Appendix D -2

Limited Phase II Environmental Site Assessment

Limited Phase II

Environmental Site Assessment

251 Searingtown Road

North Hills, New York

NP&V Job# 13008

February 18, 2013
Revised: November 13, 2013

Limited Phase II

Environmental Site Assessment

251 Searingtown Road, North Hills

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Prepared For:

Ms. Irene Ho
The Manhasset Bay Group
c/o Charles M. Strain, Partner
Farrell Fritz, P.C.
1320 RXR Plaza
Uniondale, New York 11556

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

NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

Limited Phase II

Environmental Site Assessment

251 Searingtown Road, North Hills

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Limited Phase II

Environmental Site Assessment

251 Searingtown Road, North Hills

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 during the site reconnaissance for a Preliminary Environmental Site Investigation report prepared by Nelson, Pope & Voorhis, LLC dated January 23, 2013. The Phase I ESA was subsequently 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) and issued on August 23, 2013. 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 North Hills, County of Nassau, New York. The thirty-three (33±) acre property currently contains a 70,000 ± square foot (SF), three (3) story, mansion that has been converted and is presently utilized as a Jesuit retreat house. The structure, which was constructed in 1916-1920, contains numerous rooms including: two (2) chapels, libraries, dining halls, a large solarium, sitting rooms, visitor's quarters, etc. The structure consists of a masonry and steel framed building, situated above a poured concrete foundation that forms a full basement with concrete floors. The building elevators were inspected and found to have solid/concrete floors and there was no evidence of leaks or staining observed.

The exterior of the building consists of a brick and stone façade and a slate shingle roof, with several flat portions of the roof constructed with rolled rubber and asphalt membrane. Interior surfaces of the building include: ceramic tile, hardwood, and carpeted floors, painted plaster and limestone walls, and painted plaster and acoustical tile ceilings. Various suspect asbestos-containing building materials were observed during the inspection which are detailed below. The existing building is connected to the Nassau County municipal sewer collection system and public water purveyor. Electrical service is available to the property and is provided by LIPA.

Two (2) #2 fuel oil-fired boilers located in the basement provide heat to the building, and cooling is provided through outdoor air conditioning units. An outdoor, 4,000 gallon above ground #2 fuel oil storage tank was observed on the southeast corner of the building. According to Zia Hassan, the facility's director of maintenance, the storage tank was reportedly installed approximately thirteen (13) years ago. Mr. Hassan was unaware of any other above ground or underground fuel storage tanks on the property. The building was originally heated with a coal fired steam heating system; however, it is unknown when the heating system was converted to

fuel oil. The steam heating system consisted of a network of fresh air tunnels, which still exist but are no longer utilized. The tank and boilers appeared to be in good condition, and no staining was observed.

A sump pump and several floor drains were observed in the basement boiler room. According to Mr. Hassan, the sump pump and floor drains discharge to the municipal sewer system. However, given the age of the building, further investigation is warranted to verify that former sanitary systems or underground storage tanks are not present. In addition, there were several stormwater drains observed in the paved parking areas and driveway. There was no evidence of any hazardous materials on the subject property. In addition, there was no other evidence of discharge, areas of stressed vegetation, staining, residue of oils or other toxic substances, pools of discharge, petroleum or chemical odors, or other such indicators noted during the site reconnaissance, except as noted above.

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

1. It is unknown whether an on-site sanitary system or underground storage tanks were ever utilized on the subject property. Historic record review and Ground Penetrating Radar (GPR) technology should be utilized in order to determine whether either of these structures presently exist. If located, the structures should be properly closed and samples should be collected to determine whether any subsurface contamination exists.

2. Several floor drains were observed in the basement boiler room. Although it is believed that these floor drains discharge to the local municipal sewer system, a dye test should be performed to ensure that this information is accurate. In addition, samples should be collected to ensure that no previous or existing actions have resulted in subsurface contamination.

This assessment has been designed and performed by NP&V to address the potential impacts to the on-site leaching pools. 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) Part 375. The following sections detail the subject property and surrounding area characteristics, sampling program, quality assurance protocol, laboratory analysis methodology and laboratory results.

2.0 GROUND PENETRATING RADAR SURVEY (GPR)

A remote sensing ground penetrating radar field survey was performed over portions of the planimetric surface of the property. The ground penetrating radar (GPR) used in this process was a GSSI model SIR-3000 with a 400 MHz antenna.

The GPR system consisted of a control unit, control cable and a transducer. The GPR control unit transmits a trigger pulse at a normal repetition rate of 50 KHz. The pulse is then sent to the transmitter electronics in the transducer (antenna) via the control cable where the trigger pulses are transformed into bipolar pulses with higher amplitudes. The transformed pulse will vary in shape and frequency according to the transducer used. The GSSI system is capable of transmitting electromagnetic energy into the subsurface of the earth in the frequency range of 16 MHz to 2000 MHz. In the subsurface, reflections of the pulse occur at boundaries where there is a dielectric contrast (void, steel, soil type). The reflected portion of the signal travels back to the antenna and the control unit and is subsequently shown on the display of the computers color video monitor for interpolation.

A qualified technician specified a coordinate system on the planimetric surface to locate any subsurface dielectric anomalies on the premises. The operator used known knowledge of the subsurface soil composition to calibrate the SIR-3000 system to site specific conditions. Factor settings such as range, gain, number of gain points, and scans per unit, are modified to yield the most accurate data to describe the subsurface conditions.

Upon finding a dielectric anomaly a more specific coordinate system was designed over the area to determine its size, shape and orientation. The data collected during the survey was reviewed by the operator and compared against past experience, technical judgment and prior site knowledge to classify the anomalies.

The GPR survey was utilized to determine if any underground storage tanks were present on the property. The rear driveway/parking area was surveyed in order to locate any subsurface storage tanks. The survey of this area did not identify any anomalies typical of an underground storage tank.

The GPR was also utilized to potentially identify the location of the former on-site sanitary system. This survey was completed by dividing the property into a grid and traversing the property with the GPR unit along the grid lines. The “grid” lines were setup in three (3) foot intervals along the north-south and east-west axis of the property. This survey detected several anomalies which may have represented a typical subsurface leaching structure. In order to confirm if a subsurface structure was present, test holes were dug in the areas of the anomalies. None of the test holes dug identified the presence of subsurface structure. The areas which were dug up did contain numerous large stones. **Figure 1** provides an aerial photograph which identifies the areas of the property that were surveyed.

3.0 AREAS OF ADDITIONAL INVESTIGATION

3.1 SANITARY SYSTEM INVESTIGATION

The existing building is currently connected to the municipal sewage collection system and has been for many years. Given the age of the building, an on-site sanitary system is expected to have been utilized prior to the establishment of a public sewer system. A site plan of the subject property from 1922 identified an on-site sanitary system approximately 250 feet due east of the eastern service wing of the house (east of the existing parking area). This area is presently extensively stockpiled with limbs and logs from trees damaged during Hurricane Sandy and densely wooded areas east of this stockpile. Therefore, access for ground penetrating radar and magnetometer investigation is not possible without removal of this stockpile and clearing of the existing trees and underbrush. Further physical investigation of this area is recommended, and if a former sanitary system is identified, the system will be sampled to determine whether any subsurface contamination exists and properly closed. The Nassau County Department of Health will oversee future sampling and closure of the former sanitary system (if located) during the future subdivision review process.

Two (2) exterior manholes and a sewer system clean out were located on the exterior of the eastern side of the building, in the vicinity of the sewer pipe exiting the building. One (1) manhole provided access to a grease trap, approximately 12 feet below grade. The grease trap was found to have a solid bottom and connection to the public sewer system, as was the second manhole. Because both structures had solid bottoms and discharged to the public sewer system, the structures were not sampled.

Freedom of information record requests were submitted to the Nassau County Health Department, Nassau County Fire Marshal, and Village of North Hills to determine if documentation regarding the sanitary system connection and abandonment of on-site sanitary system (if any) exists. A review of the information received from these agencies did not reveal any information regarding the former or existing sanitary system, only confirmation that the building is connected to the public sewer system.

3.2 STORAGE TANK INVESTIGATION

During the Preliminary Environmental Site Investigation, two (2) supply lines were observed on the wall leading from the east side of the building into the boiler room from a pump towards a day tank.

The registry of the New York State Department of Environmental Conservation (NYSDEC) was consulted for information on Inactive Hazardous Waste Disposal Sites (IHWDS) and Hazardous Substance Waste Disposal Sites (HSWDS), which are sites contaminated with toxic substances but are not eligible for state cleanup funding programs. According to the NYSDEC registry, the St. Ignatius Retreat House (Facility ID# 056958) is listed with a 4,000 gallon outdoor above

ground #2 fuel oil storage tank that was installed in 1996. In addition, a 5,000 gallon underground #2 fuel oil storage tank that was installed in 1976 was listed for the subject property and identified as being either "deleted from the reported data or re-assigned."

Nassau County Health Department (NCDH) records indicated that a 5,000 underground #2 fuel oil storage tank was removed from the property in May 1996. The NCDH Field Investigation report completed by Mike Palmisano indicated that there were "No holes in tank, no contamination in excavation". The existing 4,000 gallon above ground fuel oil storage tank was installed in July 1996. No records were maintained by the Nassau County Fire Marshal. The Village of North Hills records revealed that the 5,000 gallon underground fuel oil storage tank was installed in June 1960. A letter from the attorney of the former owner, a permit was requested from the Village for the installation of an underground gasoline storage tank and a pump. It is unknown if this tank and pump were ever installed. No anomalies typical of underground storage tank were identified in the area of the proposed tank and pump. Permit #1524 was issued in July 1996 for the removal of the 5,000 gallon underground fuel oil storage tank and the installation of the existing 4,000 gallon above ground fuel oil storage tank.

3.3 STORM DRAIN INVESTIGATION

There are several stormwater drains located within the existing parking areas. These were investigated and each pool was observed to be filled with leaves and debris. The storm drains located on the southeast side of the ring driveway (located southwest of east service wing of the building) and the center of the parking area to the east of the building were cleaned of the debris and soil samples from the sediment within these drains were collected and submitted for laboratory analysis on October 1, 2013. Additional investigation of the storm drains was completed on October 10, 2013, including sampling of additional storm drains and a pipe camera investigation. This investigation determined that elevated concentrations of semi-volatile organic compounds and/or metals were identified in all of the catch basins sampled (see Section 4).

In order to determine the discharge point of these catch basins, a pipe camera was utilized to trace the pipes which emanated from each of these drains. It should be noted that all of the pipe were half filled or more with sediment which limited the pipe camera survey. **Figure 2** provides a map that identifies the direction of the pipes emanating from these structures. This investigation found that the catch basins along the entrance road way are connected to the municipal drainage system in Searingtown Road. The three catch basins located in the ring parking area on the south side of the main building and the two catch basins in the larger parking lot area have interconnecting pipes. No leaching structures were identified during any of the pipe camera surveys. Pipe camera investigation of the northernmost drain in the parking area east of the building (labeled as DCB, see **Figure 2**), traced the pipe exiting the east side of the catch basin and extended approximately 60 feet to east (into the wooded area east of the parking area) before the sediment in the pipe impeded the progress of the pipe camera. It is expected that this pipe may provide a connection of the parking area drainage system to the municipal stormwater collection system located in Searingtown Road. Historical maps of the property

showed a drainage discharge pipe to Searingtown Road along the eastern property line in this vicinity. A pipe camera inspection of the drainage manhole on Searingtown Road was not possible since the manhole covers are located in the center of the right lane of south bound traffic on Searingtown Road.

3.4 LEAD INVESTIGATION

A paint sample and a drinking water sample were obtained and submitted to the laboratory for lead analysis. The samples indicate elevated levels of lead are present in paint samples, but were not present in the drinking water sample (see **Appendix A**). Proper handling of lead based paint will be required either related to building renovations or demolition activities.

4.0 SAMPLING AND ANALYSIS PROGRAM (SAP)

4.1 HAND AUGER SOIL SAMPLING

Several floor drains located in the basement boiler room of the building were investigated during the site work portion of this Phase II ESA. Only one (1) of these floor drains was found to have an open bottom. All of the other floor drains located in the basement boiler room consisted of four (4) inch diameter pipes, which extended approximately 12 inches into the ground and turned. None of these floor drains had soil bottoms; as a result, no samples were collected from any of these drains. A dye test was performed on September 19, 2013, which confirmed that the basement floor drains with four (4) inch diameter pipes discharge to the sump pump pit which is connected to the municipal sewage collection system. The floor drain with the soil bottom was sampled using a stainless steel hand auger. The soil sample (FD-1) was collected from the top zero to twelve (0-12) inches of the soils located in the bottom of the floor drain and was analyzed for the presence of volatile and semi-volatile organic compounds and metals. **Figure 2** located in the rear of this document provides a location of the sample collected.

A stainless steel hand auger was also utilized to collect soil samples from the existing stormwater catch basins located in the paved driveway and parking areas situated on the subject property. These samples were collected from the sediment that was present in the basins, as all of these basins were found to have solid concrete bottoms surface.

A soil sample was collected from the surface soil located to the south of the catch basin identified as SD-1. This sample was collected utilizing a stainless steel hand auger from the upper six (6) inches of soil. This sample was collected to determine if elevated concentrations of arsenic were present the surface soil surrounding SD-1.

4.2 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 located in basement boiler room.	FD-1
Soil sample from the catch basin located on the south side of the rear loop driveway.	SD-1
Soil sample from the catch basin located in the center of the east parking area.	SD-2
Soil sample collected from the catch basin located in the inside of the driveway north of SD-1	CCB-S
Soil sample collected from the catch basin located on the east side of the rear loop driveway.	CCB-E
Soil sample collected from the catch basin located in the east central portion of the east parking area near the dumpster.	DCB
Soil sample collected from the catch basin located on the north side of the entrance of the site on Searingtown Road.	DWCB-N
Soil sample collected from the catch basin located on the north side of the entrance of the site on Searingtown Road	DWCB-S
Soil sample collected from the surface soils in the vicinity of the SD-1.	Surface Soil

5.0 LABORATORY ANALYSIS

5.1 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 the NYSDEC parameters set forth in Part 375.

The surface soil sample was only analyzed for the presence of arsenic.

5.2 ANALYTICAL RESULTS

The laboratory analysis performed on the floor drain sample did not exhibit any elevated concentrations of volatile organic compounds. Several of the analyzed semi-volatile organic compounds and metals exhibited elevated concentrations. **Table 2A** 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 2A**, several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375 regulations. As a result, it is recommended that the floor drain be remediated under the auspices of US Environmental Protection Agency (EPA) personnel since the Nassau County Department of Health (NCDH) refers the remedial work associated with subsurface structures to the USEPA.

The laboratory analysis performed on the catch basin samples exhibited elevated concentration of volatile and semi-volatile organic compounds and metals. **Table 2B** 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 2B**, several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375 regulations. As a result, it is recommended that the sediment in the catch basins be remediated under the auspices of US Environmental Protection Agency (EPA) personnel since the Nassau County Department of Health (NCDH) refers the remedial work associated with subsurface structures to the USEPA.

TABLE 2A
COMPARISON ANALYSIS - FLOOR DRAIN SAMPLE

Constituents	FD-1	6 NYCRR Part 375 Protection of GW
Semi-Volatiles	**ug/kg**	**ug/kg**
Acenaphthylene	113	107,000
Phenanthrene	342	1,000,000
Anthracene	183	1,000,000
Flouranthene	1,760	1,000,000
Pyrene	1,670	1,000,000
Benzo-a-Anthracene	**1,460**	1,000
Chrysene	**1,360**	1,000
Benzo-b-Flouranthene	**1,940**	1,700
Benzo-k-Flouranthene	**902**	1,700
Benzo-a-Pyrene	**1,460**	22,000
Indeno(1,2,3-c,d)Pyrene	**893**	8,200
Dibenzo-a,h-Anthracene	246	1,000,000
Benzo-g,h,i-Perylene	915	1,000,000
Volatiles	**No VOC's Detected**	
Metals	**mg/kg**	**mg/kg**
Arsenic	**39.6**	16
Barium	395	820
Cadmium	**47.0**	7.5
Chromium	**135**	19
Copper	**2,260**	1,720
Lead	**5,670**	450
Manganese	1,460	2,000
Nickel	116	130
Selenium	2.02	4.0
Silver	6.97	8.3
Zinc	**9,680**	2,480
Mercury	**2.34**	0.73

ND - Not Detected
Bold and highlighted indicates the constituent exceeds the regulatory guidance values

TABLE 2B
COMPARISON ANALYSIS - CATCH BASIN SAMPLES

Constituents	SD-1	SD-2	CCB-S	CCB-E	DCB	DWCB-N	DWCB-S	6 NYCRR Part 375 Protection of GW
Semi-Volatiles	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Acenaphthene	ND	ND	ND	1,840	ND	ND	ND	98,000
Flourene	ND	ND	ND	1,400	ND	ND	ND	386,000
Phenanthrene	10,400	5,490	17,100	38,500	16,400	4,920	1,700	1,000,000
Anthracene	ND	ND	1,960	4,960	2,110	ND	ND	1,000,000
Flouranthene	24,900	14,400	41,600	65,600	43,200	13,500	3,770	1,000,000
Pyrene	19,600	11,300	31,900	59,000	33,800	10,400	2,850	1,000,000
Benzo-a-Anthracene	**10,500**	**6,210**	**13,400**	**27,500**	**17,000**	**4,450**	**1,250**	1,000
Chrysene	**15,800**	**9,620**	**21,800**	**38,300**	**24,100**	**6,830**	**1,880**	1,000
Benzo-b-Flouranthene	**19,200**	**12,500**	**27,500**	**41,100**	**31,700**	**8,130**	**2,390**	1,700
Benzo-k-Flouranthene	**8,010**	**3,960**	**7,810**	**14,300**	**8,560**	**3,120**	724	1,700
Benzo-a-Pyrene	**11,900**	7,220	**15,400**	**25,500**	18,400	4,850	1,390	22,000
Indeno(1,2,3-c,d)Pyrene	**12,500**	7,660	**14,800**	**23,400**	**17,700**	4,810	1,370	8,200
Dibenzo-a,h-Anthracene	2,110	1,660	3,060	5,030	3,890	1,070	ND	1,000,000
Benzo-g,h,i-Perylene	10,100	6,710	12,500	17,600	14,800	4,040	1,170	1,000,000
Volatiles	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Acetone	ND	ND	**1,580**	**1,100**	ND	**1,100**	**596**	**50**
Methyl Ethyl Ketone	ND	ND	112	ND	ND	ND	ND	**120**
Metals	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Arsenic	**470**	2.82	5.49	10.2	2.59	6.79	3.64	16
Barium	79.3	52.8	79.3	112	47.0	103	41.5	820
Chromium	**23.8**	9.14	**19.9**	**44.3**	11.8	**37.9**	**22.8**	19
Copper	113	78.6	142	206	34.0	82.8	20.9	1,720
Lead	**2,840**	36.1	162	312	50.6	140	21.7	450
Manganese	475	268	446	649	296	200	308	2,000
Nickel	29.8	13.9	25.1	34.1	15.2	31.0	17.0	130
Zinc	343	134	332	479	154	291	98.4	2,480
Mercury	0.34	0.05	0.12	0.08	0.04	0.20	ND	0.73

Notes: ND - Not Detected; NS - No Standard

6.0 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^{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.

7.0 SUMMARY AND CONCLUSION

This investigation was completed to address issues raised in the Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the on-site basement floor drain and stormwater catch basins had been impacted by prior 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 floor drain located in the basement boiler room was sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed semi-volatile and metal constituents exhibited elevated concentrations. Several of the elevated concentrations exceeded the NYSDEC guidance values set forth in Part 375. As a result, the open bottom drain was remediated in accordance with an USEPA approved Work Plan, and an acceptable end point sample was confirmed. A USEPA closure letter is pending.

2. A GPR survey was conducted off the east side of the house in order to locate the former on-site sanitary system and in the area of the rear driveway/parking area to determine if any underground storage tanks were present. The survey for the sanitary system identified several anomalies. In order to determine if any structures were present, the ground in the area of the anomalies was excavated but no subsurface structures were present. The survey for the underground tanks (see Figure 1did not identify any anomalies typical of an underground storage tank.

3. Several stormwater catch basins were sampled in order to determine if these structures had been impacted by prior uses of the subject property. This investigation determined that elevated concentrations of semi-volatile organic compounds and/or metals were identified in all of the catch basins sampled. In order to determine the discharge point of these catch basins, a pipe camera was utilized to trace the pipes which emanated from each of these drains. It should be noted that all of the pipe were half filled or more with sediment which limited the pipe camera survey. **Figure 2** provides a map that identifies the direction of the pipes emanating from these structures. No leaching structures were identified during any of the pipe camera surveys. Investigation of the drains confirmed that drainage structures in the access roadway are connected to the municipal drainage system in Searingtown Road. Historical maps of the property showed a drainage discharge pipe to Searingtown Road along the eastern property line in this vicinity. A pipe camera inspection of the municipal storm drain was not possible since the manhole covers are located in the center of the right lane of south bound traffic on Searingtown Road.

4. Documentation and confirmation of the following is recommended: a) connection/proper abandonment of a former sanitary system (if any).

5. It is recommended that the sediment in the catch basins be remediated under the auspices of USEPA personnel since the Nassau County Department of Health (NCDH) refers the remedial work associated with subsurface structures to the USEPA.

6. Paint samples and a drinking water sample were obtained and submitted to certified laboratory for lead analysis. The samples indicated elevated levels of lead are present in the paint samples, but were not present in the drinking water sample. Proper handling of lead based paint will be required for any future building renovations or demolition activities.

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

8.0 REFERENCES

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FIGURES

NELSON, POPE & VOORHIS, LLC
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FIGURE 1
GPR SURVEY MAP

Source: ESRI Web Mapping Service

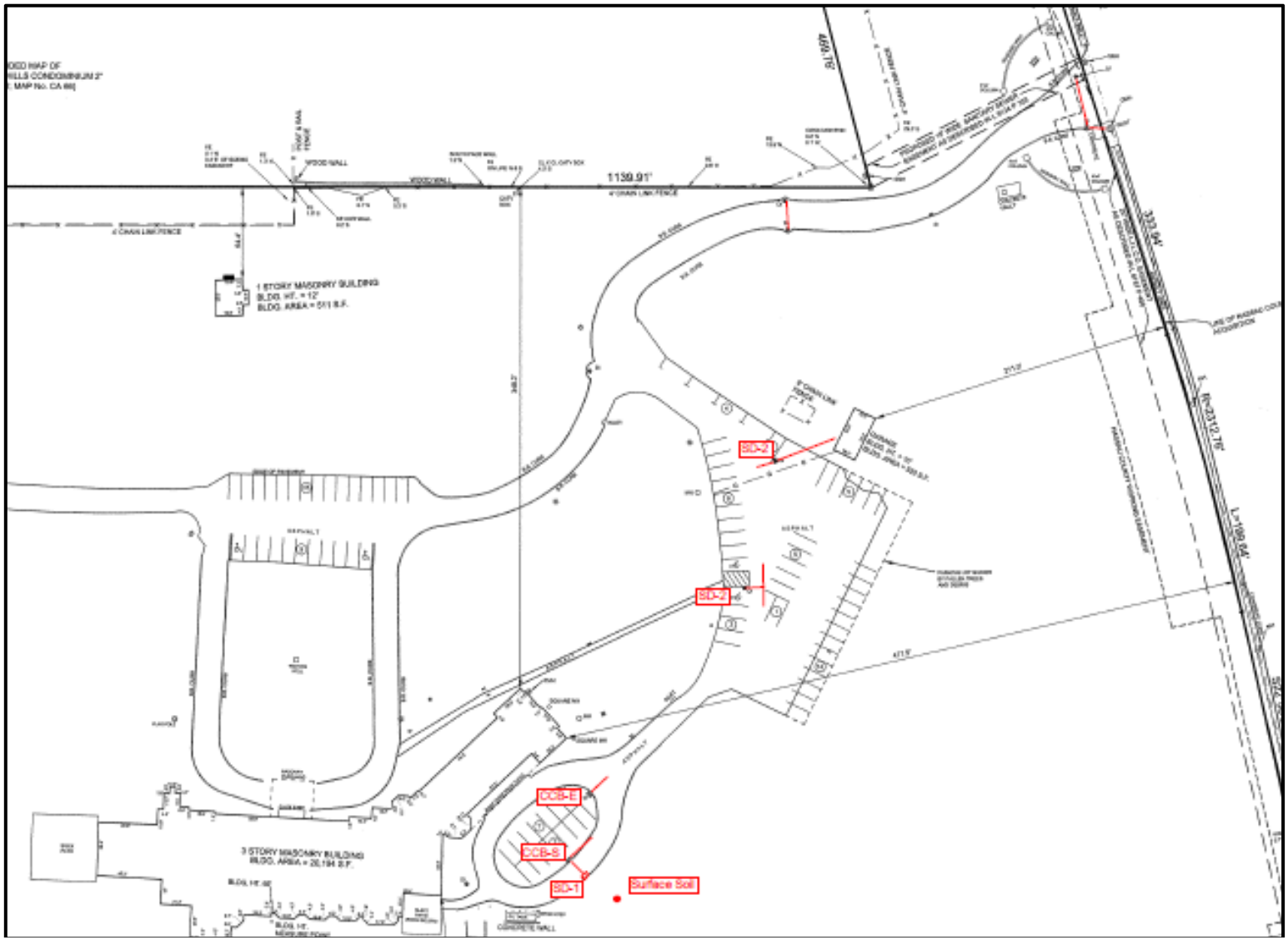
Scale: 1 inch = 75 feet

N

251 Searingtown Rd, Manhasset

GPR Survey

FIGURE 2: SAMPLE LOCATIONS



NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

NELSON, POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

FIGURE 3
AERIAL PHOTOGRAPH

Source: ESRI Web Mapping Service

Scale: 1 inch = 300 feet

N

251 Searingtown Rd, Manhasset

Phase II ESA

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
NJDEP# NY012
PADEP# 68-2943

LIAL# 3021214

February 15, 2013

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

Re: 251 Searingtown Rd Manhassett

Dear Steve McGinn,

Enclosed please find Long Island Analytical Laboratories' analysis report(s) for sample(s) received on February 12, 2013. The report was issued on February 15, 2013 for the following:

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

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: 251 Searingtown Rd Manhassett
Date (Time) Collected: 02/12/2013 12:32	Sample ID: FD-1
Date (Time) Received: 02/12/2013 17:51	Laboratory ID: 3021214-01
Matrix: Soil	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Vinyl chloride	75-01-4	74.9	<74.9	ug/kg dry	3.A
Acetone	67-64-1	150	<150	ug/kg dry	3.A
1,1-Dichloroethylene	75-35-4	74.9	<74.9	ug/kg dry	3.A
Methylene Chloride	75-09-2	74.9	<74.9	ug/kg dry	3.A
Methyl-tert-Butyl Ether	1634-04-4	74.9	<74.9	ug/kg dry	3.A
trans-1,2-Dichloroethylene	156-60-5	74.9	<74.9	ug/kg dry	3.A
1,1-Dichloroethane	75-34-3	74.9	<74.9	ug/kg dry	3.A
Methyl Ethyl Ketone (2-Butanone)	78-93-3	150	<150	ug/kg dry	3.A
cis-1,2-Dichloroethylene	156-59-2	74.9	<74.9	ug/kg dry	3.A
Chloroform	67-66-3	74.9	<74.9	ug/kg dry	3.A
1,1,1-Trichloroethane	71-55-6	74.9	<74.9	ug/kg dry	3.A
1,2-Dichloroethane	107-06-2	74.9	<74.9	ug/kg dry	3.A
Carbon Tetrachloride	56-23-5	74.9	<74.9	ug/kg dry	3.A
Benzene	71-43-2	74.9	<74.9	ug/kg dry	3.A
Trichloroethylene	79-01-6	74.9	<74.9	ug/kg dry	3.A
1,4-Dioxane	123-91-1	749	<749	ug/kg dry	3.A
Toluene	108-88-3	74.9	<74.9	ug/kg dry	3.A
Tetrachloroethylene	127-18-4	74.9	<74.9	ug/kg dry	3.A
Chlorobenzene	108-90-7	74.9	<74.9	ug/kg dry	3.A
Ethylbenzene	100-41-4	74.9	<74.9	ug/kg dry	3.A
m,p-Xylenes	108-38-3/106-42-3	150	<150	ug/kg dry	3.A
o-Xylene	95-47-6	74.9	<74.9	ug/kg dry	3.A
n-Propylbenzene	103-65-1	74.9	<74.9	ug/kg dry	3.A
1,3,5-Trimethylbenzene	108-67-8	74.9	<74.9	ug/kg dry	3.A
tert-Butylbenzene	98-06-6	74.9	<74.9	ug/kg dry	3.A
1,2,4-Trimethylbenzene	95-63-6	74.9	<74.9	ug/kg dry	3.A
sec-Butylbenzene	135-98-8	74.9	<74.9	ug/kg dry	3.A
1,3-Dichlorobenzene	541-73-1	74.9	<74.9	ug/kg dry	3.A
1,4-Dichlorobenzene	106-46-7	74.9	<74.9	ug/kg dry	3.A
1,2-Dichlorobenzene	95-50-1	74.9	<74.9	ug/kg dry	3.A
n-Butylbenzene	104-51-8	74.9	<74.9	ug/kg dry	3.A

Date Prepared: 02/14/2013

Preparation Method: EPA 5030C Modified

Date Analyzed: 02/15/2013

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: 251 Searingtown Rd Manhassett
Date (Time) Collected: 02/12/2013 12:32	Sample ID: FD-1
Date (Time) Received: 02/12/2013 17:51	Laboratory ID: 3021214-01
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Phenol	108-95-2	59.9	<59.9	ug/kg dry	
2-Methylphenol	95-48-7	59.9	<59.9	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	59.9	<59.9	ug/kg dry	
Naphthalene	91-20-3	59.9	<59.9	ug/kg dry	
Acenaphthylene	208-96-8	59.9	113	ug/kg dry	
Acenaphthene	83-32-9	59.9	<59.9	ug/kg dry	
Dibenzofuran	132-64-9	59.9	<59.9	ug/kg dry	
Fluorene	86-73-7	59.9	<59.9	ug/kg dry	
Hexachlorobenzene	118-74-1	59.9	<59.9	ug/kg dry	
Pentachlorophenol	87-86-5	59.9	<59.9	ug/kg dry	
Phenanthrene	85-01-8	59.9	342	ug/kg dry	
Anthracene	120-12-7	59.9	183	ug/kg dry	
Fluoranthene	206-44-0	59.9	1760	ug/kg dry	
Pyrene	129-00-0	59.9	1670	ug/kg dry	
Benzo(a)anthracene	56-55-3	59.9	1460	ug/kg dry	
Chrysene	218-01-9	59.9	1360	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	59.9	1940	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	59.9	902	ug/kg dry	
Benzo(a)pyrene	50-32-8	59.9	1460	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	59.9	893	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	59.9	246	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	59.9	915	ug/kg dry	

Date Prepared: 02/12/2013 Preparation Method: EPA 3545 A

Date Analyzed: 02/14/2013 Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: 251 Searingtown Rd Manhassett
Date (Time) Collected: 02/12/2013 12:32	Sample ID: FD-1
Date (Time) Received: 02/12/2013 17:51	Laboratory ID: 3021214-01
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Arsenic	02/14/2013	EPA 6010 C	1.19	39.6	mg/kg dry	
Barium	02/14/2013	EPA 6010 C	5.94	395	mg/kg dry	3.E
Beryllium	02/14/2013	EPA 6010 C	1.96	<1.96	mg/kg dry	
Cadmium	02/14/2013	EPA 6010 C	1.19	47.0	mg/kg dry	
Chromium	02/14/2013	EPA 6010 C	1.96	135	mg/kg dry	
Copper	02/14/2013	EPA 6010 C	39.2	2260	mg/kg dry	3.E
Lead	02/14/2013	EPA 6010 C	98.1	5670	mg/kg dry	3.E
Manganese	02/14/2013	EPA 6010 C	196	1460	mg/kg dry	3.E
Nickel	02/14/2013	EPA 6010 C	1.96	116	mg/kg dry	
Selenium	02/14/2013	EPA 6010 C	1.96	2.02	mg/kg dry	
Silver	02/14/2013	EPA 6010 C	1.96	6.97	mg/kg dry	
Zinc	02/14/2013	EPA 6010 C	98.1	9680	mg/kg dry	3.E

Date Prepared: 02/13/2013 — Preparation Method: EPA 3050B

Date Analyzed: 02/14/2013 — Analytical Method: EPA 6010 C

Mercury	02/15/2013	EPA 7471 B	0.03	2.34	mg/kg dry	3.E

Date Prepared: 02/13/2013 — Preparation Method: EPA 7471 B

Date Analyzed: 02/15/2013 — Analytical Method: EPA 7471 B

Data Qualifiers Key Reference:

3.A	Minimum detection limit raised due to matrix interfernce.
3.E	Compound reported at a dilution factor
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	Spike recovery out of range due to matrix inconsistency
4.M	LCS recovery above QC Limit.
4.O	Duplicate recovery out of range due to matrix inconsistency
MRL	Minimum Reporting Limit

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

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

(18)

CLIENT NAME/ADDRESS: NPU 512 Walt Whitman Rd Melville, NY 11747	CONTACT: S. M'Ginn	SAMPLER (SIGNATURE)	DATE 2/12/13	TIME 12:10	SAMPLE(S) SEALED (YES) / NO
	PHONE: 427-5665	SAMPLER NAME (PRINT): Steven J. M'Ginn	DATE	TIME	CORRECT CONTAINER(S) (YES) / NO
	FAX: 427-5620				3021214

PROJECT LOCATION: 251 Searingtown Rd Manhasset

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: Part 375 VOC	Pt 375 SVOC	Pt 375 Metals	# OF CONTAINERS
1. 3021214-01	S	G			ICE	2/12/13	1252PM	FD-1	X	X	X	2
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: NO Cyanide or Hex Chromium

RELINQUISHED BY (SIGNATURE)	DATE 2/12/13 TIME 5:16	PRINTED NAME Steven J. M'Ginn	RECEIVED BY (SIGNATURE)	DATE TIME	PRINTED NAME
RELINQUISHED BY (SIGNATURE)	DATE TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 2-12-13 TIME 5:10pm	PRINTED NAME Ben Lambelson

WHITE - OFFICE / CANARY - LAB / PINK - SAMPLE CUSTODIAN / GOLDENROD - CLIENT

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# 3092312

September 26, 2013

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

Re: 251 Searingtown Rd Manhasset

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) recieved on September 23, 2013. Long Island Analytical laboratories analyzed the samples on September 25, 2013 for the following:

CLIENT ID	ANALYSIS
DW-1	Lead

Samples received at 0.2 ° 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: 251 Searingtown Rd Manhasset
Date (Time) Collected: 09/23/2013 12:47	Sample ID: DW-1
Date (Time) Received: 09/23/2013 16:19	Laboratory ID: 3092312-01
Matrix: Non-Potable Water	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Lead	09/25/2013	EPA 200.7 Rev. 4.4	0.002	0.050	<0.050	mg/L	

Date Prepared: 09/24/2013

Preparation Method: EPA 200.2

Analytical Method: EPA 200.7 Rev. 4.4

Data Qualifiers Key Reference:

MRL Minimum Reporting Limit

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"
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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

30

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

CONTACT: S. McGinn
PHONE: 427-5665
FAX: 427-5620
EMAIL:

SAMPLER (SIGNATURE)

SAMPLER NAME (PRINT): Steven J. McGinn

SAMPLE(S) SEALED: YES / NO

CORRECT CONTAINER: YES / NO

3092312

PROJECT LOCATION:
251 Stewart Rd, Manhasset

SAMPLES RECEIVED AT: 0.2°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: Lead	# OF CONTAINERS
1 3092312-01	DW	G			ICE	9/23/13	12:47	DW-1	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) $NA_2S_2O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: ☒ NORMAL ☐ STAT
BY / /

COMMENTS / INSTRUCTIONS
Sample Preserved w/HNO3 By: CLIENT

RELINQUISHED BY (SIGNATURE)	DATE 9/23/13 TIME 3:54	PRINTED NAME Steven J. McGinn	RECEIVED BY (SIGNATURE)	DATE TIME	PRINTED NAME
RELINQUISHED BY (SIGNATURE)	DATE TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 9-23-13 TIME 3:54	PRINTED NAME Ben Lambson

WHITE - OFFICE / CANARY - SAMPLE CUSTODIAN / PINK - CLIENT

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# 3101017

October 16, 2013

Nelson, Pope & Voorhis
Eric Arnesen
572 Walt Whitman Road
Melville, NY 11747

Re: St Ignatius

Dear Eric Arnesen,

Enclosed please find the laboratory Analysis Report(s) for sample(s) recieved on October 10, 2013. Long Island Analytical laboratories analyzed the samples on October 16, 2013 for the following:

CLIENT ID	ANALYSIS
CCB-S	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
CCB-E	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
DCB	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
DWCB-N	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
DWCB-S	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 1.7 ° 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: St Ignatius	
Date (Time) Collected: 10/10/2013 15:30	Sample ID: CCB-S	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-01	% Solid:49.32
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	3.85	50.7	<50.7	ug/kg dry	3A, 4B, 5L
Acetone	67-64-1	59.0	507	1580	ug/kg dry	3E, 4K, 4B, 5L
1,1-Dichloroethylene	75-35-4	4.49	50.7	<50.7	ug/kg dry	3A, 5L
Methylene Chloride	75-09-2	11.4	50.7	<50.7	ug/kg dry	3A, 5L
Methyl-tert-Butyl Ether	1634-04-4	3.89	50.7	<50.7	ug/kg dry	3A, 4B, 5L
trans-1,2-Dichloroethylene	156-60-5	4.68	50.7	<50.7	ug/kg dry	3A, 5L
1,1-Dichloroethane	75-34-3	5.55	50.7	<50.7	ug/kg dry	3A, 5L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	15.2	101	122	ug/kg dry	3E, 5L
cis-1,2-Dichloroethylene	156-59-2	4.31	50.7	<50.7	ug/kg dry	3A, 5L
Chloroform	67-66-3	5.38	50.7	<50.7	ug/kg dry	3A, 5L
1,1,1-Trichloroethane	71-55-6	3.74	50.7	<50.7	ug/kg dry	3A, 5L
1,2-Dichloroethane	107-06-2	4.95	50.7	<50.7	ug/kg dry	3A, 5L
Carbon Tetrachloride	56-23-5	4.86	50.7	<50.7	ug/kg dry	3A, 5L
Benzene	71-43-2	3.66	50.7	<50.7	ug/kg dry	3A, 5L
Trichloroethylene	79-01-6	5.54	50.7	<50.7	ug/kg dry	3A, 5L
Toluene	108-88-3	3.99	50.7	<50.7	ug/kg dry	3A, 5L
Tetrachloroethylene	127-18-4	4.77	50.7	<50.7	ug/kg dry	3A, 5L
Chlorobenzene	108-90-7	43.1	507	<507	ug/kg dry	3A, 5L
Ethylbenzene	100-41-4	36.5	507	<507	ug/kg dry	3A, 5L
m,p-Xylenes	108-38-3/106-42-3	55.9	1010	<1010	ug/kg dry	3A, 5L
o-Xylene	95-47-6	25.4	507	<507	ug/kg dry	3A, 5L
n-Propylbenzene	103-65-1	35.3	507	<507	ug/kg dry	5L, 3A
1,3,5-Trimethylbenzene	108-67-8	32.2	507	<507	ug/kg dry	3A, 5L
tert-Butylbenzene	98-06-6	46.0	507	<507	ug/kg dry	3A, 5L
1,2,4-Trimethylbenzene	95-63-6	35.4	507	<507	ug/kg dry	3A, 5L
sec-Butylbenzene	135-98-8	31.5	507	<507	ug/kg dry	3A, 5L
1,3-Dichlorobenzene	541-73-1	26.8	507	<507	ug/kg dry	3A, 5L
1,4-Dichlorobenzene	106-46-7	41.3	507	<507	ug/kg dry	3A, 5L
1,2-Dichlorobenzene	95-50-1	43.8	507	<507	ug/kg dry	3A, 5L
n-Butylbenzene	104-51-8	30.6	507	<507	ug/kg dry	3A, 5L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Dibromofluoromethane	1868-53-7	105	70-130	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:30	Sample ID: CCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-01 % Solid:49.32
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	126	70-130	
Toluene-d8	2037-26-5	106	70-130	
4-Bromofluorobenzene	460-00-4	127	70-130	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Pentafluorobenzene	363-72-4	73	50-200	
1,4-Difluorobenzene	540-36-3	70	50-200	
Chlorobenzene-d5	3114-55-4	80	50-200	
1,4-Dichlorobenzene-d4	3855-82-1	50	50-200	

Date Prepared: 10/15/2013

Date Analyzed: 10/16/2013

Preparation Method: EPA 5035A-L

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:30	Sample ID: CCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-01 % Solid:49.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Phenol	108-95-2	324	811	<811	ug/kg dry	3.A
2-Methylphenol	95-48-7	466	811	<811	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	365	811	<811	ug/kg dry	3.A
Naphthalene	91-20-3	324	811	<811	ug/kg dry	3.A
Acenaphthylene	208-96-8	446	811	<811	ug/kg dry	3.A
Acenaphthene	83-32-9	466	811	<811	ug/kg dry	3.A
Dibenzofuran	132-64-9	385	811	<811	ug/kg dry	3.A
Fluorene	86-73-7	446	811	<811	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	406	811	<811	ug/kg dry	3.A
Pentachlorophenol	87-86-5	345	811	<811	ug/kg dry	3.A
Phenanthrene	85-01-8	446	811	17100	ug/kg dry	3.E
Anthracene	120-12-7	385	811	1980	ug/kg dry	3.E
Fluoranthene	206-44-0	406	811	41600	ug/kg dry	3.E
Pyrene	129-00-0	426	811	31900	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	487	811	13400	ug/kg dry	3.E
Chrysene	218-01-9	426	811	21600	ug/kg dry	3.E, 4.J
Benzo(b)fluoranthene	205-99-2	365	811	27500	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	466	811	7810	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	426	811	15400	ug/kg dry	3.E
Indeno(1,2,3-cd)pyrene	193-39-5	547	811	14800	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	527	811	3060	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	466	811	12500	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorophenol	367-12-4	40	25-121	3.E
Phenol-d6	13127-88-3	56	24-113	3.E
Nitrobenzene-d5	4165-60-0	55	23-120	3.E
2-Fluorobiphenyl	321-60-8	51	30-115	3.E
2,4,6-Tribromophenol	118-79-6	55	19-122	3.E
Terphenyl-d14	1718-51-0	66	18-137	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	112	50-200	
Naphthalene-d8	1146-65-2	111	50-200	
Acenaphthene-d10	15067-26-2	107	50-200	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:30	Sample ID: CCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-01 % Solid:49.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Phenanthrene-d10	1517-22-2	102	50-200	
Chrysene-d12	1719-03-5	78	50-200	
Perylene-d12	1520-96-3	72	50-200	

Date Prepared: 10/10/2013

Preparation Method: EPA 3545 A

Date Analyzed: 10/14/2013

Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:30	Sample ID: CCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-01 % Solid:49.32
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.35	3.28	5.49	mg/kg dry	
Barium	10/14/2013	EPA 6010 C	0.51	3.28	79.3	mg/kg dry	
Beryllium	10/14/2013	EPA 6010 C	0.35	3.28	<3.28	mg/kg dry	
Cadmium	10/14/2013	EPA 6010 C	0.34	3.24	<3.24	mg/kg dry	
Chromium	10/14/2013	EPA 6010 C	0.39	3.28	19.9	mg/kg dry	
Copper	10/14/2013	EPA 6010 C	0.29	3.28	142	mg/kg dry	
Lead	10/14/2013	EPA 6010 C	0.32	3.28	162	mg/kg dry	
Manganese	10/14/2013	EPA 6010 C	0.45	3.28	446	mg/kg dry	
Nickel	10/14/2013	EPA 6010 C	0.37	3.28	25.1	mg/kg dry	
Selenium	10/14/2013	EPA 6010 C	1.11	3.28	<3.28	mg/kg dry	
Silver	10/14/2013	EPA 6010 C	0.26	3.28	<3.28	mg/kg dry	
Zinc	10/14/2013	EPA 6010 C	0.85	3.28	332	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Mercury	10/11/2013	EPA 7471 B	0.003	0.04	0.12	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 7471 B

Analytical Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:32	Sample ID: CCB-E	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-02	% Solid:44.23
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	4.30	56.5	<56.5	ug/kg dry	6J, 3A, 4J
Acetone	67-64-1	65.6	565	1100	ug/kg dry	2E, 4K, 6J
1,1-Dichloroethylene	75-35-4	5.01	56.5	<56.5	ug/kg dry	3A, 6J
Methylene Chloride	75-09-2	12.7	56.5	<56.5	ug/kg dry	3A, 6J
Methyl-tert-Butyl Ether	1634-04-4	4.34	56.5	<56.5	ug/kg dry	2A, 4R, 6J
trans-1,2-Dichloroethylene	156-60-5	5.22	56.5	<56.5	ug/kg dry	3A, 6J
1,1-Dichloroethane	75-34-3	6.18	56.5	<56.5	ug/kg dry	3A, 6J
Methyl Ethyl Ketone (2-Butanone)	78-93-3	17.0	113	<113	ug/kg dry	3A, 6J
cis-1,2-Dichloroethylene	156-59-2	4.80	56.5	<56.5	ug/kg dry	3A, 6J
Chloroform	67-66-3	6.00	56.5	<56.5	ug/kg dry	3A, 6J
1,1,1-Trichloroethane	71-55-6	4.17	56.5	<56.5	ug/kg dry	3A, 6J
1,2-Dichloroethane	107-06-2	5.52	56.5	<56.5	ug/kg dry	3A, 6J
Carbon Tetrachloride	56-23-5	5.41	56.5	<56.5	ug/kg dry	3A, 6J
Benzene	71-43-2	4.08	56.5	<56.5	ug/kg dry	3A, 6J
Trichloroethylene	79-01-6	6.17	56.5	<56.5	ug/kg dry	3A, 6J
Toluene	108-88-3	4.42	56.5	<56.5	ug/kg dry	3A, 6J
Tetrachloroethylene	127-18-4	5.31	56.5	<56.5	ug/kg dry	3A, 6J
Chlorobenzene	108-90-7	48.0	565	<565	ug/kg dry	3A, 6J
Ethylbenzene	100-41-4	40.7	565	<565	ug/kg dry	3A, 6J
m,p-Xylenes	108-38-3/106-42-3	82.3	1130	<1130	ug/kg dry	3A, 6J
o-Xylene	95-47-6	28.4	565	<565	ug/kg dry	3A, 6J
n-Propylbenzene	103-65-1	39.3	565	<565	ug/kg dry	3A, 6J
1,3,5-Trimethylbenzene	108-67-8	35.9	565	<565	ug/kg dry	3A, 6J
tert-Butylbenzene	98-06-6	51.3	565	<565	ug/kg dry	3A, 6J
1,2,4-Trimethylbenzene	95-63-6	39.4	565	<565	ug/kg dry	3A, 6J
sec-Butylbenzene	135-98-8	35.2	565	<565	ug/kg dry	3A, 6J
1,3-Dichlorobenzene	541-73-1	32.1	565	<565	ug/kg dry	3A, 6J
1,4-Dichlorobenzene	106-46-7	46.0	565	<565	ug/kg dry	3A, 6J
1,2-Dichlorobenzene	95-50-1	48.8	565	<565	ug/kg dry	3A, 6J
n-Butylbenzene	104-51-8	34.1	565	<565	ug/kg dry	3A, 6J

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Dibromofluoromethane	1868-53-7	115	70-130	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:32	Sample ID: CCB-E
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-02 % Solid:44.23
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	153	70-130	4,L
Toluene-d8	2037-26-5	106	70-130	
4-Bromofluorobenzene	460-00-4	124	70-130	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Pentafluorobenzene	363-72-4	70	50-200	
1,4-Difluorobenzene	540-36-3	69	50-200	
Chlorobenzene-d5	3114-55-4	80	50-200	
1,4-Dichlorobenzene-d4	3855-82-1	54	50-200	

Date Prepared: 10/15/2013

Date Analyzed: 10/16/2013

Preparation Method: EPA 5035A-L

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:32	Sample ID: CCB-E
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-02 % Solid:44.23
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Phenol	108-95-2	362	904	<904	ug/kg dry	3.A
2-Methylphenol	95-48-7	520	904	<904	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	407	904	<904	ug/kg dry	3.A
Naphthalene	91-20-3	362	904	<904	ug/kg dry	3.A
Acenaphthylene	208-96-8	497	904	<904	ug/kg dry	3.A
Acenaphthene	83-32-9	520	904	1840	ug/kg dry	3.E
Dibenzofuran	132-64-9	430	904	<904	ug/kg dry	3.A
Fluorene	86-73-7	497	904	1900	ug/kg dry	3.E
Hexachlorobenzene	118-74-1	452	904	<904	ug/kg dry	3.A
Pentachlorophenol	87-86-5	384	904	<904	ug/kg dry	3.A
Phenanthrene	85-01-8	497	904	38500	ug/kg dry	3.E
Anthracene	120-12-7	407	904	4980	ug/kg dry	3.E
Fluoranthene	206-44-0	904	1810	65600	ug/kg dry	3.E
Pyrene	129-00-0	475	904	59000	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	543	904	27500	ug/kg dry	3.E
Chrysene	218-01-9	475	904	38300	ug/kg dry	3.E, 4.J
Benzo(b)fluoranthene	205-99-2	407	904	41100	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	520	904	14300	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	475	904	25600	ug/kg dry	3.E
Indeno(1,2,3-cd)pyrene	193-39-5	610	904	23400	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	588	904	5030	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	520	904	17600	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorophenol	367-12-4	40	25-121	3.E
Phenol-d6	13127-88-3	55	24-113	3.E
Nitrobenzene-d5	4165-60-0	58	23-120	3.E
2-Fluorobiphenyl	321-60-8	45	30-115	3.E
2,4,6-Tribromophenol	118-79-6	47	19-122	3.E
Terphenyl-d14	1718-51-0	61	18-137	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	102	50-200	
Naphthalene-d8	1146-65-2	104	50-200	
Acenaphthene-d10	15067-26-2	100	50-200	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:32	Sample ID: CCB-E
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-02 % Solid:44.23
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Phenanthrene-d10	1517-22-2	91	50-200	
Chrysene-d12	1719-03-5	70	50-200	
Perylene-d12	1520-96-3	66	50-200	

Date Prepared: 10/10/2013

Preparation Method: EPA 3545 A

Date Analyzed: 10/14/2013

Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:32	Sample ID: CCB-E	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-02	% Solid:44.23
Matrix: Soil	ELAP: #11693	

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.37	3.45	10.2	mg/kg dry	
Barium	10/14/2013	EPA 6010 C	0.85	3.45	112	mg/kg dry	
Beryllium	10/14/2013	EPA 6010 C	0.37	3.45	<3.45	mg/kg dry	
Cadmium	10/14/2013	EPA 6010 C	0.36	3.41	<3.41	mg/kg dry	
Chromium	10/14/2013	EPA 6010 C	0.35	3.45	44.3	mg/kg dry	
Copper	10/14/2013	EPA 6010 C	0.30	3.45	206	mg/kg dry	
Lead	10/14/2013	EPA 6010 C	0.34	3.45	312	mg/kg dry	
Manganese	10/14/2013	EPA 6010 C	0.47	3.45	649	mg/kg dry	
Nickel	10/14/2013	EPA 6010 C	0.39	3.45	34.1	mg/kg dry	
Selenium	10/14/2013	EPA 6010 C	1.17	3.45	<3.45	mg/kg dry	
Silver	10/14/2013	EPA 6010 C	0.27	3.45	<3.45	mg/kg dry	
Zinc	10/14/2013	EPA 6010 C	0.89	3.45	479	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Mercury	10/11/2013	EPA 7471 B	0.003	0.05	0.08	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 7471 B

Analytical Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:41	Sample ID: DCB	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-03	% Solid:68.62
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	2.77	36.4	<36.4	ug/kg dry	3A, 4B, 5L
Acetone	67-64-1	42.4	364	428	ug/kg dry	3E, 4K, 4B, 5L
1,1-Dichloroethylene	75-35-4	3.23	36.4	<36.4	ug/kg dry	3A, 5L
Methylene Chloride	75-09-2	8.18	36.4	<36.4	ug/kg dry	3A, 5L
Methyl-tert-Butyl Ether	1634-04-4	2.80	36.4	<36.4	ug/kg dry	3A, 4B, 5L
trans-1,2-Dichloroethylene	156-60-5	3.37	36.4	<36.4	ug/kg dry	3A, 5L
1,1-Dichloroethane	75-34-3	3.99	36.4	<36.4	ug/kg dry	3A, 5L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	11.0	72.9	<72.9	ug/kg dry	3A, 5L
cis-1,2-Dichloroethylene	156-59-2	3.10	36.4	<36.4	ug/kg dry	3A, 5L
Chloroform	67-66-3	3.87	36.4	<36.4	ug/kg dry	3A, 5L
1,1,1-Trichloroethane	71-55-6	2.69	36.4	<36.4	ug/kg dry	3A, 5L
1,2-Dichloroethane	107-06-2	3.56	36.4	<36.4	ug/kg dry	3A, 5L
Carbon Tetrachloride	56-23-5	3.49	36.4	<36.4	ug/kg dry	3A, 5L
Benzene	71-43-2	2.63	36.4	<36.4	ug/kg dry	3A, 5L
Trichloroethylene	79-01-6	3.98	36.4	<36.4	ug/kg dry	3A, 5L
Toluene	108-88-3	2.65	36.4	<36.4	ug/kg dry	3A, 5L
Tetrachloroethylene	127-18-4	3.42	36.4	<36.4	ug/kg dry	3A, 5L
Chlorobenzene	108-90-7	3.10	36.4	<36.4	ug/kg dry	3A, 5L
Ethylbenzene	100-41-4	2.62	36.4	<36.4	ug/kg dry	3A, 5L
m,p-Xylenes	108-38-3/106-42-3	4.01	72.9	<72.9	ug/kg dry	3A, 5L
o-Xylene	95-47-6	1.83	36.4	<36.4	ug/kg dry	3A, 5L
n-Propylbenzene	103-65-1	2.54	36.4	<36.4	ug/kg dry	3A, 5L
1,3,5-Trimethylbenzene	108-67-8	2.32	36.4	<36.4	ug/kg dry	3A, 5L
tert-Butylbenzene	98-06-6	3.31	36.4	<36.4	ug/kg dry	3A, 5L
1,2,4-Trimethylbenzene	95-63-6	2.54	36.4	<36.4	ug/kg dry	3A, 5L
sec-Butylbenzene	135-98-8	2.27	36.4	<36.4	ug/kg dry	3A, 5L
1,3-Dichlorobenzene	541-73-1	20.7	364	<364	ug/kg dry	3A, 5L
1,4-Dichlorobenzene	106-46-7	29.7	364	<364	ug/kg dry	3A, 5L
1,2-Dichlorobenzene	95-50-1	31.5	364	<364	ug/kg dry	3A, 5L
n-Butylbenzene	104-51-8	22.0	364	<364	ug/kg dry	3A, 5L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Dibromofluoromethane	1868-53-7	103	70-130	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:41	Sample ID: DCB	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-03	% Solid:68.62
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	107	70-130	
Toluene-d8	2037-26-5	120	70-130	
4-Bromofluorobenzene	460-00-4	120	70-130	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Pentafluorobenzene	363-72-4	78	50-200	
1,4-Difluorobenzene	540-36-3	74	50-200	
Chlorobenzene-d5	3114-55-4	51	50-200	
1,4-Dichlorobenzene-d4	3855-82-1	53	50-200	

Date Prepared: 10/15/2013

Preparation Method: EPA 5035A-L

Date Analyzed: 10/16/2013

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:41	Sample ID: DCB
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-03 % Solid:68.62
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Phenol	108-95-2	233	583	<583	ug/kg dry	3.A
2-Methylphenol	95-48-7	335	583	<583	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	262	583	<583	ug/kg dry	3.A
Naphthalene	91-20-3	233	583	<583	ug/kg dry	3.A
Acenaphthylene	208-96-8	321	583	<583	ug/kg dry	3.A
Acenaphthene	83-32-9	335	583	<583	ug/kg dry	3.A
Dibenzofuran	132-64-9	277	583	<583	ug/kg dry	3.A
Fluorene	86-73-7	321	583	<583	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	291	583	<583	ug/kg dry	3.A
Pentachlorophenol	87-86-5	249	583	<583	ug/kg dry	3.A
Phenanthrene	85-01-8	321	583	16400	ug/kg dry	3.E
Anthracene	120-12-7	262	583	2110	ug/kg dry	3.E
Fluoranthene	206-44-0	583	1170	43200	ug/kg dry	3.E
Pyrene	129-00-0	306	583	33800	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	350	583	17000	ug/kg dry	3.E
Chrysene	218-01-9	306	583	24100	ug/kg dry	3.E, 4.J
Benzo(b)fluoranthene	205-99-2	262	583	31700	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	335	583	8560	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	306	583	18400	ug/kg dry	3.E
Indeno(1,2,3-cd)pyrene	193-39-5	393	583	17700	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	379	583	3890	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	335	583	14800	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorophenol	367-12-4	55	25-121	3.E
Phenol-d6	13127-88-3	63	24-113	3.E
Nitrobenzene-d5	4165-60-0	86	23-120	3.E
2-Fluorobiphenyl	321-60-8	82	30-115	3.E
2,4,6-Tribromophenol	118-79-6	56	19-122	3.E
Terphenyl-d14	1718-51-0	72	18-137	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	108	50-200	
Naphthalene-d8	1146-65-2	108	50-200	
Acenaphthene-d10	15067-26-2	108	50-200	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:41	Sample ID: DCB
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-03 % Solid:68.62
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Phenanthrene-d10	1517-22-2	98	50-200	
Chrysene-d12	1719-03-5	72	50-200	
Perylene-d12	1520-96-3	67	50-200	

Date Prepared: 10/10/2013

Preparation Method: EPA 3545 A

Date Analyzed: 10/14/2013

Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:41	Sample ID: DCB
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-03 % Solid:68.62
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.26	2.33	2.59	mg/kg dry	
Barium	10/14/2013	EPA 6010 C	0.44	2.33	47.0	mg/kg dry	
Beryllium	10/14/2013	EPA 6010 C	0.25	2.33	<2.33	mg/kg dry	
Cadmium	10/14/2013	EPA 6010 C	0.24	2.30	<2.30	mg/kg dry	
Chromium	10/14/2013	EPA 6010 C	0.29	2.33	11.8	mg/kg dry	
Copper	10/14/2013	EPA 6010 C	0.20	2.33	34.0	mg/kg dry	
Lead	10/14/2013	EPA 6010 C	0.23	2.33	50.6	mg/kg dry	
Manganese	10/14/2013	EPA 6010 C	0.32	2.33	296	mg/kg dry	
Nickel	10/14/2013	EPA 6010 C	0.27	2.33	15.2	mg/kg dry	
Selenium	10/14/2013	EPA 6010 C	0.79	2.33	<2.33	mg/kg dry	
Silver	10/14/2013	EPA 6010 C	0.18	2.33	<2.33	mg/kg dry	
Zinc	10/14/2013	EPA 6010 C	0.60	2.33	154	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Mercury	10/11/2013	EPA 7471 B	0.002	0.03	0.04	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 7471 B

Analytical Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:55	Sample ID: DWCB-N	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-04	% Solid:43.62
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	4.36	57.3	<57.3	ug/kg dry	2A, 4B, 5L
Acetone	67-64-1	66.8	573	1100	ug/kg dry	2E, 4K, 4B, 5L
1,1-Dichloroethylene	75-35-4	5.08	57.3	<57.3	ug/kg dry	2A, 5L
Methylene Chloride	75-09-2	12.9	57.3	<57.3	ug/kg dry	2A, 5L
Methyl-tert-Butyl Ether	1634-04-4	4.40	57.3	<57.3	ug/kg dry	2A, 4B, 5L
trans-1,2-Dichloroethylene	156-60-5	5.30	57.3	<57.3	ug/kg dry	2A, 5L
1,1-Dichloroethane	75-34-3	6.27	57.3	<57.3	ug/kg dry	5L, 2A
Methyl Ethyl Ketone (2-Butanone)	78-93-3	17.2	115	<115	ug/kg dry	2A, 5L
cis-1,2-Dichloroethylene	156-59-2	4.87	57.3	<57.3	ug/kg dry	2A, 5L
Chloroform	67-66-3	6.09	57.3	<57.3	ug/kg dry	2A, 5L
1,1,1-Trichloroethane	71-55-6	4.23	57.3	<57.3	ug/kg dry	2A, 5L
1,2-Dichloroethane	107-06-2	5.59	57.3	<57.3	ug/kg dry	2A, 5L
Carbon Tetrachloride	56-23-5	5.49	57.3	<57.3	ug/kg dry	2A, 5L
Benzene	71-43-2	4.14	57.3	<57.3	ug/kg dry	2A, 5L
Trichloroethylene	79-01-6	6.26	57.3	<57.3	ug/kg dry	2A, 5L
Toluene	108-88-3	4.48	57.3	<57.3	ug/kg dry	2A, 5L
Tetrachloroethylene	127-18-4	5.39	57.3	<57.3	ug/kg dry	2A, 5L
Chlorobenzene	108-90-7	48.7	573	<573	ug/kg dry	2A, 5L
Ethylbenzene	100-41-4	41.3	573	<573	ug/kg dry	2A, 5L
m,p-Xylenes	108-38-3/106-42-3	83.2	1150	<1150	ug/kg dry	2A, 5L
o-Xylene	95-47-6	28.8	573	<573	ug/kg dry	2A, 5L
n-Propylbenzene	103-65-1	39.9	573	<573	ug/kg dry	2A, 5L
1,3,5-Trimethylbenzene	108-67-8	38.5	573	<573	ug/kg dry	2A, 5L
tert-Butylbenzene	98-06-6	52.0	573	<573	ug/kg dry	2A, 5L
1,2,4-Trimethylbenzene	95-63-6	40.0	573	<573	ug/kg dry	2A, 5L
sec-Butylbenzene	135-98-8	35.7	573	<573	ug/kg dry	2A, 5L
1,3-Dichlorobenzene	541-73-1	32.6	573	<573	ug/kg dry	2A, 5L
1,4-Dichlorobenzene	106-46-7	46.7	573	<573	ug/kg dry	2A, 5L
1,2-Dichlorobenzene	95-50-1	49.5	573	<573	ug/kg dry	2A, 5L
n-Butylbenzene	104-51-8	34.6	573	<573	ug/kg dry	2A, 5L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Dibromofluoromethane	1868-53-7	118	70-130	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:55	Sample ID: DWCB-N
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-04 % Solid:43.62
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	151	70-130	4,L
Toluene-d8	2037-26-5	104	70-130	
4-Bromofluorobenzene	460-00-4	126	70-130	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Pentafluorobenzene	363-72-4	74	50-200	
1,4-Difluorobenzene	540-36-3	74	50-200	3,A, 5,L
Chlorobenzene-d5	3114-55-4	79	50-200	
1,4-Dichlorobenzene-d4	3855-82-1	52	50-200	

Date Prepared: 10/15/2013

Date Analyzed: 10/16/2013

Preparation Method: EPA 5035A-L

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:55	Sample ID: DWCB-N
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-04 % Solid:43.62
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Phenol	108-95-2	367	917	<917	ug/kg dry	3.A
2-Methylphenol	95-48-7	527	917	<917	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	413	917	<917	ug/kg dry	3.A
Naphthalene	91-20-3	367	917	<917	ug/kg dry	3.A
Acenaphthylene	208-96-8	504	917	<917	ug/kg dry	3.A
Acenaphthene	83-32-9	527	917	<917	ug/kg dry	3.A
Dibenzofuran	132-64-9	436	917	<917	ug/kg dry	3.A
Fluorene	86-73-7	504	917	<917	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	459	917	<917	ug/kg dry	3.A
Pentachlorophenol	87-86-5	390	917	<917	ug/kg dry	3.A
Phenanthrene	85-01-8	504	917	4920	ug/kg dry	3.E
Anthracene	120-12-7	413	917	<917	ug/kg dry	3.A
Fluoranthene	206-44-0	459	917	13500	ug/kg dry	3.E
Pyrene	129-00-0	481	917	10400	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	550	917	4450	ug/kg dry	3.E
Chrysene	218-01-9	481	917	6830	ug/kg dry	3.E, 4.J
Benzo(b)fluoranthene	205-99-2	413	917	5130	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	527	917	3120	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	481	917	4860	ug/kg dry	3.E
Indeno(1,2,3-cd)pyrene	193-39-5	619	917	4810	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	596	917	1070	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	527	917	4040	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorophenol	367-12-4	58	25-121	3.E
Phenol-d6	13127-88-3	71	24-113	3.E
Nitrobenzene-d5	4165-60-0	68	23-120	3.E
2-Fluorobiphenyl	321-60-8	58	30-115	3.E
2,4,6-Tribromophenol	118-79-6	68	19-122	3.E
Terphenyl-d14	1718-51-0	67	18-137	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	164	50-200	
Naphthalene-d8	1146-65-2	164	50-200	
Acenaphthene-d10	15067-26-2	155	50-200	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:55	Sample ID: DWCB-N
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-04 % Solid:43.62
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Phenanthrene-d10	1517-22-2	147	50-200	
Chrysene-d12	1719-03-5	110	50-200	
Perylene-d12	1520-96-3	101	50-200	

Date Prepared: 10/10/2013

Preparation Method: EPA 3545 A

Date Analyzed: 10/14/2013

Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:55	Sample ID: DWCB-N
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-04 % Solid:43.62
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.39	3.71	6.79	mg/kg dry	
Barium	10/14/2013	EPA 6010 C	0.59	3.71	103	mg/kg dry	
Beryllium	10/14/2013	EPA 6010 C	0.39	3.71	<3.71	mg/kg dry	
Cadmium	10/14/2013	EPA 6010 C	0.36	3.66	<3.66	mg/kg dry	
Chromium	10/14/2013	EPA 6010 C	0.37	3.71	37.9	mg/kg dry	
Copper	10/14/2013	EPA 6010 C	0.33	3.71	82.8	mg/kg dry	
Lead	10/14/2013	EPA 6010 C	0.36	3.71	140	mg/kg dry	
Manganese	10/14/2013	EPA 6010 C	0.51	3.71	200	mg/kg dry	
Nickel	10/14/2013	EPA 6010 C	0.42	3.71	31.0	mg/kg dry	
Selenium	10/14/2013	EPA 6010 C	1.25	3.71	<3.71	mg/kg dry	
Silver	10/14/2013	EPA 6010 C	0.29	3.71	<3.71	mg/kg dry	
Zinc	10/14/2013	EPA 6010 C	0.96	3.71	291	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Mercury	10/11/2013	EPA 7471 B	0.003	0.05	0.20	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 7471 B

Analytical Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius	
Date (Time) Collected: 10/10/2013 15:50	Sample ID: DWCB-S	
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-05	% Solid:61.66
Matrix: Soil	ELAP: #11693	

Volatiles Low Level Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	3.08	40.5	<40.5	ug/kg dry	3A, 4B, 6L
Acetone	67-64-1	47.2	405	586	ug/kg dry	3E, 4K, 6L
1,1-Dichloroethylene	75-35-4	3.59	40.5	<40.5	ug/kg dry	3A, 6L
Methylene Chloride	75-09-2	9.11	40.5	<40.5	ug/kg dry	3A, 6L
Methyl-tert-Butyl Ether	1634-04-4	3.11	40.5	<40.5	ug/kg dry	6L, 3A, 4B
trans-1,2-Dichloroethylene	156-60-5	3.75	40.5	<40.5	ug/kg dry	3A, 6L
1,1-Dichloroethane	75-34-3	4.44	40.5	<40.5	ug/kg dry	3A, 6L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	12.2	81.1	<81.1	ug/kg dry	3A, 6L
cis-1,2-Dichloroethylene	156-59-2	3.45	40.5	<40.5	ug/kg dry	3A, 6L
Chloroform	67-66-3	4.31	40.5	<40.5	ug/kg dry	3A, 6L
1,1,1-Trichloroethane	71-55-6	2.99	40.5	<40.5	ug/kg dry	3A, 6L
1,2-Dichloroethane	107-06-2	3.96	40.5	<40.5	ug/kg dry	3A, 6L
Carbon Tetrachloride	56-23-5	3.88	40.5	<40.5	ug/kg dry	3A, 6L
Benzene	71-43-2	2.93	40.5	<40.5	ug/kg dry	3A, 6L
Trichloroethylene	79-01-6	0.886	8.11	<8.11	ug/kg dry	3A, 6L
Toluene	108-88-3	3.17	40.5	<40.5	ug/kg dry	3A, 6L
Tetrachloroethylene	127-18-4	3.81	40.5	<40.5	ug/kg dry	3A, 6L
Chlorobenzene	108-90-7	3.45	40.5	<40.5	ug/kg dry	3A, 6L
Ethylbenzene	100-41-4	2.92	40.5	<40.5	ug/kg dry	3A, 6L
m,p-Xylenes	108-38-3/106-42-3	4.47	81.1	<81.1	ug/kg dry	3A, 6L
o-Xylene	95-47-6	2.04	40.5	<40.5	ug/kg dry	3A, 6L
n-Propylbenzene	103-65-1	2.82	40.5	<40.5	ug/kg dry	3A, 6L
1,3,5-Trimethylbenzene	108-67-8	2.58	40.5	<40.5	ug/kg dry	3A, 6L
tert-Butylbenzene	98-06-6	3.68	40.5	<40.5	ug/kg dry	3A, 6L
1,2,4-Trimethylbenzene	95-63-6	2.83	40.5	<40.5	ug/kg dry	3A, 6L
sec-Butylbenzene	135-98-8	2.62	40.5	<40.5	ug/kg dry	3A, 6L
1,3-Dichlorobenzene	541-73-1	23.0	405	<405	ug/kg dry	3A, 6L
1,4-Dichlorobenzene	106-46-7	33.0	405	<405	ug/kg dry	3A, 6L
1,2-Dichlorobenzene	95-50-1	35.0	405	<405	ug/kg dry	6L, 3A
n-Butylbenzene	104-51-8	24.5	405	<405	ug/kg dry	3A, 6L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Dibromofluoromethane	1868-53-7	99	70-130	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:50	Sample ID: DWCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-05 % Solid:61.66
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	141	70-130	4,L
Toluene-d8	2037-26-5	120	70-130	
4-Bromofluorobenzene	460-00-4	122	70-130	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Pentafluorobenzene	363-72-4	80	50-200	
1,4-Difluorobenzene	540-36-3	73	50-200	
Chlorobenzene-d5	3114-55-4	55	50-200	
1,4-Dichlorobenzene-d4	3855-82-1	56	50-200	

Date Prepared: 10/15/2013

Date Analyzed: 10/16/2013

Preparation Method: EPA 5035A-L

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:50	Sample ID: DWCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-05 % Solid:61.66
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MDL	LOQ	Result	Units	Flag
Phenol	108-95-2	259	649	<649	ug/kg dry	3.A
2-Methylphenol	95-48-7	373	649	<649	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	292	649	<649	ug/kg dry	3.A
Naphthalene	91-20-3	259	649	<649	ug/kg dry	3.A
Acenaphthylene	208-96-8	357	649	<649	ug/kg dry	3.A
Acenaphthene	83-32-9	373	649	<649	ug/kg dry	3.A
Dibenzofuran	132-64-9	308	649	<649	ug/kg dry	3.A
Fluorene	86-73-7	357	649	<649	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	324	649	<649	ug/kg dry	3.A
Pentachlorophenol	87-86-5	276	649	<649	ug/kg dry	3.A
Phenanthrene	85-01-8	357	649	1700	ug/kg dry	3.E
Anthracene	120-12-7	292	649	<649	ug/kg dry	3.A
Fluoranthene	206-44-0	324	649	3770	ug/kg dry	3.E
Pyrene	129-00-0	341	649	2850	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	389	649	1250	ug/kg dry	3.E
Chrysene	218-01-9	341	649	1660	ug/kg dry	3.E, 4.J
Benzo(b)fluoranthene	205-99-2	292	649	2390	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	373	649	724	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	341	649	1390	ug/kg dry	3.E
Indeno(1,2,3-cd)pyrene	193-39-5	438	649	1370	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	422	649	<649	ug/kg dry	3.A
Benzo(g,h,i)perylene	191-24-2	373	649	1170	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2-Fluorophenol	367-12-4	53	25-121	3.E
Phenol-d6	13127-88-3	60	24-113	3.E
Nitrobenzene-d5	4165-60-0	57	23-120	3.E
2-Fluorobiphenyl	321-60-8	58	30-115	3.E
2,4,6-Tribromophenol	118-79-6	57	19-122	3.E
Terphenyl-d14	1718-51-0	63	18-137	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	118	50-200	
Naphthalene-d8	1146-65-2	122	50-200	
Acenaphthene-d10	15067-26-2	117	50-200	

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:50	Sample ID: DWCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-05 % Solid:61.66
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Phenanthrene-d10	1517-22-2	109	50-200	
Chrysene-d12	1719-03-5	79	50-200	
Perylene-d12	1520-96-3	74	50-200	

Date Prepared: 10/10/2013

Preparation Method: EPA 3545 A

Date Analyzed: 10/14/2013

Analytical Method: EPA 8270D

Client: Nelson, Pope & Voorhis	Client ID: St Ignatius
Date (Time) Collected: 10/10/2013 15:50	Sample ID: DWCB-S
Date (Time) Received: 10/10/2013 17:18	Laboratory ID: 3101017-05 % Solid:61.66
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.26	2.43	3.84	mg/kg dry	
Barium	10/14/2013	EPA 6010 C	0.46	2.43	41.5	mg/kg dry	
Beryllium	10/14/2013	EPA 6010 C	0.26	2.43	<2.43	mg/kg dry	
Cadmium	10/14/2013	EPA 6010 C	0.25	2.40	<2.40	mg/kg dry	
Chromium	10/14/2013	EPA 6010 C	0.24	2.43	22.8	mg/kg dry	
Copper	10/14/2013	EPA 6010 C	0.21	2.43	20.9	mg/kg dry	
Lead	10/14/2013	EPA 6010 C	0.24	2.43	21.7	mg/kg dry	
Manganese	10/14/2013	EPA 6010 C	0.33	2.43	308	mg/kg dry	
Nickel	10/14/2013	EPA 6010 C	0.28	2.43	17.0	mg/kg dry	
Selenium	10/14/2013	EPA 6010 C	0.62	2.43	<2.43	mg/kg dry	
Silver	10/14/2013	EPA 6010 C	0.19	2.43	<2.43	mg/kg dry	
Zinc	10/14/2013	EPA 6010 C	0.53	2.43	98.4	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Mercury	10/11/2013	EPA 7471 B	0.002	0.03	<0.03	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 7471 B

Analytical Method: EPA 7471 B

Data Qualifiers Key Reference:

3.A	Minimum detection limit raised due to matrix interference.
3.E	Compound reported at a dilution factor.
4.J	Continuing Calibration Verification (CCV) quality control levels low, values are considered to be estimated.
4.K	Continuing Calibration Verification (CCV) quality control levels high, values are considered to be estimated.
4.L	Surrogate recovery is outside the acceptance criteria.
4.R	Initial Calibration Verification (ICV) quality control levels low, values are considered to be estimated.
4.S	Initial Calibration Verification (ICV) quality control levels high, values are considered to be estimated.
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.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"
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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

(15)

CLIENT NAME/ADDRESS: NFV, 572 WATERMAN RD., MELVILLE NY 11747

CONTACT: Eric Arsen

PHONE: 427-5605

FAX:

SAMPLER (SIGNATURE): Eric

SAMPLER NAME (PRINT): Eric Arsen

SAMPLE(S) SEALED: (YES) / NO

CORRECT CONTAINER(S): (YES) / NO

3101017

PROJECT LOCATION: St. Thomas

SAMPLES RECEIVED AT: 1.7 °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: Part 375 VOC	Part 375 SVOC	Part 375 Inorganics	# OF CONTAINERS
1. 3101017-01	S	G	—	—	ICE	10/10/13	3:30	CCB-S	X	X	X	3
2. 02							3:32	CCB-E	X	X	X	
3. 03							3:41	DCB	X	X	X	
4. 04							3:05	DWCB-N	X	X	X	
5. 05							3:50	DWCB-S	X	X	X	
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												

(3)

RUSH!

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 10/15/13

COMMENTS / INSTRUCTIONS: Per Eric NO CYAN NO HEX CR

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
Eric	10/10/13 5:15	Eric Arsen			
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 10-10-13 TIME 5:18 PM	PRINTED NAME Ben Lambson

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# 3101016

October 15, 2013

Nelson, Pope & Voorhis
Eric Arnesen
572 Walt Whitman Road
Melville, NY 11747

Re: St Ignatius

Dear Eric Arnesen,

Enclosed please find the laboratory Analysis Report(s) for sample(s) recieved on October 10, 2013. Long Island Analytical laboratories analyzed the samples on October 14, 2013 for the following:

CLIENT ID	ANALYSIS
Surface Soil	Arsenic

Samples received at 1.7 ° 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: St Ignatius
Date (Time) Collected: 10/10/2013 15:37	Sample ID: Surface Soil
Date (Time) Received: 10/10/2013 17:14	Laboratory ID: 3101016-01 % Solid:90.12
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MDL	LOQ	Result	Units	Flag
Arsenic	10/14/2013	EPA 6010 C	0.18	1.73	8.87	mg/kg dry	

Date Prepared: 10/11/2013

Preparation Method: EPA 3050B

Analytical Method: EPA 6010 C

Data Qualifiers Key Reference:

MDL Minimum Detection Limit

LOQ Limit of Quantitation

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"
110 Colin Drive • Holbrook, New York 11741 • Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

(15)

CLIENT NAME/ADDRESS: NBV 572 West Merrick Rd. Valley Stream NY 11580	CONTACT: Eric Dean	SAMPLER (SIGNATURE)	SAMPLE(S) SEALED: YES / NO
	PHONE: 427-5665	SAMPLER NAME (PRINT): Eric Dean	CORRECT CONTAINER(S): YES / NO
	FAX:		L 3101016

PROJECT LOCATION: St. Ignatius

SAMPLES RECEIVED AT: 1.7 °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: As Stnd	# OF CONTAINERS
1. 3101016-01	S	G	~	~	20	10/10/13	3:37	Surface Soil	X	1
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										

(3)

RUSH!

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 10 / 15 / 13

COMMENTS / INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
	10/10/13 5:15	Eric Dean			
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	10-10-13 5:15pm	Ben Lamberton

WHITE - OFFICE / CANARY - SAMPLE CUSTODIAN / PINK - CLIENT