

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

CONDUCTED FOR:

PELICAN NURSERY
SOUTHEAST CORNER OF COLLIER
BOULEVARD (CR 951) AND IMMOKALEE ROAD
NAPLES, COLLIER COUNTY, FLORIDA

PREPARED FOR:

Mr. David B. Genson, P.E.
Barron Collier Companies
2600 Golden Gate Parkway
Naples, Florida 34105

31 January 2017

YPC Project No. 17EY802



***YPC Consulting Group, PL
5931 Country Lakes Drive
Fort Myers, Florida 33905
Phone (239) 693-7700
Fax (239) 690-0271***

EXECUTIVE SUMMARY

YPC Consulting Group, PL (YPC) has performed a Phase II Environmental Site Assessment (ESA) for Pelican Nursery which is comprised of two parcels located at the southeast corner of Collier Boulevard (CR 951) and Immokalee Road in Naples, Collier County, Florida. The property lies within Section 26 of Township 48 South and Range 26 East and consists of approximately 53.96 acres.

The property had been utilized for many years as a plant nursery. The property consists of two parcels currently used for growing ornamental plants. Several buildings were located in the northwest portion of the property. The property was bordered to the north by Immokalee Road and a shopping center; to the east by land undergoing residential development; to the south by a residential development; and, to the west by Collier Boulevard (CR 951) and a shopping center.

The purpose of this Phase II ESA was to determine if an identified recognized environmental condition (REC) at the property could impact the value or use of the property. The determined REC was detailed in the Phase I ESA prepared by YPC and dated 30 January 2017. This REC was:

- 1) The use of the *property* as a plant nursery since at least 1995 indicating the probable use of pesticides and herbicides.

This Phase II ESA only addresses the above identified REC.

Soil samples S-1 thru S-5 were collected from across the property. Soil samples were delivered to PACE Analytical Services for analysis. Laboratory analyses of the soil samples were for chlorinated pesticides by EPA Method 8081 and the 8 RCRA Metals.

The soil cleanup target levels (SCTLs) per Chapter 62-777 "Contaminant Cleanup Target Levels" of the Florida Administrative Code (F.A.C.) are utilized for comparative purposes. The three detected chlorinated pesticides in soil sample SS-3 were in very low concentrations and do not have established SCTLs. YPC does not believe this is a concern due to the very low concentrations of these three compounds in soil sample SS-3.

Several metals were detected in low to very low concentrations in four of the five soil samples. The concentrations of these metals in soil samples were well below the established SCTLs.

Based on these results soil at this site is suitable for residential or commercial/industrial development and no further assessment or remediation of the property appears warranted at this time.

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1.0 INTRODUCTION

YPC Consulting Group, P.L. (YPC) is pleased to submit this Phase II Environmental Site Assessment (ESA) report for Pelican Nursery located at the southeast corner of Collier Boulevard (CR 951) and Immokalee Road in Naples, Collier County, Florida. This report addresses the recognized environmental condition (REC) related to soils identified in the Phase I ESA (YPC, 2017) dated 30 January 2017 prepared by YPC.

1.1 Purpose

This document is to provide a Phase II ESA for the referenced Pelican Nursery. The property is comprised of two parcels located at the southeast corner of Collier Boulevard (CR 951) and Immokalee Road in Naples, Collier County, Florida, at the approximate location shown in the Site Location Map included as **Figure 1**. The property lies within Sections 26 of Township 48 South and Range 26 East and consists of approximately 53.96 acres.

The purpose of this Phase II ESA was to determine if the identified REC at the property could impact the value or use of the *property*. This determination is made based the results of soil sample collection at the property. Soil samples were laboratory analyzed and these laboratory results form the basis of our recommendations.

A Phase II ESA is to determine if potential contaminants of concern are present at a project in general accordance with ASTM Designation E 1903-97 "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process". This guide is intended to provide assistance to users in satisfying the appropriate inquiry element of CERCLA's innocent purchaser defense, as defined in 42 U.S.C. §9601(35)(B), where a previous assessment satisfying that element identified RECs. This guide is also intended to assist a user in gathering reliable information about a property's environmental conditions to guide the user's business decisions. However, this guide does not purport to include the level of specificity required of technical standards that govern full characterization of a site's environmental condition.

1.2 Site Description and History

The property had been utilized for many years as a plant nursery. The property consists of two parcels currently used for growing ornamental plants. Several buildings were located in the northwest portion of the property. The property was bordered to the north by Immokalee Road and a shopping center; to the east by land undergoing residential development; to the south by a residential development; and, to the west by Collier Boulevard (CR 951) and a shopping center.

During a previous Phase I ESA for the area YPC reviewed aerial photographs. These photographs indicate the plant nursery has occupied the property since at least 1995.

YPC performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the *property*. The Phase I ESA revealed no evidence of RECs in connection with the *property* except for the following:

- 1) The use of the *property* as a plant nursery since at least 1995 indicating the probable use of pesticides and herbicides.

This Phase II ESA only addresses the above identified REC.

1.3 Scope of Services

The Phase II ESA includes the elements listed below:

- Collect five soil samples from across the property. Laboratory analysis of each soil sample for chlorinated pesticides by EPA Method 8081 and for the 8 RCRA Metals; and,
- Evaluation and preparation of the Phase II ESA report. Recommendations will be provided as necessary.

The work was conducted and/or supervised by a Florida Licensed Professional Geologist. Soil sampling was performed in general conformance with the field sampling quality assurance protocols established in the Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs).

2.0 FIELD ACTIVITIES

On 20 January 2017 YPC conducted soil sampling at the site. Samples were collected following FDEP SOPs. Soil samples SS-1 thru SS-5 were collected from across the property. The locations of the collected samples are indicated on **Figure 2**. Soil sample locations were also recorded with a hand held GPS. Those locations are identified in **Appendix A**. Soil samples were collected from a depth of 0.5 to 1 foot below land surface.

Samples were placed in a laboratory supplied cooler filled with ice. The samples were delivered to the laboratory within the laboratory applicable holding times.

3.0 LABORATORY ANALYSIS

Soil samples were delivered to PACE Analytical Services for analysis. Laboratory analyses for the soil samples were for chlorinated pesticides by EPA Method 8081 and for the 8 RCRA Metals.

4.0 LABORATORY RESULTS

None of the laboratory analyzed chlorinated pesticides were detected in concentrations above the laboratory detection level in soil samples SS-1, SS-2, SS-4, and SS-5. In soil sample SS-3 Endosulfan Sulfate, Endrin Aldehyde, and Endrin Ketone were detected in concentrations of 0.00018 milligrams per kilogram (mg/kg), 0.00026 mg/kg, and 0.00054 mg/kg, respectively. These results are indicated in **Table 1**.

Cadmium, Mercury, Selenium, and Silver were not detected in any of the five soil samples above the laboratory detection levels. Arsenic was detected in very low levels in soil samples SS-4 and SS-5. Barium was detected in very low concentrations in soil samples SS-1, SS-2, SS-3, and SS-5. Chromium was detected in low concentrations in all five soil samples. Lead was detected in very low concentrations in soil samples SS-1, SS-2, SS-3, and SS-5. These results are summarized in **Table 2**. The laboratory analytical report is contained in **Appendix B**.

5.0 CONSLUSIONS

The soil cleanup target levels (SCTLs) per Chapter 62-777 "Contaminant Cleanup Target Levels" of the Florida Administrative Code (F.A.C.) are utilized for comparative purposes. The three detected chlorinated pesticides in soil sample SS-3 were detected in very low concentrations as shown in **Table 1** and do not have established SCTLs. YPC does not believe this is a concern due to the very low concentrations of these three compounds in soil sample SS-3.

Several metals were detected in low to very low concentrations in four of the five soil samples. The concentrations of these metals in soil samples were well below the established SCTLs.

Based on these results soil at this site is suitable for residential or commercial/industrial development activities.

6.0 RECOMMENDATIONS

Based on the laboratory analysis of the soil samples collected at this site, no further assessment or remediation of the property appears warranted at this time.

7.0 REFERENCES

Chapter 62-777 "Contaminant Cleanup Target Levels", Florida Administrative Code.


Collier County Property Appraiser's Website, 2016 aerial photograph.

YPC Consulting Group, PL; Phase I Environmental Site Assessment Report, Pelican Nursery, Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road, Naples, Collier County, Florida, YPC Project No. 17EY801, 30 January 2017.

8.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

The signature appearing below is that of the environmental professional responsible for the preparation, review, and approval of this report.

I am a licensed Professional Geologist in the State of Florida, perform geological services in conformance with Chapter 492 "Professional Geology" of the Florida Statutes, and provide my seal for the geological portions of this report.


George E. Evans, P.G., L.E.P.
Date: 1/31/17

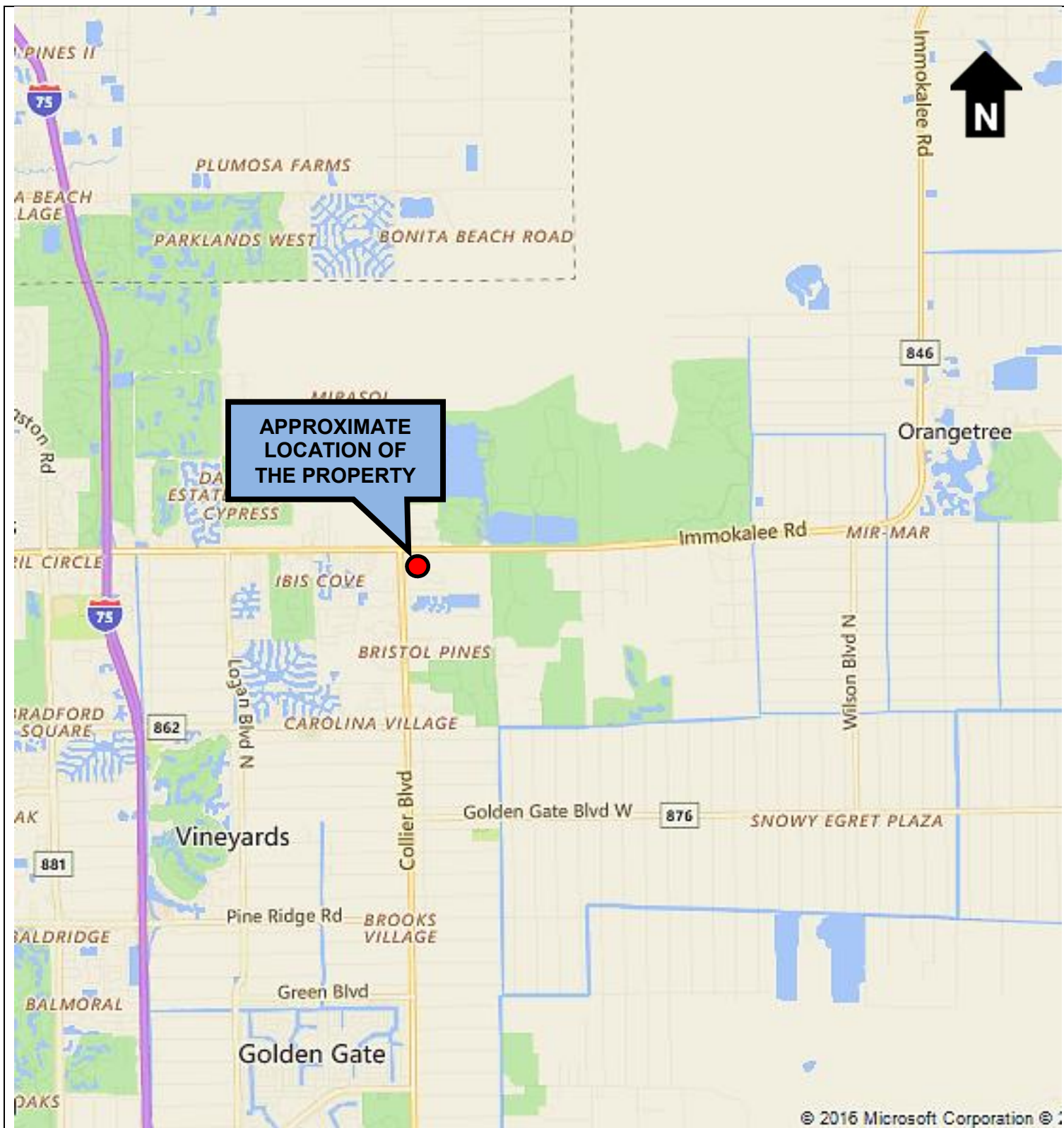
9.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL


The resume of the individual who performed and prepared this Phase II ESA is contained in **Appendix C**.

Phase II Environmental Site Assessment Report
Pelican Nursery
Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road
Naples, Collier County, Florida
Project No. 17EY802


YPC Consulting Group, PL
31 January 2017

FIGURES



TITLE Site Location Map	SOURCE Google Earth	DRAWING FILE NO. 17EY802.fg1	FIGURE NO. 1
	DATE 11 January 2017	Phase II Environmental Site Assessment Report Pelican Nursery Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road Naples, Collier County, Florida Prepared For: Barron Collier Companies	
	DRAWN BY GE		
	CHECKED BY GE		
	SCALE Not to Scale		
	PROJECT NO. 17EY802		



TITLE	SOURCE	DRAWING FILE NO.	FIGURE NO.
Soil Sample Location Map	Google Earth	17EY802.fg2	2
	DATE	Phase II Environmental Site Assessment Report Pelican Nursery Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road Naples, Collier County, Florida Prepared For: Barron Collier Companies	
	DRAWN BY		
	CHECKED BY		
	SCALE		
	PROJECT NO.		
	11 January 2017		
	GE		
	GE		
	Not to Scale		
	17EY802		

Phase II Environmental Site Assessment Report
Pelican Nursery
Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road
Naples, Collier County, Florida
Project No. 17EY802

YPC Consulting Group, PL
31 January 2017

TABLES

TABLE 1
Pelican Nursery
Summary of Detected Chlorinated Pesticides in Soil

Sample Identification	Endosulfan Sulfate (mg/kg)	Endrin Aldehyde (mg/kg)	Endrin Ketone (mg/kg)
SS-1	0.00016 U	0.00025 U	0.00030 U
SS-2	0.00015 U	0.00023 U	0.00028 U
SS-3	0.00018 I	0.00026 I	0.00054 I
SS-4	0.000043 U	0.000066 U	0.000080 U
SS-5	0.00015 U	0.00023 U	0.00028 U
SCTL - Residential	NE	NE	NE
SCTL –Commercial/ Industrial	NE	NE	NE
SCTL - Leachability	NE	NE	NE

mg/kg – milligrams per kilogram

U - Compound was analyzed for but not detected

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

SCTL – soil cleanup target level per Chapter 62-777

NE – none established

TABLE 2
Pelican Nursery
Summary of 8 RCRA Metals in Soil

Sample Identification	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
SS-1	0.30 U	0.69	0.030 U	1.3	0.66	0.0049 U	0.45 U	0.15 U
SS-2	0.30 U	0.73	0.030 U	1.1	0.85	0.0059 U	0.46 U	0.15 U
SS-3	0.28 U	0.94	0.028 U	0.88	0.78	0.0045 U	0.42 U	0.14 U
SS-4	0.34 I	0.31 U	0.031 U	0.38	0.31 U	0.0040 U	0.46 U	0.15 U
SS-5	0.52 I	6.9	0.028 U	12.4	3.0	0.0046 U	0.42 U	1.4 U
SCTL - Residential	2.1	120	82	210	400	3	440	410
SCTL Commercial/Industrial	12	130,000	1,700	470	1,400	17	11,000	8,200
SCTL - Leachability	***	1,600	7.5	38	***	2.1	5.2	17

mg/kg – milligrams per kilogram

U - Compound was analyzed for but not detected

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

SCTL – soil cleanup target level per Chapter 62-777

*** - Leachability values may be derived using the SPLP test to calculate site specific SCTLs or may be determined using TCLP in the event oil wastes are present

Phase II Environmental Site Assessment Report
Pelican Nursery
Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road
Naples, Collier County, Florida
Project No. 17EY802

YPC Consulting Group, PL
31 January 2017

APPENDIX A GPS LOCATIONS

APPENDIX A

GPS LOCATIONS – PELICAN NURSERY

SS-1 26.2720827, -81.6876324 (26°16'19.4982", -81°41'15.4746"): 8810 Immokalee Rd, Naples, FL 34120

SS-2 26.2702537, -81.6874078 (26°16'12.9144", -81°41'14.6688"): 8810 Immokalee Rd, Naples, FL 34120

SS-3 26.2708660, -81.6840664 (26°16'15.1176", -81°41'2.6376"): 8810 Immokalee Rd, Naples, FL 34120

SS-4 26.2699164, -81.6838814 (26°16'11.6970", -81°41'1.9710"): 9020 Immokalee Rd, Naples, FL 34120

SS-5 26.2720139, -81.6846657 (26°16'19.2498", -81°41'4.7976"): 9020 Immokalee Rd, Naples, FL 34120

Phase II Environmental Site Assessment Report
Pelican Nursery
Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road
Naples, Collier County, Florida
Project No. 17EY802

YPC Consulting Group, PL
31 January 2017

APPENDIX B

LABORATORY REPORT

January 30, 2017

George Evans
YPC Consulting Group
5931 Country Lakes Drive
Suite 3
Fort Myers, FL 33905

RE: Project: Pelican Nursery
Pace Project No.: 35290247

Dear George Evans:

Enclosed are the analytical results for sample(s) received by the laboratory on January 23, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mike Valder
mike.valder@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Pelican Nursery

Pace Project No.: 35290247

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Pelican Nursery

Pace Project No.: 35290247

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35290247001	SS-1	Solid	01/20/17 11:15	01/23/17 09:45
35290247002	SS-2	Solid	01/20/17 12:10	01/23/17 09:45
35290247003	SS-3	Solid	01/20/17 12:30	01/23/17 09:45
35290247004	SS-4	Solid	01/20/17 12:40	01/23/17 09:45
35290247005	SS-5	Solid	01/20/17 12:50	01/23/17 09:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Pelican Nursery

Pace Project No.: 35290247

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35290247001	SS-1	EPA 8081	JLG	22	PASI-O
		EPA 6010	RVK	7	PASI-O
		EPA 7471	MLO	1	PASI-O
		ASTM D2974-87	MED	1	PASI-O
35290247002	SS-2	EPA 8081	JLG	22	PASI-O
		EPA 6010	RVK	7	PASI-O
		EPA 7471	MLO	1	PASI-O
		ASTM D2974-87	MED	1	PASI-O
35290247003	SS-3	EPA 8081	JLG	22	PASI-O
		EPA 6010	RVK	7	PASI-O
		EPA 7471	MLO	1	PASI-O
		ASTM D2974-87	MED	1	PASI-O
35290247004	SS-4	EPA 8081	JLG	22	PASI-O
		EPA 6010	RVK	7	PASI-O
		EPA 7471	MLO	1	PASI-O
		ASTM D2974-87	MED	1	PASI-O
35290247005	SS-5	EPA 8081	JLG	22	PASI-O
		EPA 6010	RVK	7	PASI-O
		EPA 7471	MLO	1	PASI-O
		ASTM D2974-87	MED	1	PASI-O

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pelican Nursery
Pace Project No.: 35290247

Sample: SS-1 **Lab ID: 35290247001** Collected: 01/20/17 11:15 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.00022 U	mg/kg	0.0063	0.00022	1	01/24/17 22:05	01/25/17 11:32	309-00-2	
alpha-BHC	0.00026 U	mg/kg	0.0063	0.00026	1	01/24/17 22:05	01/25/17 11:32	319-84-6	
beta-BHC	0.00029 U	mg/kg	0.0063	0.00029	1	01/24/17 22:05	01/25/17 11:32	319-85-7	
delta-BHC	0.00032 U	mg/kg	0.0063	0.00032	1	01/24/17 22:05	01/25/17 11:32	319-86-8	
gamma-BHC (Lindane)	0.00055 U	mg/kg	0.0063	0.00055	1	01/24/17 22:05	01/25/17 11:32	58-89-9	
Chlordane (Technical)	0.059 U	mg/kg	0.063	0.059	1	01/24/17 22:05	01/25/17 11:32	57-74-9	
4,4'-DDD	0.00049 U	mg/kg	0.0063	0.00049	1	01/24/17 22:05	01/25/17 11:32	72-54-8	
4,4'-DDE	0.00023 U	mg/kg	0.0063	0.00023	1	01/24/17 22:05	01/25/17 11:32	72-55-9	
4,4'-DDT	0.00036 U	mg/kg	0.0063	0.00036	1	01/24/17 22:05	01/25/17 11:32	50-29-3	
Dieldrin	0.00015 U	mg/kg	0.0063	0.00015	1	01/24/17 22:05	01/25/17 11:32	60-57-1	
Endosulfan I	0.000093 U	mg/kg	0.0063	0.000093	1	01/24/17 22:05	01/25/17 11:32	959-98-8	
Endosulfan II	0.00021 U	mg/kg	0.0063	0.00021	1	01/24/17 22:05	01/25/17 11:32	33213-65-9	
Endosulfan sulfate	0.00016 U	mg/kg	0.0063	0.00016	1	01/24/17 22:05	01/25/17 11:32	1031-07-8	
Endrin	0.00019 U	mg/kg	0.0063	0.00019	1	01/24/17 22:05	01/25/17 11:32	72-20-8	
Endrin aldehyde	0.00025 U	mg/kg	0.012	0.00025	1	01/24/17 22:05	01/25/17 11:32	7421-93-4	
Endrin ketone	0.00030 U	mg/kg	0.0063	0.00030	1	01/24/17 22:05	01/25/17 11:32	53494-70-5	
Heptachlor	0.00015 U	mg/kg	0.0063	0.00015	1	01/24/17 22:05	01/25/17 11:32	76-44-8	
Heptachlor epoxide	0.00041 U	mg/kg	0.0063	0.00041	1	01/24/17 22:05	01/25/17 11:32	1024-57-3	
Methoxychlor	0.0039 U	mg/kg	0.0063	0.0039	1	01/24/17 22:05	01/25/17 11:32	72-43-5	
Toxaphene	0.027 U	mg/kg	0.063	0.027	1	01/24/17 22:05	01/25/17 11:32	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	86	%	53-140		1	01/24/17 22:05	01/25/17 11:32	877-09-8	
Decachlorobiphenyl (S)	95	%	43-157		1	01/24/17 22:05	01/25/17 11:32	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	0.30 U	mg/kg	0.60	0.30	1	01/26/17 13:40	01/27/17 16:55	7440-38-2	
Barium	0.69	mg/kg	0.60	0.30	1	01/26/17 13:40	01/27/17 16:55	7440-39-3	
Cadmium	0.030 U	mg/kg	0.060	0.030	1	01/26/17 13:40	01/27/17 16:55	7440-43-9	
Chromium	1.3	mg/kg	0.30	0.15	1	01/26/17 13:40	01/27/17 16:55	7440-47-3	
Lead	0.66	mg/kg	0.60	0.30	1	01/26/17 13:40	01/27/17 16:55	7439-92-1	
Selenium	0.45 U	mg/kg	0.90	0.45	1	01/26/17 13:40	01/27/17 16:55	7782-49-2	
Silver	0.15 U	mg/kg	0.30	0.15	1	01/26/17 13:40	01/27/17 16:55	7440-22-4	J(M1), J(R1)
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	0.0049 U	mg/kg	0.0098	0.0049	1	01/26/17 09:37	01/26/17 19:23	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.3	%	0.10	0.10	1		01/27/17 21:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pelican Nursery
Pace Project No.: 35290247

Sample: SS-2 **Lab ID: 35290247002** Collected: 01/20/17 12:10 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.00021 U	mg/kg	0.0060	0.00021	1	01/24/17 22:05	01/25/17 11:51	309-00-2	
alpha-BHC	0.00025 U	mg/kg	0.0060	0.00025	1	01/24/17 22:05	01/25/17 11:51	319-84-6	
beta-BHC	0.00027 U	mg/kg	0.0060	0.00027	1	01/24/17 22:05	01/25/17 11:51	319-85-7	
delta-BHC	0.00031 U	mg/kg	0.0060	0.00031	1	01/24/17 22:05	01/25/17 11:51	319-86-8	
gamma-BHC (Lindane)	0.00053 U	mg/kg	0.0060	0.00053	1	01/24/17 22:05	01/25/17 11:51	58-89-9	
Chlordane (Technical)	0.056 U	mg/kg	0.060	0.056	1	01/24/17 22:05	01/25/17 11:51	57-74-9	
4,4'-DDD	0.00047 U	mg/kg	0.0060	0.00047	1	01/24/17 22:05	01/25/17 11:51	72-54-8	
4,4'-DDE	0.00022 U	mg/kg	0.0060	0.00022	1	01/24/17 22:05	01/25/17 11:51	72-55-9	
4,4'-DDT	0.00034 U	mg/kg	0.0060	0.00034	1	01/24/17 22:05	01/25/17 11:51	50-29-3	
Dieldrin	0.00014 U	mg/kg	0.0060	0.00014	1	01/24/17 22:05	01/25/17 11:51	60-57-1	
Endosulfan I	0.000089 U	mg/kg	0.0060	0.000089	1	01/24/17 22:05	01/25/17 11:51	959-98-8	
Endosulfan II	0.00020 U	mg/kg	0.0060	0.00020	1	01/24/17 22:05	01/25/17 11:51	33213-65-9	
Endosulfan sulfate	0.00015 U	mg/kg	0.0060	0.00015	1	01/24/17 22:05	01/25/17 11:51	1031-07-8	
Endrin	0.00018 U	mg/kg	0.0060	0.00018	1	01/24/17 22:05	01/25/17 11:51	72-20-8	
Endrin aldehyde	0.00023 U	mg/kg	0.012	0.00023	1	01/24/17 22:05	01/25/17 11:51	7421-93-4	
Endrin ketone	0.00028 U	mg/kg	0.0060	0.00028	1	01/24/17 22:05	01/25/17 11:51	53494-70-5	
Heptachlor	0.00014 U	mg/kg	0.0060	0.00014	1	01/24/17 22:05	01/25/17 11:51	76-44-8	
Heptachlor epoxide	0.00039 U	mg/kg	0.0060	0.00039	1	01/24/17 22:05	01/25/17 11:51	1024-57-3	
Methoxychlor	0.0037 U	mg/kg	0.0060	0.0037	1	01/24/17 22:05	01/25/17 11:51	72-43-5	
Toxaphene	0.026 U	mg/kg	0.060	0.026	1	01/24/17 22:05	01/25/17 11:51	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	88	%	53-140		1	01/24/17 22:05	01/25/17 11:51	877-09-8	
Decachlorobiphenyl (S)	96	%	43-157		1	01/24/17 22:05	01/25/17 11:51	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	0.30 U	mg/kg	0.61	0.30	1	01/26/17 13:40	01/27/17 17:18	7440-38-2	
Barium	0.73	mg/kg	0.61	0.30	1	01/26/17 13:40	01/27/17 17:18	7440-39-3	
Cadmium	0.030 U	mg/kg	0.061	0.030	1	01/26/17 13:40	01/27/17 17:18	7440-43-9	
Chromium	1.1	mg/kg	0.30	0.15	1	01/26/17 13:40	01/27/17 17:18	7440-47-3	
Lead	0.85	mg/kg	0.61	0.30	1	01/26/17 13:40	01/27/17 17:18	7439-92-1	
Selenium	0.46 U	mg/kg	0.91	0.46	1	01/26/17 13:40	01/27/17 17:18	7782-49-2	
Silver	0.15 U	mg/kg	0.30	0.15	1	01/26/17 13:40	01/27/17 17:18	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	0.0059 U	mg/kg	0.012	0.0059	1	01/26/17 09:37	01/26/17 19:25	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.4	%	0.10	0.10	1		01/27/17 21:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pelican Nursery
Pace Project No.: 35290247

Sample: SS-3 **Lab ID: 35290247003** Collected: 01/20/17 12:30 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.00020 U	mg/kg	0.0060	0.00020	1	01/24/17 22:05	01/25/17 12:11	309-00-2	
alpha-BHC	0.00024 U	mg/kg	0.0060	0.00024	1	01/24/17 22:05	01/25/17 12:11	319-84-6	
beta-BHC	0.00027 U	mg/kg	0.0060	0.00027	1	01/24/17 22:05	01/25/17 12:11	319-85-7	
delta-BHC	0.00031 U	mg/kg	0.0060	0.00031	1	01/24/17 22:05	01/25/17 12:11	319-86-8	
gamma-BHC (Lindane)	0.00052 U	mg/kg	0.0060	0.00052	1	01/24/17 22:05	01/25/17 12:11	58-89-9	
Chlordane (Technical)	0.056 U	mg/kg	0.060	0.056	1	01/24/17 22:05	01/25/17 12:11	57-74-9	
4,4'-DDD	0.00046 U	mg/kg	0.0060	0.00046	1	01/24/17 22:05	01/25/17 12:11	72-54-8	
4,4'-DDE	0.00021 U	mg/kg	0.0060	0.00021	1	01/24/17 22:05	01/25/17 12:11	72-55-9	
4,4'-DDT	0.00034 U	mg/kg	0.0060	0.00034	1	01/24/17 22:05	01/25/17 12:11	50-29-3	
Dieldrin	0.00014 U	mg/kg	0.0060	0.00014	1	01/24/17 22:05	01/25/17 12:11	60-57-1	
Endosulfan I	0.000088 U	mg/kg	0.0060	0.000088	1	01/24/17 22:05	01/25/17 12:11	959-98-8	
Endosulfan II	0.00020 U	mg/kg	0.0060	0.00020	1	01/24/17 22:05	01/25/17 12:11	33213-65-9	
Endosulfan sulfate	0.00018 I	mg/kg	0.0060	0.00015	1	01/24/17 22:05	01/25/17 12:11	1031-07-8	
Endrin	0.00018 U	mg/kg	0.0060	0.00018	1	01/24/17 22:05	01/25/17 12:11	72-20-8	
Endrin aldehyde	0.00026 I	mg/kg	0.012	0.00023	1	01/24/17 22:05	01/25/17 12:11	7421-93-4	
Endrin ketone	0.00054 I	mg/kg	0.0060	0.00028	1	01/24/17 22:05	01/25/17 12:11	53494-70-5	
Heptachlor	0.00014 U	mg/kg	0.0060	0.00014	1	01/24/17 22:05	01/25/17 12:11	76-44-8	
Heptachlor epoxide	0.00039 U	mg/kg	0.0060	0.00039	1	01/24/17 22:05	01/25/17 12:11	1024-57-3	
Methoxychlor	0.0037 U	mg/kg	0.0060	0.0037	1	01/24/17 22:05	01/25/17 12:11	72-43-5	
Toxaphene	0.026 U	mg/kg	0.060	0.026	1	01/24/17 22:05	01/25/17 12:11	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	87	%	53-140		1	01/24/17 22:05	01/25/17 12:11	877-09-8	
Decachlorobiphenyl (S)	99	%	43-157		1	01/24/17 22:05	01/25/17 12:11	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	0.28 U	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:38	7440-38-2	
Barium	0.94	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:38	7440-39-3	
Cadmium	0.028 U	mg/kg	0.056	0.028	1	01/26/17 15:48	01/27/17 06:38	7440-43-9	
Chromium	0.88	mg/kg	0.28	0.14	1	01/26/17 15:48	01/27/17 06:38	7440-47-3	
Lead	0.78	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:38	7439-92-1	
Selenium	0.42 U	mg/kg	0.85	0.42	1	01/26/17 15:48	01/27/17 06:38	7782-49-2	
Silver	0.14 U	mg/kg	0.28	0.14	1	01/26/17 15:48	01/27/17 06:38	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	0.0045 U	mg/kg	0.0090	0.0045	1	01/26/17 09:37	01/26/17 19:28	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.3	%	0.10	0.10	1		01/27/17 21:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pelican Nursery
Pace Project No.: 35290247

Sample: SS-4 **Lab ID: 35290247004** Collected: 01/20/17 12:40 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.000058 U	mg/kg	0.0017	0.000058	1	01/24/17 22:05	01/25/17 12:31	309-00-2	
alpha-BHC	0.000069 U	mg/kg	0.0017	0.000069	1	01/24/17 22:05	01/25/17 12:31	319-84-6	
beta-BHC	0.000077 U	mg/kg	0.0017	0.000077	1	01/24/17 22:05	01/25/17 12:31	319-85-7	
delta-BHC	0.000087 U	mg/kg	0.0017	0.000087	1	01/24/17 22:05	01/25/17 12:31	319-86-8	
gamma-BHC (Lindane)	0.00015 U	mg/kg	0.0017	0.00015	1	01/24/17 22:05	01/25/17 12:31	58-89-9	
Chlordane (Technical)	0.016 U	mg/kg	0.017	0.016	1	01/24/17 22:05	01/25/17 12:31	57-74-9	
4,4'-DDD	0.00013 U	mg/kg	0.0017	0.00013	1	01/24/17 22:05	01/25/17 12:31	72-54-8	
4,4'-DDE	0.000061 U	mg/kg	0.0017	0.000061	1	01/24/17 22:05	01/25/17 12:31	72-55-9	
4,4'-DDT	0.000096 U	mg/kg	0.0017	0.000096	1	01/24/17 22:05	01/25/17 12:31	50-29-3	
Dieldrin	0.000040 U	mg/kg	0.0017	0.000040	1	01/24/17 22:05	01/25/17 12:31	60-57-1	
Endosulfan I	0.000025 U	mg/kg	0.0017	0.000025	1	01/24/17 22:05	01/25/17 12:31	959-98-8	
Endosulfan II	0.000057 U	mg/kg	0.0017	0.000057	1	01/24/17 22:05	01/25/17 12:31	33213-65-9	
Endosulfan sulfate	0.000043 U	mg/kg	0.0017	0.000043	1	01/24/17 22:05	01/25/17 12:31	1031-07-8	
Endrin	0.000052 U	mg/kg	0.0017	0.000052	1	01/24/17 22:05	01/25/17 12:31	72-20-8	
Endrin aldehyde	0.000066 U	mg/kg	0.0033	0.000066	1	01/24/17 22:05	01/25/17 12:31	7421-93-4	
Endrin ketone	0.000080 U	mg/kg	0.0017	0.000080	1	01/24/17 22:05	01/25/17 12:31	53494-70-5	
Heptachlor	0.000039 U	mg/kg	0.0017	0.000039	1	01/24/17 22:05	01/25/17 12:31	76-44-8	
Heptachlor epoxide	0.00011 U	mg/kg	0.0017	0.00011	1	01/24/17 22:05	01/25/17 12:31	1024-57-3	
Methoxychlor	0.0011 U	mg/kg	0.0017	0.0011	1	01/24/17 22:05	01/25/17 12:31	72-43-5	
Toxaphene	0.0074 U	mg/kg	0.017	0.0074	1	01/24/17 22:05	01/25/17 12:31	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	72	%	53-140		1	01/24/17 22:05	01/25/17 12:31	877-09-8	
Decachlorobiphenyl (S)	81	%	43-157		1	01/24/17 22:05	01/25/17 12:31	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	0.34 I	mg/kg	0.62	0.31	1	01/26/17 15:48	01/27/17 06:18	7440-38-2	
Barium	0.31 U	mg/kg	0.62	0.31	1	01/26/17 15:48	01/27/17 06:18	7440-39-3	
Cadmium	0.031 U	mg/kg	0.062	0.031	1	01/26/17 15:48	01/27/17 06:18	7440-43-9	
Chromium	0.38	mg/kg	0.31	0.15	1	01/26/17 15:48	01/27/17 06:18	7440-47-3	
Lead	0.31 U	mg/kg	0.62	0.31	1	01/26/17 15:48	01/27/17 06:18	7439-92-1	
Selenium	0.46 U	mg/kg	0.93	0.46	1	01/26/17 15:48	01/27/17 06:18	7782-49-2	
Silver	0.15 U	mg/kg	0.31	0.15	1	01/26/17 15:48	01/27/17 06:18	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	0.0040 U	mg/kg	0.0081	0.0040	1	01/26/17 09:37	01/26/17 19:30	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pelican Nursery

Pace Project No.: 35290247

Sample: SS-4 **Lab ID: 35290247004** Collected: 01/20/17 12:40 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	1.4	%	0.10	0.10	1		01/27/17 21:21		

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ANALYTICAL RESULTS

Project: Pelican Nursery
Pace Project No.: 35290247

Sample: SS-5 **Lab ID: 35290247005** Collected: 01/20/17 12:50 Received: 01/23/17 09:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.00020 U	mg/kg	0.0059	0.00020	1	01/24/17 22:05	01/25/17 12:50	309-00-2	
alpha-BHC	0.00024 U	mg/kg	0.0059	0.00024	1	01/24/17 22:05	01/25/17 12:50	319-84-6	
beta-BHC	0.00027 U	mg/kg	0.0059	0.00027	1	01/24/17 22:05	01/25/17 12:50	319-85-7	
delta-BHC	0.00030 U	mg/kg	0.0059	0.00030	1	01/24/17 22:05	01/25/17 12:50	319-86-8	
gamma-BHC (Lindane)	0.00051 U	mg/kg	0.0059	0.00051	1	01/24/17 22:05	01/25/17 12:50	58-89-9	
Chlordane (Technical)	0.055 U	mg/kg	0.059	0.055	1	01/24/17 22:05	01/25/17 12:50	57-74-9	
4,4'-DDD	0.00045 U	mg/kg	0.0059	0.00045	1	01/24/17 22:05	01/25/17 12:50	72-54-8	
4,4'-DDE	0.00021 U	mg/kg	0.0059	0.00021	1	01/24/17 22:05	01/25/17 12:50	72-55-9	
4,4'-DDT	0.00033 U	mg/kg	0.0059	0.00033	1	01/24/17 22:05	01/25/17 12:50	50-29-3	
Dieldrin	0.00014 U	mg/kg	0.0059	0.00014	1	01/24/17 22:05	01/25/17 12:50	60-57-1	
Endosulfan I	0.000086 U	mg/kg	0.0059	0.000086	1	01/24/17 22:05	01/25/17 12:50	959-98-8	
Endosulfan II	0.00020 U	mg/kg	0.0059	0.00020	1	01/24/17 22:05	01/25/17 12:50	33213-65-9	
Endosulfan sulfate	0.00015 U	mg/kg	0.0059	0.00015	1	01/24/17 22:05	01/25/17 12:50	1031-07-8	
Endrin	0.00018 U	mg/kg	0.0059	0.00018	1	01/24/17 22:05	01/25/17 12:50	72-20-8	
Endrin aldehyde	0.00023 U	mg/kg	0.011	0.00023	1	01/24/17 22:05	01/25/17 12:50	7421-93-4	
Endrin ketone	0.00028 U	mg/kg	0.0059	0.00028	1	01/24/17 22:05	01/25/17 12:50	53494-70-5	
Heptachlor	0.00013 U	mg/kg	0.0059	0.00013	1	01/24/17 22:05	01/25/17 12:50	76-44-8	
Heptachlor epoxide	0.00038 U	mg/kg	0.0059	0.00038	1	01/24/17 22:05	01/25/17 12:50	1024-57-3	
Methoxychlor	0.0036 U	mg/kg	0.0059	0.0036	1	01/24/17 22:05	01/25/17 12:50	72-43-5	
Toxaphene	0.025 U	mg/kg	0.059	0.025	1	01/24/17 22:05	01/25/17 12:50	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	79	%	53-140		1	01/24/17 22:05	01/25/17 12:50	877-09-8	
Decachlorobiphenyl (S)	78	%	43-157		1	01/24/17 22:05	01/25/17 12:50	2051-24-3	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Arsenic	0.52 I	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:22	7440-38-2	
Barium	6.9	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:22	7440-39-3	
Cadmium	0.028 U	mg/kg	0.056	0.028	1	01/26/17 15:48	01/27/17 06:22	7440-43-9	
Chromium	12.4	mg/kg	0.28	0.14	1	01/26/17 15:48	01/27/17 06:22	7440-47-3	
Lead	3.0	mg/kg	0.56	0.28	1	01/26/17 15:48	01/27/17 06:22	7439-92-1	
Selenium	0.42 U	mg/kg	0.83	0.42	1	01/26/17 15:48	01/27/17 06:22	7782-49-2	
Silver	1.4 U	mg/kg	2.8	1.4	10	01/26/17 15:48	01/27/17 22:27	7440-22-4	1p,D3
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471									
Mercury	0.0046 U	mg/kg	0.0092	0.0046	1	01/26/17 09:37	01/26/17 19:36	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.0	%	0.10	0.10	1		01/27/17 21:21		

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

QC Batch: 346566 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 35290247001, 35290247002, 35290247003, 35290247004, 35290247005

METHOD BLANK: 1861554 Matrix: Solid
Associated Lab Samples: 35290247001, 35290247002, 35290247003, 35290247004, 35290247005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.0040 U	0.0079	0.0040	01/26/17 18:32	

LABORATORY CONTROL SAMPLE: 1861555

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.067	0.048	71	80-120	L5

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1861556 1861557

Parameter	Units	35289675001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.0069 U	.13	.12	0.11	0.12	82	89	80-120	8	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

QC Batch: 346616

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET Solid

Associated Lab Samples: 35290247001, 35290247002

METHOD BLANK: 1861668

Matrix: Solid

Associated Lab Samples: 35290247001, 35290247002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	0.22 U	0.44	0.22	01/27/17 16:47	
Barium	mg/kg	0.22 U	0.44	0.22	01/27/17 16:47	
Cadmium	mg/kg	0.022 U	0.044	0.022	01/27/17 16:47	
Chromium	mg/kg	0.11 U	0.22	0.11	01/27/17 16:47	
Lead	mg/kg	0.22 U	0.44	0.22	01/27/17 16:47	
Selenium	mg/kg	0.33 U	0.66	0.33	01/27/17 16:47	
Silver	mg/kg	0.11 U	0.22	0.11	01/27/17 16:47	

LABORATORY CONTROL SAMPLE: 1861669

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	11.2	10.2	91	80-120	
Barium	mg/kg	11.2	11.3	101	80-120	
Cadmium	mg/kg	1.1	1.1	100	80-120	
Chromium	mg/kg	11.2	12.0	107	80-120	
Lead	mg/kg	11.2	11.2	100	80-120	
Selenium	mg/kg	11.2	10.1	90	80-120	
Silver	mg/kg	1.1	1.1	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1861670 1861671

Parameter	Units	35290247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	0.30 U	12.6	14.8	11.4	13.4	88	89	75-125	16	20	
Barium	mg/kg	0.69	12.6	14.8	13.3	15.4	100	100	75-125	14	20	
Cadmium	mg/kg	0.030 U	1.2	1.5	1.2	1.4	97	96	75-125	15	20	
Chromium	mg/kg	1.3	12.6	14.8	14.6	16.8	106	105	75-125	14	20	
Lead	mg/kg	0.66	12.6	14.8	12.8	15.1	96	98	75-125	16	20	
Selenium	mg/kg	0.45 U	12.6	14.8	10.7	12.8	85	86	75-125	17	20	
Silver	mg/kg	0.15 U	1.2	1.5	0.84	1.1	67	73	75-125	25	20	J(M1), J(R1)

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

QC Batch: 346622

Analysis Method: EPA 6010

QC Batch Method: EPA 3050

Analysis Description: 6010 MET Solid

Associated Lab Samples: 35290247003, 35290247004, 35290247005

METHOD BLANK: 1861684

Matrix: Solid

Associated Lab Samples: 35290247003, 35290247004, 35290247005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	0.31 U	0.62	0.31	01/27/17 05:54	
Barium	mg/kg	0.31 U	0.62	0.31	01/27/17 05:54	
Cadmium	mg/kg	0.031 U	0.062	0.031	01/27/17 05:54	
Chromium	mg/kg	0.15 U	0.31	0.15	01/27/17 05:54	
Lead	mg/kg	0.31 U	0.62	0.31	01/27/17 05:54	
Selenium	mg/kg	0.46 U	0.93	0.46	01/27/17 05:54	
Silver	mg/kg	0.15 U	0.31	0.15	01/27/17 05:54	

LABORATORY CONTROL SAMPLE: 1861685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	11.3	11.0	97	80-120	
Barium	mg/kg	11.3	11.3	100	80-120	
Cadmium	mg/kg	1.1	1.2	102	80-120	
Chromium	mg/kg	11.3	12.2	108	80-120	
Lead	mg/kg	11.3	11.1	98	80-120	
Selenium	mg/kg	11.3	10.1	89	80-120	
Silver	mg/kg	1.1	1.1	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1861686

1861687

Parameter	Units	35290247003		MS		MSD		MS		MSD		% Rec		Max	
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	% Rec	% Rec	Limits	RPD	RPD	Qual
Arsenic	mg/kg	0.28 U	16	16.1	15.6	15.9	98	99	75-125	2	20				
Barium	mg/kg	0.94	16	16.1	17.7	17.6	105	104	75-125	0	20				
Cadmium	mg/kg	0.028 U	1.6	1.6	1.7	1.7	105	104	75-125	0	20				
Chromium	mg/kg	0.88	16	16.1	18.9	19.0	113	113	75-125	0	20				
Lead	mg/kg	0.78	16	16.1	17.3	17.0	104	101	75-125	2	20				
Selenium	mg/kg	0.42 U	16	16.1	14.6	14.4	92	90	75-125	2	20				
Silver	mg/kg	0.14 U	1.6	1.6	1.5	1.5	92	91	75-125	1	20				

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

QC Batch: 346193 Analysis Method: EPA 8081
QC Batch Method: EPA 3546 Analysis Description: 8081 GCS Pesticides
Associated Lab Samples: 35290247001, 35290247002, 35290247003, 35290247004, 35290247005

METHOD BLANK: 1859291 Matrix: Solid
Associated Lab Samples: 35290247001, 35290247002, 35290247003, 35290247004, 35290247005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
4,4'-DDD	mg/kg	0.00013 U	0.0017	0.00013	01/25/17 09:54	
4,4'-DDE	mg/kg	0.000061 U	0.0017	0.000061	01/25/17 09:54	
4,4'-DDT	mg/kg	0.000096 U	0.0017	0.000096	01/25/17 09:54	
Aldrin	mg/kg	0.000058 U	0.0017	0.000058	01/25/17 09:54	
alpha-BHC	mg/kg	0.000069 U	0.0017	0.000069	01/25/17 09:54	
beta-BHC	mg/kg	0.000077 U	0.0017	0.000077	01/25/17 09:54	
Chlordane (Technical)	mg/kg	0.016 U	0.017	0.016	01/25/17 09:54	
delta-BHC	mg/kg	0.000087 U	0.0017	0.000087	01/25/17 09:54	
Dieldrin	mg/kg	0.000040 U	0.0017	0.000040	01/25/17 09:54	
Endosulfan I	mg/kg	0.000025 U	0.0017	0.000025	01/25/17 09:54	
Endosulfan II	mg/kg	0.000057 U	0.0017	0.000057	01/25/17 09:54	
Endosulfan sulfate	mg/kg	0.000043 U	0.0017	0.000043	01/25/17 09:54	
Endrin	mg/kg	0.000052 U	0.0017	0.000052	01/25/17 09:54	
Endrin aldehyde	mg/kg	0.00011 I	0.0033	0.000066	01/25/17 09:54	
Endrin ketone	mg/kg	0.000080 U	0.0017	0.000080	01/25/17 09:54	
gamma-BHC (Lindane)	mg/kg	0.00015 U	0.0017	0.00015	01/25/17 09:54	
Heptachlor	mg/kg	0.000039 U	0.0017	0.000039	01/25/17 09:54	
Heptachlor epoxide	mg/kg	0.00011 U	0.0017	0.00011	01/25/17 09:54	
Methoxychlor	mg/kg	0.0011 U	0.0017	0.0011	01/25/17 09:54	
Toxaphene	mg/kg	0.0074 U	0.017	0.0074	01/25/17 09:54	
Decachlorobiphenyl (S)	%	96	43-157		01/25/17 09:54	
Tetrachloro-m-xylene (S)	%	85	53-140		01/25/17 09:54	

LABORATORY CONTROL SAMPLE: 1859292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	mg/kg	.017	0.015	87	71-137	
4,4'-DDE	mg/kg	.017	0.014	86	71-136	
4,4'-DDT	mg/kg	.017	0.015	89	62-140	
Aldrin	mg/kg	.017	0.014	82	67-128	
alpha-BHC	mg/kg	.017	0.014	82	68-130	
beta-BHC	mg/kg	.017	0.015	89	70-130	
delta-BHC	mg/kg	.017	0.010	61	45-123	
Dieldrin	mg/kg	.017	0.015	88	72-132	
Endosulfan I	mg/kg	.017	0.015	88	72-130	
Endosulfan II	mg/kg	.017	0.015	90	72-132	
Endosulfan sulfate	mg/kg	.017	0.014	84	68-130	
Endrin	mg/kg	.017	0.015	87	70-135	
Endrin aldehyde	mg/kg	.017	0.014	83	59-131	
Endrin ketone	mg/kg	.017	0.016	93	69-135	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

LABORATORY CONTROL SAMPLE: 1859292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
gamma-BHC (Lindane)	mg/kg	.017	0.014	83	69-132	
Heptachlor	mg/kg	.017	0.015	87	68-131	
Heptachlor epoxide	mg/kg	.017	0.015	88	69-130	
Methoxychlor	mg/kg	.017	0.016	93	64-139	
Decachlorobiphenyl (S)	%			87	43-157	
Tetrachloro-m-xylene (S)	%			74	53-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1859635 1859636

Parameter	Units	35290247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4,4'-DDD	mg/kg	0.00049 U	.06	.059	0.058	0.059	94	99	71-137	3	40	
4,4'-DDE	mg/kg	0.00023 U	.06	.059	0.057	0.059	93	98	71-136	3	40	
4,4'-DDT	mg/kg	0.00036 U	.06	.059	0.058	0.061	95	101	62-140	4	40	
Aldrin	mg/kg	0.00022 U	.06	.059	0.055	0.057	89	96	67-128	5	40	
alpha-BHC	mg/kg	0.00026 U	.06	.059	0.054	0.057	89	95	68-130	5	40	
beta-BHC	mg/kg	0.00029 U	.06	.059	0.059	0.060	97	101	70-130	3	40	
delta-BHC	mg/kg	0.00032 U	.06	.059	0.041	0.042	68	71	45-123	2	40	
Dieldrin	mg/kg	0.00015 U	.06	.059	0.058	0.060	95	100	72-132	3	40	
Endosulfan I	mg/kg	0.000093 U	.06	.059	0.058	0.060	95	100	72-130	3	40	
Endosulfan II	mg/kg	0.00021 U	.06	.059	0.060	0.061	98	102	72-132	2	40	
Endosulfan sulfate	mg/kg	0.00016 U	.06	.059	0.057	0.057	93	95	68-130	1	40	
Endrin	mg/kg	0.00019 U	.06	.059	0.058	0.059	95	99	70-135	2	40	
Endrin aldehyde	mg/kg	0.00025 U	.06	.059	0.062	0.058	102	97	59-131	8	40	
Endrin ketone	mg/kg	0.00030 U	.06	.059	0.061	0.062	100	104	69-135	2	40	
gamma-BHC (Lindane)	mg/kg	0.00055 U	.06	.059	0.055	0.057	91	96	69-132	3	40	
Heptachlor	mg/kg	0.00015 U	.06	.059	0.058	0.059	94	99	68-131	3	40	
Heptachlor epoxide	mg/kg	0.00041 U	.06	.059	0.058	0.059	95	99	69-130	2	40	
Methoxychlor	mg/kg	0.0039 U	.06	.059	0.061	0.063	99	105	64-139	3	40	
Decachlorobiphenyl (S)	%						95	101	43-157			
Tetrachloro-m-xylene (S)	%						85	93	53-140			

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QUALITY CONTROL DATA

Project: Pelican Nursery

Pace Project No.: 35290247

QC Batch: 347061 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 35290247001, 35290247002, 35290247003, 35290247004, 35290247005

SAMPLE DUPLICATE: 1864199

Parameter	Units	35288898002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	64.9	65.6	1	10	

SAMPLE DUPLICATE: 1864200

Parameter	Units	35290389011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	38.2	39.6	3	10	

SAMPLE DUPLICATE: 1864201

Parameter	Units	35290389037 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	42.3	45.2	7	10	

SAMPLE DUPLICATE: 1864202

Parameter	Units	35290389055 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	27.1	28.0	3	10	

SAMPLE DUPLICATE: 1864203

Parameter	Units	35290696001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	31.4	30.7	2	10	

SAMPLE DUPLICATE: 1864204

Parameter	Units	35291122003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.8	10.1	38	10	J(D6)

SAMPLE DUPLICATE: 1864205

Parameter	Units	35291136002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	1.6	1.6	1	10	

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QUALIFIERS

Project: Pelican Nursery
Pace Project No.: 35290247

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U Compound was analyzed for but not detected.
1p Analyte was detected in the CCB. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.
D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J(D6) Estimated Value. The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
J(R1) Estimated Value. RPD value was outside control limits.
L5 LCS recovery exceeded QC limits. Batch accepted based on matrix spike recovery within LCS limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pelican Nursery

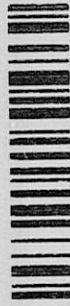
Pace Project No.: 35290247

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35290247001	SS-1	EPA 3546	346193	EPA 8081	346267
35290247002	SS-2	EPA 3546	346193	EPA 8081	346267
35290247003	SS-3	EPA 3546	346193	EPA 8081	346267
35290247004	SS-4	EPA 3546	346193	EPA 8081	346267
35290247005	SS-5	EPA 3546	346193	EPA 8081	346267
35290247001	SS-1	EPA 3050	346616	EPA 6010	346800
35290247002	SS-2	EPA 3050	346616	EPA 6010	346800
35290247003	SS-3	EPA 3050	346622	EPA 6010	346801
35290247004	SS-4	EPA 3050	346622	EPA 6010	346801
35290247005	SS-5	EPA 3050	346622	EPA 6010	346801
35290247001	SS-1	EPA 7471	346566	EPA 7471	346630
35290247002	SS-2	EPA 7471	346566	EPA 7471	346630
35290247003	SS-3	EPA 7471	346566	EPA 7471	346630
35290247004	SS-4	EPA 7471	346566	EPA 7471	346630
35290247005	SS-5	EPA 7471	346566	EPA 7471	346630
35290247001	SS-1	ASTM D2974-87	347061		
35290247002	SS-2	ASTM D2974-87	347061		
35290247003	SS-3	ASTM D2974-87	347061		
35290247004	SS-4	ASTM D2974-87	347061		
35290247005	SS-5	ASTM D2974-87	347061		

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WO#: 35290247



OF-CUSTODY / Analytical Request Document

-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: YPC Consulting Group

Address: 5730 Tanasi Court
Lakeland, FL 33812

Email:

Phone: Fax:

Requested Due Date:

Required Project Information:

Report To: George Evans

Copy To:

Purchase Order #:

Project Name: Pest and Metals - Pelican NWR

Project #: 77EY802

Section C

Invoice Information:

Attention:

Company Name:

Address:

Pace Quote:

Pace Project Manager: mike.valder@pacelabs.com

Pace Profile #: 7119 line 16

Regulatory Agency

State / Location

FL

Requested Analysis Filtered (Y/N)

#	ITEM	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	DATE		TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
				START	END			DATE	TIME							
1	55-1	Drinking Water	DW	11/15/12	11:15	G	55-1	11/15/12	11:15							
2	55-2	Water	WT	12/10/12	12:10	G	55-2	12/10/12	12:10							
3	55-3	Waste Water	WW	12/30/12	12:30	G	55-3	12/30/12	12:30							
4	55-4	Product	P	12/40/12	12:40	G	55-4	12/40/12	12:40							
5	55-5	Solid	SL	12:50	12:50	G	55-5	12:50	12:50							
6		Oil	OL													
7		Wipe	WP													
8		Air	AR													
9		Other	OT													
10		Tissue	TS													
11																
12																

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
Empty Containers		George Evans		11/17/12		06:00		George Evans		11/17/12		09:45			
		Duke Evans		12/31/12		7:30		Duke Evans		12/31/12		12:50		3.1	
		Duke Evans		12/31/12		12:50		Duke Evans		12/31/12		12:50		3.1	

SAMPLER NAME AND SIGNATURE		DATE SIGNED:	
PRINT Name of SAMPLER:			
SIGNATURE of SAMPLER:			

Phase II Environmental Site Assessment Report
Pelican Nursery
Southeast Corner of Collier Boulevard (CR 951) and Immokalee Road
Naples, Collier County, Florida
Project No. 17EY802

YPC Consulting Group, PL
31 January 2017

APPENDIX C RESUME



EDUCATION	University of North Carolina at Charlotte - Charlotte, North Carolina Bachelor of Science in Earth Sciences (Geology), 1978
REGISTRATIONS/ LICENSES	Licensed Professional Geologist – Florida #1457 and Georgia #1274 Licensed Environmental Professional #134
TRAINING	Ground Water and Unsaturated Zone Monitoring and Sampling, 1985 The Second Multidisciplinary Conference on Sinkholes and the Environmental Impacts of Karst, 1989 Hazardous Waste Management under RCRA, 1994 Advanced Hazardous Waste Management under RCRA, 1994 IBM-PC Applications for Ground Water Pollution and Hydrology, 1996 Phase I Environmental Site Assessments, 1999 Phase II Environmental Site Assessments, 2000 All Appropriate Inquiry, 2006 Brownfields Redevelopment and Reuse in Florida, 2006 FDEP Risk Based Corrective Actions Seminar, 2007 Continuing OSHA Hazardous Waste Site Operations (HAZWOPER) since 1989 including Site Supervisor Training, 1993

PROFESSIONAL EXPERIENCE PROFILE:

2011 to Present	YPC Consulting Group, P.L., Fort Myers, Florida Environmental Services Manager
2007-2011	American Compliance Technologies, Inc., Lakeland, Florida Senior Project Manager
1997-2007	ASC Geosciences, Inc.; Lakeland, Florida Director of Geoenvironmental Services/Regional Manager
1995-1996	HSA Scientists and Engineers; Tampa, Florida Senior Geologist
1991-1995	Missimer & Associates; Tampa, Florida Senior Geologist
1983-1991	Cline Engineering; Oldsmar, Florida Geologist
1979-1983	Law Engineering Testing Company; Charlotte, North Carolina Geotechnical Engineering Technician



PROFESSIONAL EXPERIENCE

George E. Evans is currently the Environmental Services Manager/Senior Geologist at YPC Consulting Group, PL. He has been a geologist for more than 29 years with over 21 years of project management experience in contamination assessments and remediation including project scope development, project oversight, report preparation, report review, and permit preparation. Projects include both hazardous and non-hazardous substances/wastes including volatile and semi-volatile organic compounds such as solvents, petroleum related constituents, pesticides, herbicides as well as metals. He has successfully managed petroleum preapproval projects and has acted as quality assurance manager.

As a project manager, his responsibilities involved every aspect of projects from proposal preparation through project closure. This includes obtaining contract approval, job initiation, budgetary analysis, budget tracking, subcontractor invoice review, invoice preparation, and collections. Mr. Evans' experience also includes regulatory agency negotiation, subcontractor selection, and environmental expert during meetings.

Developed many site assessment reports and generally achieved first time approval of the report through the applicable regulatory agency. Written several remedial action plans with recommendations for AS/SVE, pump and treat, low flow pump and treat, in-situ bioremediation, and participated in many others.

While at ASC Geosciences, Inc. Mr. Evans was responsible for re-starting the environmental services division. He was promoted to the regional manager for the Central Florida area with over-site of geotechnical engineering, materials testing, and environmental services.

SUMMARY OF PROJECT EXPERIENCE

Consultant for several Brownfields sites including projects in Jacksonville, Fort Myers, and Polk County, Florida. For the Jacksonville site project tasks included finishing the site assessment, preparing the remedial action plan, and preparing the risk assessment. For the Brownfields site in Fort Myers tasks included performance of an All Appropriate Inquiry which resulted in the determination of areas recommended for further investigation. The developer entered into a Brownfields Site Rehabilitation Agreement with the Florida Department of Environmental Protection and acquired the property. The Polk County project tasks for several sites included All Appropriate Inquiries, Site Specific Quality Assurance Project Plans, and Phase II Environmental Site Assessments.

Senior Project Manager for numerous site assessments and remediation projects at petroleum contaminated facilities and non-petroleum sites. Sites include FDEP administered Preapproval Program sites and sites regulated by Chapter 62-770 of the Florida Administrative Code (F.A.C.) Petroleum Contaminated Site Cleanup Criteria. Also managed sites regulated by Chapter 62-780 F.A.C. Contaminated Site Cleanup Criteria and Chapter 62-785 F.A.C. Brownfields Cleanup Criteria.

Senior Project Manager for a major boat manufacturer in Manatee County, Florida. Volatile organic compounds were suspected in groundwater. A contamination assessment was performed with oversight by the Florida Department of Environmental Protection. Up to 50% acetone in groundwater was discovered beneath the facility. Subsurface investigation activities were performed in Level B personal protective equipment. The groundwater plume was delineated and a remedial action pilot study was performed. The pilot study revealed that the selected remedial alternative was applicable to site conditions.



Project Manager for a dry cleaner facility project in Fort Lauderdale, Florida. Groundwater beneath the facility was determined to be impacted by the solvent tetrachloroethene (common drycleaner spot remover). The resulting groundwater investigation found impacts to neighboring properties and the regional drinking water aquifer. Remediation involved injections of sodium permanganate which greatly reduced solvent concentrations.

Consultant for numerous Phase I/Phase II Environmental Site Assessments (ESAs). Sites ranged from small commercial properties, large commercial/industrial facilities, and small to large undeveloped and agricultural sites up to 20,000 acres in size. Performed many Phase I/Phase II ESAs for the Southwest Florida Water Management District.

Consultant for a land developer in Collier/Lee Counties, Florida. One project entailed the performance of 80 Phase I ESAs in 60 days. Many other projects were performed on agricultural properties and wooded properties.

Senior Project Manager on several RCRA facilities including two sites in Georgia. Contaminates were primarily solvents and metals.

Senior Project Manager for several sites where Risk Based Corrective Actions were performed utilizing the benzo-a-pyrene equivalents conversion table and the TRPH fractions calculator.