

**LIMITED  
ENVIRONMENTAL SITE INVESTIGATION  
FOR  
2101 & 2103 PALMER AVENUE  
LARCHMONT, NEW YORK**

**PREPARED FOR:**

**GRIFFON ASSOCIATES, INC  
570 TAXTER ROAD  
ELMSFORD, NEW YORK 10523**

**PREPARED BY:**

**TECTONIC ENGINEERING & SURVEYING CONSULTANTS P.C.  
70 PLEASANT HILL ROAD  
MOUNTAINVILLE, NEW YORK 10953**

**OCTOBER 14, 2010**

*Peter T. Sutherland*

A circular blue ink seal for Peter Theodore Sutherland, a Licensed Professional Engineer in the State of New York. The seal features the state emblem in the center, surrounded by the text "STATE OF NEW YORK", "PETER THEODORE SUTHERLAND", and "LICENSED PROFESSIONAL ENGINEER". The license number "No. 075840" is at the bottom.

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**PETER T. SUTHERLAND, P.E. NO. 075840**

***TECTONIC***

**Practical Solutions. Exceptional Service**

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FOR  
2101 & 2103 PALMER AVENUE  
LARCHMONT, NEW YORK**

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## **1.0 INTRODUCTION**

On behalf of Griffon Associates, Inc., Tectonic Engineering & Surveying Consultants P.C. (Tectonic) has performed a limited Phase II Environmental Site Investigation at the property located at 2101 & 2103 Palmer Avenue in Larchmont, New York on September 27, 2010. The purpose of the investigation was to delineate the area of petroleum impacted soils encountered during a geotechnical subsurface investigation performed by Tectonic on September 20, 2010. The petroleum contamination discovered during the geotechnical investigation was reported to NYSDEC Spills Hotline and NYSDEC issued a Spill Number of 10-06787. A summary of the investigation is presented below.

The work was performed in general accordance with the technical requirements of the New York State Department of Environmental Conservation (NYSDEC) DER-10 "Technical Guidance for Site Investigation and Remediation" procedures manual, dated December 2002 as well as in general accordance with certain key elements of ASTM E 1903 guidelines and EPA standard operating procedures (SOPs). The technical approach and sampling procedures to evaluating these media are described under Section 5.0.

## **2.0 INVESTIGATION BACKGROUND AND OBJECTIVES**

The area of concern currently consists of an approximate 90 foot by 150 foot area located in the northeastern portion of the Property. The area of concern is currently paved and is being utilized as a parking facility for fifty-three foot long tractor trailers.

At the request of Griffon Associates, Inc., Tectonic performed a subsurface investigation for geotechnical evaluation on September 20 through 21, 2010. This investigation included eight (8) test pits and seven (7) geotechnical borings that were performed at various locations on the Property. During the geotechnical subsurface investigation, Tectonic encountered petroleum that seeped from the walls of one test pit (TP-7) as well as petroleum odors in one of the borings (B-7) and one of the test pits (TP-6). This limited Phase II ESA was performed in order to provide a preliminary delineation of the area affected by the petroleum contamination and to evaluate the probable source ("hot

spot”) of the petroleum. Results of the geotechnical investigation are provided in a separate geotechnical report.

### **3.0 PROPERTY DESCRIPTION**

The area of concern is situated in the northeast portion of an approximately 2.5 acre property located at 2101 & 2103 Palmer Avenue in Larchmont, Westchester County, New York.

The Property is located at 2101 & 2103 Palmer Avenue which is north of Palmer Avenue and south of a Metropolitan Transportation Authority Railroad as shown on Figure 1. The Property is accessible through an ingress and egress easement extending north from Palmer Avenue in the western portion of the Property and is located in a mixed commercial/residential area.

The paved site is located in the northeastern portion of the Property and is currently being utilized as a storage facility for fifty-three foot long tractor trailers that have been damaged in accidents. The remaining portion of the Property is utilized as a parking area for vehicles.

### **4.0 GEOLOGIC AND HYDROGEOLOGIC SETTING**

Larchmont is situated in the northeastern portion of Westchester County, New York. Tectonic’s previous geotechnical investigation found that the site is underlain by granitic gneiss, which is probably part of the Harrison Gneiss formation as mapped by the New York State Geologic survey. Bedrock outcrops near the southeastern portion of the parcel. In the area of concern, the geotechnical investigation indicated that up to approximately 14 feet of soil overlaid the gneiss bedrock.

The thin layer of native soils is the uppermost hydrogeologic unit. This aquifer consists primarily of glacial tills. The glacial till consists of a poorly sorted mixture of sand, silt, clay, gravel, and boulders. The till typically has a low to moderate permeability, and overlays the metamorphic bedrock. The primary permeability in the bedrock is due to

existing fractures, and is dependent on the size and interconnectedness of the fractures.

The site is at an elevation of approximately 36 feet above mean sea level (AMSL) at the northern end of the site and 27 feet AMSL at the southern end of the Property. Depth to water in the vicinity of the site is estimated to be 8 feet below grade.

## **5.0 SUBSURFACE INVESTIGATION AND SAMPLING**

Tectonic mobilized a van-mounted Geoprobe on September 27, 2010 operated by General Borings Inc. to assist in the advancement of ten (10) soil borings, G1 through G10. Borings G3 through G8 and G10 were located within the tractor trailer parking area and borings G1, G2 and G9 were located on the exterior of the parking area to evaluate whether the petroleum impacted soils extended outside of the fenced area. A boring location plan is included as Figure II.

A Tectonic geologist performed full-time inspection during the advancement of the soil borings. All of the borings were advanced to refusal on either boulders or bedrock which ranged in depths from six feet to eleven and a half feet below existing grade.

Samples were collected in four (4)-foot increments using a Macro Core Sampler. The sampler has a removable cutting shoe and contains an acetate liner. After penetrating the subsurface to the required depth, the sampler was withdrawn and the acetate liner opened to expose soils from that sampling interval.

Soils were screened on-site for the presence of volatile organic compounds (VOCs) with a MiniRAE 3000 photo-ionization detector (PID) that had been calibrated following manufacturer's instructions prior to its use. Soils were also characterized using the USCS soil classification system and boring logs were constructed. PID readings and visual/olfactory observations of the soil samples are included on the boring logs in Appendix III. Table 1 summarizes the highest OVM readings measured and the depth below existing ground surface

<b>TABLE 1. HIGHEST PID READING BY BORING</b>		
<b>Boring Number</b>	<b>Highest PID Reading (ppm)</b>	<b>Approximate Depth Below Existing Grade of Highest PID Reading (Feet)</b>
G-1	42.0	3 to 4
G-2	0.1	0 to 4 and 8 to 10
G-3	0.4	1 to 2
G-4	3.2	6 to 7
G-5	47.8	5 to 6
G-6	28.5	7 to 8
G-7	35.1	7 to 8
G-8	0.4	8 to 9
G-9	0.1	0 to 1 and 7 to 9
G-10	13.3	4 to 5

The soils from borings G-2, G-3 and G-9 did not exhibit petroleum staining, odors or elevated PID readings that would indicate the presence of petroleum or other apparent contaminants. The soils extracted from the remainder of the borings did exhibit petroleum odors, elevated PID readings and/or staining. In borings G-4 and G-7 petroleum contamination was found below the water table.

Fill was encountered in all of the soil borings and ranged in thickness from one foot to five feet. The fill generally consisted of brown coarse to fine sand, with varying amounts of fine gravel and silt. The fill also contained varying amounts of brick, concrete, asphalt and wood. Native soils were found underlying the fill and generally consisted of dark brown coarse to fine sand with varying amounts of fine gravel and silt. A layer of grey silty clay was encountered in two (2) of the borings, G-4 and G-8. This lens was encountered at an approximate depth of six (6) feet below existing grade in G-4 and at an approximate depth of four (4) feet below existing grade in G-8, which roughly corresponded to groundwater depths in both of the borings.

Groundwater levels were inferred based on soil sample moisture. Groundwater was encountered at varying depths across the area of concern as indicated on the attached boring logs.

One soil sample was collected from boring G-4 and one from boring G-5, from just above the water table, approximately six (6) to seven (7) feet below existing grade.

The composite soil samples from discrete depth intervals in the borings were collected with a designated plastic scoop and placed into freezer bags. The soils in the bags were kneaded to produce a visually homogeneous mixture, then placed into laboratory pre-cleaned glassware, placed on ice and were packaged in a sealed cooler and transported on ice under standard chain-of-custody protocols to Phoenix Environmental Laboratories in Manchester, CT. The samples were received by the laboratory at the correct temperature and within acceptable holding times.

## **6.0 ANALYTICAL TEST RESULTS**

The two soil samples sent to the laboratory were analyzed for the presence of Volatile Organic Compounds (VOCs) by EPA Method 8260B and Semi-volatile organic compounds (SVOCs) by EPA Method 8270C. Soil analytical results were compared to the recommended soil cleanup objectives (RSCOs) set forth in NYSDEC Spills Technology and Remediation Series (STARS) Memo #1 revised August 22, 2001.

### **Soil Analytical Test Results**

The analytical test results for the soil samples are summarized in Table 2 and copies of the analytical test results are attached in Appendix IV. For all the samples, the concentrations above the standards set forth in NYSDEC STARS are indicated in bold and highlighted in yellow.

One VOC, naphthalene, was detected above laboratory reporting limits in the soil sample collected from boring G4. Seven (7) VOCs, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-isopropyltoluene, n-butylbenzene, n-propylbenzene, p-isopropyltoluene and sec-butylbenzene were detected above laboratory reporting limits from the sample collected from G5. Although the concentrations of VOCs were above laboratory reporting limits, concentrations of VOCs did not exceed RSCOs set forth in NYSDEC STARS.

Four (4) SVOCs, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene, were detected above laboratory reporting limits in the soil

samples collected from boring G4. Additionally, the concentrations of benzo(a)pyrene and benzo(b)fluoranthene were above the NYSDEC STARS RSCOs. One (1) SVOC, phenanthrene, was above the laboratory reporting limit in the soil sample collected from G5. Although the concentration of this SVOC was above laboratory reporting limits, analytical test results indicate that the concentration does not exceed the applicable NYSDEC STARS RSCO.

TABLE 2. ANALYTICAL TEST RESULTS SUMMARY TABLE			
Sample ID	NY STARS	G4 6-7	G5 6-7
Lab Sample Number	Recommended Soil Clean Up Objective (RSCO)	AZ59767	AZ59768
Sampling Date		9/27/2010	9/27/2010
Sampling Depth (Below Ground Surface)		Approximately 6 feet to 7 feet	Approximately 6 feet to 7 feet
Matrix		Soil	Soil
Units	ppm	ppm	ppm
Compound			
Volatile Organic Compounds (VOCs)			
Naphthalene	13.0	0.044	ND
1,2,4-Trimethylbenzene	10.0*	ND	1.4
1,3,5-Trimethylbenzene	3.3	ND	0.590
2-Isopropyltoluene	NS	ND	0.230
n-Butylbenzene	10.0*	ND	0.350
n-Propylbenzene	3.7	ND	0.190
p-Isopropyltoluene	10.0*	ND	0.290
sec-Butylbenzene	10.0*	ND	0.240
Semivolatile Organic Compounds (SVOCs)			
Benzo(a)pyrene	0.061 or MDL	<b>0.860</b>	ND
Benzo(b)fluoranthene	0.220 or MDL	<b>0.330</b>	ND
Benzo(g,h,i)perylene	50.0**	0.630	ND
Indeno(1,2,3-cd)pyrene	3.2	0.480	ND
Phenanthrene	50.0**	ND	0.820
NS = No Standard ND = Not Detected MDL = Method Detection Limit * = As per TAGM 4046 individual and the sum of VOCs not listed (Tentatively Identified Compounds (TICs)) <= 10 ppm ** = As per TAGM 4046 individual non-carcinogenic semivolatiles <= 50 ppm and total semivolatiles not listed (Tentatively Identified Compounds (TICs)) <= 500 ppm <b>0.860</b> = Exceeds NY STARS Guidelines			



## **7.0 CONCLUSIONS**

The findings of our subsurface investigation conducted on September 27, 2010 and the results of analytical testing are:

- The investigation confirmed that the soils at the northern end of the Property have been impacted by petroleum hydrocarbons. The highest concentrations appear to be in the soils just above the groundwater table. On Figure 2, the approximate limit of petroleum contamination is shown.
- The highest OVM readings were found in the northernmost borings and the readings decreased progressively in the borings towards the south. Concentrations of petroleum hydrocarbons measured in the borings fell below the OVM's measurement capability south of the fenced trailer compound. This indicates that the source area of the petroleum is located at the north end of the Property and may potentially originate from an adjoining parcel.
- Analytical results indicate the soils just above the water table in boring G-4 contain two polycyclic aromatic hydrocarbons (PAHs) above their respective RSCOs in NYSDEC STARS Memo #1.
- The sample results from boring G-5 indicate elevated concentrations of VOCs. The concentrations of VOCs are below their respective RSCOs in NYSDEC STARS Memo #1.

## **8.0 RECOMMENDATIONS**

Based on our findings and conclusions, Tectonic recommends the following:

- Due to the confirmed presence of elevated concentrations of PAHs and VOCs within the site soils at the north end of the Property and that contamination appears to have migrated on the groundwater table, further investigation of the Property is recommended to better delineate the location of the source area. The additional investigation should confirm that the site groundwater has been impacted, the groundwater flow gradient, and whether the petroleum has impacted the on-site bedrock.
- NYSDEC should be updated regarding the findings of this investigation. Further, the relatively higher degree of contamination on the north side of the parcel is a strong indication that the adjacent parcels should be investigated to locate the source of the petroleum spill, which suggests a leaking petroleum storage tank.
- Prior to the design and construction of any structure on the Property, the proposed structure should be evaluated for the potential for vapor intrusion per NYSDEC and NYSDOH Vapor Intrusion Guidance. If that evaluation

indicates the potential for vapor intrusion, remedial measures should be implemented as part of the building design and construction.

- Any petroleum contaminated soil generated during remediation or site construction should be properly disposed off-site at a permitted disposal and/or recycling facility such as a permitted lined landfill or thermal recycling facility. Prior to off-site disposal, soil wastes generated should be tested to confirm the acceptance criteria of specific disposal facilities are met in accordance with applicable state regulations. The excavation should be backfilled with clean fill.
- A licensed and permitted waste hauler should be retained to properly transport and dispose of petroleum contaminated soil generated by earthwork activities at the site at a proper state permitted disposal facility. All transportation and disposal manifests and documentation should be obtained for material removed from the Site.
- During construction, all remediation and construction activities should follow OSHA guidelines and the site contractor should prepare and implement a site specific environmental Health and Safety Plan (HASP). The HASP should also address a Community Air Monitoring Plan (CAMP) due to the petroleum contamination in the site soils. The HASP should be prepared for the site contractor by a qualified environmental professional or certified industrial hygienist. The CAMP should recommend real time VOC and particulate air monitoring during all earthwork construction and remediation activities. Additionally, dust suppression measures should be implemented as per NYSDEC TAGM #4031.

## **9.0 LIMITATIONS**

The environmental subsurface investigation services provided by Tectonic have been performed in general accordance with certain key elements of ASTM E 1903 guidelines and our understanding of the Client's needs to make a business decision based on a practical scope of work and level of investigation that is commensurate with the nature of the proposed project. These services have been provided as part of an iterative, phased approach to site characterization using findings of each phase to better define the efforts of subsequent phases of investigation. Our professional services have been performed using the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental engineers and geologists practicing in this or similar situations. Our interpretation of the field data is based on good judgment and experience. However, no matter how qualified the environmental engineer or detailed the investigation, subsurface conditions cannot always be predicted beyond the points

of actual sampling and testing. No other warranty, expressed or implied, is made as to the professional advice included in this report.

# **FIGURE 1**





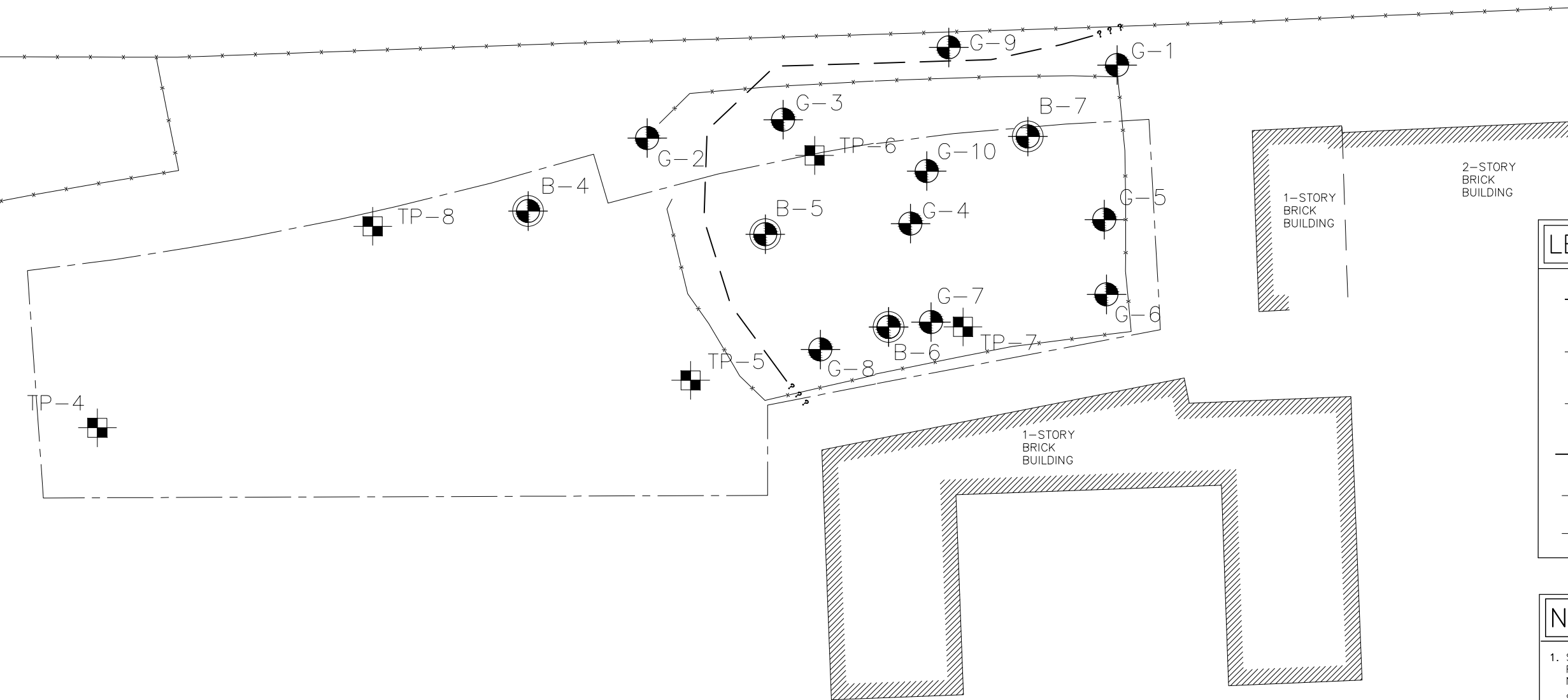
Name: Unknown  
 Date: 10/08/10  
 Scale: 1 inch = 2,000 ft.

Location: 040°55' 51.83" N 073°45' 42.74" W



## **FIGURE 2**

METRO-NORTH RAILROAD



PALMER AVENUE

## LEGEND

- B-3 APPROXIMATE GEOPROBE BORING LOCATION PERFORMED ON 9/29/10
- B-3 APPROXIMATE GEOTECHNICAL BORING LOCATION PERFORMED 9/20/10 THROUGH 9/21/10
- TP-3 APPROXIMATE TEST PIT LOCATION PERFORMED ON 9/20/10
- APPROXIMATE LIMIT OF PETROLEUM CONTAMINATION
- CHAIN LINK FENCE
- APPROXIMATE PARCEL BOUNDARY

## NOTES

- SKETCH BASED ON DRAWING ENTITLED PROPOSED SITE PLAN FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, SHEET NUMBER SY-1. FOR: ESPOSITO BUILDERS INC. BY GEMMOLA & ASSOCIATES REVISION 15, DATED 3/26/08
- BORING AND TEST PIT LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON MEASUREMENTS OFF EXISTING SITE FEATURES.
- GEOTECHNICAL BORINGS AND TEST PITS PERFORMED BY TECTONIC ON 9/20/10 AND 9/21/10.
- GEOPROBE BORINGS PERFORMED BY TECTONIC ON 9/27/10.
- LIMITS OF CONTAMINATION BOUNDARY IS APPROXIMATE AND IS BASED ON VISUAL AND OLFACTORY OBSERVATIONS, PID READINGS, AND ANALYTICAL TEST RESULTS FROM THE BORINGS AND TEST PITS PERFORMED BY TECTONIC.

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ORIGINAL SIZE IN INCHES

Rev	Date	Revision	Approved	DRAWING CONTROL			
				Designed by: KG	Drawn by: JAU	Checked by: PTS	
				Purpose	Released by	Date	
				<input type="radio"/> For Comment			
				<input type="radio"/> For Approval			
				<input type="radio"/> For Bid			
				<input type="radio"/> For Construction			

**TECTONIC** • PLANNING  
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### BORING AND TEST PIT LOCATION PLAN



LIMITED PHASE II ESA  
2101 & 2103 PALMER AVENUE  
LARCHMONT, NEW YORK

Date	10/6/10	Work Order	5669.02	Drawing No.	FIGURE 2	Rev	
Scale	1" = 20'						

# **APPENDIX I**



BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10




<div>TECTONIC</div> <div>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</div>			PROJECT No. 5669.02			BORING No. G-1											
			PROJECT: Larchmont Apartments														
			LOCATION: Larchmont, NY						SHEET No. 1 of 1								
CLIENT: Griffon Associates				GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Kristine Garbarino									
CONTRACTOR: General Borings, Inc.								DRILLER: Tom McGovern									
METHOD OF ADVANCING BORING		DIA.	DEPTH					SURFACE ELEVATION: ---									
POWER AUGER:			TO	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			DATUM: See Remarks										
ROT. DRILL:			TO	SCREEN DEPTH: --- TO ---			DATE START: 9/27/10										
CASING:			TO	WEATHER: Rain TEMP: 60° F			DATE FINISH: 9/27/10										
DIAMOND CORE:			TO	DEPTH TO ROCK: ---			UNCONFINED COMPRESS. STRENGTH (TONS/FT)					DEPTH (FT.)					
Geoprobe Truck Mounted				*CHANGES IN STRATA ARE INFERRED			1 2 3 4 5										
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT %								
			SAMPLE NUMBER	RECOV.					MOISTURE	X-----⊗-----△							
LENGTH (IN.)	RQD (%)			10 20 30 40 50	STANDARD PENETRATION (BLOWS/FT.)												
									10 20 30 40 50								
1						M									1		
2																2	
3						M	SM									3	
4																	4
5						M	SM										5
6						M	SM										6
7															7		
8															8		
9															9		
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17															17		
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19															19		
20															20		
21															21		
22															22		
23															23		
24															24		
25															25		
REMARKS:																	

BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<b>TECTONIC</b> <small>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</small>								PROJECT No. <b>5669.02</b>		<b>BORING No. G-2</b>								
								PROJECT: <b>Larchmont Apartments</b>										
								LOCATION: <b>Larchmont, NY</b>		SHEET No. 1 of 1								
CLIENT: <b>Griffon Associates</b>						GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: <b>Kristine Garbarino</b>								
CONTRACTOR: <b>General Borings, Inc.</b>							9/27/10		8'	DRILLER: <b>Tom McGovern</b>								
METHOD OF ADVANCING BORING		DIA.	DEPTH						SURFACE ELEVATION: <b>---</b>									
POWER AUGER:			TO		MON. WELL		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		<b>See Remarks</b>							
ROT. DRILL:			TO		SCREEN DEPTH:		--- TO ---		DATE START:		<b>9/27/10</b>							
CASING:			TO		WEATHER: <b>Rain</b>		TEMP: <b>60° F</b>		DATE FINISH:		<b>9/27/10</b>							
DIAMOND CORE:			TO		DEPTH TO ROCK: <b>---</b>				UNCONFINED COMPRESS. STRENGTH ● (TONS/FT)		DEPTH (FT.)							
Geoprobe Truck Mounted					*CHANGES IN STRATA ARE INFERRED													
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*										
			SAMPLE NUMBER	RECOV.					MOISTURE	1					2	3	4	5
LENGTH (IN.)	RQD (%)			PLASTIC LIMIT % X-----	WATER CONTENT % ⊗-----		LIQUID LIMIT % -----△											
									STANDARD PENETRATION (BLOWS/FT.) ●									
									10	20	30	40	50					
1						M	SM	Dk bwn c-f SAND, some f Gravel, little Silt (OVM=0.1ppm)								1		
2						M		(OVM=0.1ppm)									2	
3						M		Dk bwn c-f SAND, some f Gravel, little Silt, little Organics (OVM=0.1ppm)								3		
4						M	SM CL	Dk bwn c-f SAND, some f Gravel, little Silt, little Organics (OVM=0.1ppm)									4	
5							CL SM SM	Gy SILTY CLAY Gy SILTY CLAY, trace c-f Sand (OVM=0.0ppm)								5		
6								Dk bwn c-f SAND, some f Gravel, little Silt (OVM=0.0ppm)									6	
7						M	SM	Bwn c-f SAND, little f Gravel, little Silt (OVM=0.0ppm)									7	
8						M	SM	(OVM=0.0ppm)									8	
9						W	SM	Sampled 7-8 (OVM=0.1ppm)									9	
10						W	SM	Bwn c-f SAND, some Clayey Silt (OVM=0.1ppm)									10	
11						W	SM	Bwn c-f SAND, some f Gravel, little Silt (OVM=0.0ppm) (OVM=0.0ppm)								11		
12								End of Boring at 11.5'								12		
13																13		
14																14		
15																15		
16																16		
17																17		
18																18		
19																19		
20																20		
21																21		
22																22		
23																23		
24																24		
25																25		




REMARKS: Water level based on soil sample moisture.

BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<b>TECTONIC</b> <small>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</small>			PROJECT No. <b>5669.02</b>			<b>BORING No. G-3</b>												
			PROJECT: <b>Larchmont Apartments</b>															
			LOCATION: <b>Larchmont, NY</b>			SHEET No. 1 of 1												
CLIENT: <b>Griffon Associates</b>			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: <b>Kristine Garbarino</b>											
CONTRACTOR: <b>General Borings, Inc.</b>				9/27/10		8'	DRILLER: <b>Tom McGovern</b>											
METHOD OF ADVANCING BORING		DIA.		DEPTH				SURFACE ELEVATION: ---										
POWER AUGER:			TO	MON. WELL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		<b>See Remarks</b>									
ROT. DRILL:			TO	SCREEN DEPTH: --- TO ---		DATE START:		<b>9/27/10</b>										
CASING:			TO	WEATHER: <b>Rain</b> TEMP: <b>60° F</b>		DATE FINISH:		<b>9/27/10</b>										
DIAMOND CORE:			TO	DEPTH TO ROCK: ---		UNCONFINED COMPRESS. STRENGTH (TONS/FT)		DEPTH (FT.)										
Geoprobe Truck Mounted				*CHANGES IN STRATA ARE INFERRED														
DEPTH (FT.)		N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL						LITHOLOGY*	1 2 3 4 5				
				SAMPLE NUMBER	RECOV.			PLASTIC LIMIT %		WATER CONTENT %		LIQUID LIMIT %						
					LENGTH (IN.)			RQD (%)	MOISTURE	X-----⊗-----△								
									10 20 30 40 50									
									●		STANDARD PENETRATION (BLOWS/FT.)							
									10 20 30 40 50									
1						M	SM	Bwn c-f SAND, some f Gravel, little Silt (FILL) (OVM=0.1ppm)								1		
2								(OVM=0.4ppm)									2	
3						M		(OVM=0.1ppm)									3	
4						M	SM	Dk bwn c-f SAND, some f Gravel, little Silt (coal pieces) (FILL) (OVM=0.0ppm)									4	
5						M		Dk bwn c-f SAND, little f Gravel, little Silt (OVM=0.1ppm)									5	
6						M		Dk bwn c-f SAND, some f Gravel, little Silt (OVM=0.1ppm)									6	
7						M	SM	Dk bwn c-f SAND, some Clayey Silt (micaceous) (OVM=0.0ppm)									7	
8						M		Gy CLAY, trace c-f Sand (OVM=0.1ppm)										8
9						W	SP	Bwn c-f SAND, trace Silt (OVM=0.0ppm)										9
10						W		(OVM=0.1ppm)										10
11								(OVM=0.0ppm)									11	
12								End of Boring at 11.5'								12		
13																13		
14																14		
15																15		
16																16		
17																17		
18																18		
19																19		
20																20		
21																21		
22																22		
23																23		
24																24		
25																25		

REMARKS: Water level based on soil sample moisture.

BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<div>TECTONIC</div> <div>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</div>								PROJECT No. 5669.02			BORING No. G-4						
								PROJECT: Larchmont Apartments									
								LOCATION: Larchmont, NY						SHEET No. 1 of 1			
CLIENT: Griffon Associates								GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Kristine Garbarino					
CONTRACTOR: General Borings, Inc.									9/27/10		8'	DRILLER: Tom McGovern					
METHOD OF ADVANCING BORING				DIA.	DEPTH							SURFACE ELEVATION: ---					
POWER AUGER:					TO			MON. WELL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM: See Remarks						
ROT. DRILL:					TO			SCREEN DEPTH: --- TO ---			DATE START: 9/27/10						
CASING:					TO			WEATHER: Rain		TEMP: 60° F		DATE FINISH: 9/27/10					
DIAMOND CORE:					TO			DEPTH TO ROCK: ---			UNCONFINED COMPRESS. STRENGTH (TONS/FT)					DEPTH (FT.)	
Geoprobe Truck Mounted							*CHANGES IN STRATA ARE INFERRED										
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*									
			SAMPLE NUMBER	RECOV.					MOISTURE	1	2	3	4	5			
LENGTH (IN.)	RQD (%)			PLASTIC LIMIT %	WATER CONTENT %		LIQUID LIMIT %										
									10	20	30	40	50				
									STANDARD PENETRATION (BLOWS/FT.)								
									10	20	30	40	50				
1						M	SM	(OVM=0.7ppm) Bwn c-f SAND, some f Gravel, little Silt (brick) (FILL)								1	
2						M		(OVM=1.9ppm) (OVM=2.3ppm)									2
3						M		(OVM=2.5ppm)									3
4						M											4
5						M		Bwn c-f SAND, some Silt (OVM=1.3ppm)									5
6						M		(OVM=2.0ppm)									6
7						M		Gy SILTY CLAY, trace c-f Sand (OVM=3.2ppm)									7
8						M		Same (OVM=1.2ppm)									8
9						W	SP	Bwn c-f SAND, little f Gravel, trace Silt (OVM=0.6ppm)								9	
10						W		Bwn c-f SAND, some f Gravel, trace Silt (OVM=0.5ppm) (OVM=0.4ppm)								10	
11																11	
12								End of Boring at 11'								12	
13																13	
14																14	
15																15	
16																16	
17																17	
18																18	
19																19	
20																20	
21																21	
22																22	
23																23	
24																24	
25																25	

REMARKS: Water level based on soil sample moisture.

BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

TECTONIC ENGINEERING & SURVEYING CONSULTANTS P.C.			PROJECT No. 5669.02			BORING No. G-5												
			PROJECT: Larchmont Apartments															
			LOCATION: Larchmont, NY			SHEET No. 1 of 1												
CLIENT: Griffon Associates			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Kristine Garbarino											
CONTRACTOR: General Borings, Inc.							DRILLER: Tom McGovern											
METHOD OF ADVANCING BORING		DIA.		DEPTH				SURFACE ELEVATION: ---										
POWER AUGER:			TO	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		See Remarks										
ROT. DRILL:			TO	SCREEN DEPTH: --- TO ---		DATE START:		9/27/10										
CASING:			TO	WEATHER: Rain TEMP: 60° F		DATE FINISH:		9/27/10										
DIAMOND CORE:			TO	DEPTH TO ROCK: ---		UNCONFINED COMPRESS. STRENGTH (TONS/FT)		DEPTH (FT.)										
Geoprobe Truck Mounted			*CHANGES IN STRATA ARE INFERRED															
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL						LITHOLOGY*					
			SAMPLE NUMBER	RECOV.										MOISTURE	1	2	3	4
LENGTH (IN.)	RQD (%)			PLASTIC LIMIT %	WATER CONTENT %		LIQUID LIMIT %											
						STANDARD PENETRATION (BLOWS/FT.)												
								10	20	30	40	50						
1						M	SM	Bwn c-f SAND, some f Gravel, little Silt (Concrete, brick) (FILL) (OVM=0.1ppm)						1				
2						M		(OVM=0.2ppm)						2				
3						M		(OVM=0.2ppm)						3				
4						M		(OVM=0.6ppm)						4				
5						M		(OVM=4.8ppm)						5				
6						M	SP	Bwn c-f SAND, little f Gravel, little Silt (OVM=47.8ppm)						6				
7								End of Boring at 6'						7				
8														8				
9														9				
10														10				
11														11				
12														12				
13														13				
14														14				
15														15				
16														16				
17														17				
18														18				
19														19				
20														20				
21														21				
22														22				
23														23				
24														24				
25														25				
REMARKS:																		






BORING LOG - 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<div>TECTONIC</div> <div>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</div>								PROJECT No. 5669.02		BORING No. G-7							
								PROJECT: Larchmont Apartments									
								LOCATION: Larchmont, NY					SHEET No. 1 of 1				
CLIENT: Griffon Associates						GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Kristine Garbarino							
CONTRACTOR: General Borings, Inc.							9/27/10		7'	DRILLER: Tom McGovern							
METHOD OF ADVANCING BORING		DIA.	DEPTH						SURFACE ELEVATION: ---								
POWER AUGER:			TO		MON. WELL		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		See Remarks						
ROT. DRILL:			TO		SCREEN DEPTH:		--- TO ---		DATE START:		9/27/10						
CASING:			TO		WEATHER: Rain		TEMP: 60° F		DATE FINISH:		9/27/10						
DIAMOND CORE:			TO		DEPTH TO ROCK: ---				UNCONFINED COMPRESS. STRENGTH ● (TONS/FT)		DEPTH (FT.)						
Geoprobe Truck Mounted					*CHANGES IN STRATA ARE INFERRED												
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*										
			SAMPLE NUMBER	RECOV.				PLASTIC LIMIT % X ---	WATER CONTENT % ⊗ ---	LIQUID LIMIT % --- Δ							
LENGTH (IN.)	RQD (%)	MOISTURE		10	20	30	40				50						
								● STANDARD PENETRATION (BLOWS/FT.)									
								10 20 30 40 50									
1						M	SM	Bwn c-f SAND, some f Gravel, some Silt (brick, wood) (FILL) (OVM=0.7ppm)							1		
2						M	SM	Gy c-f SAND, some Silty Clay, trace f Gravel (OVM=0.7ppm)								2	
3						M	SM	(OVM=1.3ppm)								3	
4						M	SM	(OVM=4.2ppm)								4	
5						M	SM	(OVM=5.6ppm)								5	
6						M	SM	(OVM=10.1ppm)								6	
7						M	SM	(OVM=12.7ppm)								7	
8						W		(OVM=35.1ppm)								8	
9						W	SM	(OVM=2.5ppm)								9	
10						W	SM	Bwn c-f SAND, some f Gravel, little Silt (OVM=8.4ppm)								10	
11						W	SM	(OVM=2.3ppm)								11	
12								(OVM=1.0ppm)							12		
13								End of Boring at 11.5'							13		
14															14		
15															15		
16															16		
17															17		
18															18		
19															19		
20															20		
21															21		
22															22		
23															23		
24															24		
25															25		

REMARKS: Water level based on soil sample moisture.


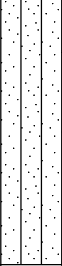
BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<b>TECTONIC</b> <small>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</small>			PROJECT No. <b>5669.02</b>		<b>BORING No. G-8</b>												
			PROJECT: <b>Larchmont Apartments</b>														
			LOCATION: <b>Larchmont, NY</b>		SHEET No. 1 of 1												
CLIENT: <b>Griffon Associates</b>			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: <b>Kristine Garbarino</b>										
CONTRACTOR: <b>General Borings, Inc.</b>				9/27/10		4'	DRILLER: <b>Tom McGovern</b>										
METHOD OF ADVANCING BORING		DIA.		DEPTH				SURFACE ELEVATION: <b>---</b>									
POWER AUGER:			TO	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		<b>See Remarks</b>									
ROT. DRILL:			TO	SCREEN DEPTH: <b>---</b> TO <b>---</b>		DATE START:		<b>9/27/10</b>									
CASING:			TO	WEATHER: <b>Rain</b> TEMP: <b>60° F</b>		DATE FINISH:		<b>9/27/10</b>									
DIAMOND CORE:			TO	DEPTH TO ROCK: <b>---</b>		UNCONFINED COMPRESS. STRENGTH ● (TONS/FT)		DEPTH (FT.)									
Geoprobe Truck Mounted				*CHANGES IN STRATA ARE INFERRED													
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*						1	2	3	4	5
			SAMPLE NUMBER	RECOV.									PLASTIC LIMIT %		WATER CONTENT %		LIQUID LIMIT %
LENGTH (IN.)	RQD (%)	MOISTURE		10	20	30	40	50	STANDARD PENETRATION (BLOWS/FT.)		10	20	30	40	50		
1					M	SM	Dk bwn-blk c-f SAND, some Silt, little f Gravel (Concrete) (OVM=0.2ppm)									1	
2					M	SM	(OVM=0.3ppm)										2
3					M	SM	(OVM=0.3ppm)										3
4					M	SM	(OVM=0.2ppm)										4
5					W	CH	Bwn c-f SAND, and gy Clay, some f Gravel (OVM=0.1ppm)									5	
6					W	CH	(OVM=0.1ppm)										6
7					W	CH	(OVM=0.1ppm)										7
8					W	CH	(OVM=0.1ppm)										8
9					W	CH	(OVM=0.4ppm)										9
10					W	SP	Bwn c-f SAND, little f Gravel, trace Silt (OVM=0.0ppm)									10	
11					W	SP	(OVM=0.0ppm)										11
12							End of Boring at 11'									12	
13																13	
14																14	
15																15	
16																16	
17																17	
18																18	
19																19	
20																20	
21																21	
22																22	
23																23	
24																24	
25																25	

REMARKS: Water level based on soil sample moisture.



BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<b>TECTONIC</b> <small>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</small>								PROJECT No. <b>5669.02</b>		<b>BORING No. G-9</b>						
								PROJECT: <b>Larchmont Apartments</b>								
								LOCATION: <b>Larchmont, NY</b>		SHEET No. 1 of 1						
CLIENT: <b>Griffon Associates</b>						GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: <b>Kristine Garbarino</b>						
CONTRACTOR: <b>General Borings, Inc.</b>							9/27/10		4'	DRILLER: <b>Tom McGovern</b>						
METHOD OF ADVANCING BORING		DIA.	DEPTH						SURFACE ELEVATION: ---							
POWER AUGER:			TO		MON. WELL		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		<b>See Remarks</b>					
ROT. DRILL:			TO		SCREEN DEPTH:		--- TO ---		DATE START:		<b>9/27/10</b>					
CASING:			TO		WEATHER: <b>Rain</b>		TEMP: <b>60° F</b>		DATE FINISH:		<b>9/27/10</b>					
DIAMOND CORE:			TO		DEPTH TO ROCK: ---				UNCONFINED COMPRESS. STRENGTH ● (TONS/FT)		DEPTH (FT.)					
Geoprobe Truck Mounted					*CHANGES IN STRATA ARE INFERRED											
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*									
			SAMPLE NUMBER	RECOV.				MOISTURE	1	2	3	4	5			
LENGTH (IN.)	RQD (%)	PLASTIC LIMIT % X-----		WATER CONTENT % ⊗-----		LIQUID LIMIT % -----△										
			STANDARD PENETRATION (BLOWS/FT.) ●					10	20	30	40	50				
1					M	SM	Dk bwn-blk c-f SAND, some f Gravel, little Silt (FILL) (OVM=0.1ppm)								1	
2					M	SM	(OVM=0.0ppm)									2
3					M	SM	(OVM=0.0ppm)									3
4					M	SM	(OVM=0.0ppm)									4
5					W	SM	Dk bwn-blk c-f SAND, some f Gravel, little Silt (OVM=0.0ppm)								5	
6					W	SM	(OVM=0.0ppm)									6
7					W	SM	(OVM=0.0ppm)									7
8					W	SM	(OVM=0.1ppm)									8
9					W	SM	(OVM=0.1ppm)									9
10							End of Boring at 9'								10	
11															11	
12															12	
13															13	
14															14	
15															15	
16															16	
17															17	
18															18	
19															19	
20															20	
21															21	
22															22	
23															23	
24															24	
25															25	

REMARKS: Water level based on soil sample moisture.

BORING LOG 5669-02.GPJ TECTONIC.ENG.GDT 10/8/10

<b>TECTONIC</b> <small>ENGINEERING &amp; SURVEYING CONSULTANTS P.C.</small>			PROJECT No. <b>5669.02</b>		<b>BORING No. G-10</b>											
			PROJECT: <b>Larchmont Apartments</b>													
			LOCATION: <b>Larchmont, NY</b>		SHEET No. 1 of 1											
CLIENT: <b>Griffon Associates</b>			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: <b>Kristine Garbarino</b>									
CONTRACTOR: <b>General Borings, Inc.</b>							DRILLER: <b>Tom McGovern</b>									
METHOD OF ADVANCING BORING		DIA.		DEPTH				SURFACE ELEVATION: <b>---</b>								
POWER AUGER:			TO	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM:		<b>See Remarks</b>								
ROT. DRILL:			TO	SCREEN DEPTH: <b>---</b> TO <b>---</b>		DATE START:		<b>9/27/10</b>								
CASING:			TO	WEATHER: <b>Rain</b> TEMP: <b>60° F</b>		DATE FINISH:		<b>9/27/10</b>								
DIAMOND CORE:			TO	DEPTH TO ROCK: <b>---</b>		UNCONFINED COMPRESS. STRENGTH (TONS/FT)		DEPTH (FT.)								
Geoprobe Truck Mounted			*CHANGES IN STRATA ARE INFERRED													
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*								
			SAMPLE NUMBER	RECOV.					MOISTURE	PLASTIC LIMIT %	WATER CONTENT %		LIQUID LIMIT %			
LENGTH (IN.)	RQD (%)			X	⊗	△										
									10	20	30	40	50			
									STANDARD PENETRATION (BLOWS/FT.)							
									10	20	30	40	50			
1					M	SM	Dk bwn-blk c-f SAND, some f Gravel, little Silt (brick, wood) (OVM=0.7ppm)								1	
2					M	SM	(OVM=2.3ppm)									2
3					M	SM	(OVM=4.6ppm)									3
4					M	SM	(OVM=4.0ppm)									4
5					M	CL	Gy CLAY, some c-f Sand, little f Gravel (OVM=13.3ppm)								5	
6					M	CL	(OVM=2.1ppm)									6
7					M	CL	(OVM=1.9ppm)									7
8							End of Boring at 7'								8	
9															9	
10															10	
11															11	
12															12	
13															13	
14															14	
15															15	
16															16	
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20															20	
21															21	
22															22	
23															23	
24															24	
25															25	
REMARKS:																

## **APPENDIX II**



Tuesday, October 05, 2010

Attn: Mr. Jim Upright  
Tectonic Engineering  
70 Pleasant Hill Road  
Mountainville, NY 10953

Project ID: 5669.02 GRIFFIN ASSOCIATES/LARCHMONT  
Sample ID#s: AZ59767 - AZ59768

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller  
Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #MA-CT-007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B  
NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
VT Lab Registration #VT11301



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

October 05, 2010

FOR: Attn: Mr. Jim Upright  
Tectonic Engineering  
70 Pleasant Hill Road  
Mountainville, NY 10953

### Sample Information

Matrix: SOIL  
Location Code: TECTONIC  
Rush Request:  
P.O.#:

### Custody Information

Collected by: KG  
Received by: LDF  
Analyzed by: see "By" below

<u>Date</u>	<u>Time</u>
09/27/10	14:45
09/29/10	10:40

### Laboratory Data

SDG ID: GAZ59767  
Phoenix ID: AZ59767

Project ID: 5669.02 GRIFFIN ASSOCIATES/LARCHMONT

Client ID: G4 6-7

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	77		%	09/29/10		JL	E160.3
Soil Extraction for SVOA	Completed			09/29/10		FS/F	SW3545
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1,1-Trichloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1,2,2-Tetrachloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1,2-Trichloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1-Dichloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1-Dichloroethene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,1-Dichloropropene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2,3-Trichlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2,3-Trichloropropane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2,4-Trichlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2,4-Trimethylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2-Dibromo-3-chloropropane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2-Dichlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2-Dichloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,2-Dichloropropane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,3,5-Trimethylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,3-Dichlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
1,3-Dichloropropane	ND	13	ug/Kg	10/05/10		LM	SW8260
1,4-Dichlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
2,2-Dichloropropane	ND	13	ug/Kg	10/05/10		LM	SW8260
2-Chlorotoluene	ND	13	ug/Kg	10/05/10		LM	SW8260
2-Hexanone	ND	65	ug/Kg	10/05/10		LM	SW8260
2-Isopropyltoluene	ND	13	ug/Kg	10/05/10		LM	SW8260
4-Chlorotoluene	ND	13	ug/Kg	10/05/10		LM	SW8260

Client ID: G4 6-7

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	65	ug/Kg	10/05/10		LM	SW8260
Acetone	ND	65	ug/Kg	10/05/10		LM	SW8260
Acrylonitrile	ND	26	ug/Kg	10/05/10		LM	SW8260
Benzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Bromobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Bromochloromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Bromodichloromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Bromoform	ND	13	ug/Kg	10/05/10		LM	SW8260
Bromomethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Carbon Disulfide	ND	13	ug/Kg	10/05/10		LM	SW8260
Carbon tetrachloride	ND	13	ug/Kg	10/05/10		LM	SW8260
Chlorobenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Chloroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Chloroform	ND	13	ug/Kg	10/05/10		LM	SW8260
Chloromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
cis-1,2-Dichloroethene	ND	13	ug/Kg	10/05/10		LM	SW8260
cis-1,3-Dichloropropene	ND	13	ug/Kg	10/05/10		LM	SW8260
Dibromochloromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Dibromoethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Dibromomethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Dichlorodifluoromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Ethylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Hexachlorobutadiene	ND	13	ug/Kg	10/05/10		LM	SW8260
Isopropylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
m&p-Xylene	ND	13	ug/Kg	10/05/10		LM	SW8260
Methyl Ethyl Ketone	ND	65	ug/Kg	10/05/10		LM	SW8260
Methyl t-butyl ether (MTBE)	ND	26	ug/Kg	10/05/10		LM	SW8260
Methylene chloride	ND	130	ug/Kg	10/05/10		LM	SW8260
Naphthalene	44	13	ug/Kg	10/05/10		LM	SW8260
n-Butylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
n-Propylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
o-Xylene	ND	13	ug/Kg	10/05/10		LM	SW8260
p-Isopropyltoluene	ND	13	ug/Kg	10/05/10		LM	SW8260
sec-Butylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Styrene	ND	13	ug/Kg	10/05/10		LM	SW8260
tert-Butylbenzene	ND	13	ug/Kg	10/05/10		LM	SW8260
Tetrachloroethene	ND	13	ug/Kg	10/05/10		LM	SW8260
Tetrahydrofuran (THF)	ND	26	ug/Kg	10/05/10		LM	SW8260
Toluene	ND	13	ug/Kg	10/05/10		LM	SW8260
Total Xylenes	ND	13	ug/Kg	10/05/10		LM	SW8260
trans-1,2-Dichloroethene	ND	13	ug/Kg	10/05/10		LM	SW8260
trans-1,3-Dichloropropene	ND	13	ug/Kg	10/05/10		LM	SW8260
trans-1,4-dichloro-2-butene	ND	26	ug/Kg	10/05/10		LM	SW8260
Trichloroethene	ND	13	ug/Kg	10/05/10		LM	SW8260
Trichlorofluoromethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Trichlorotrifluoroethane	ND	13	ug/Kg	10/05/10		LM	SW8260
Vinyl chloride	ND	13	ug/Kg	10/05/10		LM	SW8260
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	100		%	10/05/10		LM	SW8260
% Bromofluorobenzene	97		%	10/05/10		LM	SW8260

Client ID: G4 6-7

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	101		%	10/05/10		LM	SW8260
% Toluene-d8	98		%	10/05/10		LM	SW8260
<b><u>Semivolatiles</u></b>							
1,2-Dichlorobenzene	ND	300	ug/Kg	09/30/10		KCA	SW8270
1,2-Diphenylhydrazine	ND	300	ug/Kg	09/30/10		KCA	SW8270
1,3-Dichlorobenzene	ND	300	ug/Kg	09/30/10		KCA	SW8270
1,4-Dichlorobenzene	ND	300	ug/Kg	09/30/10		KCA	SW8270
2,4-Dinitrotoluene	ND	300	ug/Kg	09/30/10		KCA	SW8270
2,6-Dinitrotoluene	ND	300	ug/Kg	09/30/10		KCA	SW8270
2-Chloronaphthalene	ND	300	ug/Kg	09/30/10		KCA	SW8270
2-Methylnaphthalene	ND	300	ug/Kg	09/30/10		KCA	SW8270
2-Nitroaniline	ND	1200	ug/Kg	09/30/10		KCA	SW8270
3,3'-Dichlorobenzidine	ND	1700	ug/Kg	09/30/10		KCA	SW8270
3-Nitroaniline	ND	1200	ug/Kg	09/30/10		KCA	SW8270
4-Bromophenyl phenyl ether	ND	300	ug/Kg	09/30/10		KCA	SW8270
4-Chloroaniline	ND	300	ug/Kg	09/30/10		KCA	SW8270
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	09/30/10		KCA	SW8270
4-Nitroaniline	ND	1200	ug/Kg	09/30/10		KCA	SW8270
Acenaphthene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Acenaphthylene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Anthracene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Benz(a)anthracene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Benzidine	ND	1700	ug/Kg	09/30/10		KCA	SW8270
Benzo(a)pyrene	860	300	ug/Kg	09/30/10		KCA	SW8270
Benzo(b)fluoranthene	330	300	ug/Kg	09/30/10		KCA	SW8270
Benzo(ghi)perylene	630	300	ug/Kg	09/30/10		KCA	SW8270
Benzo(k)fluoranthene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Benzoic acid	ND	430	ug/Kg	09/30/10		KCA	SW8270
Benzyl alcohol	ND	300	ug/Kg	09/30/10		KCA	SW8270
Benzyl butyl phthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	09/30/10		KCA	SW8270
Bis(2-chloroethyl)ether	ND	300	ug/Kg	09/30/10		KCA	SW8270
Bis(2-chloroisopropyl)ether	ND	300	ug/Kg	09/30/10		KCA	SW8270
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Chrysene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Dibenz(a,h)anthracene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Dibenzofuran	ND	300	ug/Kg	09/30/10		KCA	SW8270
Diethyl phthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Dimethylphthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Di-n-butylphthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Di-n-octylphthalate	ND	300	ug/Kg	09/30/10		KCA	SW8270
Fluoranthene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Fluorene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Hexachlorobenzene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Hexachlorobutadiene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Hexachlorocyclopentadiene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Hexachloroethane	ND	300	ug/Kg	09/30/10		KCA	SW8270
Indeno(1,2,3-cd)pyrene	480	300	ug/Kg	09/30/10		KCA	SW8270
Isophorone	ND	300	ug/Kg	09/30/10		KCA	SW8270

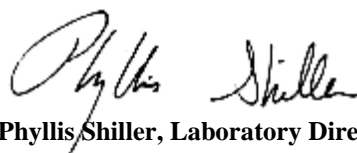
Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Nitrobenzene	ND	300	ug/Kg	09/30/10		KCA	SW8270
N-Nitrosodimethylamine	ND	300	ug/Kg	09/30/10		KCA	SW8270
N-Nitrosodi-n-propylamine	ND	300	ug/Kg	09/30/10		KCA	SW8270
N-Nitrosodiphenylamine	ND	300	ug/Kg	09/30/10		KCA	SW8270
Phenanthrene	ND	300	ug/Kg	09/30/10		KCA	SW8270
Pyrene	ND	300	ug/Kg	09/30/10		KCA	SW8270
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	46		%	09/30/10		KCA	SW8270
% Nitrobenzene-d5	48		%	09/30/10		KCA	SW8270
% Terphenyl-d14	31		%	09/30/10		KCA	SW8270

**Comments:**

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

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**Phyllis Shiller, Laboratory Director**

**October 06, 2010**





Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

October 05, 2010

FOR: Attn: Mr. Jim Upright  
Tectonic Engineering  
70 Pleasant Hill Road  
Mountainville, NY 10953

### Sample Information

Matrix: SOIL  
Location Code: TECTONIC  
Rush Request:  
P.O.#:

### Custody Information

Collected by: KG  
Received by: LDF  
Analyzed by: see "By" below

<u>Date</u>	<u>Time</u>
09/27/10	15:30
09/29/10	10:40

### Laboratory Data

SDG ID: GAZ59767  
Phoenix ID: AZ59768

Project ID: 5669.02 GRIFFIN ASSOCIATES/LARCHMONT

Client ID: G5 6-7

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	89		%	09/29/10		JL	E160.3
Soil Extraction for SVOA	Completed			09/30/10		BS/F	SW3545
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1,1-Trichloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1,2,2-Tetrachloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1,2-Trichloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1-Dichloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1-Dichloroethene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,1-Dichloropropene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2,3-Trichlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2,3-Trichloropropane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2,4-Trichlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2,4-Trimethylbenzene	1400	140	ug/Kg	10/01/10		R/L	SW8260
1,2-Dibromo-3-chloropropane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2-Dichlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2-Dichloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,2-Dichloropropane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,3,5-Trimethylbenzene	590	140	ug/Kg	10/01/10		R/L	SW8260
1,3-Dichlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,3-Dichloropropane	ND	140	ug/Kg	10/01/10		R/L	SW8260
1,4-Dichlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
2,2-Dichloropropane	ND	140	ug/Kg	10/01/10		R/L	SW8260
2-Chlorotoluene	ND	140	ug/Kg	10/01/10		R/L	SW8260
2-Hexanone	ND	700	ug/Kg	10/01/10		R/L	SW8260
2-Isopropyltoluene	230	140	ug/Kg	10/01/10		R/L	SW8260
4-Chlorotoluene	ND	140	ug/Kg	10/01/10		R/L	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	700	ug/Kg	10/01/10		R/L	SW8260
Acetone	ND	700	ug/Kg	10/01/10		R/L	SW8260
Acrylonitrile	ND	280	ug/Kg	10/01/10		R/L	SW8260
Benzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Bromobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Bromochloromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Bromodichloromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Bromoform	ND	140	ug/Kg	10/01/10		R/L	SW8260
Bromomethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Carbon Disulfide	ND	140	ug/Kg	10/01/10		R/L	SW8260
Carbon tetrachloride	ND	140	ug/Kg	10/01/10		R/L	SW8260
Chlorobenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Chloroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Chloroform	ND	140	ug/Kg	10/01/10		R/L	SW8260
Chloromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
cis-1,2-Dichloroethene	ND	140	ug/Kg	10/01/10		R/L	SW8260
cis-1,3-Dichloropropene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Dibromochloromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Dibromoethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Dibromomethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Dichlorodifluoromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Ethylbenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Hexachlorobutadiene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Isopropylbenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
m&p-Xylene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Methyl Ethyl Ketone	ND	700	ug/Kg	10/01/10		R/L	SW8260
Methyl t-butyl ether (MTBE)	ND	280	ug/Kg	10/01/10		R/L	SW8260
Methylene chloride	ND	140	ug/Kg	10/01/10		R/L	SW8260
Naphthalene	ND	140	ug/Kg	10/01/10		R/L	SW8260
n-Butylbenzene	350	140	ug/Kg	10/01/10		R/L	SW8260
n-Propylbenzene	190	140	ug/Kg	10/01/10		R/L	SW8260
o-Xylene	ND	140	ug/Kg	10/01/10		R/L	SW8260
p-Isopropyltoluene	290	140	ug/Kg	10/01/10		R/L	SW8260
sec-Butylbenzene	240	140	ug/Kg	10/01/10		R/L	SW8260
Styrene	ND	140	ug/Kg	10/01/10		R/L	SW8260
tert-Butylbenzene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Tetrachloroethene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Tetrahydrofuran (THF)	ND	280	ug/Kg	10/01/10		R/L	SW8260
Toluene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Total Xylenes	ND	140	ug/Kg	10/01/10		R/L	SW8260
trans-1,2-Dichloroethene	ND	140	ug/Kg	10/01/10		R/L	SW8260
trans-1,3-Dichloropropene	ND	140	ug/Kg	10/01/10		R/L	SW8260
trans-1,4-dichloro-2-butene	ND	280	ug/Kg	10/01/10		R/L	SW8260
Trichloroethene	ND	140	ug/Kg	10/01/10		R/L	SW8260
Trichlorofluoromethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Trichlorotrifluoroethane	ND	140	ug/Kg	10/01/10		R/L	SW8260
Vinyl chloride	ND	140	ug/Kg	10/01/10		R/L	SW8260
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	101		%	10/01/10		R/L	SW8260
% Bromofluorobenzene	127		%	10/01/10		R/L	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	102		%	10/01/10		R/L	SW8260
% Toluene-d8	104		%	10/01/10		R/L	SW8260
<b><u>Semivolatiles</u></b>							
1,2-Dichlorobenzene	ND	520	ug/Kg	10/04/10		HM	SW8270
1,2-Diphenylhydrazine	ND	520	ug/Kg	10/04/10		HM	SW8270
1,3-Dichlorobenzene	ND	520	ug/Kg	10/04/10		HM	SW8270
1,4-Dichlorobenzene	ND	520	ug/Kg	10/04/10		HM	SW8270
2,4-Dinitrotoluene	ND	520	ug/Kg	10/04/10		HM	SW8270
2,6-Dinitrotoluene	ND	520	ug/Kg	10/04/10		HM	SW8270
2-Chloronaphthalene	ND	520	ug/Kg	10/04/10		HM	SW8270
2-Methylnaphthalene	ND	520	ug/Kg	10/04/10		HM	SW8270
2-Nitroaniline	ND	2200	ug/Kg	10/04/10		HM	SW8270
3,3'-Dichlorobenzidine	ND	3000	ug/Kg	10/04/10		HM	SW8270
3-Nitroaniline	ND	2200	ug/Kg	10/04/10		HM	SW8270
4-Bromophenyl phenyl ether	ND	520	ug/Kg	10/04/10		HM	SW8270
4-Chloroaniline	ND	520	ug/Kg	10/04/10		HM	SW8270
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	10/04/10		HM	SW8270
4-Nitroaniline	ND	2200	ug/Kg	10/04/10		HM	SW8270
Acenaphthene	ND	520	ug/Kg	10/04/10		HM	SW8270
Acenaphthylene	ND	520	ug/Kg	10/04/10		HM	SW8270
Anthracene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benz(a)anthracene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzidine	ND	3000	ug/Kg	10/04/10		HM	SW8270
Benzo(a)pyrene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzo(b)fluoranthene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzo(ghi)perylene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzo(k)fluoranthene	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzoic acid	ND	740	ug/Kg	10/04/10		HM	SW8270
Benzyl alcohol	ND	520	ug/Kg	10/04/10		HM	SW8270
Benzyl butyl phthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	10/04/10		HM	SW8270
Bis(2-chloroethyl)ether	ND	520	ug/Kg	10/04/10		HM	SW8270
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	10/04/10		HM	SW8270
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Chrysene	ND	520	ug/Kg	10/04/10		HM	SW8270
Dibenz(a,h)anthracene	ND	520	ug/Kg	10/04/10		HM	SW8270
Dibenzofuran	ND	520	ug/Kg	10/04/10		HM	SW8270
Diethyl phthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Dimethylphthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Di-n-butylphthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Di-n-octylphthalate	ND	520	ug/Kg	10/04/10		HM	SW8270
Fluoranthene	ND	520	ug/Kg	10/04/10		HM	SW8270
Fluorene	ND	520	ug/Kg	10/04/10		HM	SW8270
Hexachlorobenzene	ND	520	ug/Kg	10/04/10		HM	SW8270
Hexachlorobutadiene	ND	520	ug/Kg	10/04/10		HM	SW8270
Hexachlorocyclopentadiene	ND	520	ug/Kg	10/04/10		HM	SW8270
Hexachloroethane	ND	520	ug/Kg	10/04/10		HM	SW8270
Indeno(1,2,3-cd)pyrene	ND	520	ug/Kg	10/04/10		HM	SW8270
Isophorone	ND	520	ug/Kg	10/04/10		HM	SW8270

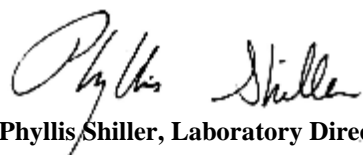
Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	ND	520	ug/Kg	10/04/10		HM	SW8270
Nitrobenzene	ND	520	ug/Kg	10/04/10		HM	SW8270
N-Nitrosodimethylamine	ND	520	ug/Kg	10/04/10		HM	SW8270
N-Nitrosodi-n-propylamine	ND	520	ug/Kg	10/04/10		HM	SW8270
N-Nitrosodiphenylamine	ND	520	ug/Kg	10/04/10		HM	SW8270
Phenanthrene	820	520	ug/Kg	10/04/10		HM	SW8270
Pyrene	ND	520	ug/Kg	10/04/10		HM	SW8270
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	49		%	10/04/10		HM	SW8270
% Nitrobenzene-d5	61		%	10/04/10		HM	SW8270
% Terphenyl-d14	30		%	10/04/10		HM	SW8270

**Comments:**

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

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**Phyllis Shiller, Laboratory Director**

**October 06, 2010**



Environmental Laboratories, Inc.  
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# QA/QC Report

October 06, 2010

## QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 162232, QC Sample No: AZ59255 (AZ59767, AZ59768)							
<u>Semivolatiles</u>							
1,2-Dichlorobenzene	ND	59	50	16.5	48	57	17.1
1,3-Dichlorobenzene	ND	57	47	19.2	48	56	15.4
1,4-Dichlorobenzene	ND	60	49	20.2	46	55	17.8
2,4-Dinitrotoluene	ND	58	46	23.1	54	72	28.6
2,6-Dinitrotoluene	ND	58	47	21.0	48	60	22.2
2-Chloronaphthalene	ND	61	48	23.9	48	59	20.6
2-Methylnaphthalene	ND	60	47	24.3	49	60	20.2
2-Nitroaniline	ND	>130	122	NC	118	NC	NC
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC
3-Nitroaniline	ND	102	80	24.2	92	117	23.9
4-Bromophenyl phenyl ether	ND	62	51	19.5	42	53	23.2
4-Chloroaniline	ND	66	45	37.8	35	41	15.8
4-Chlorophenyl phenyl ether	ND	62	49	23.4	51	65	24.1
4-Nitroaniline	ND	63	50	23.0	49	59	18.5
Acenaphthene	ND	60	51	16.2	54	67	21.5
Acenaphthylene	ND	61	48	23.9	50	62	21.4
Anthracene	ND	70	53	27.6	45	63	33.3
Benz(a)anthracene	ND	67	55	19.7	31	53	52.4
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC
Benzo(a)pyrene	ND	68	55	21.1	32	55	52.9
Benzo(b)fluoranthene	ND	69	57	19.0	27	48	56.0
Benzo(ghi)perylene	ND	72	53	30.4	55	77	33.3
Benzo(k)fluoranthene	ND	71	59	18.5	43	57	28.0
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC
Benzyl butyl phthalate	ND	65	48	30.1	68	73	7.1
Bis(2-chloroethoxy)methane	ND	61	48	23.9	47	58	21.0
Bis(2-chloroethyl)ether	ND	57	48	17.1	48	57	17.1
Bis(2-chloroisopropyl)ether	ND	60	50	18.2	42	49	15.4
Bis(2-ethylhexyl)phthalate	ND	71	53	29.0	63	NC	NC
Chrysene	ND	67	56	17.9	30	53	55.4
Dibenz(a,h)anthracene	ND	76	53	35.7	68	87	24.5
Dibenzofuran	ND	59	46	24.8	49	63	25.0
Diethyl phthalate	ND	61	49	21.8	51	64	22.6
Dimethylphthalate	ND	60	48	22.2	50	59	16.5
Di-n-butylphthalate	ND	61	48	23.9	54	62	13.8
Di-n-octylphthalate	ND	62	52	17.5	53	77	36.9
Fluoranthene	ND	63	55	13.6	14	41	98.2
Fluorene	ND	69	55	22.6	58	75	25.6
Hexachlorobenzene	ND	61	53	14.0	46	57	21.4
Hexachlorobutadiene	ND	59	47	22.6	46	56	19.6
Hexachlorocyclopentadiene	ND	62	44	34.0	2.6	5.0	63.2

# QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Hexachloroethane	ND	56	47	17.5	40	47	16.1
Indeno(1,2,3-cd)pyrene	ND	75	54	32.6	53	75	34.4
Isophorone	ND	55	45	20.0	44	53	18.6
Naphthalene	ND	61	51	17.9	50	62	21.4
Nitrobenzene	ND	58	47	21.0	48	56	15.4
N-Nitrosodimethylamine	ND	53	46	14.1	NC	115	NC
N-Nitrosodi-n-propylamine	ND	70	48	37.3	47	56	17.5
N-Nitrosodiphenylamine	ND	72	56	25.0	61	78	24.5
Phenanthrene	ND	67	53	23.3	8.3	44	136.5 3
Pyrene	ND	67	56	17.9	18	35	64.2 3
% 2-Fluorobiphenyl	52	52	42	21.3	44	53	18.6
% Nitrobenzene-d5	51	48	56	15.4	46	54	16.0
% Terphenyl-d14	51	49	41	17.8	27	29	7.1 3

QA/QC Batch 162540, QC Sample No: AZ60007 (AZ59768)

## Volatiles

1,1,1,2-Tetrachloroethane	ND	97	94	3.1	101	97	4.0
1,1,1-Trichloroethane	ND	105	95	10.0	105	95	10.0
1,1,2,2-Tetrachloroethane	ND	52	57	9.2	47	52	10.1 2,3
1,1,2-Trichloroethane	ND	96	90	6.5	100	95	5.1
1,1-Dichloroethane	ND	97	88	9.7	96	89	7.6
1,1-Dichloroethene	ND	103	79	26.4	103	87	16.8
1,1-Dichloropropene	ND	98	85	14.2	100	90	10.5
1,2,3-Trichlorobenzene	ND	78	88	12.0	69	81	16.0 3
1,2,3-Trichloropropane	ND	68	60	12.5	64	56	13.3 2,3
1,2,4-Trichlorobenzene	ND	72	73	1.4	65	67	3.0 3
1,2,4-Trimethylbenzene	ND	92	86	6.7	82	80	2.5
1,2-Dibromo-3-chloropropane	ND	85	94	10.1	93	98	5.2
1,2-Dichlorobenzene	ND	88	86	2.3	82	81	1.2
1,2-Dichloroethane	ND	104	100	3.9	106	97	8.9
1,2-Dichloropropane	ND	98	87	11.9	95	88	7.7
1,3,5-Trimethylbenzene	ND	93	90	3.3	85	85	0.0
1,3-Dichlorobenzene	ND	86	81	6.0	79	76	3.9
1,3-Dichloropropane	ND	99	92	7.3	100	86	15.1
1,4-Dichlorobenzene	ND	84	79	6.1	76	72	5.4
2,2-Dichloropropane	ND	90	80	11.8	86	76	12.3
2-Chlorotoluene	ND	92	86	6.7	84	82	2.4
2-Hexanone	ND	75	66	12.8	87	71	20.3
2-Isopropyltoluene	ND	91	91	0.0	88	88	0.0
4-Chlorotoluene	ND	89	79	11.9	80	77	3.8
4-Methyl-2-pentanone	ND	82	81	1.2	93	82	12.6
Acetone	ND	74	68	8.5	86	82	4.8
Acrylonitrile	ND	82	94	13.6	87	83	4.7
Benzene	ND	99	88	11.8	96	89	7.6
Bromobenzene	ND	95	90	5.4	89	86	3.4
Bromochloromethane	ND	100	92	8.3	100	89	11.6
Bromodichloromethane	ND	94	90	4.3	102	94	8.2
Bromoform	ND	88	89	1.1	103	93	10.2
Bromomethane	ND	84	79	6.1	95	95	0.0
Carbon Disulfide	ND	53	41	25.5	99	81	20.0
Carbon tetrachloride	ND	106	84	23.2	109	103	5.7
Chlorobenzene	ND	94	87	7.7	94	86	8.9
Chloroethane	ND	103	85	19.1	101	89	12.6

## QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Chloroform	ND	100	91	9.4	100	91	9.4
Chloromethane	ND	73	75	2.7	85	89	4.6
cis-1,2-Dichloroethene	ND	97	89	8.6	94	84	11.2
cis-1,3-Dichloropropene	ND	89	83	7.0	91	81	11.6
Dibromochloromethane	ND	92	88	4.4	101	90	11.5
Dibromoethane	ND	95	92	3.2	102	96	6.1
Dibromomethane	ND	95	92	3.2	100	94	6.2
Dichlorodifluoromethane	ND	78	81	3.8	95	100	5.1
Ethylbenzene	ND	97	88	9.7	93	87	6.7
Hexachlorobutadiene	ND	82	90	9.3	75	90	18.2
Isopropylbenzene	ND	91	86	5.6	89	87	2.3
m&p-Xylene	ND	94	86	8.9	89	85	4.6
Methyl ethyl ketone	ND	68	75	9.8	76	70	8.2
Methyl t-butyl ether (MTBE)	ND	104	82	23.7	114	88	25.7
Methylene chloride	ND	92	75	20.4	92	79	15.2
Naphthalene	ND	86	101	16.0	84	95	12.3
n-Butylbenzene	ND	84	80	4.9	75	74	1.3
n-Propylbenzene	ND	96	89	7.6	83	80	3.7
o-Xylene	ND	90	85	5.7	92	89	3.3
p-Isopropyltoluene	ND	93	89	4.4	83	81	2.4
sec-Butylbenzene	ND	93	90	3.3	85	86	1.2
Styrene	ND	90	83	8.1	91	86	5.6
tert-Butylbenzene	ND	100	96	4.1	90	92	2.2
Tetrachloroethene	ND	98	88	10.8	96	83	14.5
Tetrahydrofuran (THF)	ND	85	92	7.9	86	82	4.8
Toluene	ND	99	89	10.6	96	88	8.7
trans-1,2-Dichloroethene	ND	92	71	25.8	104	72	36.4
trans-1,3-Dichloropropene	ND	89	83	7.0	90	82	9.3
trans-1,4-dichloro-2-butene	ND	68	60	12.5	64	56	13.3
Trichloroethene	ND	128	112	13.3	128	116	9.8
Trichlorofluoromethane	ND	105	87	18.8	109	94	14.8
Trichlorotrifluoroethane	ND	99	81	20.0	102	88	14.7
Vinyl chloride	ND	85	82	3.6	89	90	1.1
% 1,2-dichlorobenzene-d4	101	100	103	3.0	100	100	0.0
% Bromofluorobenzene	104	99	95	4.1	103	99	4.0
% Dibromofluoromethane	97	98	101	3.0	101	96	5.1
% Toluene-d8	95	101	98	3.0	100	98	2.0

Comment:

A blank MS/MSD was analyzed with this batch.

QA/QC Batch 162539, QC Sample No: AZ60012 (AZ59767)

Volatiles

1,1,1,2-Tetrachloroethane	ND	102	101	1.0	93	93	0.0	
1,1,1-Trichloroethane	ND	109	101	7.6	103	96	7.0	
1,1,2,2-Tetrachloroethane	ND	60	62	3.3	102	100	2.0	2
1,1,2-Trichloroethane	ND	102	97	5.0	88	84	4.7	
1,1-Dichloroethane	ND	100	75	28.6	95	91	4.3	
1,1-Dichloroethene	ND	106	92	14.1	104	90	14.4	
1,1-Dichloropropene	ND	98	94	4.2	94	93	1.1	
1,2,3-Trichlorobenzene	ND	83	91	9.2	42	45	6.9	3
1,2,3-Trichloropropane	ND	75	68	9.8	48	43	11.0	2,3
1,2,4-Trichlorobenzene	ND	72	77	6.7	49	50	2.0	3
1,2,4-Trimethylbenzene	ND	94	91	3.2	90	87	3.4	

## QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
1,2-Dibromo-3-chloropropane	ND	98	101	3.0	78	90	14.3
1,2-Dichlorobenzene	ND	91	90	1.1	76	74	2.7
1,2-Dichloroethane	ND	107	101	5.8	96	96	0.0
1,2-Dichloropropane	ND	98	94	4.2	90	87	3.4
1,3,5-Trimethylbenzene	ND	94	94	0.0	94	92	2.2
1,3-Dichlorobenzene	ND	87	84	3.5	81	77	5.1
1,3-Dichloropropane	ND	101	92	9.3	95	90	5.4
1,4-Dichlorobenzene	ND	84	81	3.6	80	77	3.8
2,2-Dichloropropane	ND	89	87	2.3	91	88	3.4
2-Chlorotoluene	ND	93	90	3.3	95	90	5.4
2-Hexanone	ND	70	72	2.8	<40	<40	NC
2-Isopropyltoluene	ND	95	94	1.1	86	89	3.4
4-Chlorotoluene	ND	88	84	4.7	88	83	5.8
4-Methyl-2-pentanone	ND	85	83	2.4	<40	43	NC
Acetone	ND	71	91	24.7	<40	<40	NC
Acrylonitrile	ND	91	74	20.6	43	44	2.3
Benzene	ND	102	95	7.1	91	90	1.1
Bromobenzene	ND	96	92	4.3	99	92	7.3
Bromochloromethane	ND	101	95	6.1	94	88	6.6
Bromodichloromethane	ND	104	97	7.0	86	84	2.4
Bromoform	ND	100	99	1.0	67	66	1.5
Bromomethane	ND	88	86	2.3	59	60	1.7
Carbon Disulfide	ND	53	49	7.8	83	75	10.1
Carbon tetrachloride	ND	113	103	9.3	100	99	1.0
Chlorobenzene	ND	97	93	4.2	90	87	3.4
Chloroethane	ND	101	95	6.1	101	91	10.4
Chloroform	ND	100	99	1.0	97	92	5.3
Chloromethane	ND	74	84	12.7	80	79	1.3
cis-1,2-Dichloroethene	ND	100	95	5.1	94	86	8.9
cis-1,3-Dichloropropene	ND	94	87	7.7	69	65	6.0
Dibromochloromethane	ND	101	95	6.1	84	81	3.6
Dibromoethane	ND	100	99	1.0	84	78	7.4
Dibromomethane	ND	99	96	3.1	95	93	2.1
Dichlorodifluoromethane	ND	77	88	13.3	96	100	4.1
Ethylbenzene	ND	97	94	3.1	91	89	2.2
Hexachlorobutadiene	ND	83	96	14.5	42	57	30.3
Isopropylbenzene	ND	90	89	1.1	105	102	2.9
m&p-Xylene	ND	95	92	3.2	87	85	2.3
Methyl ethyl ketone	ND	62	79	24.1	<40	<40	NC
Methyl t-butyl ether (MTBE)	ND	108	85	23.8	105	90	15.4
Methylene chloride	ND	94	82	13.6	95	85	11.1
Naphthalene	ND	94	107	12.9	50	52	3.9
n-Butylbenzene	ND	86	86	0.0	68	71	4.3
n-Propylbenzene	ND	97	94	3.1	99	95	4.1
o-Xylene	ND	92	91	1.1	89	87	2.3
p-Isopropyltoluene	ND	94	94	0.0	72	74	2.7
sec-Butylbenzene	ND	95	96	1.0	85	87	2.3
Styrene	ND	91	89	2.2	45	46	2.2
tert-Butylbenzene	ND	99	100	1.0	96	98	2.1
Tetrachloroethene	ND	98	94	4.2	97	95	2.1
Tetrahydrofuran (THF)	ND	86	94	8.9	79	81	2.5
Toluene	ND	101	95	6.1	90	86	4.5
trans-1,2-Dichloroethene	ND	107	78	31.4	92	76	19.0



# QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
trans-1,3-Dichloropropene	ND	92	88	4.4	74	69	7.0
trans-1,4-dichloro-2-butene	ND	75	68	9.8	48	43	11.0
Trichloroethene	ND	123	118	4.1	88	88	0.0
Trichlorofluoromethane	ND	107	98	8.8	107	94	12.9
Trichlorotrifluoroethane	ND	104	92	12.2	101	89	12.6
Vinyl chloride	ND	87	93	6.7	85	86	1.2
% 1,2-dichlorobenzene-d4	102	100	102	2.0	94	99	5.2
% Bromofluorobenzene	100	101	98	3.0	94	92	2.2
% Dibromofluoromethane	101	103	101	2.0	97	101	4.0
% Toluene-d8	95	103	99	4.0	98	96	2.1

QA/QC Batch 162761, QC Sample No: AZ60507 (AZ59767, AZ59768)

## Volatiles

1,1,1,2-Tetrachloroethane	102	101	1.0	
1,1,1-Trichloroethane	104	106	1.9	
1,1,2,2-Tetrachloroethane	60	58	3.4	2
1,1,2-Trichloroethane	92	96	4.3	
1,1-Dichloroethane	78	93	17.5	
1,1-Dichloroethene	89	99	10.6	
1,1-Dichloropropene	90	90	0.0	
1,2,3-Trichlorobenzene	94	84	11.2	
1,2,3-Trichloropropane	60	67	11.0	2
1,2,4-Trichlorobenzene	81	74	9.0	
1,2,4-Trimethylbenzene	94	91	3.2	
1,2-Dibromo-3-chloropropane	99	94	5.2	
1,2-Dichlorobenzene	91	91	0.0	
1,2-Dichloroethane	104	105	1.0	
1,2-Dichloropropane	89	91	2.2	
1,3,5-Trimethylbenzene	95	93	2.1	
1,3-Dichlorobenzene	85	86	1.2	
1,3-Dichloropropane	93	96	3.2	
1,4-Dichlorobenzene	82	84	2.4	
2,2-Dichloropropane	85	88	3.5	
2-Chlorotoluene	91	90	1.1	
2-Hexanone	63	64	1.6	
2-Isopropyltoluene	96	92	4.3	
4-Chlorotoluene	85	85	0.0	
4-Methyl-2-pentanone	77	76	1.3	
Acetone	66	68	3.0	
Acrylonitrile	78	81	3.8	
Benzene	92	94	2.2	
Bromobenzene	94	94	0.0	
Bromochloromethane	94	92	2.2	
Bromodichloromethane	97	102	5.0	
Bromoform	92	101	9.3	
Bromomethane	78	83	6.2	
Carbon Disulfide	46	51	10.3	
Carbon tetrachloride	107	110	2.8	
Chlorobenzene	93	95	2.1	
Chloroethane	93	97	4.2	
Chloroform	96	98	2.1	
Chloromethane	71	68	4.3	2
cis-1,2-Dichloroethene	90	89	1.1	

# QA/QC Data

SDG I.D.: GAZ59767

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
cis-1,3-Dichloropropene		85	89	4.6			
Dibromochloromethane		96	101	5.1			
Dibromoethane		96	97	1.0			
Dibromomethane		96	97	1.0			
Dichlorodifluoromethane		84	82	2.4			
Ethylbenzene		93	94	1.1			
Hexachlorobutadiene		106	87	19.7			
Isopropylbenzene		90	87	3.4			
m&p-Xylene		92	92	0.0			
Methyl ethyl ketone		66	56	16.4			
Methyl t-butyl ether (MTBE)		90	105	15.4			
Methylene chloride		82	89	8.2			
Naphthalene		97	91	6.4			
n-Butylbenzene		86	84	2.4			
n-Propylbenzene		93	94	1.1			
o-Xylene		89	87	2.3			
p-Isopropyltoluene		96	94	2.1			
sec-Butylbenzene		95	92	3.2			
Styrene		87	88	1.1			
tert-Butylbenzene		104	97	7.0			
Tetrachloroethene		94	99	5.2			
Tetrahydrofuran (THF)		79	76	3.9			
Toluene		93	95	2.1			
trans-1,2-Dichloroethene		77	102	27.9			
trans-1,3-Dichloropropene		90	89	1.1			
trans-1,4-dichloro-2-butene		60	66	9.5			
Trichloroethene		119	120	0.8			
Trichlorofluoromethane		100	108	7.7			
Trichlorotrifluoroethane		90	98	8.5			
Vinyl chloride		82	79	3.7			
% 1,2-dichlorobenzene-d4		102	103	1.0			
% Bromofluorobenzene		96	101	5.1			
% Dibromofluoromethane		101	101	0.0			
% Toluene-d8		99	101	2.0			

Comment:

Due to sample matrix effects, the MS/MSD is not reported for this batch.

2 = This parameter is outside laboratory lcs/lcsd specified limits.

3 = This parameter is outside laboratory ms/msd specified limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

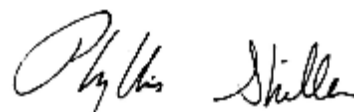
LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria



Phyllis Shiller, Laboratory Director

October 06, 2010



**Environmental Laboratories, Inc.**  
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Tel. (860) 645-1102 Fax (860) 645-0823



# NY Temperature Narration

October 06, 2010

SDG I.D.: GAZ59767

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The samples in this delivery group were received at 5C.  
(Note acceptance criteria is above freezing up to 6C)



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