

Limited Phase II

Environmental Site Assessment

Lau Property

Hempstead, New York

NP&V Job# 15202

November 5, 2015

Limited Phase II

Environmental Site Assessment

Lau Property

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Environmental Site Assessment

Lau Property

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Limited Phase II
Environmental Site Assessment
Lau Property

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 October 16, 2015. The Phase I ESA was performed in accordance with the standards detailed by the American Society of Testing and Materials (ASTM) for the Performance of a Phase I Environmental Site Assessment (E 1527). This Limited Phase II ESA was designed to determine what, if any, impact on-site activities have had upon the environmental quality of the subject property.

The subject property is located in the Village of Hempstead, County of Nassau, New York. The property is identified more specifically as Nassau County Tax Number: Section 34, Block 195, Lots 8 through 9, 111, 116 and 131. The ±1.25 acre parcel is located on the southwest corner of Main Street and Bedell Street. The subject property is located within an area developed with residential and commercial uses as well as municipal parking lots.

The subject property is currently utilized for commercial, retail and services purposes. The northern half of the property is used as a parking area for overstock vehicles for a nearby automobile dealership, and the southeastern portion of the property is occupied by a commercial retail strip center. The strip center is occupied by several restaurants, a laundromat, a billiard parlor, a wireless store, a hair salon, a check cashing service center and a vacant store front. The southwestern portion of the property is occupied by an asphalt parking lot associated with the commercial strip center.

The building consists of a one story masonry structure situated on a concrete block foundation that forms a full basement and has a rolled rubber roof. The building exterior is covered with decorative stone, aluminum siding and painted concrete block. The interior of the building consists of painted sheetrock walls and ceilings with stone, vinyl tiled and wood covered floors.

The building is heated by natural gas fired boilers and air conditioning units. A ceiling mounted gas fired Reznor heater was observed in the unit occupied by the laundromat.

No evidence of any storage tanks was observed during the reconnaissance of the subject property. A 1,000 gallon underground storage tank was formerly located in the northwestern portion of the property. According to Mr. Lau (property owner), this tank was removed in 2015 along with several tons of contaminated soil. No drums were observed during the reconnaissance of the subject property.

Several floor drains were observed in the basement of the building; these floor drains discharge directly to the subsurface. In addition, several open grate stormwater drainage features were observed in the paved parking area during the reconnaissance of the subject property.

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

1. There are two (2) floor drains that discharge directly to the subsurface. Based on observations during the site reconnaissance former discharges may have adversely impacted subsurface soils.
2. The open grate stormwater leaching pools located in the parking areas of the subject property should be sampled to ensure that none of the structures are contaminated

This assessment has been designed and performed by NP&V to address the potential impacts to two (2) on-site floor drains and three (3) stormwater 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 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 three (3) stormwater leaching pools located in the paved parking area on the west side of the building and the two (2) floor drains located in the basement on the east and west side of the building were sampled using a stainless steel hand auger. The soil samples (LP-1 thru LP-3, FD-1 and FD-2) were collected from the bottom sediment soil of the leaching pools and floor drains. These samples was collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the New York State Department of Environmental Conservation (NYSDEC) parameters for the presence of volatile and semi-volatile organic compounds and metals as set forth in Part 375. **Figure 1** located at the end of this document provides a location map of the samples collected.

2.2 LABORATORY SAMPLE LOCATION AND FREQUENCY

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

TABLE 1
SAMPLE IDENTIFICATION

SAMPLE LOCATION	SAMPLE ID CODE
Soil sample collected from stormwater leaching pool located in the western portion of the parking area on the west side of the building	LP-1
Soil sample collected from stormwater leaching pool located in the southern portion of the parking area on the west side of the building.	LP-2
Soil sample collected from stormwater leaching pool located in the northern portion of the parking area on the west side of the building.	LP-3
Soil sample collected from the floor drain at the bottom of the stairs on the west side of the building.	FD-1
Soil sample collected from the floor drain at the bottom of the stairs on the east side of the building.	FD-2

3.0 LABORATORY ANALYSIS

3.1 ANALYTICAL TEST METHODS

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

3.2 ANALYTICAL RESULTS

The laboratory analysis performed on the three (3) leaching pool and two (2) floor drain samples did not exhibit any elevated concentrations of volatile organic compounds. Several of the analyzed semi-volatile organic compounds and metals 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**, some of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceed the NYSDEC guidance values, it is recommended that LP-1, LP-2, FD-1 and FD-2 be remediated under the auspices of United States Environmental Protection Agency (USEPA) personnel.

TABLE 2
COMPARISON ANALYSIS

Constituents	LP-1	LP-2	LP-3	FD-1	FD-2	6 NYCRR Part 375 Protection of Groundwater
Semi-Volatiles	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	ND	ND	ND	ND	954	NS
Fluorene	3,000	ND	ND	ND	ND	386,000
Phenanthrene	37,900	ND	ND	1,000	ND	1,000,000
Anthracene	5,730	ND	ND	ND	ND	1,000,000
Fluoranthene	92,300	1,010	ND	2,860	782	1,000,000
Pyrene	67,000	ND	ND	2,160	ND	1,000,000
Benzo(a)anthracene	39,200	ND	ND	1,360	ND	1,000
Chrysene	57,900	ND	ND	3,180	ND	1,000
Benzo(b)fluoranthene	39,600	1,090	ND	4,520	1,050	1,700
Benzo(k)fluoranthene	20,600	ND	ND	2,350	ND	800
Benzo(a)pyrene	28,600	1,010	ND	3,420	788	22,000
Indeno(1,2,3-cd)pyrene	32,400	867	ND	2,840	ND	8,200
Dibenzo(a,h)anthracene	11,600	ND	ND	1,120	ND	1,000,000
Benzo(g,h,i)perylene	35,900	908	ND	3,050	ND	1,000,000
Volatiles	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene Chloride	ND	ND	ND	8.10	ND	50
Chloroform	ND	ND	ND	ND	73.5	370
Toluene	30.8	ND	ND	ND	ND	700
Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	2.27	2.88	8.99	4.02	17.2	16
Barium	25.4	27.0	21.8	123	262	820
Cadmium	ND	ND	ND	2.54	36.8	7.5
Chromium	27.4	19.6	15.6	150	67.9	19
Copper	72.9	43.5	68.0	245	1,260	1,720
Lead	79.2	87.4	40.4	163	1,340	450
Manganese	74.0	59.9	130	189	344	2,000
Nickel	12.6	11.6	13.0	19.6	55.9	130
Zinc	289	294	631	704	3,720	2,480
Mercury	0.03	0.10	0.03	0.26	11.7	0.73

ND - Not Detected

NS - No Standard

Bold and highlighted indicates the constituent exceeds the regulatory guidance values

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

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

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

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

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

Sample Identification

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

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

Chain-of-Custody Procedures

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

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

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

Laboratory Custody Procedures

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

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

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

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

5.0 SUMMARY AND CONCLUSION

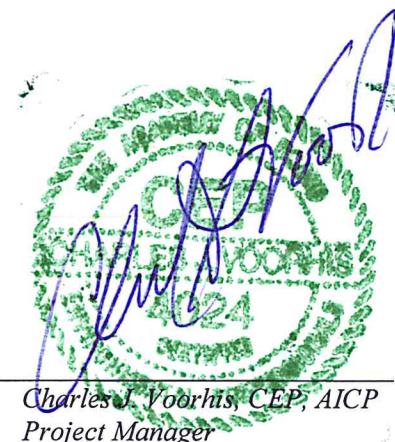
This investigation was completed to address issues raised in a prior Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the on-site stormwater leaching pools and basement floor drains had been impacted by the prior and existing uses of the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

1. Three (3) stormwater leaching pools located in the paved parking area on the west side of the building and two (2) floor drains located in the basement on the east and west sides of the building were sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed semi-volatile and metal constituents exhibited elevated concentrations. Several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC. Since these concentrations exceed the NYSDEC guidance values, it is recommended that LP-1, LP-2, FD-1 and FD-2 be remediated under the auspices of USEPA personnel.

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

11/5/15

Date of Completion



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

6.0 REFERENCES

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

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

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

FIGURES



FIGURE 1
LOCATION MAP

Nelson Pope & Vooring, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

Source: NYS Orthophraphy, 2013
Scale: 1 inch = 50 feet



**Lau Property
Village of
Hempstead**

Limited Phase II ESA

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

Laboratory Report

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

LIAL# 5102702

November 03, 2015

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

Re: Lau Property

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on October 26, 2015. Long Island Analytical laboratories analyzed the samples on November 03, 2015 for the following:

SAMPLE ID	ANALYSIS
LP-1	NYC Part 375 Package
LP-2	NYC Part 375 Package
LP-3	NYC Part 375 Package
FD-1	NYC Part 375 Package
FD-2	NYC Part 375 Package

Samples received at 2.5 °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: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	14.1	<14.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	14.1	<14.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	14.1	<14.1	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	14.1	<14.1	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	35.3	<35.3	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	14.1	<14.1	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	14.1	<14.1	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	35.3	<35.3	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	35.3	<35.3	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	141	<141	ug/kg dry	3.A, 5.L
Acetone	67-64-1	141	<141	ug/kg dry	3.A, 5.L
Benzene	71-43-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	14.1	<14.1	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	14.1	<14.1	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	14.1	<14.1	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	14.1	<14.1	ug/kg dry	5.L, 3.A
m,p-Xylenes	108-38-3/106-42-3	28.2	<28.2	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	28.2	<28.2	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	14.1	<14.1	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	35.3	<35.3	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	14.1	<14.1	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	14.1	<14.1	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	14.1	<14.1	ug/kg dry	5.L, 3.A
tert-Butylbenzene	98-06-6	14.1	<14.1	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	14.1	<14.1	ug/kg dry	3.A, 5.L
Toluene	108-88-3	14.1	30.8	ug/kg dry	3.E, 5.L
trans-1,2-Dichloroethylene	156-60-5	14.1	<14.1	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	14.1	<14.1	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	14.1	<14.1	ug/kg dry	3.A, 4.J, 5.L
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
1,2-Dichloroethane-d4	10706-07-0	74	74.4-131	4.L	
4-Bromofluorobenzene	460-00-4	121	82.3-134		
Dibromofluoromethane	1868-53-7	90	79.4-122		
Toluene-d8	2037-26-5	115	85-123		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
1,4-Dichlorobenzene-d4	3855-82-1	70	50-200		
1,4-Difluorobenzene	540-36-3	117	50-200		
Chlorobenzene-d5	3114-55-4	86	50-200		
Pentafluorobenzene	363-72-4	121	50-200		

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	2120	<2120	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	2120	<2120	ug/kg dry	3.A
Acenaphthene	83-32-9	2120	<2120	ug/kg dry	3.E
Acenaphthylene	208-96-8	2120	<2120	ug/kg dry	3.A
Anthracene	120-12-7	2120	5730	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	2120	39200	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	2120	28600	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	2120	39600	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	2120	35900	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	2120	20600	ug/kg dry	3.E
Chrysene	218-01-9	2120	57900	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	2120	11600	ug/kg dry	3.E
Dibenzofuran	132-64-9	2120	<2120	ug/kg dry	3.A
Fluoranthene	206-44-0	21200	92300	ug/kg dry	3.E
Fluorene	86-73-7	2120	3000	ug/kg dry	3.E
Hexachlorobenzene	118-74-1	2120	<2120	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	2120	32400	ug/kg dry	3.E
Naphthalene	91-20-3	2120	<2120	ug/kg dry	3.A
Pentachlorophenol	87-86-5	2120	<2120	ug/kg dry	3.A
Phenanthrene	85-01-8	2120	37900	ug/kg dry	3.E
Phenol	108-95-2	2120	<2120	ug/kg dry	3.A
Pyrene	129-00-0	21200	67000	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	111	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	74	34.39-110.73	3.E
2-Fluorophenol	367-12-4	94	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	90	31-118.25	3.E
Phenol-d6	13127-88-3	92	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	110	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	97	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	70	50-200	
Chrysene-d12	1719-03-5	100	50-200	
Naphthalene-d8	1146-65-2	91	50-200	
Perylene-d12	1520-96-3	71	50-200	
Phenanthrene-d10	1517-22-2	86	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.24	<4.24	ug/kg dry	
4,4'-DDE	72-55-9	4.24	<4.24	ug/kg dry	
4,4'-DDT	50-29-3	4.24	<4.24	ug/kg dry	
Aldrin	309-00-2	7.06	<7.06	ug/kg dry	
alpha-BHC	319-84-6	7.06	<7.06	ug/kg dry	
beta-BHC	319-85-7	7.06	<7.06	ug/kg dry	
cis-Chlordane	5103-71-9	7.06	<7.06	ug/kg dry	
delta-BHC	319-86-8	7.06	<7.06	ug/kg dry	
Dieldrin	60-57-1	7.06	<7.06	ug/kg dry	
Endosulfan I	959-98-8	7.06	<7.06	ug/kg dry	
Endosulfan II	33213-65-9	7.06	<7.06	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.06	<7.06	ug/kg dry	
Endrin	72-20-8	7.06	<7.06	ug/kg dry	
gamma-BHC	58-89-9	7.06	<7.06	ug/kg dry	
Heptachlor	76-44-8	7.06	<7.06	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	246	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	81	83.1-126	4.D

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	84	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.1	<14.1	ug/kg dry	
Aroclor-1221	11104-28-2	14.1	<14.1	ug/kg dry	
Aroclor-1232	11141-16-5	14.1	<14.1	ug/kg dry	
Aroclor-1242	53469-21-9	14.1	<14.1	ug/kg dry	
Aroclor-1248	12672-29-6	14.1	<14.1	ug/kg dry	
Aroclor-1254	11097-69-1	14.1	<14.1	ug/kg dry	
Aroclor-1260	11096-82-5	14.1	<14.1	ug/kg dry	
Aroclor-1262	37324-23-5	14.1	<14.1	ug/kg dry	
Aroclor-1268	11100-14-4	14.1	<14.1	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	67	43.5-123	
Tetrachloro-m-xylene	877-09-8	72	72.3-118	4.D

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	112	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	35	<35	ug/kg dry	
Surrogate	CAS No.	% Recovery	Rec. Limits		Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	46	21.5-137		
Internal Standard	CAS No.	% Recovery	Rec. Limits		Flag
4,4'-Dibromooccafluorobiphenyl	10386-84-2	92	50-200		

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.83	2.27	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.83	25.4	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.83	27.4	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.83	72.9	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.83	79.2	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.83	74.0	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.83	12.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Zinc	10/27/2015	EPA 6010 C	1.83	289	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.03	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	14.2	<14.2	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	14.2	<14.2	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	14.2	<14.2	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	14.2	<14.2	ug/kg dry	5.L, 3.A
1,2-Dichlorobenzene	95-50-1	14.2	<14.2	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	14.2	<14.2	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
1,3-Dichlorobenzene	541-73-1	14.2	<14.2	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	14.2	<14.2	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	142	<142	ug/kg dry	3.A, 5.L
Acetone	67-64-1	142	<142	ug/kg dry	5.L, 3.A
Benzene	71-43-2	14.2	<14.2	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	14.2	<14.2	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	14.2	<14.2	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	14.2	<14.2	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	14.2	<14.2	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	14.2	<14.2	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	28.4	<28.4	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	28.4	<28.4	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	14.2	<14.2	ug/kg dry	4.G, 4.T, 5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	14.2	<14.2	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	14.2	<14.2	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	14.2	<14.2	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	14.2	<14.2	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
tert-Butylbenzene	98-06-6	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
Tetrachloroethylene	127-18-4	14.2	<14.2	ug/kg dry	3.A, 5.L
Toluene	108-88-3	14.2	<14.2	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	14.2	<14.2	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	14.2	<14.2	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	14.2	<14.2	ug/kg dry	3.A, 4.G, 4.J, 5.L
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
1,2-Dichloroethane-d4	10706-07-0	72	74.4-131	4.L	
4-Bromofluorobenzene	460-00-4	127	82.3-134		
Dibromofluoromethane	1868-53-7	88	79.4-122		
Toluene-d8	2037-26-5	107	85-123		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
1,4-Dichlorobenzene-d4	3855-82-1	70	50-200		
1,4-Difluorobenzene	540-36-3	123	50-200		
Chlorobenzene-d5	3114-55-4	107	50-200		
Pentafluorobenzene	363-72-4	128	50-200		

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	853	<853	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	853	<853	ug/kg dry	3.A
Acenaphthene	83-32-9	853	<853	ug/kg dry	3.A
Acenaphthylene	208-96-8	853	<853	ug/kg dry	3.A
Anthracene	120-12-7	853	<853	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	853	<853	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	853	1010	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	853	1090	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	853	908	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	853	<853	ug/kg dry	3.A
Chrysene	218-01-9	853	<853	ug/kg dry	3.A
Dibenz(a,h)anthracene	53-70-3	853	<853	ug/kg dry	3.A
Dibenzofuran	132-64-9	853	<853	ug/kg dry	3.A
Fluoranthene	206-44-0	853	1010	ug/kg dry	3.E
Fluorene	86-73-7	853	<853	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	853	<853	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	853	867	ug/kg dry	3.E
Naphthalene	91-20-3	853	<853	ug/kg dry	3.A
Pentachlorophenol	87-86-5	853	<853	ug/kg dry	3.A
Phenanthrene	85-01-8	853	<853	ug/kg dry	3.A
Phenol	108-95-2	853	<853	ug/kg dry	3.A
Pyrene	129-00-0	853	<853	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	99	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	73	34.39-110.73	3.E
2-Fluorophenol	367-12-4	79	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	78	31-118.25	3.E
Phenol-d6	13127-88-3	83	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	92	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	109	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	81	50-200	
Chrysene-d12	1719-03-5	77	50-200	
Naphthalene-d8	1146-65-2	116	50-200	
Perylene-d12	1520-96-3	104	50-200	
Phenanthrene-d10	1517-22-2	76	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.27	55.6	ug/kg dry	
4,4'-DDE	72-55-9	4.27	<4.27	ug/kg dry	
4,4'-DDT	50-29-3	4.27	<4.27	ug/kg dry	
Aldrin	309-00-2	7.11	<7.11	ug/kg dry	
alpha-BHC	319-84-6	7.11	<7.11	ug/kg dry	
beta-BHC	319-85-7	7.11	<7.11	ug/kg dry	
cis-Chlordane	5103-71-9	7.11	477	ug/kg dry	
delta-BHC	319-86-8	7.11	<7.11	ug/kg dry	
Dieldrin	60-57-1	7.11	<7.11	ug/kg dry	
Endosulfan I	959-98-8	7.11	<7.11	ug/kg dry	
Endosulfan II	33213-65-9	7.11	<7.11	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.11	<7.11	ug/kg dry	
Endrin	72-20-8	7.11	<7.11	ug/kg dry	
gamma-BHC	58-89-9	7.11	<7.11	ug/kg dry	
Heptachlor	76-44-8	7.11	94.9	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	94	62.3-146	
Tetrachloro-m-xylene	877-09-8	96	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	109	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.2	<14.2	ug/kg dry	
Aroclor-1221	11104-28-2	14.2	<14.2	ug/kg dry	
Aroclor-1232	11141-16-5	14.2	<14.2	ug/kg dry	
Aroclor-1242	53469-21-9	14.2	<14.2	ug/kg dry	
Aroclor-1248	12672-29-6	14.2	<14.2	ug/kg dry	
Aroclor-1254	11097-69-1	14.2	<14.2	ug/kg dry	
Aroclor-1260	11096-82-5	14.2	<14.2	ug/kg dry	
Aroclor-1262	37324-23-5	14.2	<14.2	ug/kg dry	
Aroclor-1268	11100-14-4	14.2	<14.2	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	73	43.5-123	
Tetrachloro-m-xylene	877-09-8	87	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	115	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	36	<36	ug/kg dry	
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
2,4-Dichlorophenylacetic Acid	19719-28-9	47	21.5-137		

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromooccafluorobiphenyl	10386-84-2	97	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.77	2.88	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.77	27.0	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.77	19.6	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.77	43.5	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.77	87.4	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.77	59.9	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.77	11.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Zinc	10/27/2015	EPA 6010 C	1.77	294	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.10	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	32.4	<32.4	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	32.4	<32.4	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	32.4	<32.4	ug/kg dry	5.L, 3.A
1,3,5-Trimethylbenzene	108-67-8	32.4	<32.4	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	32.4	<32.4	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	32.4	<32.4	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	324	<324	ug/kg dry	3.A, 5.L
Acetone	67-64-1	324	<324	ug/kg dry	3.A, 5.L
Benzene	71-43-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	32.4	<32.4	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	32.4	<32.4	ug/kg dry	5.L, 3.A
Chloroform	67-66-3	32.4	<32.4	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	32.4	<32.4	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	64.8	<64.8	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	64.8	<64.8	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	32.4	<32.4	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	32.4	<32.4	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	32.4	<32.4	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	32.4	<32.4	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	32.4	<32.4	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	32.4	<32.4	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	32.4	<32.4	ug/kg dry	3.A, 5.L
Toluene	108-88-3	32.4	<32.4	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	32.4	<32.4	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	32.4	<32.4	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	32.4	<32.4	ug/kg dry	3.A, 4.J, 5.L
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
1,2-Dichloroethane-d4	10706-07-0	71	74.4-131	4.L	
4-Bromofluorobenzene	460-00-4	114	82.3-134		
Dibromofluoromethane	1868-53-7	86	79.4-122		
Toluene-d8	2037-26-5	102	85-123		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
1,4-Dichlorobenzene-d4	3855-82-1	93	50-200		
1,4-Difluorobenzene	540-36-3	125	50-200		
Chlorobenzene-d5	3114-55-4	117	50-200		
Pentafluorobenzene	363-72-4	132	50-200		

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

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

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	73	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	47	34.39-110.73	3.E
2-Fluorophenol	367-12-4	55	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	56	31-118.25	3.E
Phenol-d6	13127-88-3	63	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	88	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	120	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	86	50-200	
Chrysene-d12	1719-03-5	111	50-200	
Naphthalene-d8	1146-65-2	112	50-200	
Perylene-d12	1520-96-3	125	50-200	
Phenanthrene-d10	1517-22-2	82	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	3.89	<3.89	ug/kg dry	
4,4'-DDE	72-55-9	3.89	<3.89	ug/kg dry	
4,4'-DDT	50-29-3	3.89	<3.89	ug/kg dry	
Aldrin	309-00-2	6.48	<6.48	ug/kg dry	
alpha-BHC	319-84-6	6.48	<6.48	ug/kg dry	
beta-BHC	319-85-7	6.48	<6.48	ug/kg dry	
cis-Chlordane	5103-71-9	6.48	<6.48	ug/kg dry	
delta-BHC	319-86-8	6.48	<6.48	ug/kg dry	
Dieldrin	60-57-1	6.48	<6.48	ug/kg dry	
Endosulfan I	959-98-8	6.48	<6.48	ug/kg dry	
Endosulfan II	33213-65-9	6.48	<6.48	ug/kg dry	
Endosulfan Sulfate	1031-07-8	6.48	<6.48	ug/kg dry	
Endrin	72-20-8	6.48	<6.48	ug/kg dry	
gamma-BHC	58-89-9	6.48	<6.48	ug/kg dry	
Heptachlor	76-44-8	6.48	<6.48	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	282	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	87	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	80	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	13.0	<13.0	ug/kg dry	
Aroclor-1221	11104-28-2	13.0	<13.0	ug/kg dry	
Aroclor-1232	11141-16-5	13.0	<13.0	ug/kg dry	
Aroclor-1242	53469-21-9	13.0	<13.0	ug/kg dry	
Aroclor-1248	12672-29-6	13.0	<13.0	ug/kg dry	
Aroclor-1254	11097-69-1	13.0	<13.0	ug/kg dry	
Aroclor-1260	11096-82-5	13.0	<13.0	ug/kg dry	
Aroclor-1262	37324-23-5	13.0	<13.0	ug/kg dry	
Aroclor-1268	11100-14-4	13.0	<13.0	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	98	43.5-123	
Tetrachloro-m-xylene	877-09-8	88	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	102	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	32	<32	ug/kg dry	
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
2,4-Dichlorophenylacetic Acid	19719-28-9	68	21.5-137		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
4,4'-Dibromooccafluorobiphenyl	10386-84-2	109	50-200		

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.67	8.99	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.64	21.8	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.65	<1.65	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.67	15.6	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.67	68.0	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.67	40.4	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.67	130	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.67	13.0	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	16.4	631	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.03	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	7.36	<7.36	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	7.36	<7.36	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	7.36	<7.36	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	7.36	<7.36	ug/kg dry	5.L
1,2-Dichlorobenzene	95-50-1	36.8	<36.8	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	7.36	<7.36	ug/kg dry	5.L
1,3,5-Trimethylbenzene	108-67-8	7.36	<7.36	ug/kg dry	5.L
1,3-Dichlorobenzene	541-73-1	36.8	<36.8	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	36.8	<36.8	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	73.6	<73.6	ug/kg dry	5.L
Acetone	67-64-1	73.6	<73.6	ug/kg dry	5.L
Benzene	71-43-2	7.36	<7.36	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	7.36	<7.36	ug/kg dry	5.L
Chlorobenzene	108-90-7	7.36	<7.36	ug/kg dry	5.L
Chloroform	67-66-3	7.36	<7.36	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	7.36	<7.36	ug/kg dry	5.L
Ethylbenzene	100-41-4	7.36	<7.36	ug/kg dry	5.L
m,p-Xylenes	108-38-3/106-42-3	14.7	<14.7	ug/kg dry	5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	14.7	<14.7	ug/kg dry	5.L
Methylene Chloride	75-09-2	7.36	8.10	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	7.36	<7.36	ug/kg dry	5.L
n-Butylbenzene	104-51-8	36.8	<36.8	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	7.36	<7.36	ug/kg dry	5.L
o-Xylene	95-47-6	7.36	<7.36	ug/kg dry	5.L
sec-Butylbenzene	135-98-8	7.36	<7.36	ug/kg dry	5.L
tert-Butylbenzene	98-06-6	7.36	<7.36	ug/kg dry	5.L
Tetrachloroethylene	127-18-4	7.36	<7.36	ug/kg dry	5.L
Toluene	108-88-3	7.36	<7.36	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	7.36	<7.36	ug/kg dry	5.L
Trichloroethylene	79-01-6	7.36	<7.36	ug/kg dry	5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	7.36	<7.36	ug/kg dry	4.J, 5.L
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
1,2-Dichloroethane-d4	10706-07-0	74	74.4-131	4.L	
4-Bromofluorobenzene	460-00-4	116	82.3-134		
Dibromofluoromethane	1868-53-7	84	79.4-122		
Toluene-d8	2037-26-5	116	85-123		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
1,4-Dichlorobenzene-d4	3855-82-1	61	50-200		
1,4-Difluorobenzene	540-36-3	106	50-200		
Chlorobenzene-d5	3114-55-4	80	50-200		
Pentafluorobenzene	363-72-4	116	50-200		

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	662	<662	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	662	<662	ug/kg dry	3.A
Acenaphthene	83-32-9	662	<662	ug/kg dry	3.A
Acenaphthylene	208-96-8	662	<662	ug/kg dry	3.A
Anthracene	120-12-7	662	<662	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	662	1360	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	662	3420	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	662	4520	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	662	3050	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	662	2350	ug/kg dry	3.E
Chrysene	218-01-9	662	3180	ug/kg dry	3.E
Dibenz(a,h)anthracene	53-70-3	662	1120	ug/kg dry	3.E
Dibenzofuran	132-64-9	662	<662	ug/kg dry	3.A
Fluoranthene	206-44-0	662	2860	ug/kg dry	3.E
Fluorene	86-73-7	662	<662	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	662	<662	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	662	2840	ug/kg dry	3.E
Naphthalene	91-20-3	662	<662	ug/kg dry	3.A
Pentachlorophenol	87-86-5	662	<662	ug/kg dry	3.A
Phenanthrene	85-01-8	662	1000	ug/kg dry	3.E
Phenol	108-95-2	662	<662	ug/kg dry	3.A
Pyrene	129-00-0	662	2160	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	47	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	41	34.39-110.73	3.E
2-Fluorophenol	367-12-4	35	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	39	31-118.25	3.E
Phenol-d6	13127-88-3	41	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	32	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	117	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	116	50-200	
Chrysene-d12	1719-03-5	75	50-200	
Naphthalene-d8	1146-65-2	122	50-200	
Perylene-d12	1520-96-3	76	50-200	
Phenanthrene-d10	1517-22-2	110	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.42	<4.42	ug/kg dry	
4,4'-DDE	72-55-9	4.42	20.3	ug/kg dry	
4,4'-DDT	50-29-3	4.42	32.3	ug/kg dry	
Aldrin	309-00-2	7.36	<7.36	ug/kg dry	
alpha-BHC	319-84-6	7.36	<7.36	ug/kg dry	
beta-BHC	319-85-7	7.36	<7.36	ug/kg dry	
cis-Chlordane	5103-71-9	7.36	34.4	ug/kg dry	
delta-BHC	319-86-8	7.36	<7.36	ug/kg dry	
Dieldrin	60-57-1	7.36	<7.36	ug/kg dry	
Endosulfan I	959-98-8	7.36	<7.36	ug/kg dry	
Endosulfan II	33213-65-9	7.36	<7.36	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.36	<7.36	ug/kg dry	
Endrin	72-20-8	7.36	<7.36	ug/kg dry	
gamma-BHC	58-89-9	7.36	<7.36	ug/kg dry	
Heptachlor	76-44-8	7.36	<7.36	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	399	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	88	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	116	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.7	<14.7	ug/kg dry	
Aroclor-1221	11104-28-2	14.7	<14.7	ug/kg dry	
Aroclor-1232	11141-16-5	14.7	<14.7	ug/kg dry	
Aroclor-1242	53469-21-9	14.7	<14.7	ug/kg dry	
Aroclor-1248	12672-29-6	14.7	<14.7	ug/kg dry	
Aroclor-1254	11097-69-1	14.7	<14.7	ug/kg dry	
Aroclor-1260	11096-82-5	14.7	<14.7	ug/kg dry	
Aroclor-1262	37324-23-5	14.7	<14.7	ug/kg dry	
Aroclor-1268	11100-14-4	14.7	<14.7	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	72	43.5-123	
Tetrachloro-m-xylene	877-09-8	89	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	107	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	37	<37	ug/kg dry	
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
2,4-Dichlorophenylacetic Acid	19719-28-9	70	21.5-137		

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromooccafluorobiphenyl	10386-84-2	113	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	2.04	4.02	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	2.04	123	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	2.04	2.54	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	2.04	150	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	2.04	245	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	2.04	163	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	2.04	189	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	2.04	19.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	20.4	704	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.26	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	42.0	<42.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	42.0	<42.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	42.0	<42.0	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	42.0	<42.0	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	42.0	<42.0	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	42.0	<42.0	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	420	<420	ug/kg dry	3.A, 5.L
Acetone	67-64-1	420	<420	ug/kg dry	3.A, 5.L
Benzene	71-43-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	42.0	<42.0	ug/kg dry	5.L, 3.A
Chlorobenzene	108-90-7	42.0	<42.0	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	42.0	73.5	ug/kg dry	3.E, 5.L
cis-1,2-Dichloroethylene	156-59-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	42.0	<42.0	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	84.1	<84.1	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	84.1	<84.1	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	42.0	<42.0	ug/kg dry	5.L, 3.A
n-Butylbenzene	104-51-8	42.0	<42.0	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	42.0	<42.0	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	42.0	<42.0	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	42.0	<42.0	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	42.0	<42.0	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	42.0	<42.0	ug/kg dry	3.A, 5.L
Toluene	108-88-3	42.0	<42.0	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	42.0	<42.0	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	42.0	<42.0	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	42.0	<42.0	ug/kg dry	3.A, 4.J, 5.L
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
1,2-Dichloroethane-d4	10706-07-0	77	74.4-131		
4-Bromofluorobenzene	460-00-4	126	82.3-134		
Dibromofluoromethane	1868-53-7	92	79.4-122		
Toluene-d8	2037-26-5	107	85-123		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
1,4-Dichlorobenzene-d4	3855-82-1	60	50-200		
1,4-Difluorobenzene	540-36-3	110	50-200		
Chlorobenzene-d5	3114-55-4	92	50-200		
Pentafluorobenzene	363-72-4	115	50-200		

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	757	<757	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	757	<757	ug/kg dry	3.A
Acenaphthene	83-32-9	757	<757	ug/kg dry	3.A
Acenaphthylene	208-96-8	757	<757	ug/kg dry	3.A
Anthracene	120-12-7	757	<757	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	757	<757	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	757	788	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	757	1050	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	757	<757	ug/kg dry	3.A
Benzo(k)fluoranthene	207-08-9	757	<757	ug/kg dry	3.A
Chrysene	218-01-9	757	<757	ug/kg dry	3.A
Dibenz(a,h)anthracene	53-70-3	757	<757	ug/kg dry	3.A
Dibenzofuran	132-64-9	757	<757	ug/kg dry	3.A
Fluoranthene	206-44-0	757	782	ug/kg dry	3.E
Fluorene	86-73-7	757	<757	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	757	<757	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	757	<757	ug/kg dry	3.A
Naphthalene	91-20-3	757	<757	ug/kg dry	3.A
Pentachlorophenol	87-86-5	757	<757	ug/kg dry	3.A
Phenanthrene	85-01-8	757	<757	ug/kg dry	3.A
Phenol	108-95-2	757	954	ug/kg dry	3.E
Pyrene	129-00-0	757	<757	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	103	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	61	34.39-110.73	3.E
2-Fluorophenol	367-12-4	72	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	82	31-118.25	3.E
Phenol-d6	13127-88-3	81	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	92	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	116	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	79	50-200	
Chrysene-d12	1719-03-5	103	50-200	
Naphthalene-d8	1146-65-2	114	50-200	
Perylene-d12	1520-96-3	116	50-200	
Phenanthrene-d10	1517-22-2	76	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	5.05	606	ug/kg dry	
4,4'-DDE	72-55-9	5.05	230	ug/kg dry	
4,4'-DDT	50-29-3	5.05	56.6	ug/kg dry	
Aldrin	309-00-2	8.41	<8.41	ug/kg dry	
alpha-BHC	319-84-6	8.41	<8.41	ug/kg dry	
beta-BHC	319-85-7	8.41	<8.41	ug/kg dry	
cis-Chlordane	5103-71-9	8.41	552	ug/kg dry	4.G
delta-BHC	319-86-8	8.41	<8.41	ug/kg dry	
Dieldrin	60-57-1	8.41	<8.41	ug/kg dry	
Endosulfan I	959-98-8	8.41	<8.41	ug/kg dry	
Endosulfan II	33213-65-9	8.41	<8.41	ug/kg dry	
Endosulfan Sulfate	1031-07-8	8.41	<8.41	ug/kg dry	4.G
Endrin	72-20-8	8.41	<8.41	ug/kg dry	
gamma-BHC	58-89-9	8.41	14.9	ug/kg dry	
Heptachlor	76-44-8	8.41	<8.41	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	1890	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	88	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	109	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	16.8	<16.8	ug/kg dry	
Aroclor-1221	11104-28-2	16.8	<16.8	ug/kg dry	
Aroclor-1232	11141-16-5	16.8	<16.8	ug/kg dry	
Aroclor-1242	53469-21-9	16.8	<16.8	ug/kg dry	
Aroclor-1248	12672-29-6	16.8	<16.8	ug/kg dry	
Aroclor-1254	11097-69-1	16.8	<16.8	ug/kg dry	
Aroclor-1260	11096-82-5	16.8	<16.8	ug/kg dry	4.G
Aroclor-1262	37324-23-5	16.8	<16.8	ug/kg dry	
Aroclor-1268	11100-14-4	16.8	<16.8	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	81	43.5-123	
Tetrachloro-m-xylene	877-09-8	100	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	92	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	42	<42	ug/kg dry	
Surrogate	CAS No.	% Recovery	Rec. Limits	Flag	
2,4-Dichlorophenylacetic Acid	19719-28-9	73	21.5-137		
Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag	
4,4'-Dibromooccafluorobiphenyl	10386-84-2	120	50-200		

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	2.29	17.2	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	2.29	262	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	2.29	36.8	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	2.29	67.9	mg/kg dry	
Copper	10/28/2015	EPA 6010 C	22.9	1260	mg/kg dry	3.E
Lead	10/28/2015	EPA 6010 C	22.9	1340	mg/kg dry	3.E
Manganese	10/27/2015	EPA 6010 C	2.29	344	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	2.29	55.9	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	22.9	3720	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	2.25	11.7	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 4.D Surrogate recovery has failed low.
- 4.E Surrogate recovery has failed high.
- 4.G Spike recovery out of range due to matrix interference.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.L Surrogate recovery is outside the acceptance criteria.
- 4.T Sample Matrix Spike/Spike Dup RPD is above acceptable range.
- 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

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS 572 W. Main Rd Malville, N.Y. 11747		CONTACT: Steve McLean	SAMPLER/SIGNATURE: Steve McLean	SAMPLE(S) SEALED YES / NO	5102702			
		PHONE: 427-5665	SAMPLER NAME (PRINT) Jonathan McLean	NUMBER OF CONTAINERS 2				
		FAX:		YES / NO				
PROJECT LOCATION: Lau Pipe Dry		EMAIL:						
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	CHLORINE PRES.	DATE	SAMPLE # LOCATION			
					#	TIME		
1. S (2) H2O	S	ICE	ICE	10/26/15 1:20	LP-1	X		
2. O/L	S	ICE	ICE	10/26/15 1:36	LP-2	X		
3. O/3	S	ICE	ICE	10/26/15 2:00	LP-3	X		
4. O/4	S	D/E	D/E	10/26/15 2:10	FD-4	X		
5. O/5	S	ICE	ICE	10/26/15 2:20	FD-2	X		
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 ₂ SO ₄ ; (4) NAOH; (5) Na ₂ S ₃ O ₃ ; (6) HNO ₃ ; (7) OTHER				TURNAROUND REQUIRED: <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> STAT	COMMENTS / INSTRUCTIONS No Hexachloro or cyanide			
RELINQUISHED BY (SIGNATURE) Steve McLean				DATE 10/26/15	PRINTED NAME Jonathan McLean	RECEIVED BY (SIGNATURE) Ben Lamberson	DATE 10/26/15	PRINTED NAME Ben Lamberson
RELINQUISHED BY (SIGNATURE) Steve McLean				DATE 10/26/15	PRINTED NAME Steve McLean	RECEIVED BY SAMPLE CUSTODIAN Ben Lamberson	DATE 10/26/15	PRINTED NAME Ben Lamberson
WHITE - OFFICE / CANARY - SAMPLE CUSTODIAN / PINK - CLIENT NYSDOH ELAP# 11693 USEPA# NY01273 CTDOH# PH-0284 NJDEP# NY012 PADEP# 68-2943								