	Not Detected	53	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Benzene	13	Not Detected	43	Not Detected
Toluene	13	62	50	240
Ethyl Benzene	13	Not Detected	58	Not Detected
m,p-Xylene	13	Not Detected	58	Not Detected
o-Xylene	13	Not Detected	58	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	54	Not Detected
Chlorobenzene	13	Not Detected	62	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	75	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	54	Not Detected
Freon 114	13	Not Detected	94	Not Detected
Bromomethane	13	Not Detected	52	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	33	Not Detected
Methyl tert-butyl ether	13	Not Detected	48	Not Detected
1,2-Dichloropropane	13	Not Detected	62	Not Detected
1,1,2-Trichloroethane	13	Not Detected	73	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	66	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	66	Not Detected
1,3-Dichlorobenzene	13	Not Detected	81	Not Detected
1,4-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dichlorobenzene	13	Not Detected	81	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	92	Not Detected

Container Type: 1 Liter Summa Canister

0116

AIR TOXICS LTD.

1st Amend

SAMPLE NAME: SG-15

ID#: 0311274R1-03A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111919**	**Date of Collection:**	**11/12/03**
Dil. Factor:	**2.13**	**Date of Analysis:**	**11/19/03 04:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	11	Not Detected	54	Not Detected
Freon 113	11	Not Detected	83	Not Detected
Chloroform	11	3.6 J	53	18 J
1,1,1-Trichloroethane	11	Not Detected U5	59	Not Detected
Carbon Tetrachloride	11	Not Detected U5	68	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
Tetrachloroethene	11	14	73	94
1,1-Dichloroethene	11	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Benzene	11	Not Detected	34	Not Detected
Toluene	11	41	41	160
Ethyl Benzene	11	Not Detected	47	Not Detected
m,p-Xylene	11	Not Detected	47	Not Detected
o-Xylene	11	Not Detected	47	Not Detected
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
Chlorobenzene	11	Not Detected	50	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Freon 11	11	Not Detected	61	Not Detected
Chloromethane	11	Not Detected	22	Not Detected
1,2-Dichloroethane	11	Not Detected U5	44	Not Detected
Freon 114	11	Not Detected	76	Not Detected
Bromomethane	11	Not Detected	42	Not Detected
Chloroethane	11	Not Detected	28	Not Detected
2-Propanol	11	Not Detected	27	Not Detected
Methyl tert-butyl ether	11	Not Detected	39	Not Detected
1,2-Dichloropropane	11	Not Detected	50	Not Detected
1,1,2-Trichloroethane	11	Not Detected	59	Not Detected
1,3,5-Trimethylbenzene	11	Not Detected	53	Not Detected
1,2,4-Trimethylbenzene	11	Not Detected	53	Not Detected
1,3-Dichlorobenzene	11	Not Detected	65	Not Detected
1,4-Dichlorobenzene	11	Not Detected	65	Not Detected
1,2-Dichlorobenzene	11	Not Detected	65	Not Detected
1,2-Dibromoethane (EDB)	11	Not Detected	83	Not Detected
1,1,2,2-Tetrachloroethane	11	Not Detected	74	Not Detected

J = Estimated value.

AMB 12/04/03

Container Type: 1 Liter Summa Canister

0039

1st Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-16

ID#: 0311272AR1-13A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111818**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.53**	**Date of Analysis: 11/18/03 03:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	64	Not Detected
Freon 113	13	Not Detected	98	Not Detected
Chloroform	13	6.4 J	63	32 J
1,1,1-Trichloroethane	13	Not Detected	70	Not Detected
Carbon Tetrachloride	13	Not Detected	81	Not Detected
Trichloroethene	13	Not Detected	69	Not Detected
Tetrachloroethene	13	Not Detected	87	Not Detected
1,1-Dichloroethene	13	Not Detected	51	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	51	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	51	Not Detected
Benzene	13	Not Detected	41	Not Detected
Toluene	13	70	48	270
Ethyl Benzene	13	Not Detected	56	Not Detected
m,p-Xylene	13	4.9 J	56	22 J
o-Xylene	13	Not Detected	56	Not Detected
Vinyl Chloride	13	Not Detected	33	Not Detected
1,1-Dichloroethane	13	Not Detected	52	Not Detected
Chlorobenzene	13	Not Detected	59	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
Freon 11	13	Not Detected	72	Not Detected
Chloromethane	13	Not Detected	26	Not Detected
1,2-Dichloroethane	13	Not Detected	52	Not Detected
Freon 114	13	Not Detected	90	Not Detected
Bromomethane	13	Not Detected	50	Not Detected
Chloroethane	13	Not Detected	34	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	46	Not Detected
1,2-Dichloropropane	13	Not Detected	59	Not Detected
1,1,2-Trichloroethane	13	Not Detected	70	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	63	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	63	Not Detected
1,3-Dichlorobenzene	13	Not Detected	77	Not Detected
1,4-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	99	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	88	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0123

1st Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-17

ID#: 0311272AR1-14A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111819**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.53**	**Date of Analysis: 11/18/03 04:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	64	Not Detected
Freon 113	13	Not Detected	98	Not Detected
Chloroform	13	28	63	140
1,1,1-Trichloroethane	13	Not Detected	70	Not Detected
Carbon Tetrachloride	13	Not Detected	81	Not Detected
Trichloroethene	13	Not Detected	69	Not Detected
Tetrachloroethene	13	Not Detected	87	Not Detected
1,1-Dichloroethene	13	Not Detected	51	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	51	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	51	Not Detected
Benzene	13	Not Detected	41	Not Detected
Toluene	13	290	48	1100
Ethyl Benzene	13	Not Detected	56	Not Detected
m,p-Xylene	13	5.6 J	56	25 J
o-Xylene	13	Not Detected	56	Not Detected
Vinyl Chloride	13	Not Detected	33	Not Detected
1,1-Dichloroethane	13	Not Detected	52	Not Detected
Chlorobenzene	13	Not Detected	59	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
Freon 11	13	Not Detected	72	Not Detected
Chloromethane	13	Not Detected	26	Not Detected
1,2-Dichloroethane	13	Not Detected	52	Not Detected
Freon 114	13	Not Detected	90	Not Detected
Bromomethane	13	Not Detected	50	Not Detected
Chloroethane	13	Not Detected	34	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	46	Not Detected
1,2-Dichloropropane	13	Not Detected	59	Not Detected
1,1,2-Trichloroethane	13	Not Detected	70	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	63	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	63	Not Detected
1,3-Dichlorobenzene	13	Not Detected	77	Not Detected
1,4-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	99	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	88	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0133

AIR TOXICS LTD.

1ST AVENUE

SAMPLE NAME: SG-18

ID#: 0311274R1-04A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111920**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/19/03 05:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	67	Not Detected
1,1,1-Trichloroethane	13	Not Detected U5	74	Not Detected
Carbon Tetrachloride	13	Not Detected U5	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	12 J	93	82 J
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	22	52	85
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	Not Detected	59	Not Detected
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected U5	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

Container Type: 1 Liter Silonite Canister

AMK 12/26/03

0049

1st Ave

AIR TOXICS LTD.

SAMPLE NAME: SG-19

ID#: 0311272AR1-15A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111821**	**Date of Collection:**	**11/11/03**
Dil. Factor:	**2.42**	**Date of Analysis:**	**11/18/03 05:04 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	61	Not Detected
Freon 113	12	Not Detected	94	Not Detected
Chloroform	12	Not Detected	60	Not Detected
1,1,1-Trichloroethane	12	Not Detected	67	Not Detected
Carbon Tetrachloride	12	Not Detected	77	Not Detected
Trichloroethene	12	Not Detected	66	Not Detected
Tetrachloroethene	12	Not Detected	83	Not Detected
1,1-Dichloroethene	12	Not Detected	49	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	49	Not Detected
Benzene	12	3.4 J	39	11 J
Toluene	12	150	46	590
Ethyl Benzene	12	Not Detected	53	Not Detected
m,p-Xylene	12	Not Detected	53	Not Detected
o-Xylene	12	Not Detected	53	Not Detected
Vinyl Chloride	12	Not Detected	31	Not Detected
1,1-Dichloroethane	12	Not Detected	50	Not Detected
Chlorobenzene	12	Not Detected	57	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Freon 11	12	Not Detected	69	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
1,2-Dichloroethane	12	Not Detected	50	Not Detected
Freon 114	12	Not Detected	86	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
1,2-Dichloropropane	12	Not Detected	57	Not Detected
1,1,2-Trichloroethane	12	Not Detected	67	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	60	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	60	Not Detected
1,3-Dichlorobenzene	12	Not Detected	74	Not Detected
1,4-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	94	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	84	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0153

AIR TOXICS LTD.

19th Ave.

SAMPLE NAME: SG-20

ID#: 0311272AR1-16A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111822**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/16/03 06:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	67	Not Detected
1,1,1-Trichloroethane	13	Not Detected	74	Not Detected
Carbon Tetrachloride	13	Not Detected	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	9.1 J	93	63 J
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	140	52	520
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	8.3 J	59	36 J
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0162

47th Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-21

ID#: 0311272AR1-17A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111823**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.42**	**Date of Analysis: 11/18/03 06:57 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	61	Not Detected
Freon 113	12	Not Detected	94	Not Detected
Chloroform	12	9.2 J	60	46 J
1,1,1-Trichloroethane	12	Not Detected	67	Not Detected
Carbon Tetrachloride	12	Not Detected	77	Not Detected
Trichloroethene	12	Not Detected	66	Not Detected
Tetrachloroethene	12	64	83	440
1,1-Dichloroethene	12	Not Detected	49	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	49	Not Detected
Benzene	12	Not Detected	39	Not Detected
Toluene	12	1100	46	4100
Ethyl Benzene	12	Not Detected	53	Not Detected
m,p-Xylene	12	7.6 J	53	33 J
o-Xylene	12	Not Detected	53	Not Detected
Vinyl Chloride	12	Not Detected	31	Not Detected
1,1-Dichloroethane	12	Not Detected	50	Not Detected
Chlorobenzene	12	Not Detected	57	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Freon 11	12	Not Detected	69	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
1,2-Dichloroethane	12	Not Detected	50	Not Detected
Freon 114	12	Not Detected	86	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
1,2-Dichloropropane	12	Not Detected	57	Not Detected
1,1,2-Trichloroethane	12	Not Detected	67	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	60	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	60	Not Detected
1,3-Dichlorobenzene	12	Not Detected	74	Not Detected
1,4-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	94	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	84	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0172

1st Ave.

AIR TOXICS LTD.

SAMPLE NAME: SG-22

ID#: 0311272AR1-18A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111824**	**Date of Collection: 11/12/03**	
Dil. Factor:	**3.79**	**Date of Analysis: 11/18/03 07:22 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	19	Not Detected	95	Not Detected
Freon 113	19	Not Detected	150	Not Detected
Chloroform	19	3.8 J	94	19 J
1,1,1-Trichloroethane	19	Not Detected	100	Not Detected
Carbon Tetrachloride	19	Not Detected	120	Not Detected
Trichloroethene	19	24	100	130
Tetrachloroethene	19	12 J	130	82 J
1,1-Dichloroethene	19	Not Detected	76	Not Detected
trans-1,2-Dichloroethene	19	Not Detected	76	Not Detected
cis-1,2-Dichloroethene	19	Not Detected	76	Not Detected
Benzene	19	Not Detected	62	Not Detected
Toluene	19	96	72	370
Ethyl Benzene	19	Not Detected	84	Not Detected
m,p-Xylene	19	Not Detected	84	Not Detected
o-Xylene	19	Not Detected	84	Not Detected
Vinyl Chloride	19	Not Detected	49	Not Detected
1,1-Dichloroethane	19	Not Detected	78	Not Detected
Chlorobenzene	19	Not Detected	89	Not Detected
Methylene Chloride	19	Not Detected	67	Not Detected
Freon 11	19	Not Detected	110	Not Detected
Chloromethane	19	Not Detected	40	Not Detected
1,2-Dichloroethane	19	Not Detected	78	Not Detected
Freon 114	19	Not Detected	130	Not Detected
Bromomethane	19	Not Detected	75	Not Detected
Chloroethane	19	Not Detected	51	Not Detected
2-Propanol	19	Not Detected	47	Not Detected
Methyl tert-butyl ether	19	Not Detected	69	Not Detected
1,2-Dichloropropane	19	Not Detected	89	Not Detected
1,1,2-Trichloroethane	19	Not Detected	100	Not Detected
1,3,5-Trimethylbenzene	19	Not Detected	95	Not Detected
1,2,4-Trimethylbenzene	19	Not Detected	95	Not Detected
1,3-Dichlorobenzene	19	Not Detected	120	Not Detected
1,4-Dichlorobenzene	19	Not Detected	120	Not Detected
1,2-Dichlorobenzene	19	Not Detected	120	Not Detected
1,2-Dibromoethane (EDB)	19	Not Detected	150	Not Detected
1,1,2,2-Tetrachloroethane	19	Not Detected	130	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0195

AIR TOXICS LTD.

1st Ave.

SAMPLE NAME: SG-23

ID#: 0311272AR1-19A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111825**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.42**	**Date of Analysis: 11/18/03 07:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	61	Not Detected
Freon 113	12	Not Detected	94	Not Detected
Chloroform	12	Not Detected	60	Not Detected
1,1,1-Trichloroethane	12	Not Detected	67	Not Detected
Carbon Tetrachloride	12	Not Detected	77	Not Detected
Trichloroethene	12	Not Detected	66	Not Detected
Tetrachloroethene	12	Not Detected	83	Not Detected
1,1-Dichloroethene	12	Not Detected	49	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	49	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	49	Not Detected
Benzene	12	Not Detected	39	Not Detected
Toluene	12	75	46	290
Ethyl Benzene	12	Not Detected	53	Not Detected
m,p-Xylene	12	Not Detected	53	Not Detected
o-Xylene	12	Not Detected	53	Not Detected
Vinyl Chloride	12	Not Detected	31	Not Detected
1,1-Dichloroethane	12	Not Detected	50	Not Detected
Chlorobenzene	12	Not Detected	57	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Freon 11	12	Not Detected	69	Not Detected
Chloromethane	12	Not Detected	25	Not Detected
1,2-Dichloroethane	12	Not Detected	50	Not Detected
Freon 114	12	Not Detected	86	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
2-Propanol	12	Not Detected	30	Not Detected
Methyl tert-butyl ether	12	Not Detected	44	Not Detected
1,2-Dichloropropane	12	Not Detected	57	Not Detected
1,1,2-Trichloroethane	12	Not Detected	67	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	60	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	60	Not Detected
1,3-Dichlorobenzene	12	Not Detected	74	Not Detected
1,4-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dichlorobenzene	12	Not Detected	74	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	94	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	84	Not Detected

Container Type: 1 Liter Summa Canister

0206

1ST AVE.

AIR TOXICS LTD.

SAMPLE NAME: SG-24

ID#: 0311272AR1-20A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111826**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.47**	**Date of Analysis: 11/18/03 08:31 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected	62	Not Detected
Freon 113	12	Not Detected	96	Not Detected
Chloroform	12	Not Detected	61	Not Detected
1,1,1-Trichloroethane	12	Not Detected	68	Not Detected
Carbon Tetrachloride	12	Not Detected	79	Not Detected
Trichloroethene	12	Not Detected	67	Not Detected
Tetrachloroethene	12	Not Detected	85	Not Detected
1,1-Dichloroethene	12	Not Detected	50	Not Detected
trans-1,2-Dichloroethene	12	Not Detected	50	Not Detected
cis-1,2-Dichloroethene	12	Not Detected	50	Not Detected
Benzene	12	Not Detected	40	Not Detected
Toluene	12	160	47	620
Ethyl Benzene	12	Not Detected	54	Not Detected
m,p-Xylene	12	4.2 J	54	18 J
o-Xylene	12	Not Detected	54	Not Detected
Vinyl Chloride	12	Not Detected	32	Not Detected
1,1-Dichloroethane	12	Not Detected	51	Not Detected
Chlorobenzene	12	Not Detected	58	Not Detected
Methylene Chloride	12	Not Detected	44	Not Detected
Freon 11	12	Not Detected	70	Not Detected
Chloromethane	12	Not Detected	26	Not Detected
1,2-Dichloroethane	12	Not Detected	51	Not Detected
Freon 114	12	Not Detected	88	Not Detected
Bromomethane	12	Not Detected	49	Not Detected
Chloroethane	12	Not Detected	33	Not Detected
2-Propanol	12	Not Detected	31	Not Detected
Methyl tert-butyl ether	12	Not Detected	45	Not Detected
1,2-Dichloropropane	12	Not Detected	58	Not Detected
1,1,2-Trichloroethane	12	Not Detected	68	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	62	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	62	Not Detected
1,3-Dichlorobenzene	12	Not Detected	75	Not Detected
1,4-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dichlorobenzene	12	Not Detected	75	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	96	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	86	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

0213

FD of SG-01

1st Aug.

AIR TOXICS LTD.

SAMPLE NAME: SG-25

ID#: 0311272BR1-21A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111912**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.58**	**Date of Analysis: 11/19/03 01:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	65	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	64	Not Detected
1,1,1-Trichloroethane	13	Not Detected U5	72	Not Detected
Carbon Tetrachloride	13	Not Detected U5	82	Not Detected
Trichloroethene	13	Not Detected	70	Not Detected
Tetrachloroethene	13	Not Detected	89	Not Detected
1,1-Dichloroethene	13	Not Detected	52	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	52	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	52	Not Detected
Benzene	13	Not Detected	42	Not Detected
Toluene	13	6.1 J U	49	23 J U
Ethyl Benzene	13	Not Detected	57	Not Detected
m,p-Xylene	13	Not Detected	57	Not Detected
o-Xylene	13	Not Detected	57	Not Detected
Vinyl Chloride	13	Not Detected	34	Not Detected
1,1-Dichloroethane	13	Not Detected	53	Not Detected
Chlorobenzene	13	Not Detected	60	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
Freon 11	13	Not Detected	74	Not Detected
Chloromethane	13	Not Detected	27	Not Detected
1,2-Dichloroethane	13	Not Detected U5	53	Not Detected
Freon 114	13	Not Detected	92	Not Detected
Bromomethane	13	Not Detected	51	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	47	Not Detected
1,2-Dichloropropane	13	Not Detected	60	Not Detected
1,1,2-Trichloroethane	13	Not Detected	72	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	64	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	64	Not Detected
1,3-Dichlorobenzene	13	Not Detected	79	Not Detected
1,4-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dichlorobenzene	13	Not Detected	79	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	90	Not Detected

J = Estimated value.

Amb. labeled

Container Type: 1 Liter Summa Canister

0006

FD OF SG-22

AIR TOXICS LTD.

15th Ave

SAMPLE NAME: SG-26

ID#: 0311272BR1-22A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111910**	**Date of Collection:**	**11/12/03**
Dil. Factor:	**3.67**	**Date of Analysis:**	**11/19/03 12:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	18	Not Detected	92	Not Detected
Freon 113	18	Not Detected	140	Not Detected
Chloroform	18	Not Detected	91	Not Detected
1,1,1-Trichloroethane	18	Not Detected U5	100	Not Detected
Carbon Tetrachloride	18	Not Detected U5	120	Not Detected
Trichloroethene	18	8.5 J	100	46 J
Tetrachloroethene	18	Not Detected	130	Not Detected
1,1-Dichloroethene	18	Not Detected	74	Not Detected
trans-1,2-Dichloroethene	18	Not Detected	74	Not Detected
cis-1,2-Dichloroethene	18	Not Detected	74	Not Detected
Benzene	18	Not Detected	60	Not Detected
Toluene	18	87	70	330
Ethyl Benzene	18	Not Detected	81	Not Detected
m,p-Xylene	18	Not Detected	81	Not Detected
o-Xylene	18	Not Detected	81	Not Detected
Vinyl Chloride	18	Not Detected	48	Not Detected
1,1-Dichloroethane	18	Not Detected	75	Not Detected
Chlorobenzene	18	Not Detected	86	Not Detected
Methylene Chloride	18	Not Detected	65	Not Detected
Freon 11	18	Not Detected	100	Not Detected
Chloromethane	18	Not Detected	38	Not Detected
1,2-Dichloroethane	18	Not Detected U5	75	Not Detected
Freon 114	18	Not Detected	130	Not Detected
Bromomethane	18	Not Detected	72	Not Detected
Chloroethane	18	Not Detected	49	Not Detected
2-Propanol	18	Not Detected	46	Not Detected
Methyl tert-butyl ether	18	Not Detected	67	Not Detected
1,2-Dichloropropane	18	Not Detected	86	Not Detected
1,1,2-Trichloroethane	18	Not Detected	100	Not Detected
1,3,5-Trimethylbenzene	18	Not Detected	92	Not Detected
1,2,4-Trimethylbenzene	18	Not Detected	92	Not Detected
1,3-Dichlorobenzene	18	Not Detected	110	Not Detected
1,4-Dichlorobenzene	18	Not Detected	110	Not Detected
1,2-Dichlorobenzene	18	Not Detected	110	Not Detected
1,2-Dibromoethane (EDB)	18	Not Detected	140	Not Detected
1,1,2,2-Tetrachloroethane	18	Not Detected	130	Not Detected

J = Estimated value.

amk 12/8/03

Container Type: 1 Liter Summa Canister

0020

AIR TOXICS LTD.

SAMPLE NAME: Field Blank 1

ID#: 0311272BR1-23A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111909**	**Date of Collection:**	**11/11/03**
Dil. Factor:	**2.53**	**Date of Analysis:**	**11/19/03 11:32 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	64	Not Detected
Freon 113	13	Not Detected	98	Not Detected
Chloroform	13	Not Detected	63	Not Detected
1,1,1-Trichloroethane	13	Not Detected U5	70	Not Detected
Carbon Tetrachloride	13	Not Detected U5	81	Not Detected
Trichloroethene	13	Not Detected	69	Not Detected
Tetrachloroethene	13	Not Detected	87	Not Detected
1,1-Dichloroethene	13	Not Detected	51	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	51	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	51	Not Detected
Benzene	13	Not Detected	41	Not Detected
Toluene	13	3.8 J	48	14 J
Ethyl Benzene	13	Not Detected	56	Not Detected
m,p-Xylene	13	Not Detected	56	Not Detected
o-Xylene	13	Not Detected	56	Not Detected
Vinyl Chloride	13	Not Detected	33	Not Detected
1,1-Dichloroethane	13	Not Detected	52	Not Detected
Chlorobenzene	13	Not Detected	59	Not Detected
Methylene Chloride	13	3.0 J	45	11 J
Freon 11	13	Not Detected	72	Not Detected
Chloromethane	13	Not Detected	26	Not Detected
1,2-Dichloroethane	13	Not Detected U5	52	Not Detected
Freon 114	13	Not Detected	90	Not Detected
Bromomethane	13	Not Detected	50	Not Detected
Chloroethane	13	Not Detected	34	Not Detected
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	13	Not Detected	46	Not Detected
1,2-Dichloropropane	13	Not Detected	59	Not Detected
1,1,2-Trichloroethane	13	Not Detected	70	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	63	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	63	Not Detected
1,3-Dichlorobenzene	13	Not Detected	77	Not Detected
1,4-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dichlorobenzene	13	Not Detected	77	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	99	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	88	Not Detected

J = Estimated value.

AMK 12/23/03

Container Type: 1 Liter Summa Canister (100% Certified)

0038

AIR TOXICS LTD.

SAMPLE NAME: Field Blank 2

ID#: 0311272BR1-24A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111908**	**Date of Collection: 11/12/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/19/03 11:09 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	67	Not Detected
1,1,1-Trichloroethane	13	Not Detected U5	74	Not Detected
Carbon Tetrachloride	13	Not Detected U5	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	Not Detected	93	Not Detected
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	7.6 J	52	29 J
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	Not Detected	59	Not Detected
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected U5	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

AIVIK 12/23/03

Container Type: 1 Liter Summa Canister (100% Certified)

0047

AIR TOXICS LTD.

SAMPLE NAME: Ambient 1

ID#: 0311272BR1-25A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111907**	**Date of Collection: 11/11/03**	
Dil. Factor:	**2.69**	**Date of Analysis: 11/19/03 10:22 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	13	Not Detected	68	Not Detected
Freon 113	13	Not Detected	100	Not Detected
Chloroform	13	Not Detected	67	Not Detected
1,1,1-Trichloroethane	13	Not Detected U5	74	Not Detected
Carbon Tetrachloride	13	Not Detected U5	86	Not Detected
Trichloroethene	13	Not Detected	73	Not Detected
Tetrachloroethene	13	Not Detected	93	Not Detected
1,1-Dichloroethene	13	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	13	Not Detected	54	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	54	Not Detected
Benzene	13	Not Detected	44	Not Detected
Toluene	13	3.7 J	52	14 J
Ethyl Benzene	13	Not Detected	59	Not Detected
m,p-Xylene	13	Not Detected	59	Not Detected
o-Xylene	13	Not Detected	59	Not Detected
Vinyl Chloride	13	Not Detected	35	Not Detected
1,1-Dichloroethane	13	Not Detected	55	Not Detected
Chlorobenzene	13	Not Detected	63	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Freon 11	13	Not Detected	77	Not Detected
Chloromethane	13	Not Detected	28	Not Detected
1,2-Dichloroethane	13	Not Detected U5	55	Not Detected
Freon 114	13	Not Detected	96	Not Detected
Bromomethane	13	Not Detected	53	Not Detected
Chloroethane	13	Not Detected	36	Not Detected
2-Propanol	13	Not Detected	34	Not Detected
Methyl tert-butyl ether	13	Not Detected	49	Not Detected
1,2-Dichloropropane	13	Not Detected	63	Not Detected
1,1,2-Trichloroethane	13	Not Detected	74	Not Detected
1,3,5-Trimethylbenzene	13	Not Detected	67	Not Detected
1,2,4-Trimethylbenzene	13	Not Detected	67	Not Detected
1,3-Dichlorobenzene	13	Not Detected	82	Not Detected
1,4-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dichlorobenzene	13	Not Detected	82	Not Detected
1,2-Dibromoethane (EDB)	13	Not Detected	100	Not Detected
1,1,2,2-Tetrachloroethane	13	Not Detected	94	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister (100% Certified)

AMK 12/8/03

0054

AIR TOXICS LTD.

SAMPLE NAME: Ambient 2

ID#: 0311272BR1-26A

MODIFIED EPA METHOD TO-14A DIRECT INJECT GC/MS

File Name:	**3111906**	**Date of Collection:**	**11/12/03**
Dil. Factor:	**2.33**	**Date of Analysis:**	**11/19/03 09:57 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	12	Not Detected		58	Not Detected
Freon 113	12	Not Detected		91	Not Detected
Chloroform	12	Not Detected		58	Not Detected
1,1,1-Trichloroethane	12	Not Detected	U5	65	Not Detected
Carbon Tetrachloride	12	Not Detected	U5	74	Not Detected
Trichloroethene	12	Not Detected		64	Not Detected
Tetrachloroethene	12	Not Detected		80	Not Detected
1,1-Dichloroethene	12	Not Detected		47	Not Detected
trans-1,2-Dichloroethene	12	Not Detected		47	Not Detected
cis-1,2-Dichloroethene	12	Not Detected		47	Not Detected
Benzene	12	Not Detected		38	Not Detected
Toluene	12	12		45	47
Ethyl Benzene	12	Not Detected		51	Not Detected
m,p-Xylene	12	Not Detected		51	Not Detected
o-Xylene	12	Not Detected		51	Not Detected
Vinyl Chloride	12	Not Detected		30	Not Detected
1,1-Dichloroethane	12	Not Detected		48	Not Detected
Chlorobenzene	12	Not Detected		54	Not Detected
Methylene Chloride	12	Not Detected		41	Not Detected
Freon 11	12	Not Detected		66	Not Detected
Chloromethane	12	Not Detected		24	Not Detected
1,2-Dichloroethane	12	Not Detected	U5	48	Not Detected
Freon 114	12	Not Detected		83	Not Detected
Bromomethane	12	Not Detected		46	Not Detected
Chloroethane	12	Not Detected		31	Not Detected
2-Propanol	12	Not Detected		29	Not Detected
Methyl tert-butyl ether	12	Not Detected		43	Not Detected
1,2-Dichloropropane	12	Not Detected		55	Not Detected
1,1,2-Trichloroethane	12	Not Detected		65	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected		58	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected		58	Not Detected
1,3-Dichlorobenzene	12	Not Detected		71	Not Detected
1,4-Dichlorobenzene	12	Not Detected		71	Not Detected
1,2-Dichlorobenzene	12	Not Detected		71	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected		91	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected		81	Not Detected

AMK 12/23/03

Container Type: 1 Liter Summa Canister (100% Certified)

0061

ATTACHMENT C

SURVEY FIELD NOTES AND SITE SKETCHES

1118 — 90TH ST & 1ST AVE SITE — 12-19-03 OS AT

AC HOLE	DIST	#9 B/S VERT ∠	MAG-NAIL Rod	#7 HUB-5/12 REMARKS	PT NO
0-00-00	440.76	85-13-36	4.98	MAG-NAIL #7	
191-10-18	"	27-45-24	"	" " "	
342-14-36	156.36	88-10-12	4.70	SC-20	21
358-11-36	141.29	88-37-00	"	SC-24	22
359-41-00	324.18	88-03-30	"	SC-23	23
359-38-30	390.89	88-08-06	"	SC-21	24
190-09-12	59.26	91-41-36	"	FC BOT	25
254-10-30	10.24	95-05-24	"	" " PC	26
319-04-00	10.18	94-13-48	"	" " POC	27
22-55-36	13.00	93-24-54	"	" " PT	28
77-44-36	53.72	90-45-00	"	" "	29
215-21-12	76.04	88-08-48	8.46	" "	30
266-11-36	43.90	90-42-48	4.70	" " PC	31
279-33-00	46.64	90-22-06	"	" " POC	32
282-17-30	54.68	89-55-48	"	" " PT	33
277-01-24	108.14	89-25-24	"	" "	34
305-12-24	126.00	89-23-06	"	" "	35
323-47-42	89.12	89-40-48	"	" " PC	36
329-58-18	87.14	89-53-36	"	" " POC	37
335-12-30	95.84	89-38-56	"	" " PT	38
344-20-06	147.20	87-27-30	8.46	" "	39
349-28-00	194.10	87-28-36	"	" "	40

(1)

1118 — 90TH ST & 1ST AVE SITE — 12-19-03 OS AT

HOLE	DIST	VERT ∠	Rod	PT NO	REMARKS
351-02-36	297.82	87-31-30	8.46	41	FC BOT
352-31-06	292.72	87-32-06	"	42	" "
353-06-12	344.94	87-33-42	"	43	" "
354-43-06	399.38	87-42-18	"	44	" "
357-01-06	403.76	88-14-24	4.70	45	" "
358-46-54	351.74	88-09-00	"	46	" "
358-26-36	299.00	88-13-24	"	47	" "
358-00-00	247.18	88-20-00	"	48	" "
357-18-48	195.82	88-29-36	"	49	" "
356-08-48	145.28	88-46-36	"	50	" "
352-55-00	85.58	89-36-42	"	51	" " PC
354-22-24	75.60	89-55-54	"	52	" " POC
1-01-00	76.14	90-01-00	"	53	" " PT
42-35-18	75.80	89-49-00	"	54	" "
60-22-24	141.74	89-45-18	"	55	" "
41-32-36	141.00	88-09-48	8.46	56	BLDG-COR
5-57-48	91.98	87-43-48	"	57	" "
4-44-00	115.90	87-54-42	"	58	" "
3-52-06	115.76	88-02-00	"	59	" "
2-20-24	118.34	89-19-48	4.70	60	" "
3 44 21-00	200.93	88-16-12	"	61	" "
329-07-00	107.94	89-13-00	"	62	COR GAS LINE
319-11-42	134.48	89-24-42	"	63	BLDG COR
321-41-48	151.84	89-28-00	"	64	" "

(2)

90TH ST + 1ST AVE SITE

12-19-03 DS AT

1118

Horiz	Dist	Vert	Rad	Pt. No.	Remarks
325-13-36	136.12	89-31-48	4.70	65	BLDG COR
324-19-30	91.90	89-17-30	"	66	TSP
0-34-30	73.54	89-25-00	"	67	LP/TSP
260-34-42	55.68	89-40-24	"	68	" "
13-51-12	9.16	92-33-48	"	69	TSP
354-52-54	92.54	89-13-48	"	70	BRICK MH
355-28-00	102.28	89-03-06	"	71	WV
355-28-48	103.80	89-02-00	"	72	WV
356-56-36	108.84	88-55-54	"	73	RCN PAVE Pt
357-24-06	125.60	88-48-24	"	74	ELEC PED
358-14-36	153.70	88-37-36	"	75	GV
357-30-00	176.80	88-27-42	"	76	HYD

(3)

90TH ST + 1ST AVE SITE

12-22-03 DS AT

1118

Horiz	Dist	Vert	Rad	Pt. No.	Remarks
TO MH-LAMP #7 S/S MH-MAIL #6 HT = 5.17					
0-00-00	358.76	89-28-06	4.02	6	MH-MAIL #6
180-00-00	"	270-31-06	"	6	" "
179-34-00	448.79	91-49-48	4.70	9	PK #9
359-39-00	"	268-09-24	"	9	"
358-39-18	116.28	89-33-00	"	77	56-22
392-29-00	138.80	89-19-24	"	78	56-19
206-37-00	115.88	91-07-24	"	79	BLDG-COR
311-33-06	68.64	86-29-42	8.46	80	" "
343-29-48	177.72	89-10-24	4.70	81	" "
1-59-36	269.90	88-30-12	8.46	82	" "
3-05-12	170.62	88-02-42	"	83	" "
3-36-00	145.56	87-41-24	—	84	" "
4-17-30	121.02	86-53-00	—	85	" "
5-24-06	95.92	86-20-42	—	86	" "
23-07-00	21.84	81-03-48	—	87	" "
121-43-48	10.06	90-07-48	4.70	88	" "
176-25-24	130.14	91-20-12	"	89	" "
177-30-06	180.20	91-10-48	"	90	" "
281-59-18	37.12	91-25-24	"	91	EC-BST
329-24-36	70.66	90-01-30	"	92	" "
342-44-12	120.80	89-39-54	"	93	" "
350-38-00	219.64	88-26-00	8.46	94	" "
352-29-00	270.66	88-33-18	"	95	" " PC

(4)

90TH ST. & 1ST AVE. SITE 12-22-03 DS AT

1118

Hdr #	Dist	vert #	Rod	Ht. ID.	Remarks
352-03-30	278.68	88-33-18	8.46	96	FC BOT POC
1-18-48	279.50	88-45-12	"	97	" " PT
359-00-54	276.76	88-39-12	"	98	" " POC
358-98-48	265.30	88-37-06	"	99	" " PC
358-28-30	217.86	89-29-30	4.70	100	" "
358-01-30	168.58	89-33-00	"	101	" "
357-06-12	119.20	89-45-00	"	102	" "
355-07-06	72.78	89-59-18	"	103	" "
344-00-54	23.30	91-46-12	"	104	" "
181-29-48	229.10	91-53-12	"	105	VALVE
182-28-54	178.90	91-28-54	"	106	ELEC PM
192-01-06	99.44	91-22-00	"	107	" "
193-19-00	94.02	91-22-24	"	108	GAS "
183-47-00	65.12	91-05-48	"	109	LP
184-05-48	56.34	91-19-42	"	110	"
187-54-48	26.52	91-48-48	"	111	GV
232-12-09	4.4'	—	—	112	" ?
358-25-30	12.90	92-04-48	4.70	113	HYD.
359-58-36	22.22	90-39-42	"	114	GV
356-07-12	47.24	89-59-30	"	115	"
353-16-36	43.72	90-01-36	"	116	ELEC PM
356-37-06	69.14	89-47-24	"	117	" "
357-30-06	72.06	89-44-24	"	118	GV
357-55-12	79.62	89-37-48	"	119	ELEC PM

(5)

90TH ST. & 1ST AVE. SITE 12-22-03 DS AT

1118

Hdr #	Dist	vert #	Rod	Ht. ID.	Remarks
358-13-00	97.08	89-34-00	4.70	120	GPM
357-92-36	100.28	89-36-24	"	121	ELEC PM
359-29-48	122.46	89-31-18	"	122	GV
358-48-42	140.50	89-30-48	"	123	ELEC PM
358-15-48	157.24	89-30-48	"	124	GV
357-13-42	195.24	89-26-18	"	125	"
359-07-36	245.96	89-22-12	"	126	HYD
350-00-36	257.12	88-22-36	8.46	127	MW
346-32-54	170.84	89-05-48	"	128	MW
341-56-36	126.82	87-43-36	"	129	GV
306-30-00	47.96	85-33-12	"	130	ELEC PM
240-55-36	43.50	91-09-48	4.70	131	VALVE
239-37-48	45.58	91-02-36	"	132	"
221-15-18	57.92	91-13-24	"	133	GV
211-32-18	73.74	91-03-36	"	134	"
203-36-30	96.84	91-07-12	"	135	MW
193-05-48	175.00	90-28-30	8.46	136	VALVE
192-57-30	176.96	90-29-36	"	137	"
190-34-48	213.80	90-46-48	"	138	LP
189-32-42	238.58	90-59-42	"	139	MW
189-41-00	239.92	91-01-36	"	140	GV
189-18-30	243.88	"	"	141	GPM
189-16-00	247.00	91-01-24	"	142	ELEC PM
188-00-00	—	—	—	6	#6

(6)

90TH ST + 1ST AVE STE 12-22-03 DS AT

1113

HOUSE	DIST	VEHICLE	RAD	MI. NO.	REMARKS
AD MAIN	6	C/S	MAIN	#5	MI 5.22
0-W-00	372.86	89-25-12	4.98	5	MAIN #5
130-00-00	"	270-34-12	"	5	" "
90-19-18	258.96	91-22-36	4.70	1	MAIN ST
270-19-24	"	26036-48	"	1	" " "
178-14-24	358.76	90-39-30	4.70	7	MAIN ST
359-08-30	"	267-19-48	"	7	" "
123-32-12	198.12	91-07-24	"	143	SG-18
93-49-54	156.12	91-19-36	"	144	SG-8
93-05-00	61.34	91-35-00	"	145	SG-7
334-46-42	106.26	89-13-24	"	146	SG-1
351-37-00	319.30	88-43-18	8.46	147	SG-2
359-44-30	279.22	89-31-24	4.70	148	SG-5
359-47-12	128.64	89-37-06	"	149	SG-6
206-01-18	111.44	89-35-36	"	150	BLDG CUR
208-14-06	113.70	89-11-12	—	151	" "
209-29-30	109.56	88-49-54	"	152	" "
228-26-24	139.62	88-39-42	—	153	BLDG CUR
158-35-06	100.72	90-37-30	4.70	154	BLDG CUR
146-37-36	117.10	90-34-12	"	155	" "
136-58-00	127.34	90-41-30	"	156	" "
129-46-12	145.50	89-19-48	8.40	157	" "
129-07-42	165.12	89-39-30	"	158	" "
119-42-18	186.10	90-25-24	—	159	" "

(7)

90TH ST + 1ST AVE STE 12-22-03 DS AT

1118

HOUSE	DIST	VEHICLE	RAD	MI. NO.	REMARKS
117-13-30	231.84	91-09-00	4.70	160	BLDG CUR
87-09-46	211.40	91-04-00	"	161	" "
86-33-00	110.90	90-56-06	"	162	" "
84-22-30	60.92	91-09-30	"	163	" "
80-36-18	35.22	91-15-06	"	164	" "
60-51-06	10.82	92-10-06	"	165	" "
4-37-36	101.96	89-36-30	"	166	" "
3-36-42	131.00	88-22-36	—	167	" "
2-55-06	155.84	88-32-30	—	168	" "
2-24-48	180.06	86-43-36	8.46	169	" "
1-14-12	280.66	88-53-18	—	170	" "
1-05-18	305.72	88-36-48	—	171	" "
0-57-00	330.74	89-41-00	—	172	" "
0-50-30	355.84	88-43-42	—	173	" "
0-38-12	405.64	89-53-06	—	174	" "
0-33-48	430.68	89-51-24	—	175	" "
0-29-34	455.76	89-46-12	—	176	" "
0-25-42	480.62	89-57-36	—	177	" "
0-23-24	505.52	89-57-54	—	178	" "
0-19-00	530.60	89-57-48	—	179	" "
0-12-18	580.78	89-11-00	—	180	" "
0-12-12	584.70	89-11-36	—	181	" "
0-05-18	655.76	89-14-12	—	182	" "
354-47-08	557.88	89-11-42	—	183	" "

(8)

90TH ST. & ISTAR SITE 12-22-03 DS AT

IIIB

HOLE #	DUST	VOLT #	ROD	PT. NO.	REMARKS
353-50-30	532.90	88-58-18	—	184	OLD 4" CURE
353-31-06	508.02	88-57-48	—	185	" "
353-19-30	483.36	88-53-30	—	186	" "
352-57-30	458.38	88-52-24	—	187	" "
352-34-18	433.52	88-48-42	—	188	" "
351-16-12	359.68	88-46-36	—	189	" "
350-36-36	334.28	88-45-00	—	190	" "
349-57-24	309.66	88-37-48	—	191	" "
349-19-12	285.04	88-09-18	—	192	" "
348-11-00	260.38	88-11-12	—	193	" "
346-58-30	236.08	87-46-48	—	194	" "
343-47-18	187.50	88-12-36	—	195	" "
342-27-12	163.34	87-58-42	—	196	" "
333-47-12	117.10	85-45-24	—	197	" "
333-17-00	113.46	85-22-42	—	198	" "
275-04-18	49.82	88-21-24	4.70	199	" "
272-21-00	100.50	88-16-18	—	200	4" CURE
189-37-12	195.10	90-39-48	4.78	201	FC BOT
209-49-30	92.14	90-15-00	"	202	" " PT
229-32-48	124.50	89-54-36	"	203	" "
144-56-00	96.14	91-24-48	"	204	" "
122-02-36	129.61	89-49-30	8.40	205	" "
1215-36	169.10	90-18-18	"	206	" "
114-02-24	214.12	90-24-36	"	207	" "

(9)

90TH ST. & ISTAR SITE 12-22-03 DS AT

IIIB

HOLE #	DUST	VOLT #	ROD	PT. NO.	REMARKS
189-39-42	227.70	91-28-36	8.46	208	FC BOT PC
"	237.64	90-26-18	"	209	" " POC
111-44-16	244.82	90-28-18	"	210	" " PT
109-22-12	272.79	90-31-00	"	211	" " "
106-58-18	272.30	90-33-00	"	212	" " POC
105-38-42	281.30	90-37-18	"	213	" " PC
103-10-24	330.78	90-52-48	"	214	" "
91-01-36	319.74	90-51-48	"	215	" "
91-19-24	269.23	91-24-12	9.70	216	" " PC
90-20-36	260.68	91-22-12	"	217	" " POC
88-21-00	259.06	91-21-42	"	218	" " PT
88-46-00	224.44	91-23-30	"	219	" " PT
90-44-36	221.54	91-20-12	"	220	" " POC
91-54-24	211.14	91-23-42	"	221	" " PC
92-42-00	162.52	91-28-36	"	222	" "
94-06-00	115.02	91-40-12	"	223	" "
97-32-00	57.16	92-12-12	"	224	" "
113-09-42	23.90	940406	"	225	" "
144-20-36	11.76	9615-18	"	226	" " PC
190-58-18	7.00	98-09-36	"	227	" " POC
302-24-12	6.30	98-29-30	"	228	" " PT
353-24-18	52.58	98-24-24	"	229	" "
356-07-42	98.52	91-03-18	"	230	" "
357-05-18	146.18	89-43-30	"	231	" "

(10)

FROM :

FAX NO. :

Jan. 05 2004 11:38AM P6

90TH ST. & 1ST AVE. SITE — 12-22-03 DS AT

HIB

Hor #	Dist	Vert #	Rod	Pt. No.	Remarks
357-37-48	195.96	89-43-00	4.70	232	FC BOT
357-58-54	244.84	89-40-00	"	233	" "
263-39-54	98.36	89-39-18	"	234	" "
257-40-30	48.06	90-25-30	"	235	" " PC
258-14-48	40.46	90-32-24	"	236	" " POC
274-25-24	34.76	90-25-24	"	237	" " PT
324-18-24	61.02	89-58-06	"	238	" "
340-20-18	107.30	89-41-48	"	239	" "
346-45-24	161.40	88-15-00	8.46	240	" "
349-57-18	213.58	88-33-36	"	241	" "
351-36-00	262.18	88-42-12	"	242	" "
352-48-48	311.56	88-49-42	"	243	" "
353-42-00	360.02	88-54-24	"	244	" "
354-20-48	407.70	88-56-18	"	245	" "
355-06-48	485.10	89-01-18	"	246	" "
355-31-18	537.20	89-01-18	"	247	" "
355-52-00	591.52	89-01-00	"	248	" "
356-07-06	638.90	89-02-30	"	249	" "
356-19-00	664.94	89-02-54	"	250	" " PC
356-31-24	673.28	"	"	251	" " POC
356-45-30	672.88	89-01-42	"	252	" " PT
357-03-00	259.32	88-33-06	"	253	LP
357-56-12	163.50	89-20-54	"	254	HYD
357-43-30	121.64	89-38-36	4.70	255	LP

(11)

90TH ST. & 1ST AVE. SITE — 12-22-03 DS AT

HIB

Hor #	Dist	Vert #	Rod	Pt. No.	Remarks
107-36-06	33.04	91-58-42	4.70	256	HYD
132-17-12	10.50	92-30-24	"	257	TSP
261-11-00	48.18	89-32-42	"	258	"
209-44-42	94.72	89-37-12	"	259	"
200-23-18	119.74	90-10-12	"	260	MW
181-08-00	117.96	90-34-30	"	261	HYD
180-57-12	99.98	90-30-00	"	262	PAT. ALIGN
174-06-36	82.38	90-39-42	—	263	TSP
160-54-12	86.26	90-47-30	4.70	264	INTERFACE
126-43-00	133.76	91-03-30	"	265	LP
315-00-00	4.1	90-	—	266	SMH

TC MAG NAIL #5 D/S MAG NAIL #6 AZ=162° HI = 5.22

0-00-00	372.865	90-35-54	4.98	6	MAG NAIL #6
179-59-54	"	269-19-36	"	"	" "
177-55-30	299.74	89-28-42	4.70	4	MAG NAIL #4
357-55-24	"	270-25-30	"	"	" "
176-39-06	162.02	89-31-06	"	267	SG-4
168-03-12	280.42	89-08-36	"	268	BLDG-PC
164-51-48	169.34	89-53-00	"	269	LP
162-18-48	21.94	90-32-12	"	270	"
6-34-36	80.82	91-31-06	"	271	FC BOT
15-27-30	36.84	92-01-42	"	272	" "
139-30-12	16.42	94-13-18	"	273	" "

(12)

90TH ST & 1ST AVE SITE 12-22-03 DS AT

HOLE #	DIST	VOLT #	Rod	PT. NO.	REMARKS
169-30-18	61.46	90-30-18	4.70	274	FC BOT
173-47-42	108.52	89-52-36	"	275	" "
175-27-12	155.18	89-43-06	"	276	" "
176-13-30	195.32	89-35-18	"	277	" "
176-97-54	292.20	89-29-42	"	279	" "
177-15-06	291.36	89-28-30	"	280	" "PC
178-10-54	299.74	"	"	281	" "POC
179-47-48	303.52	89-31-24	"	282	" "PT
177-59-00	254.56	89-21-36	"	283	GV
177-23-18	252.14	89-25-42	"	284	"
176-47-54	203.18	89-28-42	"	285	"
177-00-00	194.52	"	"	296	ELEC PM
176-56-42	185.74	89-27-30	"	287	WV
176-58-42	179.34	89-19-18	"	288	GV
176-41-42	171.10	89-27-12	"	289	ELEC PM
176-08-12	134.00	89-33-30	"	290	GV
175-58-06	131.78	89-34-48	"	291	"
174-01-30	86.86	89-49-48	"	292	"
174-31-18	80.94	89-51-30	"	293	"
166-35-06	34.82	90-35-42	"	294	"
69-53-06	8.22	96-56-00	"	295	GV
41-26-18	11.66	94-27-12	"	296	MW
18-11-06	25.72	92-26-12	"	297	GV
14-42-06	30.14	92-10-30	"	286	MW

(13)

90TH ST & 1ST AVE SITE 12-22-03 DS AT

HOLE #	DIST	VOLT #	Rod	PT. NO.	REMARKS
6-53-36	60.76	91-20-48	4.70	299	GV
5-10-24	74.38	91-17-00	"	300	"
4-22-24	34.00	91-08-48	"	301	MW
4-21-30	85.50	"	"	302	ELEC PM
6-18-48	54.00	91-18-48	"	303	" "
3-07-30	110.98	91-01-24	"	304	GV
0-22-36	198.94	90-46-12	"	305	"
1-14-24	219.12	90-41-00	"	306	"
1-06-48	240.18	90-44-00	"	307	GPM
1-02-42	248.22	90-43-18	"	308	ELM
0-56-42	291.64	90-43-00	"	309	WV
9-06-42	248.76	89-40-30	0.46	310	ELEC PM
9-25-06	247.12	"	"	311	GV
9-13-42	244.60	89-40-00	"	312	"
14-00-12	165.74	89-17-06	"	313	"
18-02-30	130.50	88-55-06	"	314	"
19-58-42	119.14	88-46-54	"	315	"
23-57-42	100.90	88-29-06	"	316	ELEC PM
26-20-06	91.38	88-15-36	"	317	MW
28-37-36	9.88	88-10-06	"	318	GV
28-48-48	85.72	88-04-24	"	319	"
32-40-36	83.10	87-49-36	"	320	ELEC PM
37-57-12	67.02	90-48-30	4.73	321	GV
66-28-18	47.06	85-46-18	0.46	322	"

(14)

90th ST. + 1ST Ave site — 12-22-03 DS AT

1118

HOLE	DIST	VECTOR	LAT	PT. NO.	REMARKS
04-32-00	49.50	85-36-36	8.46	323	MW
97-36-12	43.04	85-04-30	"	324	GV
113-13-36	46.16	89-52-48	4.70	325	MW
126-10-48	52.02	89-45-24	"	326	GV
149-03-18	72.10	86-36-30	8.46	327	"
152-48-00	96.14	89-26-54	4.70	328	"
160-55-12	139.38	89-21-12	"	329	"
162-07-18	142.48	89-23-48	—	330	"
164-02-00	160.78	89-11-48	4.70	331	ELEC PM
165-51-18	181.78	89-15-12	"	332	GV
166-09-48	184.44	89-16-12	"	333	ELEC PM
166-19-30	189.36	89-17-06	"	334	WV
167-22-00	212.16	89-10-12	"	335	GV
168-25-12	225.60	88-14-18	8.46	336	ELEC PM
179-59-54	(R)			6	#6
					12-23-03
	AC MAG MAIL #1 6/8		MAG MAIL	#6 HI = 5.21	
0-00-00	258.91	88-48-00	4.70	6	MAG MAIL #6
180-00-00	"	271-07-00	"	"	" "
89-39-54	385.195	89-18-36	4.96	7	MAG MAIL #7
269-39-54	"	270-36-30	"	"	" "
77-34-24	190.40	88-06-36	8.46	337	SG-9
91-43-06	325.62	89-15-12	4.70	338	SG-10
180-00-30	148.36	89-02-24	8.46	339	FC BOT
		(15)			

90th ST. + 1ST Ave site — 12-23-03 DS AT

1118

HOLE	DIST	VECTOR	LAT	PT. NO.	REMARKS
284-24-48	190.30	88-57-18	8.46	340	FC BOT
285-31-12	166.80	88-55-12	—	341	BLDG COR
289-31-30	98.98	89-39-18	4.70	342	PAY PHONE
299-51-06	89.06	89-27-06	"	343	LP
308-36-48	119.80	89-05-30	"	344	HYD
315-33-48	113.26	89-08-24	"	345	GV
320-35-06	123.50	89-05-12	"	346	ELEC PM
322-24-36	129.22	89-01-12	"	347	" "
324-23-18	138.70	88-59-30	"	348	GV
327-43-12	157.82	87-32-12	8.46	349	"
331-08-30	164.40	87-38-42	"	350	ELEC PM
321-43-00	167.44	87-41-06	"	351	WV
331-58-00	169.00	87-40-36	"	352	ELEC PM
339-02-42	182.36	87-46-24	"	353	GV
335-08-00	191.74	87-47-12	"	354	ELEC PM
336-02-42	197.60	87-49-18	"	355	GV
340-59-48	247.66	88-02-00	"	356	"
359-25-00	233.76	88-48-54	4.70	357	GV
358-19-36	211.16	88-47-42	"	358	"
358-25-06	193.44	88-54-18	"	359	"
"	191.86	88-52-48	"	360	ELEC PM
359-25-30	140.00	88-40-24	"	361	GV
357-08-00	123.66	88-48-42	"	362	GPM
357-19-30	109.10	88-41-48	"	363	"
		(16)			

FROM :
FAX NO. :
Jan. 05 2004 11:39AM P9

90th ST. & 1ST AVE. 12-23-03 DS AT

IIIB

HORZ	DIST	VERT	Rod	PT. NO.	REMARKS
357-19-12	97.26	BB-46-06	4.70	364	ELECPM
356-17-30	95.70	BB-49-42	"	365	GPM
355-24-18	73.56	BB-46-48	"	366	"
354-59-00	56.78	BB-38-30	"	367	ELEC PM
356-38-00	48.70	BB-08-30	"	368	TSP
190-15-06	11.56	91-00-12	"	369	"
104-17-06	11.76	89-22-18	"	370	SMH
162-16-30	41.12	91-28-00	"	371	BLDG COR
134-07-30	17.02	89-27-00	"	372	" "
90-13-36	57.66	89-33-00	"	373	HPD
93-15-00	160.90	89-19-00	"	374	BLDG COR
65-36-48	120.00	89-01-12	"	375	" "
72-28-48	167.40	87-29-24	—	376	" "
74-34-00	191.52	87-51-36	—	377	" "
76-12-24	215.76	BB-13-12	8.46	378	" "
78-36-18	264.74	BB-22-30	"	379	" "
81-24-12	343.46	BB-39-30	"	380	" "
82-19-36	413.04	BB-43-12	—	381	" "
83-01-36	462.74	BB-44-30	—	382	" "
83-50-54	537.60	BB-41-12	—	383	" "
84-04-36	562.96	BB-40-30	—	384	" "
~~89-46-18~~ BB-14-18	582.34	~~BB-14-18~~ BB-45-18	—	385	" "
84-13-12	587.30	89-45-48	—	386	" "
57-35-42	66.24	89-12-18	4.70	387	FC BOT

(17)

90th ST. & 1ST AVE SITE 12-23-03 DS AT

IIIB

HORZ	DIST	VERT	Rod	PT. NO.	REMARKS
71-33-00	115.48	89-19-30	4.70	388	FC BOT
76-30-00	160.12	89-21-06	"	389	" "
79-32-00	210.92	89-21-54	"	390	" "
81-22-48	262.44	89-21-36	"	391	" "
82-36-42	313.56	BB-40-30	8.46	392	" "
83-28-42	362.10	89-21-00	4.70	393	" "
84-08-12	411.82	BB-48-36	8.46	394	" "
88-17-12	63.52	89-47-48	4.70	395	" "
88-39-42	113.68	89-39-10	"	396	" "
88-43-42	171.26	89-35-24	"	397	" "
88-44-00	218.32	89-31-00	"	398	" "
88-47-18	270.94	89-21-54	"	399	" "
88-48-24	326.36	89-28-42	"	400	" "
89-49-54	389.44	89-25-54	"	401	" "
88-50-18	444.16	"	"	402	" "
88-51-00	501.60	89-24-18	"	403	" "
"	548.72	89-01-00	8.46	404	" "
"	599.02	89-02-54	"	405	" "
88-51-42	642.90	89-05-18	"	406	" "
88-52-06	664.82	89-06-06	"	407	MPC
93-09-12	388.48	89-16-00	4.70	409	CV
82-33-42	335.20	89-16-54	"	409	"
82-28-00	312.82	89-18-00	"	410	ELECPM
81-59-36	302.68	89-16-24	"	411	" "

(18)

90th ST. & 1ST AVE. SITE — 12-23-03 DS AT

111B

HOR ∠	DIST	VERT ∠	Rod	PT. NO.	REMARKS
81-33-24	294.16	89-15-48	4.70	412	GV
81-45-12	290.22	89-17-42	"	413	"
80-41-48	260.00	89-16-24	"	414	"
79-05-00	214.98	89-17-30	"	415	"
78-52-48	212.72	88-16-30	8.46	416	"
78-27-24	211.08	88-14-30	"	417	"
76-42-24	170.28	89-12-00	4.70	418	ELEC PM.
76-23-48	167.72	"	"	419	GV
76-06-06	166.78	89-12-18	"	420	"
76-08-36	162.88	89-09-42	"	421	LP
74-31-24	153.24	89-11-42	"	422	GV
71-55-36	127.84	89-09-48	"	423	"
58-55-36	75.92	88-58-30	"	424	"
90-03-48	39.84	89-28-12	"	425	WV
89-08-18	101.78	89-24-48	"	426	"
269-39-00 (21)	—	—		2	# 2
REMARK MAG NAIL #2 O/S MAG NAIL #1 HI = 5.20					
0-03-00	385.20	90-00-30	4.96	1	MAG NAIL #1
190-50-00	"	269-14-24	"	"	" "
178-57-48	380.695	89-15-12	4.70	3	MAG NAIL #3
358-57-48	"	270-39-36	"	"	" "
179-07-06	153.94	89-35-42	"	427	SG-12
169-27-48	12.09	92-13-36	"	428	SG-13
		(19)			

90th ST. & 1ST AVE SITE — 12-23-03 DS AT

111B

HOR ∠	DIST	VERT ∠	Rod	PT. NO.	REMARKS
359-00-42	128.30	90-49-18	4.70	429	SG-14
356-38-24	174.80	89-29-06	8.46	430	BLDG COR.
353-20-54	75.50	86-11-24	—	431	" "
350-38-36	51.22	87-14-36	8.46	432	" "
341-48-48	25.92	91-19-24	4.70	433	" "
196-07-00	262.2	89-50-06	"	434	" "
185-01-36	75.52	89-35-00	"	435	" "
183-31-30	100.60	86-44-18	—	436	" "
182-41-00	125.36	87-44-18	8.46	437	" "
182-08-12	150.32	87-59-54	"	438	" "
181-44-30	174.76	88-13-48	—	439	" "
181-31-12	195.26	88-18-00	8.46	440	" "
180-47-42	275.62	89-42-00	"	441	" "
169-40-36	283.70	88-37-18	"	442	" "
199-13-12	78.68	89-55-06	4.70	443	FC-BOT
1-03-12	90.50	90-56-48	"	444	ELEC PM
1-41-48	67.28	91-16-00	"	445	GV
2-55-00	50.18	91-26-06	"	446	LP
6-38-48	28.50	91-55-30	"	447	WV
11-00-54	20.74	92-36-42	"	448	ELPM
9-10-42	17.70	92-59-48	"	449	WV
153-14-06	5.18	96-02-06	"	450	GV
170-22-00	24.70	90-53-24	"	451	ELECPM
173-45-48	30.48	90-38-36	"	452	" "
		(20)			

90TH ST. & 1ST AVE SITE 12-23-03 DS AT

1118

HOR #	DIST.	VERT #	Rod	PT. NO.	REMARKS
179-17-36	41.90	90-29-36	4.70	453	WV
179-45-30	97.52	89-40-42	"	454	GV
178-07-24	123.86	89-41-54	"	455	"
178-25-18	148.68	89-40-06	"	456	"
178-16-30	145.90	"	"	457	ELEC PM
178-00-36	173.84	88-21-36	8.46	458	GV
178-09-18	177.54	88-23-30	"	459	"
177-36-48	168.28	88-20-00	"	460	ELEC PM
177-56-24	180.32	88-27-18	"	461	" "
178-26-24	220.54	88-36-12	—	462	HYD
180-00-06	(1)			1	MAG NAIL #1
TP MAG NAIL #		3 6/8 MAG NAIL #2		HI = 5.22	
0-00-00	360.70	90-27-06	4.96	2	MAG NAIL #2
180-00-00	"	269-08-00	"	"	" "
			4.70		MAG NAIL #3
322-40-18	109.80	90-27-30	8.46	463	SG-15
9-31-00	250.22	90-00-24	"	464	SG-14
44-50-36	125.08	90-35-00	4.70	465	SG-17
54-32-54	205.42	89-33-18	"	466	BLDG COR
50-32-30	164.32	89-51-30	"	467	" "
44-02-24	145.60	90-12-54	"	468	" "
36-03-18	129.96	87-23-12	—	469	" "
		(21)			

90TH ST. & 1ST AVE SITE 12-23-03 DS AT

1118

HOR #	DIST	VERT #	Rod	PT. NO.	REMARKS
37-43-30	122.50	89-02-00	8.46	470	BLDG COR
27-09-00	108.74	89-13-00	"	471	" "
324-14-12	136.14	90-21-06	"	472	" "
330-24-24	121.94	90-15-00	—	473	" "
325-23-12	103.44	90-36-24	8.46	474	FC BOT
310-56-40	130.32	90-52-00	"	475	" "
8-24-30	263.68	90-00-00	"	476	" "
10-13-00	216.60	90-05-00	"	477	" "
12-39-48	174.22	89-56-06	"	478	" "
16-43-42	131.92	89-45-54	"	479	" "
18-05-42	148.76	89-36-12	"	480	BLDG COR
20-38-12	107.10	91-39-30	4.70	481	FC BOT PC
23-53-00	98.52	91-47-24	"	482	" " TOC
31-32-54	99.54	91-35-06	"	483	" " PT
50-22-30	132.50	90-58-06	"	484	" "
60-37-00	111.92	88-49-18	8.46	485	" "
57-38-24	163.00	90-00-36	4.70	486	GV
"	161.06	90-02-30	"	487	ELEC PM
54-36-18	149.60	90-11-36	"	488	HYD
54-27-12	147.02	90-14-00	"	489	ELEC PM
51-06-18	141.10	90-16-48	"	490	GV
47-31-48	129.30	88-48-12	8.46	491	"
42-33-30	116.74	88-59-00	"	492	E PM
34-04-48	104.78	89-08-42	"	493	PAY PHONE
		(22)			

1ST. Ave + 90TH ST. site — 12-23-03 DS AP

1118

Hole #	Dist	Vert #	Rod	Pt. No.	Remarks
32-56-18	104.00	89-10-12	8.46	494	TAP Phase
34-11-36	100.42	91-25-48	4.70	495	ELEC PM
28-56-48	100.10	91-24-00	"	496	TSP
6-38-18	362.32	90-45-36	"	497	WV.
7-20-18	334.58	90-47-18	"	498	GV
7-21-42	321.32	90-48-12	"	499	"
8-50-18	264.30	89-59-42	—	500	LP
10-09-42	236.32	89-58-12	8.46	501	GV
9-53-00	235.42	89-59-18	"	502	WV
9-54-42	232.00	90-00-18	"	503	GV
10-16-36	231.60	89-58-24	"	504	WV
10-39-12	224.28	89-58-48	"	505	GV
11-05-42	210.64	89-56-36	"	506	"
11-22-48	206.00	"	"	507	"
16-24-06	193.04	89-42-06	"	508	"
355-40-18	87.52	09-44-36	"	509	TSP
338-20-30	93.58	90-13-36	"	510	ELEC PM
336-53-00	94.50	90-14-24	"	511	" "
331-59-30	99.22	90-20-30	"	512	GV
326-29-30	104.08	90-24-12	"	513	ELEC PM
319-59-00	116.36	90-32-18	"	514	GV
309-21-42	137.48	90-41-36	"	515	"
285-11-42	99.26	92-43-18	4.70	516	FC BUT
299-38-30	54.30	94-09-30	"	517	" "
		(23)			

90TH ST. + 1ST Ave site — 12-23-03 DS AP

1118

Hole #	Dist	Vert #	Rod	Pt. No.	Remarks
346-52-24	26.58	98-26-12	4.70	518	FC BUT PC
6-04-36	22.16	96-37-12	"	519	" " TOC
26-18-24	17.42	98-16-12	"	520	" " PT
164-56-12	16.94	89-51-30	"	521	" "
114-55-18	38.82	88-40-00	"	522	" "
70-08-30	37.56	91-27-54	"	523	" " PC
61-58-12	42.20	92-16-30	"	524	" " TOC
61-59-42	54.18	92-09-18	"	525	" " PT
74-57-24	96.44	90-27-18	"	526	" "
80-09-18	104.10	89-55-06	"	527	" "
93-18-12	207.98	88-29-24	8.46	528	" "
89-37-42	255.36	89-27-06	"	529	" " PC
180-00-06	(21)			2	#2
NO MAG NAIL #2		4/5 MAG NAIL #5		HI = 5.28	
0-00-00	299.75	90-38-18	4.70	5	MAG NAIL #5
180-00-00	"	269-16-30	"	"	" "
14-40-54	160.52	89-03-42	8.46	530	SG-3
70-37-48	53.56	88-45-06	4.70	531	BLDG POC
75-05-18	58.20	88-32-48	"	532	" PC
78-30-36	74.92	88-29-36	"	533	" CMB
95-36-42	44.60	89-13-30	"	534	FC BUT PT
93-18-12	93.64	88-55-42	"	535	" "
DTP 93-42	66.12	91-17-24	"	536	SG-16
		(24)			

90ST + 1ST AVE ST PL.

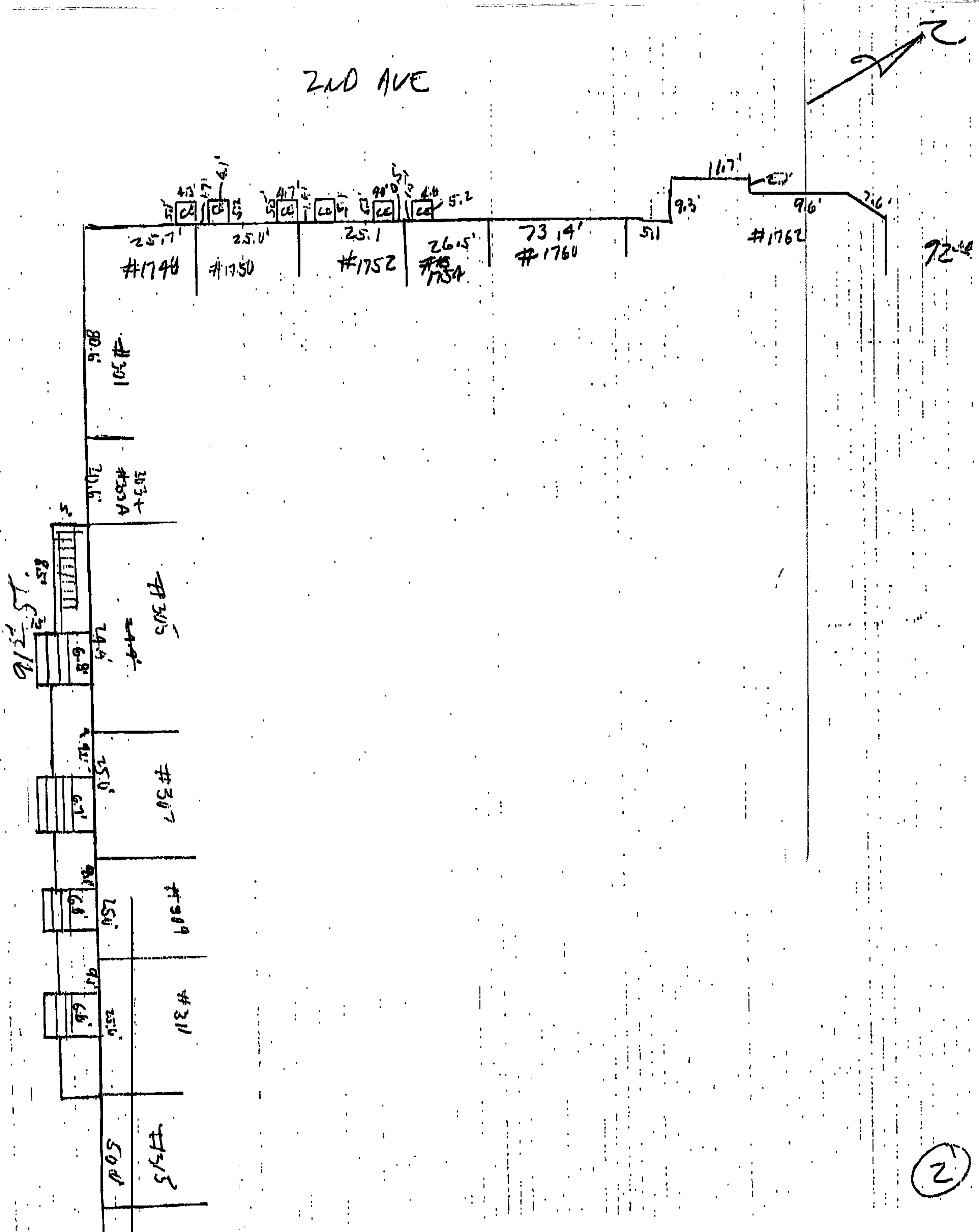
12-23-03 DS AT

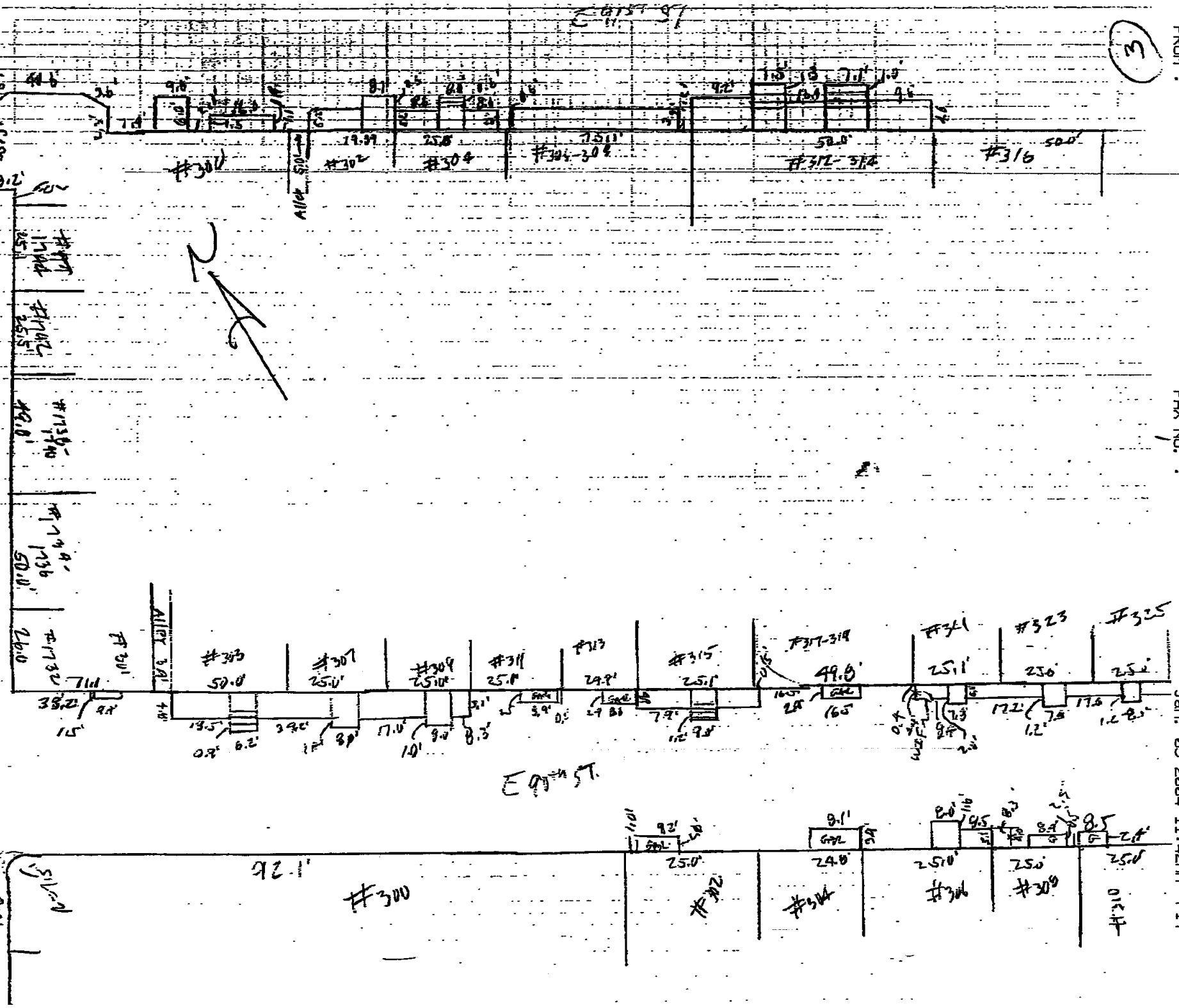
HOLE #	DIST	VERT ∠	RAD	PT. NO.	REMARKS
268-30-48	69.98	91-42-24	4.70	537	FC BOT
295-24-42	41.48	90-31-24	"	538	BLDG COR
282-10-06	89.08	90-53-30	"	539	" "
270-02-48	99.44	91-24-48	"	540	C/L M.
269-50-18	80.94	91-23-36	"	541	ELEC/M
272-38-42	71.92	91-18-36	"	542	C/V
269-18-18	46.78	91-34-06	"	543	"
269-23-06	44.70	91-38-06	"	544	ELEC/M
262-41-06	9.58	91-18-36	"	545	TSP
180-08-24	67.40	89-24-36	"	546	FC-BOT PDC
179-07-30	77.10	88-54-24	"	547	" " PT
180-04-42	131.12	87-51-48	"	548	" "
166-35-18	129.44	87-48-00	"	549	" "
158-31-30	84.54	88-41-18	"	550	" " PC
152-01-54	75.56	89-01-30	"	551	" " PDC
144-36-12	78.69	89-08-42	"	552	" " PT
12626-48	109.58	86-59-12	8.46	553	" "
TE #4	B/S #3	HI =	5.28		
0-00-00	278.14	91-40-30	4.70	3	#3
181-11-00	"	269-14-48	"	"	"
107-14-00	299.735	90-38-36	4.70	5	#5
287-13-48	"	269-16-24	"	"	"

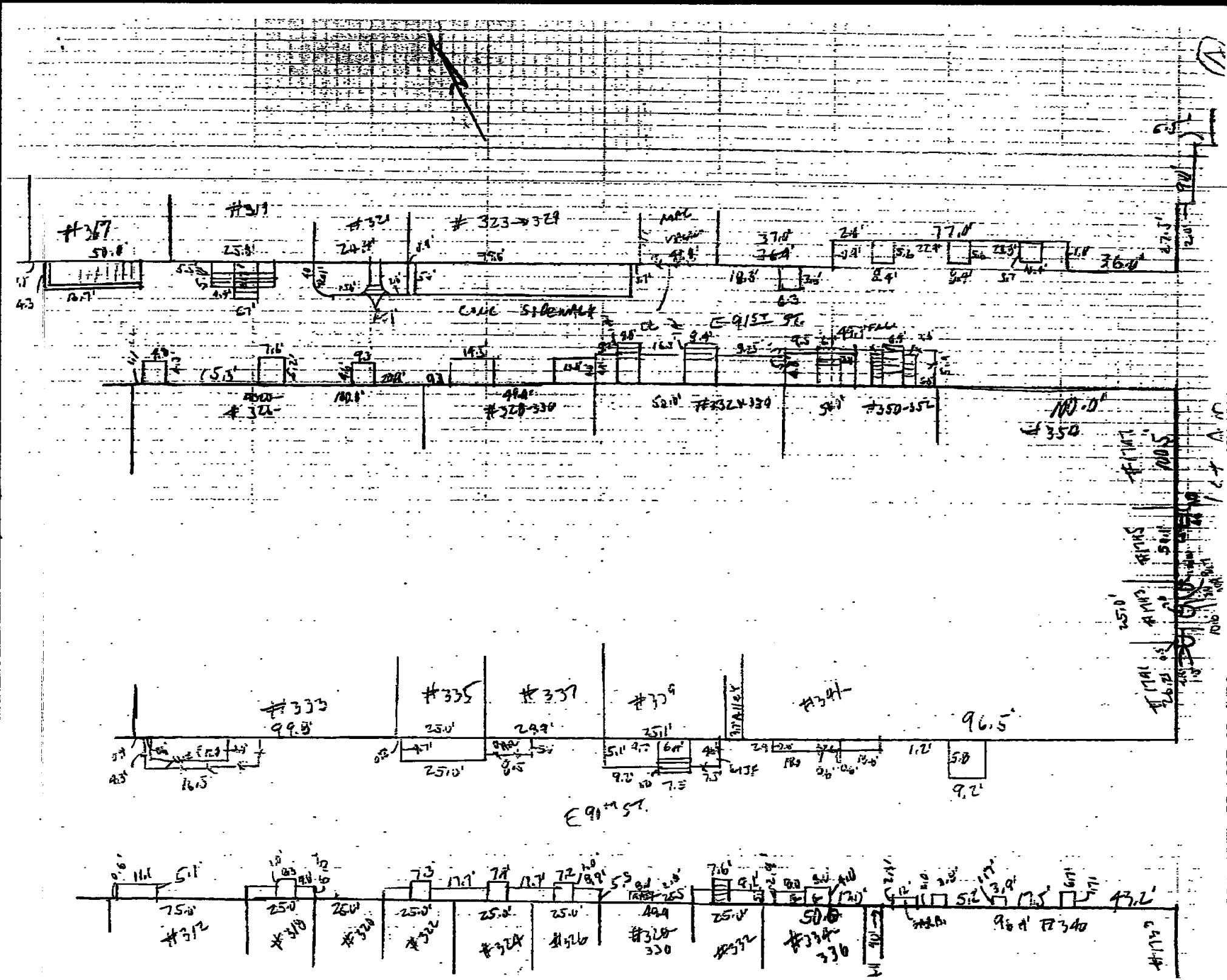
12-23-03 DS AT

HOLE #	DIST	VERT ∠	RAD	PT. NO.	REMARKS
	TE #3	B/S #2	HI =	5.22	
0-00-00	380.695	90-46-48	9.96	2	#2
180-00-00	"	269-08-36	"	"	"
71-46-06	278.13	89-28-12	4.70	4	#4
251-46-06	"	270-27-12	"	"	"

1ST AVE


2ND AVE
25.7'
25.0'
25.1
26.5'
#1750
#1752
#1760
#1762
11.7'
9.3'
9.6'
7.6'
5.2
80.6'
#301
#305
#307
#309
#311
6.8'
6.7'
6.6'
25.0'

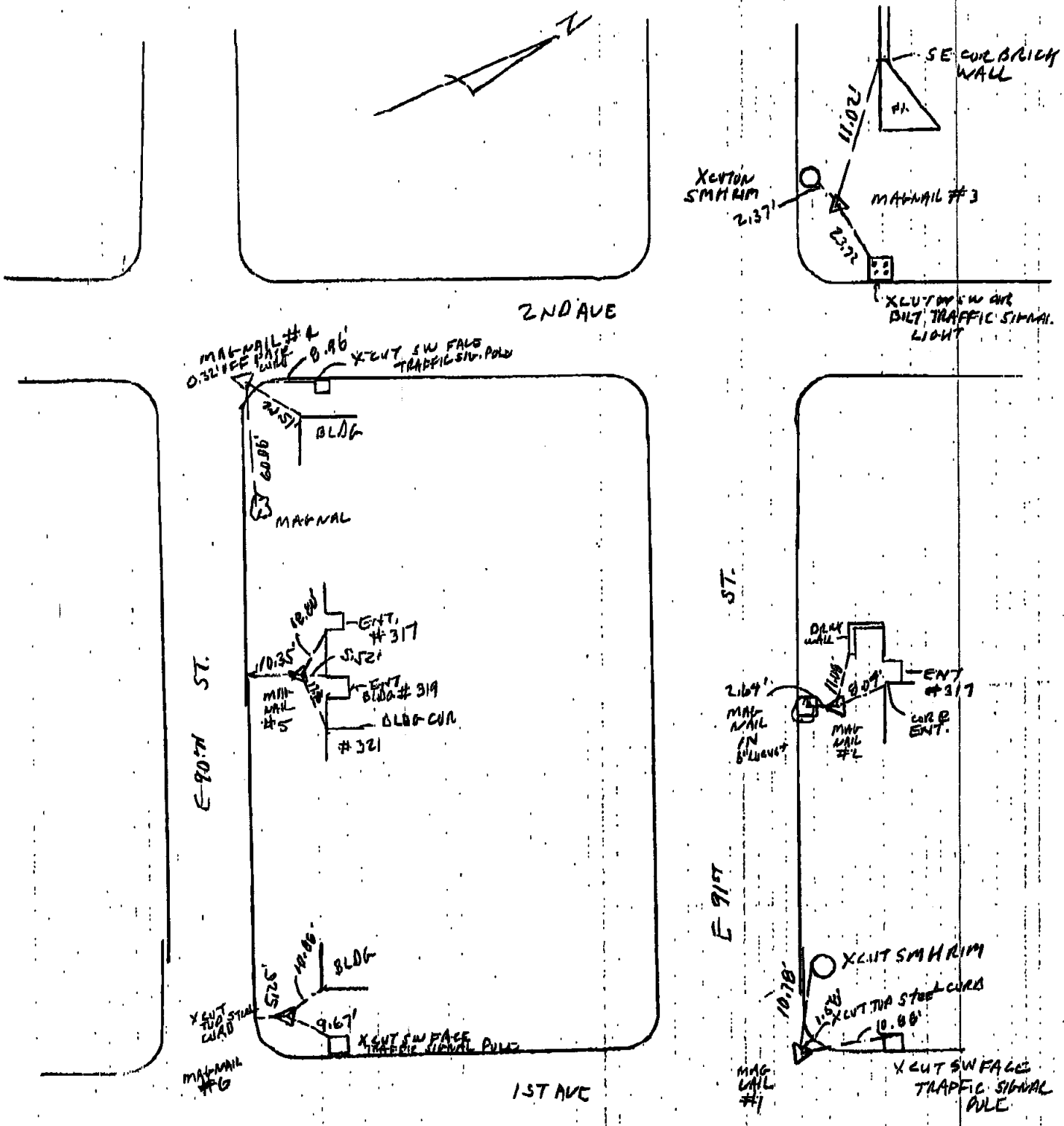

E 61ST ST
#300
#302
#304
#306-308
#310-312
#314-316
#317-319
#321
#323
#325
ALLEY
2nd AVE
E 61ST ST
#300
#302
#304
#306
#308
#310


#317
#319
#321
#323→329
Curb Sidewalk
℄ 91ST St.
#321-327
#328-330
#324-334
#350-352
#350
#333
#335
#337
#339
#341
96.5'
℄ 91ST St.
#312
#318
#320
#322
#324
#326
#328
#330
#332
#334
#336
#340

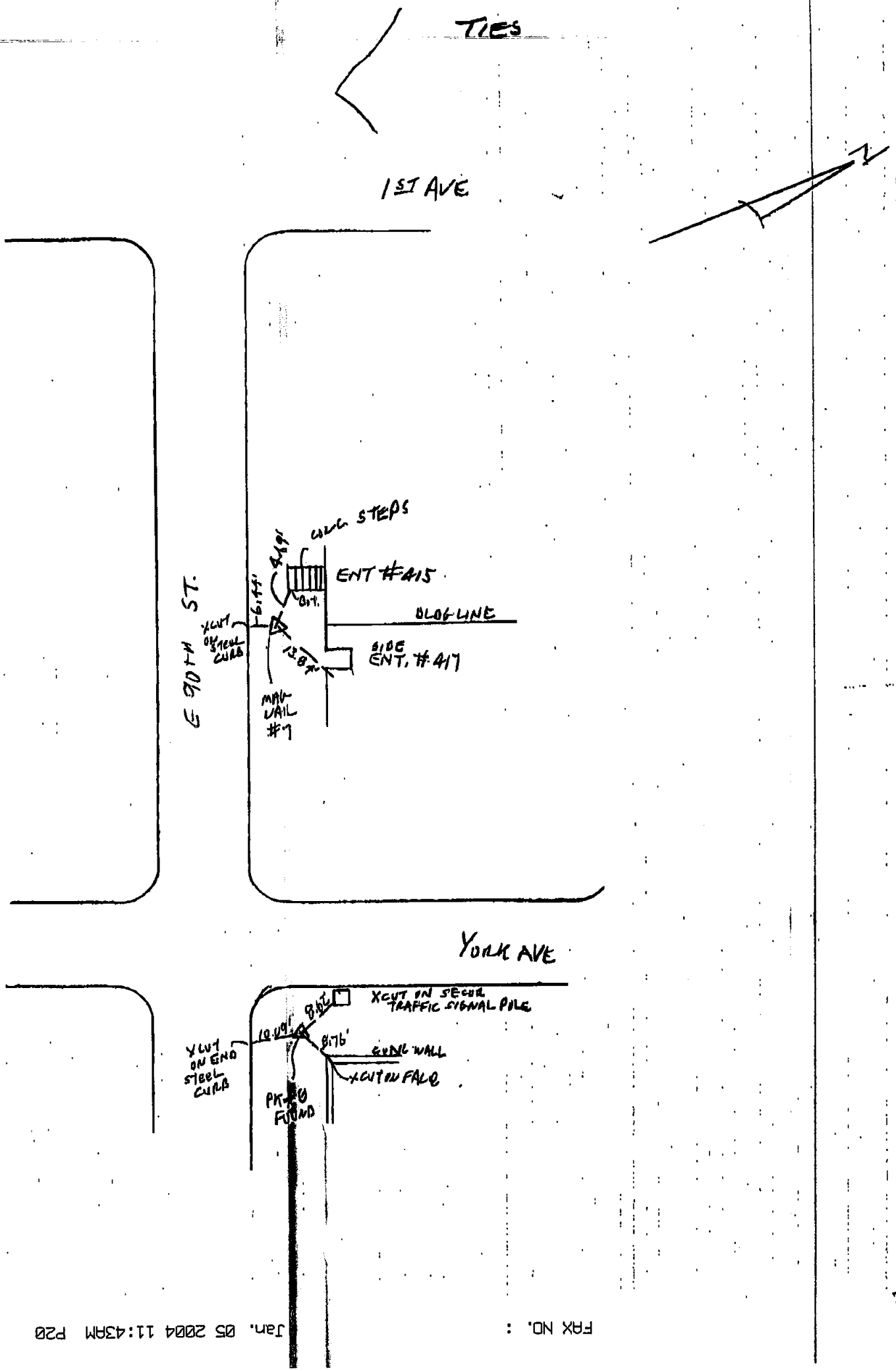
1118

1ST AVE + EAST 90TH STREET SITE TIES

12/1/03 05 AT

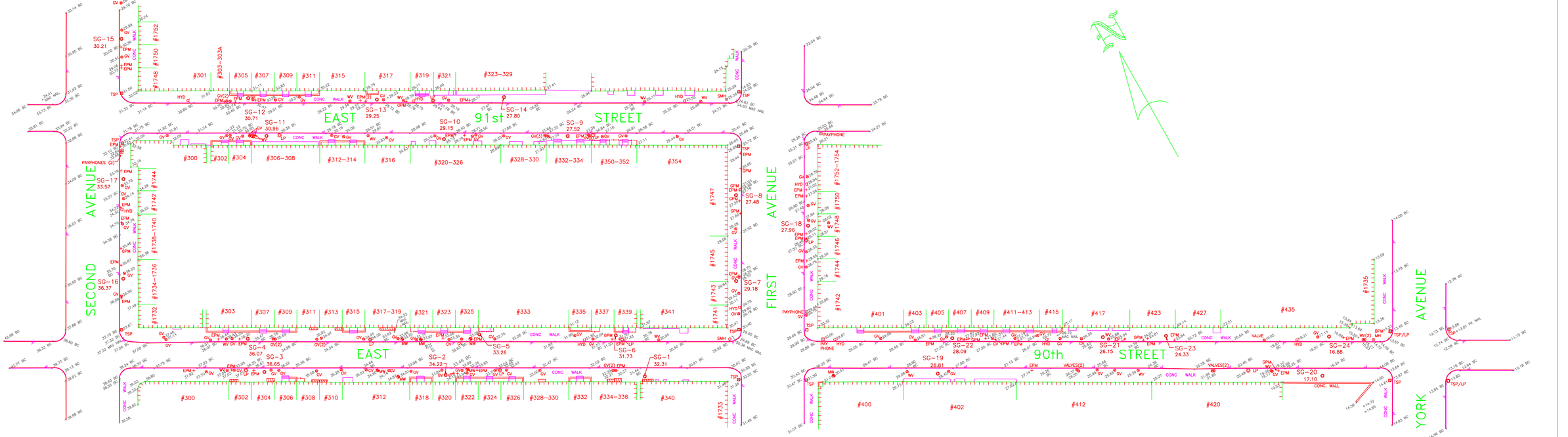


1/2


TIES
1ST AVE
N
E 90TH ST.
CONC. STEPS
ENT #415
BLDG LINE
SIDE ENT. #417
XCUT ON STEEL CURB
MAIL VAIL #7
YORK AVE
XCUT ON SEC. TRAFFIC SIGNAL POLE
XCUT ON END STEEL CURB
CONC. WALL
XCUT ON FACE
PK NAIL FOUND

ATTACHMENT D

SURVEY DRAWING



LEGEND

SG-4 34.07	SOIL GAS POINT (WITH GROUND ELEVATION)
MW	MONITORING WELL
SMH	SEWER MANHOLE
WV	WATER VALVE
HYD	HYDRANT
GV	GAS VALVE
GPM	GAS PAINT MARK
EPM	ELECTRIC PAINT MARK
TSP	TRAFFIC SIGNAL POLE
LP	LIGHT POLE
	GARBAGE BIN
	EDGE OF BUILDING (WITH ADDRESS SHOWN)
	WIRE FENCE
	EDGE OF PAVEMENT
	CONCRETE CURB (WITH BOTTOM OF CURB AT FACE ELEV)
+ 38.24 BC	SPOT ELEVATION

NOTES:

1.) DATES OF FIELD SURVEY: DECEMBER 19-23, 2003
2.) HORIZONTAL DATUM: ASSUMED
3.) VERTICAL DATUM: NAVD 88
4.) NORTH FROM MAGNETIC OBSERVATION
5.) ALL CURB ELEVATIONS LISTED ARE BOTTOM OF CURB ELEVATIONS

SCALE
50 25 0 50 FT.

N:\11173261.00000\CAD\ 1118.DWG 1=1 1/12/04-1

REVISIONS

YEC, INC.
VALLEY COTTAGE NEW YORK

1ST AVE. AND E 90TH ST. SURVEY

BOROUGH OF MANHATTAN
NEW YORK COUNTY, NEW YORK

DATE:	SCALE:	DRAWN BY:	CHECKED BY:	JOB NO.
JAN. 2004	1" = 50'	MBW	DRS	A0306