Appendix I-4
Supplemental SCDHS Phase II Environmental Site Assessment

Nelson, Pope & Voorhis, LLC
December 20, 2016

Supplemental SCDHS Phase II

Environmental Site Assessment

Indian Hills Country Club

Fort Salonga, New York

NP&V Job# 86047

December 30, 2016

Limited Phase II

Environmental Site Assessment

Indian Hills Country Club

THIS DOCUMENT CONTAINS 11 PAGES OF TEXT

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NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

Supplemental SCDHS Phase II

Environmental Site Assessment

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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 February 4, 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 Supplemental SCDHS 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 lies in the Hamlet of Fort Salonga, Town of Huntington, County of Suffolk, New York. The subject property consists of a ±145 acre property that is comprised of two (2) tax parcels on the north side of Breeze Hill Road and two (2) tax parcels on the south side of Breeze Hill Road. The entirety of the subject property is located east of Makamah Road, west of Fresh Pond Road and directly south of Long Island Sound. The parcels north of Breeze Hill Road are more particularly described as Suffolk County Tax Map #s 0400-14-04-1 and 2, and the parcels south of Breeze Hill Road are more particularly described as Suffolk County Tax Map #s 0400-15-01-11 and 12. The surrounding area is moderately developed and contains a mix of residential and vacant land.

The subject property consists of an irregularly-shaped property that presently contains a landscaped 18-hole golf course with a driving range and associated country club facilities. There are several small freshwater ponds located throughout the golf course and the course borders an estuarine and marine wetland to the north (Long Island Sound). The structures currently present on the subject property include: the main clubhouse, a pro shop, a halfway house, a barn utilized for storage, an equipment shed, a fertilizer and spray rig storage structure, and a maintenance garage with associated offices. All of the buildings are connected to separate sanitary systems with the exception of the storage barn, the equipment shed, and the fertilizer storage structure, which are not connected to sanitary systems. The clubhouse is connected to two (2) separate sanitary systems, one (1) for the kitchen and one (1) for the bathrooms.

The main clubhouse, which consists of a two-story building with a painted concrete and wood shingle exterior, was originally constructed in 1896 according to Bob Cornelius, the maintenance manager of the country club. Several additions were added to the original structure over the years to form its current configuration. This building contains locker rooms, a kitchen, dining areas, restrooms, an event hall, a card room, office space, and storage areas.

The pro shop consists of a two-story building with a wood shingle exterior. The building contains storage areas for member's golf bags and golf carts in the basement, a retail pro shop on the first floor, and office space on the second floor.

The maintenance buildings include an equipment shed, a fertilizer and spray rig storage structure, and a repair shop with associated offices; these buildings are located in the northeastern portion of the subject property, adjoined by a common paved parking area. There were several maintenance sand piles and chopped wood piles stored east of these buildings in addition to some landscaping equipment and some empty drums stored outdoors. There was no staining observed in the vicinity of any of the outdoor drums or equipment.

The repair shop consists of a one-story concrete block building with concrete floors and an attached office with vinyl siding. The maintenance shop contained several motor oil drums. Minor staining was observed in several areas on the concrete floor of the repair shop; however, the staining is not expected to adversely affect the subject property, since there are no floor drains present. A dirt-filled pit covered with wood boards was observed in the concrete floor towards the center of the repair shop. According to John Paquette, the Golf Course Superintendent, this was formerly a concrete maintenance pit that did not contain any floor drains and was backfilled approximately a year ago.

Based on a request from the Suffolk County Department of Health Services (SCDHS) which required sampling of a small drywell located on the south side of the main club, the Pro Shop building sanitary system and the dirt-filled pit in the maintenance garage prompted the performance of this Supplemental SCDHS Phase II Environmental Site Assessment. These conditions included:

This assessment has been designed and performed by NP&V to address the potential impacts to the subsoils of the subject property. 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 Suffolk County Department of Health Services (SCDHS) SOP 9-95 Pumpout and Soil Cleanup Criteria. 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 small drywell located on the south side of the main clubhouse building and the Pro Shop on-site sanitary system were sampled using a stainless steel hand auger. A soil sample was collected from the bottom sediment/soils of the drywell. No sample was collected from the Pro Shop septic tank but, one (1) sample was collected from the overflow leaching pool connected to the septic tank. The samples from the drywell and leaching pool were collected from the top zero to twelve (0-12) inches of the soil. The samples were analyzed for the presence of volatile and semi-volatile organic compounds and metals based on the SCDHS parameters. **Figure 1** located at the end of this document provides a location map of the samples collected.

2.2 POWER PROBE SOIL PROBES

One (1) soil probe was installed within the former maintenance pit located in the maintenance building. **Figure 1** provides a map identifying the location of the above referenced soil probe. The soil probe was installed using a Power Probe sampling apparatus Model 9100, in order to collect soil samples which provide a representation of the subsurface soil at depths that ranged from zero to four (0-4) feet, four to eight (4-8) feet and eight to twelve (8-12) feet below existing grade. The soil samples were visually inspected and the sample which exhibited the bottom of the pit was sent to a laboratory for analysis.

2.2.1 Soil Probe Installation

The soil probe was installed using a Power Probe hydraulically powered soil probing tool. Mechanized, vehicle mounted soil probe systems apply both static force and hydraulically powered percussion hammers for tool placement. Recovery of large sample volumes was facilitated with a probe-driven sampler. The probe-driven sampler consisted of a dual tube sampling system that has an outer tube that remains in the ground while the inner tube is removed along with the non-reactive plastic tube in which the soil sample has been collected. This dual tube sampling system ensures that the soil sample collected is from the selected sampling depth as the probe was advanced. Discrete samples were secured at the desired depths and were contained within a non-reactive plastic sleeve that lined the hollow probe for subsequent inspection and analysis.

2.3 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 the pit located in the maintenance garage.	Pit-1
Soil sample collected from the leaching pool located in the middle of the parking lot.	PSSS-PL
Soil sample collected from the leaching pool located off the northeast portion of the building.	CH-K

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 drywell and Pro Shop sanitary system leaching pool samples were analyzing for the presence of volatile and semi-volatile organic compounds and metals based on SCDHS parameters set forth in SOP 9-95.

3.2 ANALYTICAL RESULTS

The laboratory analysis performed on the samples did not exhibit any elevated concentrations of semi-volatile organic compounds and metals. Several of the analyzed volatile organic compounds exhibited elevated concentrations. **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 in samples CH-K exceeded the regulatory guidance values set forth in the SCDHS SOP 9-95. Since these concentrations exceed the SCDHS guidance values, it is recommended that CH-K be remediated under the auspices of SCDHS personnel.

TABLE 2

COMPARISON ANALYSIS

Constituents	PSSS-PL	CH-K	Pit-1	SCDHS SOP 9-95
Semi-Volatiles	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Fluoranthene	ND	ND	173	200,000
Benzo(b)fluoranthene	ND	ND	214	3,400
Benzo(g,h,i)perylene	ND	ND	172	200,000
Volatiles	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Acetone	ND	**10,600**	ND	**
Methylene Chloride	ND	**1,580**	ND	100
Chloroform	ND	**12,600**	ND	800
4-Isopropyltoluene	ND	1,520	ND	22,000
Metals	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Arsenic	ND	ND	3.30	30
Barium	18.8	622	25.0	4,000
Cadmium	ND	ND	22.3	40
Chromium	3.31	63.2	30.7	100
Copper	71.2	111	22.9	8,500
Lead	75.6	30.7	184	2,000
Nickel	1.95	36.3	8.31	650
Mercury	0.03	0.11	1.57	3.7

**Due to its relatively short half-life in the environment, if acetone is the only contaminant of concern in a sample, the primary response should be to determine and eliminate the source of the acetone discharge. The requirement to perform a remediation will be determined on a case-by-case basis.

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, a Power Probe sampling apparatus, stainless steel rods 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. 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^{o} 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 by the SCDHS in order to determine if elevated concentrations were present in the structures sampled. A sampling and analysis program was designed to determine if the Pro Shop sanitary system, the main clubhouse drywell and maintenance pit 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. In addition, the following presents an evaluation of the results of this investigation.

1. The drywell on the south side of the main clubhouse, the Pro Shop sanitary system leaching pool and the former maintenance pit from the maintenance garage were sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. No elevated concentrations of any semi-volatile organic compounds and metals were detected in any of the samples. Several of the analyzed volatile constituents exhibited elevated concentrations; however, only three (3) constituents from sample CH-K exceeded the regulatory guidance values set forth in the SCDHS SOP 9-95. Since these concentrations exceed the SCDHS guidance values, it is recommended that CH-K be remediated under the auspices of SCDHS personnel along with the other structures which were identified during the original Limited Phase II ESA report.

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 Supplemental SCDHS 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 Supplemental SCDHS 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.

Suffolk County Department of Health Services (SCDHS), January 2011, Standard Operating Procedure For Administration of Article 12 of the Suffolk County Sanitary Code - "Pumpout and Soil Cleanup Criteria", Farmingville, New York.

FIGURES

NELSON, POPE & VOORHIS, LLC
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FIGURE 1
SAMPLE LOCATION MAP

Source: ESRI Web Mapping Service

Scale: 1 inch = 300 feet

N

Indian Hills Country Club

Supplemental SCDHS Phase II

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"

Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 6120212

December 14, 2016

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747

Re: Indian Hills Golf Course

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on December 02, 2016. Long Island Analytical laboratories analyzed the samples on December 13, 2016 for the following:

SAMPLE ID	ANALYSIS
PSSS-PL	SCDH Metals, SCDH Semi-Volatiles, SCDH Volatiles
CH-K	SCDH Metals, SCDH Semi-Volatiles, SCDH Volatiles

Samples received at 1.5 ° 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: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 09:55	Sample ID: PSSS-PL
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-01 % Solid:78.10
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1,2-Tetrachloroethane	630-20-6	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1,1-Trichloroethane	71-55-6	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1,2,2-Tetrachloroethane	79-34-5	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1,2-Trichloroethane	79-00-5	64.0	<64.0	ug/kg dry	3.A, 4.N, 5.L
1,1-Dichloroethane	75-34-3	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	64.0	<64.0	ug/kg dry	3.A, 5.L
1,1-Dichloropropylene	563-58-6	64.0	<64.0	ug/kg dry	3.A, 5.L
1,2,3-Trichlorobenzene	87-61-6	128	<128	ug/kg dry	5.L, 3.A
1,2,3-Trichloropropane	96-18-4	64.0	<64.0	ug/kg dry	3.A, 4.N, 5.L
1,2,4,5-Tetramethylbenzene	95-93-2	128	<128	ug/kg dry	2.B, 3.A, 5.L
1,2,4-Trichlorobenzene	120-82-1	128	<128	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	64.0	<64.0	ug/kg dry	3.A, 5.L
1,2-Dibromo-3-chloropropane	96-12-8	128	<128	ug/kg dry	3.A, 4.J, 5.L
1,2-Dibromoethane	106-93-4	64.0	<64.0	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	128	<128	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	64.0	<64.0	ug/kg dry	3.A, 5.L
1,2-Dichloropropane	78-87-5	64.0	<64.0	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	64.0	<64.0	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	128	<128	ug/kg dry	3.A, 5.L
1,3-Dichloropropane	142-28-9	64.0	<64.0	ug/kg dry	3.A, 4.N, 5.L
1,4-Dichlorobenzene	106-46-7	128	<128	ug/kg dry	3.A, 5.L
1,4-Diethylbenzene	105-05-5	128	<128	ug/kg dry	2.B, 3.A, 5.L
2,2-Dichloropropane	594-20-7	64.0	<64.0	ug/kg dry	3.A, 5.L
2-Chlorotoluene	95-49-8	64.0	<64.0	ug/kg dry	3.A, 5.L
4-Chlorotoluene	106-43-4	64.0	<64.0	ug/kg dry	3.A, 5.L
4-Ethyltoluene	622-96-8	64.0	<64.0	ug/kg dry	2.B, 3.A, 4.K, 5.L
4-Isopropyltoluene	99-87-6	128	<128	ug/kg dry	3.A, 5.L
4-Methyl-2-Pentanone	108-10-1	128	<128	ug/kg dry	3.A, 5.L
Acetone	67-64-1	640	<640	ug/kg dry	3.A, 4.K, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 09:55	Sample ID: PSSS-PL
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-01 % Solid:78.10
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Benzene	71-43-2	64.0	<64.0	ug/kg dry	3.A, 5.L
Bromobenzene	108-86-1	64.0	<64.0	ug/kg dry	5.L, 3.A
Bromochloromethane	74-97-5	64.0	<64.0	ug/kg dry	3.A, 5.L
Bromodichloromethane	75-27-4	64.0	<64.0	ug/kg dry	3.A, 5.L
Bromoform	75-25-2	64.0	<64.0	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	64.0	<64.0	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	64.0	<64.0	ug/kg dry	3.A, 5.L
Chloroethane	75-00-3	64.0	<64.0	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	64.0	<64.0	ug/kg dry	3.A, 5.L
Chloromethane	74-87-3	64.0	<64.0	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	64.0	<64.0	ug/kg dry	3.A, 5.L
cis-1,3-Dichloropropylene	10061-01-5	64.0	<64.0	ug/kg dry	3.A, 5.L
Dibromochloromethane	124-48-1	64.0	<64.0	ug/kg dry	3.A, 5.L
Dibromomethane	74-95-3	64.0	<64.0	ug/kg dry	3.A, 4.N, 5.L
Dichlorodifluoromethane	75-71-8	64.0	<64.0	ug/kg dry	4.J, 5.L, 3.A
Ethylbenzene	100-41-4	64.0	<64.0	ug/kg dry	3.A, 5.L
Hexachlorobutadiene	87-68-3	128	<128	ug/kg dry	3.A, 5.L
Isopropylbenzene (Cumene)	98-82-8	64.0	<64.0	ug/kg dry	3.A, 4.M, 5.L
m,p-Xylenes	108-38-3/106-42-3	128	<128	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	128	<128	ug/kg dry	3.A, 4.J, 4.N, 5.L
Methylene Chloride	75-09-2	64.0	<64.0	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	64.0	<64.0	ug/kg dry	4.J, 4.N, 5.L, 3.A
Naphthalene	91-20-3	128	<128	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	128	<128	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	64.0	<64.0	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	64.0	<64.0	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	64.0	<64.0	ug/kg dry	3.A, 5.L
Styrene	100-42-5	64.0	<64.0	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	64.0	<64.0	ug/kg dry	5.L, 3.A

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 09:55	Sample ID: PSSS-PL
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-01 % Solid:78.10
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Tetrachloroethylene	127-18-4	64.0	<64.0	ug/kg dry	3.A, 5.L
Toluene	108-88-3	64.0	<64.0	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	64.0	<64.0	ug/kg dry	3.A, 5.L
trans-1,3-Dichloropropylene	10061-02-6	64.0	<64.0	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	64.0	<64.0	ug/kg dry	3.A, 5.L
Trichlorofluoromethane	75-69-4	64.0	<64.0	ug/kg dry	3.A, 5.L
Vinyl chloride	75-01-4	64.0	<64.0	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	93	74.4-131	
4-Bromofluorobenzene	460-00-4	103	82.3-134	
Dibromofluoromethane	1868-53-7	104	79.4-122	
Toluene-d8	2037-26-5	95	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	86	50-200	
1,4-Difluorobenzene	540-36-3	59	50-200	
Chlorobenzene-d5	3114-55-4	59	50-200	
Pentafluorobenzene	363-72-4	57	50-200	

Date Prepared: 12/08/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 12/09/2016

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 09:55	Sample ID: PSSS-PL
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-01 % Solid:78.10
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Acenaphthene	83-32-9	960	<960	ug/kg dry	
Anthracene	120-12-7	960	<960	ug/kg dry	
Benzo(a)anthracene	56-55-3	960	<960	ug/kg dry	
Benzo(a)pyrene	50-32-8	960	<960	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	960	<960	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	960	<960	ug/kg dry	4.J, 4.N
Benzo(k)fluoranthene	207-08-9	960	<960	ug/kg dry	
Chrysene	218-01-9	960	<960	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	960	<960	ug/kg dry	4.J, 4.N
Fluoranthene	206-44-0	960	<960	ug/kg dry	
Fluorene	86-73-7	960	<960	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	960	<960	ug/kg dry	4.J, 4.N
Naphthalene	91-20-3	960	<960	ug/kg dry	
Phenanthrene	85-01-8	960	<960	ug/kg dry	
Pyrene	129-00-0	960	<960	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorobiphenyl	321-60-8	65	34.39-110.73	
Nitrobenzene-d5	4165-60-0	67	31-118.25	
Terphenyl-d14	1718-51-0	73	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	99	50-200	
Acenaphthene-d10	15067-26-2	87	50-200	
Chrysene-d12	1719-03-5	86	50-200	
Naphthalene-d8	1146-65-2	92	50-200	
Perylene-d12	1520-96-3	87	50-200	
Phenanthrene-d10	1517-22-2	89	50-200	

Date Prepared: 12/09/2016

Preparation Method: EPA 3545 A

Date Analyzed: 12/12/2016

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 09:55	Sample ID: PSSS-PL
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-01 % Solid:78.10
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	12/06/2016	EPA 6010 C	1.79	<1.79	mg/kg dry	
Barium	12/06/2016	EPA 6010 C	1.79	18.8	mg/kg dry	
Beryllium	12/06/2016	EPA 6010 C	1.79	<1.79	mg/kg dry	
Cadmium	12/06/2016	EPA 6010 C	1.79	<1.79	mg/kg dry	
Chromium	12/06/2016	EPA 6010 C	1.79	3.31	mg/kg dry	
Copper	12/06/2016	EPA 6010 C	1.79	71.2	mg/kg dry	
Lead	12/06/2016	EPA 6010 C	1.79	75.6	mg/kg dry	
Nickel	12/06/2016	EPA 6010 C	1.79	1.95	mg/kg dry	
Selenium	12/06/2016	EPA 6010 C	1.79	<1.79	mg/kg dry	
Silver	12/06/2016	EPA 6010 C	1.79	<1.79	mg/kg dry	

Date Prepared: 12/05/2016 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	12/08/2016	EPA 7471 B	0.01	0.03	mg/kg dry	

Date Prepared: 12/06/2016 Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 10:06	Sample ID: CH-K
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-02 % Solid:33.37
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1,2-Tetrachloroethane	630-20-6	749	<749	ug/kg dry	3.A, 5.L
1,1,1-Trichloroethane	71-55-6	749	<749	ug/kg dry	3.A, 5.L
1,1,2,2-Tetrachloroethane	79-34-5	749	<749	ug/kg dry	3.A, 5.L
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	749	<749	ug/kg dry	3.A, 5.L
1,1,2-Trichloroethane	79-00-5	749	<749	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	749	<749	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	749	<749	ug/kg dry	3.A, 5.L
1,1-Dichloropropylene	563-58-6	749	<749	ug/kg dry	3.A, 5.L
1,2,3-Trichlorobenzene	87-61-6	749	<749	ug/kg dry	3.A, 5.L
1,2,3-Trichloropropane	96-18-4	749	<749	ug/kg dry	3.A, 5.L
1,2,4,5-Tetramethylbenzene	95-93-2	749	<749	ug/kg dry	5.L, 2.B, 3.A
1,2,4-Trichlorobenzene	120-82-1	749	<749	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	749	<749	ug/kg dry	3.A, 5.L
1,2-Dibromo-3-chloropropane	96-12-8	749	<749	ug/kg dry	3.A, 5.L
1,2-Dibromoethane	106-93-4	749	<749	ug/kg dry	3.A, 4.M, 5.L
1,2-Dichlorobenzene	95-50-1	749	<749	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	749	<749	ug/kg dry	3.A, 5.L
1,2-Dichloropropane	78-87-5	749	<749	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	749	<749	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	749	<749	ug/kg dry	3.A, 5.L
1,3-Dichloropropane	142-28-9	749	<749	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	749	<749	ug/kg dry	3.A, 5.L
1,4-Diethylbenzene	105-05-5	749	<749	ug/kg dry	2.B, 3.A, 5.L
2,2-Dichloropropane	594-20-7	749	<749	ug/kg dry	3.A, 5.L
2-Chlorotoluene	95-49-8	749	<749	ug/kg dry	3.A, 5.L
4-Chlorotoluene	106-43-4	749	<749	ug/kg dry	3.A, 5.L
4-Ethyltoluene	622-96-8	749	<749	ug/kg dry	2.B, 3.A, 5.L
4-Isopropyltoluene	99-87-6	749	1520	ug/kg dry	5.L, 3.E
4-Methyl-2-Pentanone	108-10-1	1500	<1500	ug/kg dry	3.A, 4.M, 5.L
Acetone	67-64-1	7490	10600	ug/kg dry	3.E, 4.K, 4.M, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 10:06	Sample ID: CH-K
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-02 % Solid:33.37
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Benzene	71-43-2	749	<749	ug/kg dry	3.A, 5.L
Bromobenzene	108-86-1	749	<749	ug/kg dry	3.A, 5.L
Bromochloromethane	74-97-5	749	<749	ug/kg dry	3.A, 5.L
Bromodichloromethane	75-27-4	749	<749	ug/kg dry	3.A, 5.L
Bromoform	75-25-2	749	<749	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	749	<749	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	749	<749	ug/kg dry	3.A, 5.L
Chloroethane	75-00-3	749	<749	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	749	12600	ug/kg dry	3.A, 5.L
Chloromethane	74-87-3	749	<749	ug/kg dry	5.L, 3.A
cis-1,2-Dichloroethylene	156-59-2	749	<749	ug/kg dry	3.A, 5.L
cis-1,3-Dichloropropylene	10061-01-5	749	<749	ug/kg dry	3.A, 5.L
Dibromochloromethane	124-48-1	749	<749	ug/kg dry	3.A, 5.L
Dibromomethane	74-95-3	749	<749	ug/kg dry	3.A, 5.L
Dichlorodifluoromethane	75-71-8	749	<749	ug/kg dry	3.A, 4.J, 4.N, 5.L
Ethylbenzene	100-41-4	749	<749	ug/kg dry	3.A, 5.L
Hexachlorobutadiene	87-68-3	749	<749	ug/kg dry	3.A, 5.L
Isopropylbenzene (Cumene)	98-82-8	749	<749	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	1500	<1500	ug/kg dry	3.A, 4.N, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	1500	<1500	ug/kg dry	3.A, 4.M, 5.L
Methylene Chloride	75-09-2	749	1580	ug/kg dry	4.M, 5.L, 3.E, 4.K
Methyl-tert-Butyl Ether	1634-04-4	749	<749	ug/kg dry	3.A, 5.L
Naphthalene	91-20-3	749	<749	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	749	<749	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	749	<749	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	749	<749	ug/kg dry	3.A, 4.N, 5.L
sec-Butylbenzene	135-98-8	749	<749	ug/kg dry	3.A, 5.L
Styrene	100-42-5	749	<749	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	749	<749	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 10:06	Sample ID: CH-K
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-02 % Solid:33.37
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Tetrachloroethylene	127-18-4	749	<749	ug/kg dry	3.A, 5.L
Toluene	108-88-3	749	<749	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	749	<749	ug/kg dry	3.A, 5.L
trans-1,3-Dichloropropylene	10061-02-6	749	<749	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	749	<749	ug/kg dry	3.A, 5.L
Trichlorofluoromethane	75-69-4	749	<749	ug/kg dry	3.A, 4.J, 5.L
Vinyl chloride	75-01-4	749	<749	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	116	74.4-131	
4-Bromofluorobenzene	460-00-4	106	82.3-134	
Dibromofluoromethane	1868-53-7	115	79.4-122	
Toluene-d8	2037-26-5	88	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	50	50-200	
1,4-Difluorobenzene	540-36-3	62	50-200	
Chlorobenzene-d5	3114-55-4	62	50-200	
Pentafluorobenzene	363-72-4	61	50-200	

Date Prepared: 12/12/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 12/12/2016

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 10:06	Sample ID: CH-K
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-02 % Solid:33.37
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Acenaphthene	83-32-9	2250	<2250	ug/kg dry	
Anthracene	120-12-7	2250	<2250	ug/kg dry	
Benzo(a)anthracene	56-55-3	2250	<2250	ug/kg dry	
Benzo(a)pyrene	50-32-8	2250	<2250	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	2250	<2250	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	2250	<2250	ug/kg dry	4.J, 4.N
Benzo(k)fluoranthene	207-08-9	2250	<2250	ug/kg dry	
Chrysene	218-01-9	2250	<2250	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	2250	<2250	ug/kg dry	4.J, 4.N
Fluoranthene	206-44-0	2250	<2250	ug/kg dry	
Fluorene	86-73-7	2250	<2250	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	2250	<2250	ug/kg dry	4.J, 4.N
Naphthalene	91-20-3	2250	<2250	ug/kg dry	
Phenanthrene	85-01-8	2250	<2250	ug/kg dry	
Pyrene	129-00-0	2250	<2250	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorobiphenyl	321-60-8	25	34.39-110.73	4.D
Nitrobenzene-d5	4165-60-0	25	31-118.25	4.D
Terphenyl-d14	1718-51-0	48	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	80	50-200	
Acenaphthene-d10	15067-26-2	83	50-200	
Chrysene-d12	1719-03-5	85	50-200	
Naphthalene-d8	1146-65-2	83	50-200	
Perylene-d12	1520-96-3	83	50-200	
Phenanthrene-d10	1517-22-2	83	50-200	

Date Prepared: 12/09/2016

Preparation Method: EPA 3545 A

Date Analyzed: 12/13/2016

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Indian Hills Golf Course
Date (Time) Collected: 12/02/2016 10:06	Sample ID: CH-K
Date (Time) Received: 12/02/2016 16:42	Laboratory ID: 6120212-02 % Solid:33.37
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	12/06/2016	EPA 6010 C	4.69	<4.69	mg/kg dry	
Barium	12/06/2016	EPA 6010 C	4.69	622	mg/kg dry	
Beryllium	12/06/2016	EPA 6010 C	4.69	<4.69	mg/kg dry	
Cadmium	12/06/2016	EPA 6010 C	4.69	<4.69	mg/kg dry	
Chromium	12/06/2016	EPA 6010 C	4.69	63.2	mg/kg dry	
Copper	12/06/2016	EPA 6010 C	4.69	111	mg/kg dry	
Lead	12/06/2016	EPA 6010 C	4.69	30.7	mg/kg dry	
Nickel	12/06/2016	EPA 6010 C	4.69	36.3	mg/kg dry	
Selenium	12/06/2016	EPA 6010 C	4.69	<4.69	mg/kg dry	
Silver	12/06/2016	EPA 6010 C	4.69	<4.69	mg/kg dry	

Date Prepared: 12/05/2016 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	12/08/2016	EPA 7471 B	0.04	0.11	mg/kg dry	

Date Prepared: 12/06/2016 Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

2.B	Parameter not certifiable by NELAP.
3.A	Reporting limit raised due to matrix interfernce.
3.E	Compound reported at a dilution factor.
4.D	Surrogate recovery has failed low.
4.J	Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
4.K	Continuing Calibration Verification (CCV) quality control levels failed high, values are considered to be estimated.
4.M	LCS recovery was above QC acceptance limit.
4.N	LCS recovery was below 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

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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

8

CLIENT NAME/ADDRESS: NPV 572 Walt Whitman Rd Melville, N.Y. 11747

CONTACT: Steve McGinn

PHONE: 427-5665

EMAIL:

PROJECT LOCATION: ~~Robert~~ Indian H. Golf Course

SAMPLER (SIGNATURE):

SAMPLER NAME (PRINT): Jonathan McGinn

SAMPLE(S) SEALED: YES / NO

CORRECT CONTAINER(S): YES / NO

6120212

SAMPLES RECEIVED AT: 1.5 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	pH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # LOCATION	ANALYSIS REQUIRED: SOP 9-95	# OF CONTAINERS
1 6120212-01	S	G			1	12/2/16	9:55	PSS-PL	X	2
2. ↓ -02	S	G			1	12/2/16	10:06	CH-K	X	2
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER

TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON

PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_2O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☒ NORMAL ☐ STAT

BY / /

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
	12/2/16 4:00	Jonathan McGinn		12-2-16 4:00	Ben Lamberson
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE / TIME	PRINTED NAME
				12-2-16 4:41 PM	Ben Lamberson

WHITE - OFFICE / CANARY - CLIENT

LONG ISLAND ANALYTICAL LABORATORIES INC.
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Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 6121312

December 22, 2016

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747

Re: IHCC Northport

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on December 13, 2016. Long Island Analytical laboratories analyzed the samples on December 22, 2016 for the following:

SAMPLE ID	ANALYSIS
Pit-1	SCDH Metals, SCDH Semi-Volatiles

Samples received at 2.0 ° C

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: IHCC Northport
Date (Time) Collected: 12/13/2016 09:55	Sample ID: Pit-1
Date (Time) Received: 12/13/2016 16:18	Laboratory ID: 6121312-01 % Solid:91.14
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Acenaphthene	83-32-9	165	<165	ug/kg dry	
Anthracene	120-12-7	165	<165	ug/kg dry	
Benzo(a)anthracene	56-55-3	165	<165	ug/kg dry	
Benzo(a)pyrene	50-32-8	165	<165	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	165	214	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	165	172	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	165	<165	ug/kg dry	
Chrysene	218-01-9	165	<165	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	165	<165	ug/kg dry	
Fluoranthene	206-44-0	165	173	ug/kg dry	
Fluorene	86-73-7	165	<165	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	165	<165	ug/kg dry	
Naphthalene	91-20-3	165	<165	ug/kg dry	
Phenanthrene	85-01-8	165	<165	ug/kg dry	
Pyrene	129-00-0	165	<165	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorobiphenyl	321-60-8	81	34.39-110.73	
Nitrobenzene-d5	4165-60-0	73	31-118.25	
Terphenyl-d14	1718-51-0	75	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	82	50-200	
Acenaphthene-d10	15067-26-2	82	50-200	
Chrysene-d12	1719-03-5	72	50-200	
Naphthalene-d8	1146-65-2	82	50-200	
Perylene-d12	1520-96-3	73	50-200	
Phenanthrene-d10	1517-22-2	80	50-200	

Date Prepared: 12/16/2016

Preparation Method: EPA 3545 A

Date Analyzed: 12/20/2016

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: IHCC Northport
Date (Time) Collected: 12/13/2016 09:55	Sample ID: Pit-1
Date (Time) Received: 12/13/2016 16:18	Laboratory ID: 6121312-01 % Solid:91.14
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	12/22/2016	EPA 6010 C	1.72	3.30	mg/kg dry	
Barium	12/22/2016	EPA 6010 C	1.72	25.0	mg/kg dry	
Beryllium	12/22/2016	EPA 6010 C	1.72	<1.72	mg/kg dry	
Cadmium	12/22/2016	EPA 6010 C	1.72	22.3	mg/kg dry	
Chromium	12/22/2016	EPA 6010 C	1.72	30.7	mg/kg dry	
Copper	12/22/2016	EPA 6010 C	1.72	22.9	mg/kg dry	
Lead	12/22/2016	EPA 6010 C	1.72	184	mg/kg dry	4.G
Nickel	12/22/2016	EPA 6010 C	1.72	8.31	mg/kg dry	
Selenium	12/22/2016	EPA 6010 C	1.72	<1.72	mg/kg dry	
Silver	12/22/2016	EPA 6010 C	1.72	<1.72	mg/kg dry	

Date Prepared: 12/19/2016 Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	12/21/2016	EPA 7471 B	0.09	1.57	mg/kg dry	4.F, 4.H

Date Prepared: 12/19/2016 Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

4.F Spike recovery does not meet QC criteria due to high target compound concentration.
4.G Spike recovery out of range due to matrix interference.
4.H Batch spike recovery out of range due to matrix inconsistency.
MDL Minimum Detection Limit
LOQ Limit of Quantitation

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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS: NV 572 Walt Whitman Rd Melville, NY 11747

CONTACT: Steven McGuinn

PHONE: 631 427-5665

EMAIL:

PROJECT LOCATION: ~~Fort Totten~~ IITCC, Northport

SAMPLER (SIGNATURE):

SAMPLER NAME (PRINT): Steven J. McGuinn

SAMPLE(S) SEALED: YES / NO

CORRECT CONTAINER(S): YES / NO

LABORATORY USE ONLY: 6121312

SAMPLES RECEIVED AT: 2.0 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	pH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # LOCATION	ANALYSIS REQUIRED: SCDH SVOC	SCDH Metals	# OF CONTAINERS
1 6121312-04	S	G			1	12/13/16	9:55	P-1	X	X	1
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER

TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON

PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_3O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☑ NORMAL ☐ STAT BY / /

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)	DATE 12/13/16 TIME 2:50	PRINTED NAME Steven J. McGuinn	RECEIVED BY (SIGNATURE)	DATE 12-13-16 TIME 1330	PRINTED NAME Ben LAMBERSON
RELINQUISHED BY (SIGNATURE)	DATE TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 12-13-16 TIME 4:17	PRINTED NAME Ben Lamberson

WHITE - OFFICE / CANARY - CLIENT