

Appendix C-5

**Limited Phase II ESA, 122 & 126 Bedell Street (Residential Lots)
December 3rd, 2015**

Limited Phase II

Environmental Site Assessment

122 & 126 Bedell Street

Hempstead, New York

NP&V Job# 15247

December 3, 2015

**Limited Phase II
Environmental Site Assessment**

122 & 126 Bedell Street

**THIS DOCUMENT CONTAINS 10 PAGES OF TEXT
COPIES AND CIRCULATION OF THIS REPORT ARE AS FOLLOWS:**

Two (2) copies to client
One (1) copy retained in NP&V files

Prepared For:

Don Monti
Darren Monti
Renaissance Downtowns
9 Gerhard Road
Plainview, New York 11803
Phone (516) 433-9000

Prepared By:

Mr. Charles J. Voorhis, CEP, AICP
Nelson, Pope & Voorhis, LLC
572 Walt Whitman Road
Melville, New York 11747
(631) 427-5665

Long Island Analytical Laboratories
110 Colin Avenue
Holbrook, New York 11741

Copyright © 2015 by Nelson, Pope & Voorhis, LLC

**Limited Phase II
Environmental Site Assessment**

122 & 126 Bedell Street

CONTENTS

1.0	INTRODUCTION	Page 1 of 10
2.0	SAMPLING AND ANALYSIS PROGRAM (SAP)	Page 3 of 10
2.1	HAND AUGER SOIL SAMPLING	Page 3 of 10
2.2	SOIL SAMPLE FOR LABORATORY ANALYSIS	Page 3 of 10
3.0	LABORATORY ANALYSIS	Page 5 of 10
3.1	ANALYTICAL TEST METHODS	Page 5 of 10
3.2	ANALYTICAL RESULTS	Page 5 of 10
4.0	QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (QA/QC)	Page 6 of 10
5.0	SUMMARY AND CONCLUSION	Page 8 of 10
6.0	REFERENCES	Page 9 of 10
	FIGURES	Page 10 of 10
	APPENDICES	

Limited Phase II
Environmental Site Assessment
122 & 126 Bedell Street

1.0 INTRODUCTION AND PURPOSE

Nelson, Pope & Voorhis, LLC (NP&V) has been contracted to prepare a Limited Phase II Environmental Site Assessment for the subject property. This report is intended to address recognized environmental conditions that were identified in a Phase I Environmental Site Assessment report prepared by Nelson, Pope & Voorhis, LLC dated November 13, 2015. The Phase I ESA was performed in accordance with the standards detailed by the American Society of Testing and Materials (ASTM) for the Performance of a Phase I Environmental Site Assessment (E 1527). This Limited Phase II ESA was designed to determine what, if any, impact on-site activities have had upon the environmental quality of the subject property.

The subject property is located in the Village of Hempstead, County of Nassau, New York. The property is identified more specifically as Nassau County Tax Number: Section 34, Block 195, Lot 130. The ± 0.10 acre parcel is located on the south side of Bedell Street, approximately 150 feet west of Main Street. The subject property is located within an area developed with residential and commercial uses as well as municipal parking lots. The subject property is currently occupied by two (2), two (2) story single family homes.

Both buildings consist of wood framed structures with vinyl siding and asphalt shingle roofs with concrete block foundations. The interior of the buildings consist of painted sheetrock and/or plaster walls and ceilings with vinyl tiled and wood covered floors.

The eastern residence (126 Bedell Street) is heated by a natural gas fired boiler and window mounted air conditioning units. The western residence (122 Bedell Street) is heated by a fuel oil fired boiler and cooled by window mounted air conditioning units. A 275 gallon fuel oil above ground storage tank was observed in the basement of both buildings. The tank in the basement of 126 Bedell Street was found to be empty at the time of the inspection. Floor drains were observed in the basements of each residence and were situated adjacent to the boilers that service each home.

Based on these findings the Phase I Environmental Site Assessment identified recognized environmental conditions that prompted the performance of this Limited Phase II Environmental Site Assessment. These conditions included:

1. There are floor drains in both basements located adjacent to the boilers that service each which discharge directly to the subsurface.

This assessment has been designed and performed by NP&V to address the potential impacts to the subsurface soils in the vicinity of the floor drains. The laboratory analysis was provided by Long Island Analytical Laboratories, Inc.

The protocol used to direct this investigation is based upon the following documents: 1) the New York State Department of Environmental Conservation (NYSDEC) 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6. The following sections detail the subject property and surrounding area characteristics, sampling program, quality assurance protocol, laboratory analysis methodology and laboratory results.

2.0 SAMPLING AND ANALYSIS PROGRAM (SAP)

2.1 HAND AUGER SOIL SAMPLING

The two (2) floor drains located in the basements of the two (2) residences were sampled using a stainless steel hand auger. The soil samples (FD-1 and FD-2) were collected from the bottom sediment soil of the floor drains. These samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the NYSDEC parameters for the presence of volatile and semi-volatile organic compounds and metals. **Figure 1** located in the rear of this document provides a location of the samples collected.

2.2 LABORATORY SAMPLE LOCATION AND FREQUENCY

The soil samples collected from the site were containerized and labeled for identification purposes. The labels were coded to correspond to the location from which the samples were secured. **Table 1** provides an index of how the samples were coded during labeling.

TABLE 1
SAMPLE IDENTIFICATION

SAMPLE LOCATION	SAMPLE ID CODE
Soil sample collected from floor drain in the basement of the residence on the west side of the property (122).	FD-1
Soil sample collected from floor drain in the basement of the residence on the east side of the property (126).	FD-2

3.0 LABORATORY ANALYSIS

3.1 ANALYTICAL TEST METHODS

The soil samples were transported to a New York State Certified Commercial Laboratory for analysis. Selection of the analytical test methods for the presence of volatile and semi-volatile organic compounds and metals based on NYSDEC parameters.

3.2 ANALYTICAL RESULTS

The laboratory analysis performed on the two (2) floor drains samples did not exhibit any elevated concentrations of volatile or semi volatile organic compounds in FD-2. Several of the analyzed volatile and semi-volatile organic compounds in FD-1 exhibited elevated concentrations and both samples exhibited elevated concentrations of several of the metals analyzed. **Table 2** provides a comparison of those constituents with elevated concentrations and the regulatory guidance values. The laboratory analysis sheets (NYS ASPA) as prepared by Long Island Analytical Laboratories are presented in **Appendix A** of this document. As depicted in **Table 2**, several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceed the NYSDEC guidance values, it is recommended that FD-1 and FD-2 remediated under the auspices of USEPA personnel.

TABLE 2
COMPARISON ANALYSIS

Constituents	FD-1	FD-2	6 NYCRR Part 375 Protection of GW
Semi-Volatiles	ug/kg	ug/kg	ug/kg
Naphthalene	16,800	ND	12,000
Pentachlorophenol	2,390	ND	NS
Phenanthrene	11,800	ND	1,000,000
Fluoranthene	746	ND	1,000,000
Pyrene	8,620	ND	1,000,000
Volatiles	ug/kg	ug/kg	ug/kg
1,3,5-Trimethylbenzene	2,580	ND	8,400
1,2,4-Trimethylbenzene	7,970	ND	3,600
sec-Butylbenzene	934	ND	11,000
Metals	mg/kg	mg/kg	mg/kg
Arsenic	12.0	3.39	16
Barium	131	339	820
Cadmium	7.97	2.64	7.5
Chromium	72.7	14.1	NS
Copper	8,480	923	1,720
Lead	10,700	858	450
Manganese	555	221	2,000
Nickel	76.5	15.4	130
Silver	4.48	2.69	8.3
Zinc	2,290	10,700	2,480
Mercury	0.19	1.85	0.73

ND - Not Detected NS - No Standard

Bold and highlighted indicates the constituent exceeds the regulatory guidance values

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (QA/QC)

This sampling protocol was conducted in accordance with USEPA accepted sampling procedures for hazardous waste streams (Municipal Research Laboratory, 1980, Sampling and Sampling Procedures for Hazardous Material Waste Streams, USEPA, Cincinnati, Ohio EPA- 600/280-018) and ASTM Material Sampling Procedures. All samples were collected by or under the auspices of USEPA trained personnel having completed the course Sampling of Hazardous Materials, offered by the Office of Emergency and Remedial Response.

Separate QA/QC measures were implemented for each of the instruments used in the Sampling and Analysis Program. Sampling instruments included a stainless steel hand auger and sample vessels.

Prior to arrival on the site and between sample locations, the probes sections were decontaminated by washing with a detergent (alconox/liquinox) and potable water solution with distilled water rinse. The organic vapor analyzer was calibrated prior to sampling using a span gas of known concentration. All sample vessels were "level A" certified decontaminated containers. Samples were placed into vessels consistent with the analytical parameters. After acquisition, samples were preserved in the field. All containerized samples were refrigerated to 4° C during transport.

A sample represents physical evidence; therefore, an essential part of liability reduction is the proper control of gathered evidence. To establish proper control, the following sample identification and chain-of-custody procedures were followed.

Sample Identification

Sample identification was executed by use of a sample tag, logbook and manifest. Documentation provides the following:

1. Project Code
2. Sample Laboratory Number
3. Sample Preservation
4. Instrument Used for Source Soil Grabs
5. Composite Medium Used for Source Soil Grabs
6. Date Sample was Secured from Source Soil
7. Time Sample was Secured from Source Soil
8. Person Who Secured Sample from Source Soil

Chain-of-Custody Procedures

Due to the evidential nature of samples, possession was traceable from the time the samples were collected until they were received by the testing laboratory. A sample was considered under custody if:

It was in a person's possession, or
It was in a person's view, after being in possession, or
It was in a person's possession and they were to lock it up, or
It is in a designated secure area.

When transferring custody, the individuals relinquishing and receiving signed, dated and noted the time on the Chain-of- Custody Form.

Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample tags matched that on the Chain-of-Custody records. Pertinent information as to shipment, pick-up, courier, etc. was entered in the "remarks" section. The custodian then entered the sample tag data into a bound logbook which was arranged by project code and station number.

The laboratory custodian used the sample tag number or assigned an unique laboratory number to each sample tag and assured that all samples were transferred to the proper analyst or stored in the appropriate source area.

The custodian distributed samples to the appropriate analysts. Laboratory personnel were responsible for the care and custody of samples from the time they were received until the sample was exhausted or returned to the custodian.

All identifying data sheets and laboratory records were retained as part of the permanent site record. Samples received by the laboratory were retained until after analysis and quality assurance checks were completed.

5.0 SUMMARY AND CONCLUSION

This investigation was completed to address issues raised in a prior Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the basement floor drains had been impacted by the prior and existing uses of the subject property. The sampling and analysis plan consisted of soil/sediment quality testing using analytical test methods consistent with expected parameters and agency soil cleanup objectives. The following presents an evaluation of the results of this investigation.

1. The two (2) floor drains located in the basements of the two (2) residences were sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed volatile and semi-volatile organic compounds and metal constituents exhibited elevated concentrations. Several of the elevated concentrations exceeded the NYSDEC guidance values set forth in Part 375. As a result, it is recommended that FD-1 and FD-2 be remediated under the auspices of USEPA personnel.

The subject property has been evaluated consistent with the findings of a Phase I ESA, and in accordance with standard practice for the industry. This Limited Phase II ESA addresses only the specific areas of the site warranting further analysis and can only provide conclusions regarding the subsurface soil quality in those specific areas tested. The Limited Phase II ESA report is limited to the evaluation of on-site conditions at the time of completion of the field sampling program.

Date of Completion

*Charles J. Voorhis, CEP, AICP
Project Manager*

6.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC), 1992, Sampling Guidelines and Protocols, Technology Background and Quality Control/Quality Assurance for NYSDEC Spill Response Program, NYSDEC, Albany, New York.

American Society for Testing and Materials (ASTM), June 2011, E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, West Conshohocken, Pennsylvania.

New York State Department of Environmental Conservation (NYSDEC), December 2006, 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6, Division of Environmental Remediation, Albany, New York.

FIGURES



FIGURE 1 SAMPLE LOCATION MAP

Source: NYS Orthophotography Program, 2013
 Scale: 1 inch = 25 feet



122 & 126 Bedell Street

Limited Phase II ESA

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.****"TOMORROWS ANALYTICAL SOLUTIONS TODAY"**Laboratory ReportNYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 5112310

December 01, 2015

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747**Re: 122 & 126 Bedell Street Hempstead**

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on November 23, 2015. Long Island Analytical laboratories analyzed the samples on December 01, 2015 for the following:

SAMPLE ID	ANALYSIS
FD-1	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
FD-2	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 2.7 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.**Michael Veraldi - Laboratory Director**

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	285	<285	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	285	<285	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	285	<285	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	285	7970	ug/kg dry	3.E, 5.L
1,2-Dichlorobenzene	95-50-1	285	<285	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	285	<285	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	285	2580	ug/kg dry	3.E, 5.L
1,3-Dichlorobenzene	541-73-1	285	<285	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	285	<285	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	2850	<2850	ug/kg dry	3.A, 5.L
Acetone	67-64-1	2850	<2850	ug/kg dry	5.L, 3.A
Benzene	71-43-2	285	<285	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	285	<285	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	285	<285	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	285	<285	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	285	<285	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	285	<285	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	570	<570	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	570	<570	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	285	<285	ug/kg dry	4.J, 5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	285	<285	ug/kg dry	3.A, 4.M, 5.L
n-Butylbenzene	104-51-8	285	<285	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	285	<285	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	285	<285	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	285	934	ug/kg dry	3.E, 5.L
tert-Butylbenzene	98-06-6	285	<285	ug/kg dry	5.L, 3.A
Tetrachloroethylene	127-18-4	285	<285	ug/kg dry	3.A, 5.L
Toluene	108-88-3	285	<285	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	285	<285	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	285	<285	ug/kg dry	3.A, 5.L



**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.**

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	285	<285	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	86	74.4-131	
4-Bromofluorobenzene	460-00-4	126	82.3-134	
Dibromofluoromethane	1868-53-7	95	79.4-122	
Toluene-d8	2037-26-5	104	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	56	50-200	
1,4-Difluorobenzene	540-36-3	91	50-200	
Chlorobenzene-d5	3114-55-4	81	50-200	
Pentafluorobenzene	363-72-4	92	50-200	

Date Prepared: 11/24/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 11/25/2015

Analytical Method: EPA 8260 C



**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.**

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	684	<684	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	684	<684	ug/kg dry	3.A
Acenaphthene	83-32-9	684	<684	ug/kg dry	3.A
Acenaphthylene	208-96-8	684	<684	ug/kg dry	3.A
Anthracene	120-12-7	684	<684	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	684	<684	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	684	<684	ug/kg dry	3.A
Benzo(b)fluoranthene	205-99-2	684	<684	ug/kg dry	3.A
Benzo(g,h,i)perylene	191-24-2	684	<684	ug/kg dry	3.A
Benzo(k)fluoranthene	207-08-9	684	<684	ug/kg dry	3.A
Chrysene	218-01-9	684	<684	ug/kg dry	3.A
Dibenzo(a,h)anthracene	53-70-3	684	<684	ug/kg dry	3.A
Dibenzofuran	132-64-9	684	<684	ug/kg dry	3.A
Fluoranthene	206-44-0	684	746	ug/kg dry	3.E
Fluorene	86-73-7	684	<684	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	684	<684	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	684	<684	ug/kg dry	3.A
Naphthalene	91-20-3	6840	16800	ug/kg dry	3.E
Pentachlorophenol	87-86-5	684	2390	ug/kg dry	3.E
Phenanthrene	85-01-8	684	11800	ug/kg dry	3.E
Phenol	108-95-2	684	<684	ug/kg dry	3.A
Pyrene	129-00-0	684	8620	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	69	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	108	34.39-110.73	3.E
2-Fluorophenol	367-12-4	73	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	88	31-118.25	3.E
Phenol-d6	13127-88-3	78	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	95	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	91	50-200	

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	85	50-200	
Chrysene-d12	1719-03-5	72	50-200	
Naphthalene-d8	1146-65-2	79	50-200	
Perylene-d12	1520-96-3	84	50-200	
Phenanthrene-d10	1517-22-2	63	50-200	

Date Prepared: 11/23/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/30/2015

Analytical Method: EPA 8270 D



**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.**

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	11/24/2015	EPA 6010 C	1.77	12.0	mg/kg dry	
Barium	11/24/2015	EPA 6010 C	1.77	131	mg/kg dry	
Beryllium	11/24/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Cadmium	11/24/2015	EPA 6010 C	1.77	7.97	mg/kg dry	
Chromium	11/24/2015	EPA 6010 C	1.77	72.7	mg/kg dry	
Copper	11/24/2015	EPA 6010 C	177	8480	mg/kg dry	3.E
Lead	11/24/2015	EPA 6010 C	177	10700	mg/kg dry	3.E
Manganese	11/24/2015	EPA 6010 C	177	555	mg/kg dry	3.E
Nickel	11/24/2015	EPA 6010 C	1.77	76.5	mg/kg dry	
Selenium	11/24/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Silver	11/24/2015	EPA 6010 C	1.77	4.48	mg/kg dry	
Zinc	11/24/2015	EPA 6010 C	177	2290	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	11/25/2015	EPA 7471 B	0.02	0.19	mg/kg dry	

Date Prepared: 11/24/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead		
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2		
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02	% Solid:91.84	
Matrix: Soil	ELAP: #11693		

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	5.44	<5.44	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	5.44	<5.44	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	5.44	<5.44	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	5.44	<5.44	ug/kg dry	5.L
1,2-Dichlorobenzene	95-50-1	27.2	<27.2	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	5.44	<5.44	ug/kg dry	5.L
1,3,5-Trimethylbenzene	108-67-8	5.44	<5.44	ug/kg dry	5.L
1,3-Dichlorobenzene	541-73-1	27.2	<27.2	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	27.2	<27.2	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	54.4	<54.4	ug/kg dry	5.L
Acetone	67-64-1	54.4	<54.4	ug/kg dry	5.L
Benzene	71-43-2	5.44	<5.44	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	5.44	<5.44	ug/kg dry	5.L
Chlorobenzene	108-90-7	5.44	<5.44	ug/kg dry	5.L
Chloroform	67-66-3	5.44	<5.44	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	5.44	<5.44	ug/kg dry	5.L
Ethylbenzene	100-41-4	5.44	<5.44	ug/kg dry	5.L
m,p-Xylenes	108-38-3/106-42-3	10.9	<10.9	ug/kg dry	5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.9	<10.9	ug/kg dry	5.L
Methylene Chloride	75-09-2	5.44	<5.44	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	5.44	<5.44	ug/kg dry	4.M, 5.L
n-Butylbenzene	104-51-8	27.2	<27.2	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	5.44	<5.44	ug/kg dry	5.L
o-Xylene	95-47-6	5.44	<5.44	ug/kg dry	5.L
sec-Butylbenzene	135-98-8	5.44	<5.44	ug/kg dry	5.L
tert-Butylbenzene	98-06-6	5.44	<5.44	ug/kg dry	5.L
Tetrachloroethylene	127-18-4	5.44	<5.44	ug/kg dry	5.L
Toluene	108-88-3	5.44	<5.44	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	5.44	<5.44	ug/kg dry	5.L
Trichloroethylene	79-01-6	5.44	<5.44	ug/kg dry	5.L

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	5.44	<5.44	ug/kg dry	4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	83	74.4-131	
4-Bromofluorobenzene	460-00-4	117	82.3-134	
Dibromofluoromethane	1868-53-7	93	79.4-122	
Toluene-d8	2037-26-5	118	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	54	50-200	
1,4-Difluorobenzene	540-36-3	68	50-200	
Chlorobenzene-d5	3114-55-4	53	50-200	
Pentafluorobenzene	363-72-4	69	50-200	

Date Prepared: 11/24/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 11/24/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	163	<163	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	163	<163	ug/kg dry	
Acenaphthene	83-32-9	163	<163	ug/kg dry	
Acenaphthylene	208-96-8	163	<163	ug/kg dry	
Anthracene	120-12-7	163	<163	ug/kg dry	
Benzo(a)anthracene	56-55-3	163	<163	ug/kg dry	
Benzo(a)pyrene	50-32-8	163	<163	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	163	<163	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	163	<163	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	163	<163	ug/kg dry	
Chrysene	218-01-9	163	<163	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	163	<163	ug/kg dry	
Dibenzofuran	132-64-9	163	<163	ug/kg dry	
Fluoranthene	206-44-0	163	<163	ug/kg dry	
Fluorene	86-73-7	163	<163	ug/kg dry	
Hexachlorobenzene	118-74-1	163	<163	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	163	<163	ug/kg dry	
Naphthalene	91-20-3	163	<163	ug/kg dry	
Pentachlorophenol	87-86-5	163	<163	ug/kg dry	
Phenanthrene	85-01-8	163	<163	ug/kg dry	
Phenol	108-95-2	163	<163	ug/kg dry	
Pyrene	129-00-0	163	<163	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	71	18.04-120.2	
2-Fluorobiphenyl	321-60-8	71	34.39-110.73	
2-Fluorophenol	367-12-4	72	22.98-107.57	
Nitrobenzene-d5	4165-60-0	70	31-118.25	
Phenol-d6	13127-88-3	75	35.55-111.39	
Terphenyl-d14	1718-51-0	76	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	83	50-200	



LONG ISLAND ANALYTICAL LABORATORIES INC.

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	77	50-200	
Chrysene-d12	1719-03-5	73	50-200	
Naphthalene-d8	1146-65-2	81	50-200	
Perylene-d12	1520-96-3	83	50-200	
Phenanthrene-d10	1517-22-2	75	50-200	

Date Prepared: 11/23/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/30/2015

Analytical Method: EPA 8270 D



**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.**

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	11/24/2015	EPA 6010 C	1.67	3.39	mg/kg dry	
Barium	11/24/2015	EPA 6010 C	1.67	339	mg/kg dry	
Beryllium	11/24/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	11/24/2015	EPA 6010 C	1.67	2.64	mg/kg dry	
Chromium	11/24/2015	EPA 6010 C	1.67	14.1	mg/kg dry	
Copper	11/24/2015	EPA 6010 C	167	923	mg/kg dry	3.E
Lead	11/24/2015	EPA 6010 C	167	858	mg/kg dry	3.E
Manganese	11/24/2015	EPA 6010 C	1.67	221	mg/kg dry	
Nickel	11/24/2015	EPA 6010 C	1.67	15.4	mg/kg dry	
Selenium	11/24/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	11/24/2015	EPA 6010 C	1.67	2.69	mg/kg dry	
Zinc	11/24/2015	EPA 6010 C	167	10700	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	11/25/2015	EPA 7471 B	0.82	1.85	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.M LCS recovery was above QC acceptance limit.
- 5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
- MDL Minimum Detection Limit
- LOQ Limit of Quantitation



**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.**

"TOMORROW'S ANALYTICAL SOLUTIONS TODAY"

110 Colin Drive • Holbrook, New York 11741

Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

