

# Limited Soil Assessment

Flagler Beach Salt Marsh Project  
Flagler Beach, Florida

June 20, 2019  
Terracon Project No. H1197384



**Prepared for:**  
University of Florida, Whitney Laboratory for Marine Bioscience  
St. Augustine, Florida

**Prepared by:**  
Terracon Consultants, Inc.  
Winter Park, Florida

[terracon.com](http://terracon.com)

**Terracon**

Environmental    ■    Facilities    ■    Geotechnical    ■    Materials

June 20, 2019



University of Florida  
Whitney Laboratory for Marine Bioscience  
9505 Ocean Shore Boulevard  
St. Augustine, Florida 32080

Attn: Todd Osborne  
Telephone: 904-315-2758  
E-mail: osbornet@ufl.edu


Re: Limited Soil Assessment  
Flagler Beach Salt Marsh Project  
Flagler Beach, Florida  
Terracon Project No. H1197384

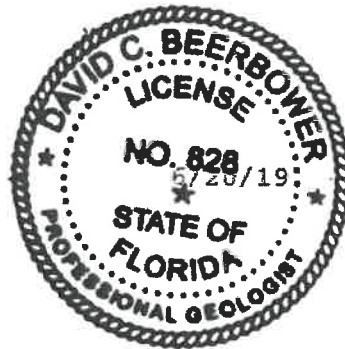
Dear Mr. Osborne:

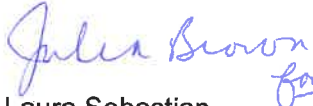
Terracon Consultants, Inc. (Terracon) is pleased to submit our report of Limited Soil Assessment (LSA) completed at the site referenced above. The report presents data from recent field activities that included the collection of soil samples for chemical analysis. Terracon conducted the testing in general accordance with Terracon's Proposal No. PH1197384 dated May 14, 2019.

Terracon appreciates this opportunity to provide environmental services to University of Florida. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,  
**Terracon Consultants, Inc.**

  
David Beerbower, PG  
Principal  
Florida Registration No. 828



  
Laura Sebastian  
Senior Staff Scientist

cc : Betty Ledyard - info@centerlinedistribution.net

Terracon Consultants, Inc. 1675 Lee Rd. Winter Park FL 32789  
P 407-740-6110 F 407-740-6112 terracon.com

Environmental

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Materials

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**LIMITED SOIL ASSESSMENT  
FLAGLER BEACH SALT MARSH PROJECT  
FLAGLER BEACH, FLORIDA**

**Terracon Project No. H1197384**

**June 20, 2019**

## **1.0 SITE DESCRIPTION**

The site is approximately 113 acres of salt marsh south of Flagler Beach in Flagler County, Florida. The site was excavated in the 1950s or 1960s to form ditches for mosquito-eating fish. The St. Johns River Water Management District (SJRWMD) will return the ditches to salt marsh by leveling spoil piles formed by excavating those ditches. The first phase of restoration is underway west of the Intracoastal Waterway (locally known as Halifax River) near Gamble Rogers Memorial State Recreation Area.

The site location is shown on a portion of a U.S. Geological Survey topographical quadrangle map provided as Exhibit 1 and a site diagram is provided as Exhibit 2.

## **2.0 PREVIOUS ASSESSMENT**

On November 7, 2018, Aerostar SES, LLC (Aerostar) collected surficial soil samples within one foot of land surface at five spoil piles within the proposed wetland restoration area for laboratory analysis of organochlorine pesticides at Pace Analytical in Ormond Beach, Florida. A concentration of 0.0003 milligram per kilogram (mg/kg) of dichlorodiphenyldichloroethylene (4,4'-DDE) was estimated in the sample collected from Project Area Section GR2 (about 200 feet west of the Intracoastal Waterway across from Gamble Rogers Memorial State Recreation Area). The estimated concentration is well below Florida's leachability-based soil cleanup target level (CTL) of 0.04 mg/kg based on surface water criteria. No other pesticides were reported in the samples above the laboratory method detection limits (MDLs).

## **3.0 SCOPE OF SERVICES**

In a letter dated May 8, 2019, Dr. William Davis, Triad Environmental Solutions, Inc., recommended additional sampling of five spoil piles at one-foot intervals to the bottom of each spoil pile to address concerns that 4,4'-DDE or dichlorodiphenyldichloroethane (4,4'-DDD) could have leached deeper into soil that will be disturbed to return the site to its original topography. Such post-application leaching could only have occurred from aerial application of dichlorodiphenyltrichloroethane (4,4'-DDT) at the site prior to the time that it was banned by the US Environmental Protection Agency (EPA) in 1972.

Dr. Davis recommended additional sampling of five spoil piles at one-foot intervals to the bottom of each spoil pile. The purpose of this Limited Soil Assessment (LSA) is to conduct soil testing as prescribed by Dr. Davis.

### **3.1 Standard of Care**

Terracon's services were performed in accordance with Terracon's Proposal No. PH1197384 dated May 14, 2019, and the standard of care set forth therein. Except as set forth in the Agreement for Services, Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These LSA services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal.

### **3.2 Additional Scope Limitations**

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSA. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

### **3.3 Reliance**

This report has been prepared for the exclusive use of the University of Florida (client). Any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of the client and Terracon. Any unauthorized distribution or reuse is at client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be permitted to the extent set forth in but subject to, the terms, conditions, and limitations stated in the proposal, LSA report, and our Agreement for Services dated May 14, 2019. The limitation of liability defined in the terms and conditions of such agreement is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

## 4.0 FIELD INVESTIGATION

Terracon has a commitment to the safety of all its employees. As such, and in accordance with our Incident and Injury Free® safety culture, a site safety pre-task plan was developed to identify potential safety concerns and prepare our personnel to handle conditions during field services. Prior to commencement of daily on-site activities, Terracon held a meeting with assigned staff to review the proposed work sequence and evaluate work practices for safe completion of the project. Fieldwork was conducted by environmental staff with OSHA 1910.120 training. Sampling activities were conducted in general accordance with the FDEP *Standard Operating Procedures for Field Activities*, DEP-SOP-001/01.

On June 7, 2019, a total of five soil borings were advanced to the water table to observe soils for physical indications of potential contaminant impacts. The soil boring locations were hand-augered within the same Wetland Project Area Sections as Aerostar's November 2018 borings. Approximate soil boring locations are illustrated on Exhibit 2, which also displays St Johns River Water Management District's 16 Project Area Sections. Global Positioning System (GPS) latitude and longitude coordinates for the borings are provided below:

Boring ID	Depth to Water (feet)	Latitude (° North)	Longitude (° West)
FC-GR2	2	29.43559	81.11349
FC-I	1	29.43525	81.11696
FC-K	2	29.43868	81.11882
FC-B	2	29.43130	81.11569
FC-L1	1	29.42617	81.11623

Discrete samples were collected at 1-foot intervals at borings FC-GR2, FC-I, FC-K, FC-B and FC-L1 to the water table, which was encountered at a depth of 1 to 2 feet below ground surface (bgs) at each spoil pile. Physical indications of contaminant impacts were not apparent in the soil observed at the boring locations. Sampling equipment was decontaminated with Luminox detergent and rinsed with deionized water between borings. An equipment rinsate blank was collected after sampling was completed at boring FC-B.

The soil samples and equipment rinsate blank were placed in laboratory prepared glassware, labelled, and placed on ice in a cooler sealed with chain-of-custody tape. Boreholes were back-filled with the remaining disturbed soil. The sample cooler with completed chain-of-custody record was transported and relinquished to Pace Analytical (Pace) in Ormond Beach, Florida (Florida Department of Health Certification #E83079).

Additional soil samples (not duplicate samples) were simultaneously collected from the same borings, placed in laboratory prepared glassware, labelled, and placed on ice in another cooler.

The second cooler with a separate completed chain-of-custody record was transported to the University of Florida, Whitney Laboratory for Marine Bioscience in St. Augustine, Florida.

Pace analyzed the soil samples for organochlorine pesticides by EPA Method 8081B. Analytical results were compared to Florida's soil cleanup target levels (CTLs) listed in Chapter 62-777, Florida Administrative Code (FAC). Only 4,4'-DDE and 4,4'-DDD were estimated above the laboratory MDLs in the uppermost soil sample collected at Project Area Section GR2. The estimated concentrations of the 4,4'-DDT metabolites do not exceed the laboratory's practical quantitation limits (PQLs) or Florida's leachability-based soil CTLs based on surface water criteria. No other constituents were reported above the laboratory MDLs in the soil samples. Table 1 provides a summary of soil analytical results. Pace's laboratory analytical report and the chain-of-custody record are provided in Appendix A.

## **5.0 FINDINGS AND RECOMMENDATIONS**

### **5.1 Findings**

No organochlorine pesticides, including 4,4'-DDT, 4,4'-DDE and 4,4'-DDD, were reported above Florida's soil CTLs or laboratory PQLs in any of the soil samples collected on June 7, 2019. Though the analytical results may be indicative of 4,4'-DDT application or drift within the Wetland Project Area and ensuing leaching of the metabolites 4,4'-DDE or 4,4'-DDD into soil, they do not reveal organochlorine pesticide levels above Florida's soil CTLs for leachability based on marine surface water criteria or the less stringent fresh water surface water criteria, groundwater criteria, or direct human exposure.

### **5.2 Recommendations**

Based on the scope of services described in this report and subject to the limitations described herein, Terracon does not recommend additional assessment at this time.

## TABLE



TABLE 1: SOIL ANALYTICAL SUMMARY

Facility Name: Flagler Beach Salt Marsh Project  
 Location: Flagler Beach, Florida

No Data/Not Analyzed = Blank  
 Analytical Results = mg/kg

Sample Location	Date Sampled	Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Chlordane (Technical)	alpha-Chlordane	gamma-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor epoxide	Methoxychlor	Mirex	Toxaphene
FDEP SCTL-R <sup>1</sup> (mg/kg)		0.06	0.1	0.5	24	0.7	2.8	---	---	4.2	2.9	2.9	0.06	450	450	450	25	---	---	0.2	0.1	420	---	0.9
FDEP Marine Surface Water Leachability <sup>2</sup> (mg/kg)		0.01	0.0003	0.003	---	0.003	0.003	---	---	0.01	0.04	0.06	0.0001	0.0008	0.0008	0.0008	0.001	---	---	0.01	0.0001	0.1	---	0.002
FC-GR2 - 1'	6/7/2019	0.000060 U	0.000071 U	0.000080 U	0.000090 U	0.00015 U	0.016 U	0.000038 U	0.000070 U	0.0011 I	0.00038 I	0.000099 U	0.000041 U	0.000026 U	0.000059 U	0.000044 U	0.000054 U	0.000068 U	0.000083 U	0.000040 U	0.00011 U	0.0011 U	*	0.0076 U
FC-GR2 - 2'	6/7/2019	0.000071 U	0.000085 U	0.000095 U	0.00011 U	0.00018 U	0.020 U	0.000046 U	0.000084 U	0.00016 U	0.000075 U	0.00012 U	0.000049 U	0.000031 U	0.000070 U	0.000053 U	0.000064 U	0.000081 U	0.000098 U	0.000048 U	0.00014 U	0.0013 U	*	0.0090 U
FC-J - 1'	6/7/2019	0.000076 U	0.000090 U	0.00010 U	0.00011 U	0.00019 U	0.021 U	0.000048 U	0.000089 U	0.00017 U	0.000079 U	0.00013 U	0.000052 U	0.000033 U	0.000074 U	0.000056 U	0.000068 U	0.000086 U	0.00010 U	0.000051 U	0.00014 U	0.0014 U	*	0.0096 U
FC-K - 1'	6/7/2019	0.000061 U	0.000072 U	0.000081 U	0.000091 U	0.00015 U	0.017 U	0.000039 U	0.000071 U	0.00014 U	0.000064 U	0.00010 U	0.000042 U	0.000026 U	0.000060 U	0.000045 U	0.000054 U	0.000069 U	0.000084 U	0.000041 U	0.00012 U	0.0011 U	*	0.0077 U
FC-K - 2'	6/7/2019	0.000074 U	0.000088 U	0.000098 U	0.00011 U	0.00019 U	0.020 U	0.000047 U	0.000086 U	0.00017 U	0.000077 U	0.00012 U	0.000051 U	0.000032 U	0.000072 U	0.000055 U	0.000066 U	0.000084 U	0.00010 U	0.000049 U	0.00014 U	0.0013 U	*	0.0093 U
FC-B - 1'	6/7/2019	0.000062 U	0.000073 U	0.000082 U	0.000092 U	0.00016 U	0.017 U	0.000039 U	0.000072 U	0.00014 U	0.000065 U	0.00010 U	0.000042 U	0.000027 U	0.000061 U	0.000046 U	0.000055 U	0.000070 U	0.000085 U	0.000041 U	0.00012 U	0.0011 U	*	0.0078 U
FC-B - 2'	6/7/2019	0.000072 U	0.000085 U	0.000095 U	0.00011 U	0.00018 U	0.020 U	0.000046 U	0.000084 U	0.00016 U	0.000075 U	0.00012 U	0.000049 U	0.000031 U	0.000070 U	0.000053 U	0.000064 U	0.000082 U	0.000099 U	0.000048 U	0.00014 U	0.0013 U	*	0.0091 U
FC-L1 - 1'	6/7/2019	0.00024 U	0.00028 U	0.00032 U	0.00036 U	0.00061 U	0.065 U	0.00015 U	0.00028 U	0.00054 U	0.00025 U	0.00039 U	0.00016 U	0.00010 U	0.00023 U	0.00018 U	0.00021 U	0.00027 U	0.00033 U	0.00016 U	0.00046 U	0.0043 U	*	0.030 U
Method Blank	Date Analyzed																							
2954263	6/13/2019	0.000057 U	0.000068 U	0.000076 U	0.000086 U	0.00015 U	0.016 U	0.000037 U	0.000067 U	0.00013 U	0.000060 U	0.000095 U	0.000040 U	0.000025 U	0.000056 U	0.000043 U	0.000051 U	0.000065 U	0.000079 U	0.000039 U	0.00011 U	0.0010 U	*	0.073 U
Equipment Rinsate Blank	Date Sampled	µg/L																						
EB-1	6/7/2019	0.0014 U	0.0020 U	0.0076 U	0.0046 U	0.0021 U	0.17 U	0.0078 U	0.0048 U	0.0085 U	0.0048 U	0.0048 U	0.0019 U	0.0049 U	0.0038 U	0.0059 U	0.0041 U	0.0034 U	*	0.0059 U	0.0050 U	0.0092 U	0.012 U	0.24 U
Method Blank	Date Analyzed																							
2953789	6/13/2019	0.0015 U	0.0021 U	0.0080 U	0.0048 U	0.0022 U	0.18 U	0.0082 U	0.0050 U	0.0089 U	0.0050 U	0.0050 U	0.0020 U	0.0051 U	0.0040 U	0.0062 U	0.0043 U	0.0036 U	*	0.0062 U	0.0052 U	0.0096 U	0.013 U	0.25 U

Note:

1: FDEP SCTL-R values are from Chapter 62-777, Florida Administrative Code, Soil Cleanup Target Levels for Direct Exposure Residential. These values were developed based on direct human contact (i.e., direct exposure), as detailed in the FDEP document: Technical report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, FAC, February

2: FDEP Leachability values are from Chapter 62-777, Florida Administrative Code, Soil Cleanup Target Levels for Leachability Based on Marine Surface Water Criteria (mg/kg)

Bold numbers exceed FDEP Leachability standard

**0.019**

Shaded numbers exceed FDEP SCTL-R values

0.42

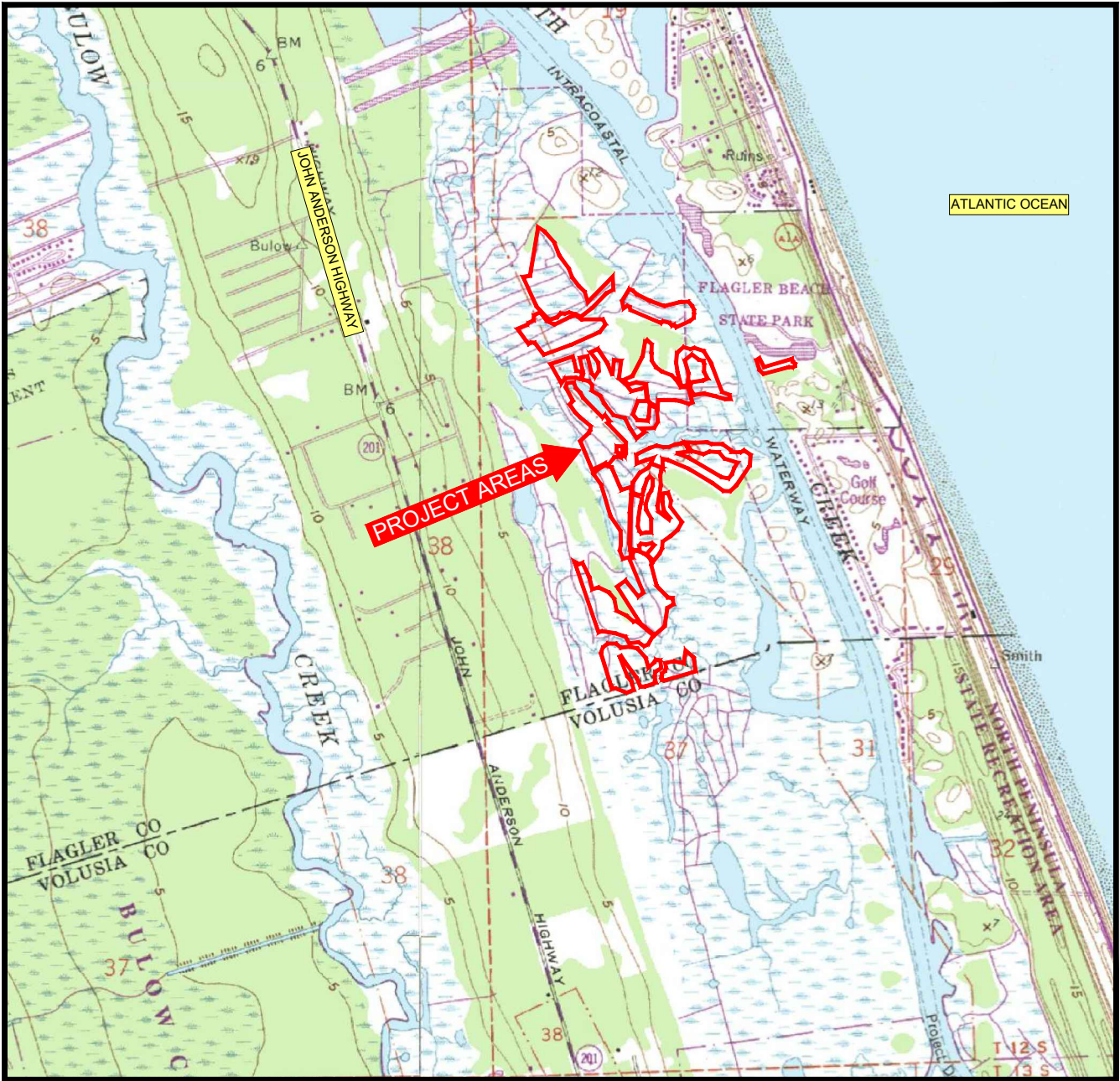
U - Indicates the compound was analyzed for but not detected.

J - Estimated Value. Analyte recovery in laboratory control sample was above QC limits, so reported result may be biased high.

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

\* - Parameter not analyzed

## **EXHIBITS**



SCALE 1"=2000'



FLAGLER BEACH EAST, FLORIDA  
1993  
7.5 MINUTE SERIES (QUADRANGLE)



N:\Projects\2019\H1197384\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cosa\H1197384\_ Exhibit 1.dwg

Project Mngr:	DB
Drawn By:	MG
Checked By:	DB
Approved By:	DB

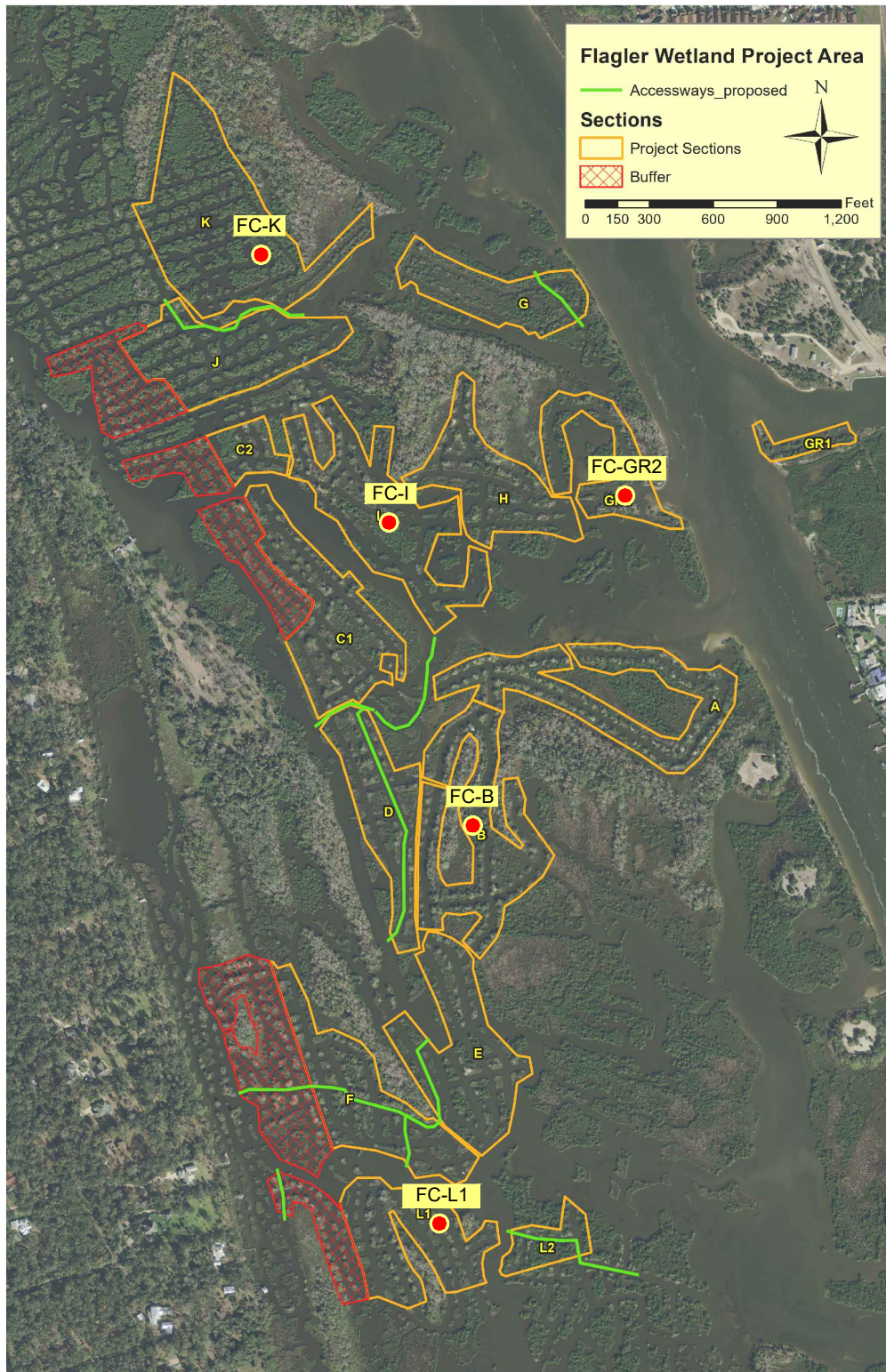
Project No.	H1197384
Scale:	AS SHOWN
File No.	H1197384
Date:	6-14-19

**Terracon**  
Consulting Engineers and Scientists

1675 LEE ROAD WINTER PARK, FLORIDA 32789  
PH. (407) 740-6110 FAX. (407) 740-6112

TOPOGRAPHIC VICINITY MAP  
ENVIRONMENTAL SITE ASSESSMENT  
FLAGLER BEACH SALT MARSH PROJECT  
FLAGLER BEACH  
FLAGLER COUNTY, FLORIDA

EXHIBIT
1



**LEGEND**

● APPROXIMATE LOCATION OF SOIL BORING

N:\Projects\2019\H1197384\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Coa\H1197384 Exhibit 2.dwg

Project Mngr:	DB
Drawn By:	MG
Checked By:	DB
Approved By:	DB

Project No.	H1197384
Scale:	AS SHOWN
File No.	H1197384
Date:	6-14-19

**Terracon**  
 Consulting Engineers and Scientists  
 1675 LEE ROAD WINTER PARK, FLORIDA 32789  
 PH. (407) 740-6110 FAX. (407) 740-6112

SOIL BORING LOCATION MAP  
 ENVIRONMENTAL SITE ASSESSMENT  
 FLAGLER BEACH SALT MARSH PROJECT  
 FLAGLER BEACH  
 FLAGLER COUNTY, FLORIDA

EXHIBIT
2

## **APPENDIX A**

### **PACE ANALYICAL REPORT AND CHAIN-OF-CUSTODY RECORD**

June 20, 2019

Mr. David Beerbower  
Terracon Consulting  
1675 Lee Road  
Winter Park, FL 32789

RE: Project: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

Dear Mr. Beerbower:

Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2019. 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,



Lori Palmer  
lori.palmer@pacelabs.com  
(813)881-9401  
Project Manager

Enclosures

cc: Igor Karimov, Terracon Consulting Engineers  
Mr. John Malkowski, Terracon Consulting Engineers



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

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### Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174  
Alaska DEC- CS/UST/LUST  
Alabama Certification #: 41320  
Arizona Certification# AZ0819  
Colorado Certification: FL NELAC Reciprocity  
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  
Kentucky Certification #: 90050  
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  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL022  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
North Dakota Certification #: R-216  
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  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35473429001	FC-GR2-1'	Solid	06/07/19 07:54	06/07/19 12:22
35473429002	FC-GR2-2'	Solid	06/07/19 07:56	06/07/19 12:22
35473429003	FC-I-1'	Solid	06/07/19 08:14	06/07/19 12:22
35473429004	FC-K-1'	Solid	06/07/19 08:53	06/07/19 12:22
35473429005	FC-K-2'	Solid	06/07/19 08:56	06/07/19 12:22
35473429006	FCB-1'	Solid	06/07/19 09:53	06/07/19 12:22
35473429007	FC-B-2'	Solid	06/07/19 09:50	06/07/19 12:22
35473429008	FC-L1-1'	Solid	06/07/19 10:34	06/07/19 12:22
35473429009	EB-1	Water	06/07/19 10:30	06/07/19 12:22

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Lab ID	Sample ID	Method	Analysts	Analytes Reported
35473429001	FC-GR2-1'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429002	FC-GR2-2'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429003	FC-I-1'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429004	FC-K-1'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429005	FC-K-2'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429006	FCB-1'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429007	FC-B-2'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429008	FC-L1-1'	EPA 8081	TCB	24
		ASTM D2974-87	CLT	1
35473429009	EB-1	EPA 8081	TCB	24

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>35473429001</b>	<b>FC-GR2-1'</b>					
EPA 8081	4,4'-DDD	0.0011	l	0.0018	06/13/19 08:48	
EPA 8081	4,4'-DDE	0.00038	l	0.0018	06/13/19 08:48	
ASTM D2974-87	Percent Moisture	3.4	%	0.10	06/10/19 11:38	
<b>35473429002</b>	<b>FC-GR2-2'</b>					
ASTM D2974-87	Percent Moisture	19.9	%	0.10	06/10/19 11:38	
<b>35473429003</b>	<b>FC-I-1'</b>					
ASTM D2974-87	Percent Moisture	23.5	%	0.10	06/10/19 11:38	
<b>35473429004</b>	<b>FC-K-1'</b>					
ASTM D2974-87	Percent Moisture	5.4	%	0.10	06/10/19 11:38	
<b>35473429005</b>	<b>FC-K-2'</b>					
ASTM D2974-87	Percent Moisture	21.6	%	0.10	06/10/19 11:38	
<b>35473429006</b>	<b>FCB-1'</b>					
ASTM D2974-87	Percent Moisture	6.3	%	0.10	06/10/19 11:39	
<b>35473429007</b>	<b>FC-B-2'</b>					
ASTM D2974-87	Percent Moisture	20.1	%	0.10	06/10/19 11:39	
<b>35473429008</b>	<b>FC-L1-1'</b>					
ASTM D2974-87	Percent Moisture	28.3	%	0.10	06/10/19 11:39	

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Sample: FC-GR2-1' Lab ID: 35473429001 Collected: 06/07/19 07:54 Received: 06/07/19 12:22 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
<b>8081 GCS Pesticides</b>									
Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.000060 U	mg/kg	0.0018	0.000060	1	06/11/19 09:04	06/13/19 08:48	309-00-2	
alpha-BHC	0.000071 U	mg/kg	0.0018	0.000071	1	06/11/19 09:04	06/13/19 08:48	319-84-6	
beta-BHC	0.000080 U	mg/kg	0.0018	0.000080	1	06/11/19 09:04	06/13/19 08:48	319-85-7	
delta-BHC	0.000090 U	mg/kg	0.0018	0.000090	1	06/11/19 09:04	06/13/19 08:48	319-86-8	
gamma-BHC (Lindane)	0.00015 U	mg/kg	0.0018	0.00015	1	06/11/19 09:04	06/13/19 08:48	58-89-9	
Chlordane (Technical)	0.016 U	mg/kg	0.018	0.016	1	06/11/19 09:04	06/13/19 08:48	57-74-9	
alpha-Chlordane	0.000038 U	mg/kg	0.0018	0.000038	1	06/11/19 09:04	06/13/19 08:48	5103-71-9	
gamma-Chlordane	0.000070 U	mg/kg	0.0018	0.000070	1	06/11/19 09:04	06/13/19 08:48	5103-74-2	
4,4'-DDD	0.0011 I	mg/kg	0.0018	0.00014	1	06/11/19 09:04	06/13/19 08:48	72-54-8	
4,4'-DDE	0.00038 I	mg/kg	0.0018	0.000063	1	06/11/19 09:04	06/13/19 08:48	72-55-9	
4,4'-DDT	0.000099 U	mg/kg	0.0018	0.000099	1	06/11/19 09:04	06/13/19 08:48	50-29-3	
Dieldrin	0.000041 U	mg/kg	0.0018	0.000041	1	06/11/19 09:04	06/13/19 08:48	60-57-1	
Endosulfan I	0.000026 U	mg/kg	0.0018	0.000026	1	06/11/19 09:04	06/13/19 08:48	959-98-8	
Endosulfan II	0.000059 U	mg/kg	0.0018	0.000059	1	06/11/19 09:04	06/13/19 08:48	33213-65-9	
Endosulfan sulfate	0.000044 U	mg/kg	0.0018	0.000044	1	06/11/19 09:04	06/13/19 08:48	1031-07-8	
Endrin	0.000054 U	mg/kg	0.0018	0.000054	1	06/11/19 09:04	06/13/19 08:48	72-20-8	
Endrin aldehyde	0.000068 U	mg/kg	0.0034	0.000068	1	06/11/19 09:04	06/13/19 08:48	7421-93-4	
Endrin ketone	0.000083 U	mg/kg	0.0018	0.000083	1	06/11/19 09:04	06/13/19 08:48	53494-70-5	
Heptachlor	0.000040 U	mg/kg	0.0018	0.000040	1	06/11/19 09:04	06/13/19 08:48	76-44-8	
Heptachlor epoxide	0.00011 U	mg/kg	0.0018	0.00011	1	06/11/19 09:04	06/13/19 08:48	1024-57-3	
Methoxychlor	0.0011 U	mg/kg	0.0018	0.0011	1	06/11/19 09:04	06/13/19 08:48	72-43-5	
Toxaphene	0.0076 U	mg/kg	0.018	0.0076	1	06/11/19 09:04	06/13/19 08:48	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	80	%	53-140		1	06/11/19 09:04	06/13/19 08:48	877-09-8	
Decachlorobiphenyl (S)	80	%	43-157		1	06/11/19 09:04	06/13/19 08:48	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	3.4	%	0.10	0.10	1		06/10/19 11:38		

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample:** FC-GR2-2' **Lab ID:** 35473429002 **Collected:** 06/07/19 07:56 **Received:** 06/07/19 12:22 **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
<b>8081 GCS Pesticides</b>									
Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.000071 U	mg/kg	0.0021	0.000071	1	06/11/19 09:00	06/19/19 07:38	309-00-2	
alpha-BHC	0.000085 U	mg/kg	0.0021	0.000085	1	06/11/19 09:00	06/19/19 07:38	319-84-6	
beta-BHC	0.000095 U	mg/kg	0.0021	0.000095	1	06/11/19 09:00	06/19/19 07:38	319-85-7	
delta-BHC	0.00011 U	mg/kg	0.0021	0.00011	1	06/11/19 09:00	06/19/19 07:38	319-86-8	
gamma-BHC (Lindane)	0.00018 U	mg/kg	0.0021	0.00018	1	06/11/19 09:00	06/19/19 07:38	58-89-9	
Chlordane (Technical)	0.020 U	mg/kg	0.021	0.020	1	06/11/19 09:00	06/19/19 07:38	57-74-9	
alpha-Chlordane	0.000046 U	mg/kg	0.0021	0.000046	1	06/11/19 09:00	06/19/19 07:38	5103-71-9	
gamma-Chlordane	0.000084 U	mg/kg	0.0021	0.000084	1	06/11/19 09:00	06/19/19 07:38	5103-74-2	
4,4'-DDD	0.00016 U	mg/kg	0.0021	0.00016	1	06/11/19 09:00	06/19/19 07:38	72-54-8	
4,4'-DDE	0.000075 U	mg/kg	0.0021	0.000075	1	06/11/19 09:00	06/19/19 07:38	72-55-9	
4,4'-DDT	0.00012 U	mg/kg	0.0021	0.00012	1	06/11/19 09:00	06/19/19 07:38	50-29-3	
Dieldrin	0.000049 U	mg/kg	0.0021	0.000049	1	06/11/19 09:00	06/19/19 07:38	60-57-1	
Endosulfan I	0.000031 U	mg/kg	0.0021	0.000031	1	06/11/19 09:00	06/19/19 07:38	959-98-8	
Endosulfan II	0.000070 U	mg/kg	0.0021	0.000070	1	06/11/19 09:00	06/19/19 07:38	33213-65-9	CH,CU
Endosulfan sulfate	0.000053 U	mg/kg	0.0021	0.000053	1	06/11/19 09:00	06/19/19 07:38	1031-07-8	CH,CU
Endrin	0.000064 U	mg/kg	0.0021	0.000064	1	06/11/19 09:00	06/19/19 07:38	72-20-8	
Endrin aldehyde	0.000081 U	mg/kg	0.0041	0.000081	1	06/11/19 09:00	06/19/19 07:38	7421-93-4	
Endrin ketone	0.000098 U	mg/kg	0.0021	0.000098	1	06/11/19 09:00	06/19/19 07:38	53494-70-5	CH,CU
Heptachlor	0.000048 U	mg/kg	0.0021	0.000048	1	06/11/19 09:00	06/19/19 07:38	76-44-8	
Heptachlor epoxide	0.00014 U	mg/kg	0.0021	0.00014	1	06/11/19 09:00	06/19/19 07:38	1024-57-3	
Methoxychlor	0.0013 U	mg/kg	0.0021	0.0013	1	06/11/19 09:00	06/19/19 07:38	72-43-5	CH,CU
Toxaphene	0.0090 U	mg/kg	0.021	0.0090	1	06/11/19 09:00	06/19/19 07:38	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	92	%	53-140		1	06/11/19 09:00	06/19/19 07:38	877-09-8	
Decachlorobiphenyl (S)	93	%	43-157		1	06/11/19 09:00	06/19/19 07:38	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	19.9	%	0.10	0.10	1		06/10/19 11:38		

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Sample: FC-I-1 Lab ID: 35473429003 Collected: 06/07/19 08:14 Received: 06/07/19 12:22 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
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081 Preparation Method: EPA 3546							
Aldrin	0.000076 U	mg/kg	0.0022	0.000076	1	06/11/19 09:00	06/19/19 08:36	309-00-2	
alpha-BHC	0.000090 U	mg/kg	0.0022	0.000090	1	06/11/19 09:00	06/19/19 08:36	319-84-6	
beta-BHC	0.00010 U	mg/kg	0.0022	0.00010	1	06/11/19 09:00	06/19/19 08:36	319-85-7	
delta-BHC	0.00011 U	mg/kg	0.0022	0.00011	1	06/11/19 09:00	06/19/19 08:36	319-86-8	
gamma-BHC (Lindane)	0.00019 U	mg/kg	0.0022	0.00019	1	06/11/19 09:00	06/19/19 08:36	58-89-9	
Chlordane (Technical)	0.021 U	mg/kg	0.022	0.021	1	06/11/19 09:00	06/19/19 08:36	57-74-9	
alpha-Chlordane	0.000048 U	mg/kg	0.0022	0.000048	1	06/11/19 09:00	06/19/19 08:36	5103-71-9	
gamma-Chlordane	0.000089 U	mg/kg	0.0022	0.000089	1	06/11/19 09:00	06/19/19 08:36	5103-74-2	
4,4'-DDD	0.00017 U	mg/kg	0.0022	0.00017	1	06/11/19 09:00	06/19/19 08:36	72-54-8	
4,4'-DDE	0.000079 U	mg/kg	0.0022	0.000079	1	06/11/19 09:00	06/19/19 08:36	72-55-9	
4,4'-DDT	0.00013 U	mg/kg	0.0022	0.00013	1	06/11/19 09:00	06/19/19 08:36	50-29-3	
Dieldrin	0.000052 U	mg/kg	0.0022	0.000052	1	06/11/19 09:00	06/19/19 08:36	60-57-1	
Endosulfan I	0.000033 U	mg/kg	0.0022	0.000033	1	06/11/19 09:00	06/19/19 08:36	959-98-8	
Endosulfan II	0.000074 U	mg/kg	0.0022	0.000074	1	06/11/19 09:00	06/19/19 08:36	33213-65-9	CU
Endosulfan sulfate	0.000056 U	mg/kg	0.0022	0.000056	1	06/11/19 09:00	06/19/19 08:36	1031-07-8	CU
Endrin	0.000068 U	mg/kg	0.0022	0.000068	1	06/11/19 09:00	06/19/19 08:36	72-20-8	
Endrin aldehyde	0.000086 U	mg/kg	0.0043	0.000086	1	06/11/19 09:00	06/19/19 08:36	7421-93-4	
Endrin ketone	0.00010 U	mg/kg	0.0022	0.00010	1	06/11/19 09:00	06/19/19 08:36	53494-70-5	CU
Heptachlor	0.000051 U	mg/kg	0.0022	0.000051	1	06/11/19 09:00	06/19/19 08:36	76-44-8	
Heptachlor epoxide	0.00014 U	mg/kg	0.0022	0.00014	1	06/11/19 09:00	06/19/19 08:36	1024-57-3	
Methoxychlor	0.0014 U	mg/kg	0.0022	0.0014	1	06/11/19 09:00	06/19/19 08:36	72-43-5	CU
Toxaphene	0.0096 U	mg/kg	0.022	0.0096	1	06/11/19 09:00	06/19/19 08:36	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	107	%	53-140		1	06/11/19 09:00	06/19/19 08:36	877-09-8	
Decachlorobiphenyl (S)	89	%	43-157		1	06/11/19 09:00	06/19/19 08:36	2051-24-3	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	23.5	%	0.10	0.10	1		06/10/19 11:38		

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Sample: FC-K-1' Lab ID: 35473429004 Collected: 06/07/19 08:53 Received: 06/07/19 12:22 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
<b>8081 GCS Pesticides</b>									
Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.000061 U	mg/kg	0.0018	0.000061	1	06/11/19 09:00	06/19/19 08:55	309-00-2	
alpha-BHC	0.000072 U	mg/kg	0.0018	0.000072	1	06/11/19 09:00	06/19/19 08:55	319-84-6	
beta-BHC	0.000081 U	mg/kg	0.0018	0.000081	1	06/11/19 09:00	06/19/19 08:55	319-85-7	
delta-BHC	0.000091 U	mg/kg	0.0018	0.000091	1	06/11/19 09:00	06/19/19 08:55	319-86-8	
gamma-BHC (Lindane)	0.00015 U	mg/kg	0.0018	0.00015	1	06/11/19 09:00	06/19/19 08:55	58-89-9	
Chlordane (Technical)	0.017 U	mg/kg	0.018	0.017	1	06/11/19 09:00	06/19/19 08:55	57-74-9	
alpha-Chlordane	0.000039 U	mg/kg	0.0018	0.000039	1	06/11/19 09:00	06/19/19 08:55	5103-71-9	
gamma-Chlordane	0.000071 U	mg/kg	0.0018	0.000071	1	06/11/19 09:00	06/19/19 08:55	5103-74-2	
4,4'-DDD	0.00014 U	mg/kg	0.0018	0.00014	1	06/11/19 09:00	06/19/19 08:55	72-54-8	
4,4'-DDE	0.000064 U	mg/kg	0.0018	0.000064	1	06/11/19 09:00	06/19/19 08:55	72-55-9	
4,4'-DDT	0.00010 U	mg/kg	0.0018	0.00010	1	06/11/19 09:00	06/19/19 08:55	50-29-3	
Dieldrin	0.000042 U	mg/kg	0.0018	0.000042	1	06/11/19 09:00	06/19/19 08:55	60-57-1	
Endosulfan I	0.000026 U	mg/kg	0.0018	0.000026	1	06/11/19 09:00	06/19/19 08:55	959-98-8	
Endosulfan II	0.000060 U	mg/kg	0.0018	0.000060	1	06/11/19 09:00	06/19/19 08:55	33213-65-9	CU
Endosulfan sulfate	0.000045 U	mg/kg	0.0018	0.000045	1	06/11/19 09:00	06/19/19 08:55	1031-07-8	CU
Endrin	0.000054 U	mg/kg	0.0018	0.000054	1	06/11/19 09:00	06/19/19 08:55	72-20-8	
Endrin aldehyde	0.000069 U	mg/kg	0.0035	0.000069	1	06/11/19 09:00	06/19/19 08:55	7421-93-4	
Endrin ketone	0.000084 U	mg/kg	0.0018	0.000084	1	06/11/19 09:00	06/19/19 08:55	53494-70-5	CU
Heptachlor	0.000041 U	mg/kg	0.0018	0.000041	1	06/11/19 09:00	06/19/19 08:55	76-44-8	
Heptachlor epoxide	0.00012 U	mg/kg	0.0018	0.00012	1	06/11/19 09:00	06/19/19 08:55	1024-57-3	
Methoxychlor	0.0011 U	mg/kg	0.0018	0.0011	1	06/11/19 09:00	06/19/19 08:55	72-43-5	CU
Toxaphene	0.0077 U	mg/kg	0.018	0.0077	1	06/11/19 09:00	06/19/19 08:55	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	67	%	53-140		1	06/11/19 09:00	06/19/19 08:55	877-09-8	
Decachlorobiphenyl (S)	87	%	43-157		1	06/11/19 09:00	06/19/19 08:55	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	5.4	%	0.10	0.10	1		06/10/19 11:38		

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample: FC-K-2'**      **Lab ID: 35473429005**      Collected: 06/07/19 08:56      Received: 06/07/19 12:22      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
<b>8081 GCS Pesticides</b>									
Analytical Method: EPA 8081    Preparation Method: EPA 3546									
Aldrin	<b>0.000074</b> U	mg/kg	0.0022	0.000074	1	06/11/19 09:00	06/19/19 09:15	309-00-2	
alpha-BHC	<b>0.000088</b> U	mg/kg	0.0022	0.000088	1	06/11/19 09:00	06/19/19 09:15	319-84-6	
beta-BHC	<b>0.000098</b> U	mg/kg	0.0022	0.000098	1	06/11/19 09:00	06/19/19 09:15	319-85-7	
delta-BHC	<b>0.00011</b> U	mg/kg	0.0022	0.00011	1	06/11/19 09:00	06/19/19 09:15	319-86-8	
gamma-BHC (Lindane)	<b>0.00019</b> U	mg/kg	0.0022	0.00019	1	06/11/19 09:00	06/19/19 09:15	58-89-9	
Chlordane (Technical)	<b>0.020</b> U	mg/kg	0.022	0.020	1	06/11/19 09:00	06/19/19 09:15	57-74-9	
alpha-Chlordane	<b>0.000047</b> U	mg/kg	0.0022	0.000047	1	06/11/19 09:00	06/19/19 09:15	5103-71-9	
gamma-Chlordane	<b>0.000086</b> U	mg/kg	0.0022	0.000086	1	06/11/19 09:00	06/19/19 09:15	5103-74-2	
4,4'-DDD	<b>0.00017</b> U	mg/kg	0.0022	0.00017	1	06/11/19 09:00	06/19/19 09:15	72-54-8	
4,4'-DDE	<b>0.000077</b> U	mg/kg	0.0022	0.000077	1	06/11/19 09:00	06/19/19 09:15	72-55-9	
4,4'-DDT	<b>0.00012</b> U	mg/kg	0.0022	0.00012	1	06/11/19 09:00	06/19/19 09:15	50-29-3	
Dieldrin	<b>0.000051</b> U	mg/kg	0.0022	0.000051	1	06/11/19 09:00	06/19/19 09:15	60-57-1	
Endosulfan I	<b>0.000032</b> U	mg/kg	0.0022	0.000032	1	06/11/19 09:00	06/19/19 09:15	959-98-8	
Endosulfan II	<b>0.000072</b> U	mg/kg	0.0022	0.000072	1	06/11/19 09:00	06/19/19 09:15	33213-65-9	CU
Endosulfan sulfate	<b>0.000055</b> U	mg/kg	0.0022	0.000055	1	06/11/19 09:00	06/19/19 09:15	1031-07-8	CU
Endrin	<b>0.000066</b> U	mg/kg	0.0022	0.000066	1	06/11/19 09:00	06/19/19 09:15	72-20-8	
Endrin aldehyde	<b>0.000084</b> U	mg/kg	0.0042	0.000084	1	06/11/19 09:00	06/19/19 09:15	7421-93-4	
Endrin ketone	<b>0.00010</b> U	mg/kg	0.0022	0.00010	1	06/11/19 09:00	06/19/19 09:15	53494-70-5	CU
Heptachlor	<b>0.000049</b> U	mg/kg	0.0022	0.000049	1	06/11/19 09:00	06/19/19 09:15	76-44-8	
Heptachlor epoxide	<b>0.00014</b> U	mg/kg	0.0022	0.00014	1	06/11/19 09:00	06/19/19 09:15	1024-57-3	
Methoxychlor	<b>0.0013</b> U	mg/kg	0.0022	0.0013	1	06/11/19 09:00	06/19/19 09:15	72-43-5	CU
Toxaphene	<b>0.0093</b> U	mg/kg	0.022	0.0093	1	06/11/19 09:00	06/19/19 09:15	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	93	%	53-140		1	06/11/19 09:00	06/19/19 09:15	877-09-8	
Decachlorobiphenyl (S)	100	%	43-157		1	06/11/19 09:00	06/19/19 09:15	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	<b>21.6</b>	%	0.10	0.10	1		06/10/19 11:38		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample:** FCB-1' **Lab ID:** 35473429006 **Collected:** 06/07/19 09:53 **Received:** 06/07/19 12:22 **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
<b>8081 GCS Pesticides</b>									
Analytical Method: EPA 8081 Preparation Method: EPA 3546									
Aldrin	0.000062 U	mg/kg	0.0018	0.000062	1	06/11/19 09:00	06/19/19 09:34	309-00-2	
alpha-BHC	0.000073 U	mg/kg	0.0018	0.000073	1	06/11/19 09:00	06/19/19 09:34	319-84-6	
beta-BHC	0.000082 U	mg/kg	0.0018	0.000082	1	06/11/19 09:00	06/19/19 09:34	319-85-7	
delta-BHC	0.000092 U	mg/kg	0.0018	0.000092	1	06/11/19 09:00	06/19/19 09:34	319-86-8	
gamma-BHC (Lindane)	0.00016 U	mg/kg	0.0018	0.00016	1	06/11/19 09:00	06/19/19 09:34	58-89-9	
Chlordane (Technical)	0.017 U	mg/kg	0.018	0.017	1	06/11/19 09:00	06/19/19 09:34	57-74-9	
alpha-Chlordane	0.000039 U	mg/kg	0.0018	0.000039	1	06/11/19 09:00	06/19/19 09:34	5103-71-9	
gamma-Chlordane	0.000072 U	mg/kg	0.0018	0.000072	1	06/11/19 09:00	06/19/19 09:34	5103-74-2	
4,4'-DDD	0.00014 U	mg/kg	0.0018	0.00014	1	06/11/19 09:00	06/19/19 09:34	72-54-8	
4,4'-DDE	0.000065 U	mg/kg	0.0018	0.000065	1	06/11/19 09:00	06/19/19 09:34	72-55-9	
4,4'-DDT	0.00010 U	mg/kg	0.0018	0.00010	1	06/11/19 09:00	06/19/19 09:34	50-29-3	
Dieldrin	0.000042 U	mg/kg	0.0018	0.000042	1	06/11/19 09:00	06/19/19 09:34	60-57-1	
Endosulfan I	0.000027 U	mg/kg	0.0018	0.000027	1	06/11/19 09:00	06/19/19 09:34	959-98-8	
Endosulfan II	0.000061 U	mg/kg	0.0018	0.000061	1	06/11/19 09:00	06/19/19 09:34	33213-65-9	CU
Endosulfan sulfate	0.000046 U	mg/kg	0.0018	0.000046	1	06/11/19 09:00	06/19/19 09:34	1031-07-8	CU
Endrin	0.000055 U	mg/kg	0.0018	0.000055	1	06/11/19 09:00	06/19/19 09:34	72-20-8	
Endrin aldehyde	0.000070 U	mg/kg	0.0035	0.000070	1	06/11/19 09:00	06/19/19 09:34	7421-93-4	
Endrin ketone	0.000085 U	mg/kg	0.0018	0.000085	1	06/11/19 09:00	06/19/19 09:34	53494-70-5	CU
Heptachlor	0.000041 U	mg/kg	0.0018	0.000041	1	06/11/19 09:00	06/19/19 09:34	76-44-8	
Heptachlor epoxide	0.00012 U	mg/kg	0.0018	0.00012	1	06/11/19 09:00	06/19/19 09:34	1024-57-3	
Methoxychlor	0.0011 U	mg/kg	0.0018	0.0011	1	06/11/19 09:00	06/19/19 09:34	72-43-5	CU
Toxaphene	0.0078 U	mg/kg	0.018	0.0078	1	06/11/19 09:00	06/19/19 09:34	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	92	%	53-140		1	06/11/19 09:00	06/19/19 09:34	877-09-8	
Decachlorobiphenyl (S)	103	%	43-157		1	06/11/19 09:00	06/19/19 09:34	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	6.3	%	0.10	0.10	1		06/10/19 11:39		

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample: FC-B-2'**      **Lab ID: 35473429007**      Collected: 06/07/19 09:50      Received: 06/07/19 12:22      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
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081    Preparation Method: EPA 3546							
Aldrin	<b>0.000072</b> U	mg/kg	0.0021	0.000072	1	06/11/19 09:00	06/19/19 09:54	309-00-2	
alpha-BHC	<b>0.000085</b> U	mg/kg	0.0021	0.000085	1	06/11/19 09:00	06/19/19 09:54	319-84-6	
beta-BHC	<b>0.000095</b> U	mg/kg	0.0021	0.000095	1	06/11/19 09:00	06/19/19 09:54	319-85-7	
delta-BHC	<b>0.00011</b> U	mg/kg	0.0021	0.00011	1	06/11/19 09:00	06/19/19 09:54	319-86-8	
gamma-BHC (Lindane)	<b>0.00018</b> U	mg/kg	0.0021	0.00018	1	06/11/19 09:00	06/19/19 09:54	58-89-9	
Chlordane (Technical)	<b>0.020</b> U	mg/kg	0.021	0.020	1	06/11/19 09:00	06/19/19 09:54	57-74-9	
alpha-Chlordane	<b>0.000046</b> U	mg/kg	0.0021	0.000046	1	06/11/19 09:00	06/19/19 09:54	5103-71-9	
gamma-Chlordane	<b>0.000084</b> U	mg/kg	0.0021	0.000084	1	06/11/19 09:00	06/19/19 09:54	5103-74-2	
4,4'-DDD	<b>0.00016</b> U	mg/kg	0.0021	0.00016	1	06/11/19 09:00	06/19/19 09:54	72-54-8	
4,4'-DDE	<b>0.000075</b> U	mg/kg	0.0021	0.000075	1	06/11/19 09:00	06/19/19 09:54	72-55-9	
4,4'-DDT	<b>0.00012</b> U	mg/kg	0.0021	0.00012	1	06/11/19 09:00	06/19/19 09:54	50-29-3	
Dieldrin	<b>0.000049</b> U	mg/kg	0.0021	0.000049	1	06/11/19 09:00	06/19/19 09:54	60-57-1	
Endosulfan I	<b>0.000031</b> U	mg/kg	0.0021	0.000031	1	06/11/19 09:00	06/19/19 09:54	959-98-8	
Endosulfan II	<b>0.000070</b> U	mg/kg	0.0021	0.000070	1	06/11/19 09:00	06/19/19 09:54	33213-65-9	CU
Endosulfan sulfate	<b>0.000053</b> U	mg/kg	0.0021	0.000053	1	06/11/19 09:00	06/19/19 09:54	1031-07-8	CU
Endrin	<b>0.000064</b> U	mg/kg	0.0021	0.000064	1	06/11/19 09:00	06/19/19 09:54	72-20-8	
Endrin aldehyde	<b>0.000082</b> U	mg/kg	0.0041	0.000082	1	06/11/19 09:00	06/19/19 09:54	7421-93-4	
Endrin ketone	<b>0.000099</b> U	mg/kg	0.0021	0.000099	1	06/11/19 09:00	06/19/19 09:54	53494-70-5	CU
Heptachlor	<b>0.000048</b> U	mg/kg	0.0021	0.000048	1	06/11/19 09:00	06/19/19 09:54	76-44-8	
Heptachlor epoxide	<b>0.00014</b> U	mg/kg	0.0021	0.00014	1	06/11/19 09:00	06/19/19 09:54	1024-57-3	
Methoxychlor	<b>0.0013</b> U	mg/kg	0.0021	0.0013	1	06/11/19 09:00	06/19/19 09:54	72-43-5	CU
Toxaphene	<b>0.0091</b> U	mg/kg	0.021	0.0091	1	06/11/19 09:00	06/19/19 09:54	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	75	%	53-140		1	06/11/19 09:00	06/19/19 09:54	877-09-8	
Decachlorobiphenyl (S)	72	%	43-157		1	06/11/19 09:00	06/19/19 09:54	2051-24-3	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	<b>20.1</b>	%	0.10	0.10	1		06/10/19 11:39		

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## ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample:** FC-L1-1' **Lab ID:** 35473429008 **Collected:** 06/07/19 10:34 **Received:** 06/07/19 12:22 **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
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081 Preparation Method: EPA 3546							
Aldrin	<b>0.00024 U</b>	mg/kg	0.0070	0.00024	1	06/11/19 09:00	06/19/19 10:13	309-00-2	P1
alpha-BHC	<b>0.00028 U</b>	mg/kg	0.0070	0.00028	1	06/11/19 09:00	06/19/19 10:13	319-84-6	P1
beta-BHC	<b>0.00032 U</b>	mg/kg	0.0070	0.00032	1	06/11/19 09:00	06/19/19 10:13	319-85-7	P1
delta-BHC	<b>0.00036 U</b>	mg/kg	0.0070	0.00036	1	06/11/19 09:00	06/19/19 10:13	319-86-8	P1
gamma-BHC (Lindane)	<b>0.00061 U</b>	mg/kg	0.0070	0.00061	1	06/11/19 09:00	06/19/19 10:13	58-89-9	P1
Chlordane (Technical)	<b>0.065 U</b>	mg/kg	0.070	0.065	1	06/11/19 09:00	06/19/19 10:13	57-74-9	P1
alpha-Chlordane	<b>0.00015 U</b>	mg/kg	0.0070	0.00015	1	06/11/19 09:00	06/19/19 10:13	5103-71-9	P1
gamma-Chlordane	<b>0.00028 U</b>	mg/kg	0.0070	0.00028	1	06/11/19 09:00	06/19/19 10:13	5103-74-2	P1
4,4'-DDD	<b>0.00054 U</b>	mg/kg	0.0070	0.00054	1	06/11/19 09:00	06/19/19 10:13	72-54-8	P1
4,4'-DDE	<b>0.00025 U</b>	mg/kg	0.0070	0.00025	1	06/11/19 09:00	06/19/19 10:13	72-55-9	P1
4,4'-DDT	<b>0.00039 U</b>	mg/kg	0.0070	0.00039	1	06/11/19 09:00	06/19/19 10:13	50-29-3	P1
Dieldrin	<b>0.00016 U</b>	mg/kg	0.0070	0.00016	1	06/11/19 09:00	06/19/19 10:13	60-57-1	P1
Endosulfan I	<b>0.00010 U</b>	mg/kg	0.0070	0.00010	1	06/11/19 09:00	06/19/19 10:13	959-98-8	P1
Endosulfan II	<b>0.00023 U</b>	mg/kg	0.0070	0.00023	1	06/11/19 09:00	06/19/19 10:13	33213-65-9	CU,P1
Endosulfan sulfate	<b>0.00018 U</b>	mg/kg	0.0070	0.00018	1	06/11/19 09:00	06/19/19 10:13	1031-07-8	CU,P1
Endrin	<b>0.00021 U</b>	mg/kg	0.0070	0.00021	1	06/11/19 09:00	06/19/19 10:13	72-20-8	P1
Endrin aldehyde	<b>0.00027 U</b>	mg/kg	0.014	0.00027	1	06/11/19 09:00	06/19/19 10:13	7421-93-4	P1
Endrin ketone	<b>0.00033 U</b>	mg/kg	0.0070	0.00033	1	06/11/19 09:00	06/19/19 10:13	53494-70-5	CU,P1
Heptachlor	<b>0.00016 U</b>	mg/kg	0.0070	0.00016	1	06/11/19 09:00	06/19/19 10:13	76-44-8	P1
Heptachlor epoxide	<b>0.00046 U</b>	mg/kg	0.0070	0.00046	1	06/11/19 09:00	06/19/19 10:13	1024-57-3	P1
Methoxychlor	<b>0.0043 U</b>	mg/kg	0.0070	0.0043	1	06/11/19 09:00	06/19/19 10:13	72-43-5	CU,P1
Toxaphene	<b>0.030 U</b>	mg/kg	0.070	0.030	1	06/11/19 09:00	06/19/19 10:13	8001-35-2	P1
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	125	%	53-140		1	06/11/19 09:00	06/19/19 10:13	877-09-8	
Decachlorobiphenyl (S)	113	%	43-157		1	06/11/19 09:00	06/19/19 10:13	2051-24-3	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	<b>28.3</b>	%	0.10	0.10	1		06/10/19 11:39		

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

**Sample: EB-1**      **Lab ID: 35473429009**      Collected: 06/07/19 10:30      Received: 06/07/19 12:22      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081    Preparation Method: EPA 3510							
Aldrin	<b>0.0014 U</b>	ug/L	0.0096	0.0014	1	06/11/19 08:43	06/14/19 01:52	309-00-2	
alpha-BHC	<b>0.0020 U</b>	ug/L	0.0096	0.0020	1	06/11/19 08:43	06/14/19 01:52	319-84-6	
beta-BHC	<b>0.0076 U</b>	ug/L	0.0096	0.0076	1	06/11/19 08:43	06/14/19 01:52	319-85-7	
delta-BHC	<b>0.0046 U</b>	ug/L	0.0096	0.0046	1	06/11/19 08:43	06/14/19 01:52	319-86-8	
gamma-BHC (Lindane)	<b>0.0021 U</b>	ug/L	0.0096	0.0021	1	06/11/19 08:43	06/14/19 01:52	58-89-9	
Chlordane (Technical)	<b>0.17 U</b>	ug/L	0.48	0.17	1	06/11/19 08:43	06/14/19 01:52	57-74-9	
alpha-Chlordane	<b>0.0078 U</b>	ug/L	0.0096	0.0078	1	06/11/19 08:43	06/14/19 01:52	5103-71-9	
gamma-Chlordane	<b>0.0048 U</b>	ug/L	0.0096	0.0048	1	06/11/19 08:43	06/14/19 01:52	5103-74-2	
4,4'-DDD	<b>0.0085 U</b>	ug/L	0.0096	0.0085	1	06/11/19 08:43	06/14/19 01:52	72-54-8	
4,4'-DDE	<b>0.0048 U</b>	ug/L	0.0096	0.0048	1	06/11/19 08:43	06/14/19 01:52	72-55-9	
4,4'-DDT	<b>0.0048 U</b>	ug/L	0.0096	0.0048	1	06/11/19 08:43	06/14/19 01:52	50-29-3	
Dieldrin	<b>0.0019 U</b>	ug/L	0.0096	0.0019	1	06/11/19 08:43	06/14/19 01:52	60-57-1	
Endosulfan I	<b>0.0049 U</b>	ug/L	0.0096	0.0049	1	06/11/19 08:43	06/14/19 01:52	959-98-8	
Endosulfan II	<b>0.0038 U</b>	ug/L	0.0096	0.0038	1	06/11/19 08:43	06/14/19 01:52	33213-65-9	
Endosulfan sulfate	<b>0.0059 U</b>	ug/L	0.096	0.0059	1	06/11/19 08:43	06/14/19 01:52	1031-07-8	
Endrin	<b>0.0041 U</b>	ug/L	0.0096	0.0041	1	06/11/19 08:43	06/14/19 01:52	72-20-8	
Endrin aldehyde	<b>0.0034 U</b>	ug/L	0.096	0.0034	1	06/11/19 08:43	06/14/19 01:52	7421-93-4	CU, J(L1)
Heptachlor	<b>0.0059 U</b>	ug/L	0.0096	0.0059	1	06/11/19 08:43	06/14/19 01:52	76-44-8	
Heptachlor epoxide	<b>0.0050 U</b>	ug/L	0.0096	0.0050	1	06/11/19 08:43	06/14/19 01:52	1024-57-3	
Methoxychlor	<b>0.0092 U</b>	ug/L	0.0096	0.0092	1	06/11/19 08:43	06/14/19 01:52	72-43-5	
Mirex	<b>0.012 U</b>	ug/L	0.096	0.012	1	06/11/19 08:43	06/14/19 01:52	2385-85-5	
Toxaphene	<b>0.24 U</b>	ug/L	0.48	0.24	1	06/11/19 08:43	06/14/19 01:52	8001-35-2	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	85	%	27-124		1	06/11/19 08:43	06/14/19 01:52	877-09-8	
Decachlorobiphenyl (S)	53	%	10-132		1	06/11/19 08:43	06/14/19 01:52	2051-24-3	

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

QC Batch: 545317 Analysis Method: EPA 8081  
QC Batch Method: EPA 3546 Analysis Description: 8081 GCS Pesticides  
Associated Lab Samples: 35473429001

METHOD BLANK: 2954263 Matrix: Solid  
Associated Lab Samples: 35473429001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
4,4'-DDD	mg/kg	0.00013 U	0.0017	0.00013	06/13/19 01:14	
4,4'-DDE	mg/kg	0.000060 U	0.0017	0.000060	06/13/19 01:14	
4,4'-DDT	mg/kg	0.000095 U	0.0017	0.000095	06/13/19 01:14	
Aldrin	mg/kg	0.000057 U	0.0017	0.000057	06/13/19 01:14	
alpha-BHC	mg/kg	0.000068 U	0.0017	0.000068	06/13/19 01:14	
alpha-Chlordane	mg/kg	0.000037 U	0.0017	0.000037	06/13/19 01:14	
beta-BHC	mg/kg	0.000076 U	0.0017	0.000076	06/13/19 01:14	
Chlordane (Technical)	mg/kg	0.016 U	0.017	0.016	06/13/19 01:14	
delta-BHC	mg/kg	0.000086 U	0.0017	0.000086	06/13/19 01:14	
Dieldrin	mg/kg	0.000040 U	0.0017	0.000040	06/13/19 01:14	
Endosulfan I	mg/kg	0.000025 U	0.0017	0.000025	06/13/19 01:14	
Endosulfan II	mg/kg	0.000056 U	0.0017	0.000056	06/13/19 01:14	
Endosulfan sulfate	mg/kg	0.000043 U	0.0017	0.000043	06/13/19 01:14	
Endrin	mg/kg	0.000051 U	0.0017	0.000051	06/13/19 01:14	
Endrin aldehyde	mg/kg	0.000065 U	0.0033	0.000065	06/13/19 01:14	
Endrin ketone	mg/kg	0.000079 U	0.0017	0.000079	06/13/19 01:14	
gamma-BHC (Lindane)	mg/kg	0.00015 U	0.0017	0.00015	06/13/19 01:14	
gamma-Chlordane	mg/kg	0.000067 U	0.0017	0.000067	06/13/19 01:14	
Heptachlor	mg/kg	0.000039 U	0.0017	0.000039	06/13/19 01:14	
Heptachlor epoxide	mg/kg	0.00011 U	0.0017	0.00011	06/13/19 01:14	
Methoxychlor	mg/kg	0.0010 U	0.0017	0.0010	06/13/19 01:14	
Toxaphene	mg/kg	0.0073 U	0.017	0.0073	06/13/19 01:14	
Decachlorobiphenyl (S)	%	98	43-157		06/13/19 01:14	
Tetrachloro-m-xylene (S)	%	100	53-140		06/13/19 01:14	

LABORATORY CONTROL SAMPLE: 2954264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	mg/kg	0.016	0.016	100	62-144	
4,4'-DDE	mg/kg	0.016	0.017	105	67-141	
4,4'-DDT	mg/kg	0.016	0.017	102	57-159	
Aldrin	mg/kg	0.016	0.018	107	70-136	
alpha-BHC	mg/kg	0.016	0.018	112	67-136	
alpha-Chlordane	mg/kg	0.016	0.017	105	70-130	
beta-BHC	mg/kg	0.016	0.017	105	68-131	
delta-BHC	mg/kg	0.016	0.018	106	58-120	
Dieldrin	mg/kg	0.016	0.018	107	63-145	
Endosulfan I	mg/kg	0.016	0.017	103	66-129	
Endosulfan II	mg/kg	0.016	0.018	107	59-130	
Endosulfan sulfate	mg/kg	0.016	0.017	106	57-137	

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: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

LABORATORY CONTROL SAMPLE: 2954264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.016	0.017	104	67-147	
Endrin aldehyde	mg/kg	0.016	0.019	112	54-144	
Endrin ketone	mg/kg	0.016	0.017	106	60-139	
gamma-BHC (Lindane)	mg/kg	0.016	0.018	110	69-137	
gamma-Chlordane	mg/kg	0.016	0.017	105	69-132	
Heptachlor	mg/kg	0.016	0.017	106	68-135	
Heptachlor epoxide	mg/kg	0.016	0.018	109	68-135	
Methoxychlor	mg/kg	0.016	0.018	109	57-153	
Decachlorobiphenyl (S)	%			102	43-157	
Tetrachloro-m-xylene (S)	%			98	53-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2954522 2954523

Parameter	Units	35473815015		MS	MSD	2954523		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result						
4,4'-DDD	mg/kg	0.0013	I	0.021	0.021	0.018	0.024	82	110	62-144	27	40	
4,4'-DDE	mg/kg	0.000077	U	0.021	0.021	0.018	0.024	85	113	67-141	29	40	
4,4'-DDT	mg/kg	0.00012	U	0.021	0.021	0.015	0.021	73	100	57-159	31	40	
Aldrin	mg/kg	0.000073	U	0.021	0.021	0.018	0.023	86	112	70-136	27	40	
alpha-BHC	mg/kg	0.000087	U	0.021	0.021	0.018	0.024	88	115	67-136	27	40	
alpha-Chlordane	mg/kg	0.000046	U	0.021	0.021	0.017	0.022	81	108	70-130	28	40	
beta-BHC	mg/kg	0.000097	U	0.021	0.021	0.017	0.022	84	108	68-131	25	40	
delta-BHC	mg/kg	0.00011	U	0.021	0.021	0.017	0.024	84	115	58-120	31	40	
Dieldrin	mg/kg	0.000050	U	0.021	0.021	0.018	0.023	85	113	63-145	28	40	
Endosulfan I	mg/kg	0.000031	U	0.021	0.021	0.017	0.022	81	106	66-129	28	40	
Endosulfan II	mg/kg	0.000072	U	0.021	0.021	0.018	0.024	86	113	59-130	28	40	
Endosulfan sulfate	mg/kg	0.000054	U	0.021	0.021	0.018	0.025	86	121	57-137	34	40	
Endrin	mg/kg	0.000065	U	0.021	0.021	0.017	0.023	81	109	67-147	29	40	
Endrin aldehyde	mg/kg	0.000083	U	0.021	0.021	0.020	0.025	94	121	54-144	25	40	
Endrin ketone	mg/kg	0.00010	U	0.021	0.021	0.018	0.024	85	115	60-139	30	40	
gamma-BHC (Lindane)	mg/kg	0.00019	U	0.021	0.021	0.018	0.024	87	114	69-137	27	40	
gamma-Chlordane	mg/kg	0.000085	U	0.021	0.021	0.018	0.024	85	114	69-132	29	40	
Heptachlor	mg/kg	0.000049	U	0.021	0.021	0.018	0.023	86	112	68-135	26	40	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Parameter	Units	2954522		2954523		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		35473815015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Heptachlor epoxide	mg/kg	0.00014 U	0.021	0.021	0.018	0.024	87	113	68-135	26	40	
Methoxychlor	mg/kg	0.0013 U	0.021	0.021	0.017	0.023	80	108	57-153	30	40	
Decachlorobiphenyl (S)	%						75	101	43-157			
Tetrachloro-m-xylene (S)	%						80	101	53-140			

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

QC Batch: 545318 Analysis Method: EPA 8081  
QC Batch Method: EPA 3546 Analysis Description: 8081 GCS Pesticides  
Associated Lab Samples: 35473429002, 35473429003, 35473429004, 35473429005, 35473429006, 35473429007, 35473429008

METHOD BLANK: 2954265 Matrix: Solid  
Associated Lab Samples: 35473429002, 35473429003, 35473429004, 35473429005, 35473429006, 35473429007, 35473429008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
4,4'-DDD	mg/kg	0.00013 U	0.0017	0.00013	06/19/19 06:59	
4,4'-DDE	mg/kg	0.000061 U	0.0017	0.000061	06/19/19 06:59	
4,4'-DDT	mg/kg	0.000095 U	0.0017	0.000095	06/19/19 06:59	
Aldrin	mg/kg	0.000058 U	0.0017	0.000058	06/19/19 06:59	
alpha-BHC	mg/kg	0.000069 U	0.0017	0.000069	06/19/19 06:59	
alpha-Chlordane	mg/kg	0.000037 U	0.0017	0.000037	06/19/19 06:59	
beta-BHC	mg/kg	0.000076 U	0.0017	0.000076	06/19/19 06:59	
Chlordane (Technical)	mg/kg	0.016 U	0.017	0.016	06/19/19 06:59	
delta-BHC	mg/kg	0.000086 U	0.0017	0.000086	06/19/19 06:59	
Dieldrin	mg/kg	0.000040 U	0.0017	0.000040	06/19/19 06:59	
Endosulfan I	mg/kg	0.000025 U	0.0017	0.000025	06/19/19 06:59	
Endosulfan II	mg/kg	0.000057 U	0.0017	0.000057	06/19/19 06:59	CU
Endosulfan sulfate	mg/kg	0.000043 U	0.0017	0.000043	06/19/19 06:59	CU
Endrin	mg/kg	0.000052 U	0.0017	0.000052	06/19/19 06:59	
Endrin aldehyde	mg/kg	0.000066 U	0.0033	0.000066	06/19/19 06:59	
Endrin ketone	mg/kg	0.000079 U	0.0017	0.000079	06/19/19 06:59	CU
gamma-BHC (Lindane)	mg/kg	0.00015 U	0.0017	0.00015	06/19/19 06:59	
gamma-Chlordane	mg/kg	0.000068 U	0.0017	0.000068	06/19/19 06:59	
Heptachlor	mg/kg	0.000039 U	0.0017	0.000039	06/19/19 06:59	
Heptachlor epoxide	mg/kg	0.00011 U	0.0017	0.00011	06/19/19 06:59	
Methoxychlor	mg/kg	0.0010 U	0.0017	0.0010	06/19/19 06:59	CU
Toxaphene	mg/kg	0.0073 U	0.017	0.0073	06/19/19 06:59	
Decachlorobiphenyl (S)	%	110	43-157		06/19/19 06:59	
Tetrachloro-m-xylene (S)	%	107	53-140		06/19/19 06:59	

LABORATORY CONTROL SAMPLE: 2954266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	mg/kg	0.017	0.016	97	62-144	
4,4'-DDE	mg/kg	0.017	0.016	98	67-141	
4,4'-DDT	mg/kg	0.017	0.017	102	57-159	
Aldrin	mg/kg	0.017	0.016	97	70-136	
alpha-BHC	mg/kg	0.017	0.017	100	67-136	
alpha-Chlordane	mg/kg	0.017	0.016	94	70-130	
beta-BHC	mg/kg	0.017	0.015	93	68-131	
delta-BHC	mg/kg	0.017	0.015	93	58-120	
Dieldrin	mg/kg	0.017	0.017	99	63-145	
Endosulfan I	mg/kg	0.017	0.017	101	66-129	
Endosulfan II	mg/kg	0.017	0.018	109	59-130 CH	
Endosulfan sulfate	mg/kg	0.017	0.018	106	57-137 CH	

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

LABORATORY CONTROL SAMPLE: 2954266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.017	0.017	102	67-147	
Endrin aldehyde	mg/kg	0.017	0.019	112	54-144	
Endrin ketone	mg/kg	0.017	0.018	107	60-139	CH
gamma-BHC (Lindane)	mg/kg	0.017	0.017	102	69-137	
gamma-Chlordane	mg/kg	0.017	0.016	97	69-132	
Heptachlor	mg/kg	0.017	0.016	99	68-135	
Heptachlor epoxide	mg/kg	0.017	0.017	101	68-135	
Methoxychlor	mg/kg	0.017	0.018	108	57-153	CH
Decachlorobiphenyl (S)	%			94	43-157	
Tetrachloro-m-xylene (S)	%			93	53-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2954568 2954569

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		35473429002	Spike Conc.	Spike Conc.	Result								
4,4'-DDD	mg/kg	0.00016 U	0.02	0.021	0.020	0.020	96	97	62-144	1	40		
4,4'-DDE	mg/kg	0.000075 U	0.02	0.021	0.020	0.023	95	110	67-141	15	40		
4,4'-DDT	mg/kg	0.00012 U	0.02	0.021	0.021	0.020	101	97	57-159	3	40		
Aldrin	mg/kg	0.000071 U	0.02	0.021	0.020	0.017	100	83	70-136	17	40		
alpha-BHC	mg/kg	0.000085 U	0.02	0.021	0.023	0.020	110	98	67-136	10	40		
alpha-Chlordane	mg/kg	0.000046 U	0.02	0.021	0.019	0.022	92	106	70-130	15	40		
beta-BHC	mg/kg	0.000095 U	0.02	0.021	0.020	0.020	99	96	68-131	2	40		
delta-BHC	mg/kg	0.00011 U	0.02	0.021	0.019	0.019	95	90	58-120	4	40		
Dieldrin	mg/kg	0.000049 U	0.02	0.021	0.020	0.022	98	105	63-145	8	40		
Endosulfan I	mg/kg	0.000031 U	0.02	0.021	0.021	0.024	101	115	66-129	13	40		
Endosulfan II	mg/kg	0.000070 U	0.02	0.021	0.022	0.022	108	104	59-130	3	40	CH	
Endosulfan sulfate	mg/kg	0.000053 U	0.02	0.021	0.022	0.022	106	107	57-137	2	40	CH,CU	
Endrin	mg/kg	0.000064 U	0.02	0.021	0.021	0.022	101	106	67-147	6	40		
Endrin aldehyde	mg/kg	0.000081 U	0.02	0.021	0.022	0.024	110	117	54-144	7	40		
Endrin ketone	mg/kg	0.000098 U	0.02	0.021	0.022	0.022	106	108	60-139	2	40	CH	
gamma-BHC (Lindane)	mg/kg	0.00018 U	0.02	0.021	0.021	0.020	102	95	69-137	7	40		
gamma-Chlordane	mg/kg	0.000084 U	0.02	0.021	0.020	0.027	96	132	69-132	32	40		

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Parameter	Units	2954568		2954569		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		35473429002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Heptachlor	mg/kg	0.000048 U	0.02	0.021	0.022	0.020	105	97	68-135	7	40	
Heptachlor epoxide	mg/kg	0.00014 U	0.02	0.021	0.020	0.022	99	107	68-135	8	40	
Methoxychlor	mg/kg	0.0013 U	0.02	0.021	0.022	0.022	105	105	57-153	0	40	CH
Decachlorobiphenyl (S)	%						99	93	43-157			
Tetrachloro-m-xylene (S)	%						93	86	53-140			

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

QC Batch: 545229 Analysis Method: EPA 8081  
QC Batch Method: EPA 3510 Analysis Description: 8081 GCS Pesticides  
Associated Lab Samples: 35473429009

METHOD BLANK: 2953789 Matrix: Water  
Associated Lab Samples: 35473429009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
4,4'-DDD	ug/L	0.0089 U	0.010	0.0089	06/13/19 22:15	
4,4'-DDE	ug/L	0.0050 U	0.010	0.0050	06/13/19 22:15	
4,4'-DDT	ug/L	0.0050 U	0.010	0.0050	06/13/19 22:15	
Aldrin	ug/L	0.0015 U	0.010	0.0015	06/13/19 22:15	
alpha-BHC	ug/L	0.0021 U	0.010	0.0021	06/13/19 22:15	
alpha-Chlordane	ug/L	0.0082 U	0.010	0.0082	06/13/19 22:15	
beta-BHC	ug/L	0.0080 U	0.010	0.0080	06/13/19 22:15	
Chlordane (Technical)	ug/L	0.18 U	0.50	0.18	06/13/19 22:15	
delta-BHC	ug/L	0.0048 U	0.010	0.0048	06/13/19 22:15	
Dieldrin	ug/L	0.0020 U	0.010	0.0020	06/13/19 22:15	
Endosulfan I	ug/L	0.0051 U	0.010	0.0051	06/13/19 22:15	
Endosulfan II	ug/L	0.0040 U	0.010	0.0040	06/13/19 22:15	
Endosulfan sulfate	ug/L	0.0062 U	0.10	0.0062	06/13/19 22:15	
Endrin	ug/L	0.0043 U	0.010	0.0043	06/13/19 22:15	
Endrin aldehyde	ug/L	0.0036 U	0.10	0.0036	06/13/19 22:15	CU
gamma-BHC (Lindane)	ug/L	0.0022 U	0.010	0.0022	06/13/19 22:15	
gamma-Chlordane	ug/L	0.0050 U	0.010	0.0050	06/13/19 22:15	
Heptachlor	ug/L	0.0062 U	0.010	0.0062	06/13/19 22:15	
Heptachlor epoxide	ug/L	0.0052 U	0.010	0.0052	06/13/19 22:15	
Methoxychlor	ug/L	0.0096 U	0.010	0.0096	06/13/19 22:15	
Mirex	ug/L	0.013 U	0.10	0.013	06/13/19 22:15	
Toxaphene	ug/L	0.25 U	0.50	0.25	06/13/19 22:15	
Decachlorobiphenyl (S)	%	53	10-132		06/13/19 22:15	
Tetrachloro-m-xylene (S)	%	60	27-124		06/13/19 22:15	

LABORATORY CONTROL SAMPLE: 2953790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/L	0.5	0.49	98	67-133	
4,4'-DDE	ug/L	0.5	0.51	102	59-125	
4,4'-DDT	ug/L	0.5	0.57	113	54-132	
Aldrin	ug/L	0.5	0.43	85	25-116	
alpha-BHC	ug/L	0.5	0.57	115	53-126	
alpha-Chlordane	ug/L	0.5	0.52	103	67-115	
beta-BHC	ug/L	0.5	0.59	119	62-130	
delta-BHC	ug/L	0.5	0.56	112	35-122	
Dieldrin	ug/L	0.5	0.53	107	66-128	
Endosulfan I	ug/L	0.5	0.54	108	67-125	
Endosulfan II	ug/L	0.5	0.55	110	67-131	
Endosulfan sulfate	ug/L	0.5	0.57	113	62-127	

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### QUALITY CONTROL DATA

Project: Flagler Beach Salt Marsh  
Pace Project No.: 35473429

LABORATORY CONTROL SAMPLE: 2953790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	0.5	0.56	112	66-130	
Endrin aldehyde	ug/L	0.5	0.65	129	61-124	CH,J(L1)
gamma-BHC (Lindane)	ug/L	0.5	0.57	115	58-127	
gamma-Chlordane	ug/L	0.5	0.55	110	66-115	
Heptachlor	ug/L	0.5	0.45	91	35-123	
Heptachlor epoxide	ug/L	0.5	0.55	111	62-125	
Methoxychlor	ug/L	0.5	0.56	111	59-135	
Mirex	ug/L	0.5	0.52	104	35-114	
Decachlorobiphenyl (S)	%			54	10-132	
Tetrachloro-m-xylene (S)	%			64	27-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2954632 2954633

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		35473515001 Result	Spike Conc.	Spike Conc.	Conc.							
4,4'-DDD	ug/L	0.0085 U	0.48	0.48	0.48	0.49	100	103	67-133	3	40	
4,4'-DDE	ug/L	0.0048 U	0.48	0.48	0.40	0.44	82	93	59-125	12	40	
4,4'-DDT	ug/L	0.0048 U	0.48	0.48	0.63	0.60	131	126	54-132	5	40	
Aldrin	ug/L	0.0014 U	0.48	0.48	0.47	0.44	97	92	25-116	5	40	
alpha-BHC	ug/L	0.0020 U	0.48	0.48	0.70	0.72	146	152	53-126	3	40	J(M1)
alpha-Chlordane	ug/L	0.0078 U	0.48	0.48	0.46	0.46	97	97	67-115	0	40	
beta-BHC	ug/L	0.0076 U	0.48	0.48	0.90	0.84	187	176	62-130	6	40	J(M1)
delta-BHC	ug/L	0.0046 U	0.48	0.48	0.73	0.65	152	136	35-122	12	40	J(M1)
Dieldrin	ug/L	0.0019 U	0.48	0.48	0.58	0.52	121	108	66-128	11	40	
Endosulfan I	ug/L	0.0049 U	0.48	0.48	0.64	0.68	133	142	67-125	6	40	J(M1)
Endosulfan II	ug/L	0.0038 U	0.48	0.48	0.56	0.55	116	115	67-131	1	40	
Endosulfan sulfate	ug/L	0.0059 U	0.48	0.48	0.63	0.53	132	111	62-127	17	40	J(M1)
Endrin	ug/L	0.0041 U	0.48	0.48	0.55	0.55	114	115	66-130	1	40	
Endrin aldehyde	ug/L	0.0034 U	0.48	0.48	0.62	0.60	129	125	61-124	4	40	CH, J(M0)
gamma-BHC (Lindane)	ug/L	0.0021 U	0.48	0.48	0.67	0.66	140	137	58-127	2	40	J(M1)
gamma-Chlordane	ug/L	0.0048 U	0.48	0.48	0.55	0.50	115	105	66-115	9	40	
Heptachlor	ug/L	0.0059 U	0.48	0.48	0.62	0.57	129	120	35-123	8	40	J(M1)
Heptachlor epoxide	ug/L	0.0050 U	0.48	0.48	0.56	0.52	118	110	62-125	7	40	
Methoxychlor	ug/L	0.0092 U	0.48	0.48	0.81	0.87	169	181	59-135	7	40	J(M1)
Mirex	ug/L	0.012 U	0.48	0.48	0.44	0.48	93	101	35-114	9	40	
Decachlorobiphenyl (S)	%						51	48	10-132			
Tetrachloro-m-xylene (S)	%						89	86	27-124			

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## QUALIFIERS

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

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### 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.

TNTC - Too Numerous To Count

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

### 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.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CU	The continuing calibration for this analyte is above laboratory acceptance limits. Analyte was not detected above the reporting limit in any of the associated samples.
J(L1)	Estimated Value. Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
J(M0)	Estimated Value. Matrix spike recovery was outside laboratory control limits.
J(M1)	Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P1	Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Flagler Beach Salt Marsh

Pace Project No.: 35473429

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35473429001	FC-GR2-1'	EPA 3546	545317	EPA 8081	545593
35473429002	FC-GR2-2'	EPA 3546	545318	EPA 8081	545592
35473429003	FC-I-1'	EPA 3546	545318	EPA 8081	545592
35473429004	FC-K-1'	EPA 3546	545318	EPA 8081	545592
35473429005	FC-K-2'	EPA 3546	545318	EPA 8081	545592
35473429006	FCB-1'	EPA 3546	545318	EPA 8081	545592
35473429007	FC-B-2'	EPA 3546	545318	EPA 8081	545592
35473429008	FC-L1-1'	EPA 3546	545318	EPA 8081	545592
35473429009	EB-1	EPA 3510	545229	EPA 8081	545498
35473429001	FC-GR2-1'	ASTM D2974-87	545127		
35473429002	FC-GR2-2'	ASTM D2974-87	545127		
35473429003	FC-I-1'	ASTM D2974-87	545127		
35473429004	FC-K-1'	ASTM D2974-87	545127		
35473429005	FC-K-2'	ASTM D2974-87	545127		
35473429006	FCB-1'	ASTM D2974-87	545127		
35473429007	FC-B-2'	ASTM D2974-87	545127		
35473429008	FC-L1-1'	ASTM D2974-87	545127		

### REPORT OF LABORATORY ANALYSIS

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WO#: 35473429



35473429

**CHAIN-OF-CUSTODY / Analytical Request Document**

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

**Section A**  
**Required Client Information:**  
 Company: Terracon - Winter Park  
 Address: 1675 Lee Road  
 Winter Park, FL 32789  
 Email: dbeerbower@terracon.com  
 Phone: 321-279-5538  
 Requested Due Date: Today SAT

**Section C**  
**Invoice Information:**  
 Report To: David Beerbower  
 Copy To:  
 Project Name: Flagler Beach Salt Marsh  
 Project #: 1197384  
 Purchase Order #:  
 Pace Quote:  
 Pace Project Manager: lori.palmer@pacelabs.com.  
 Pace Profile #: 219-12 (10 - equip bik)

**Section B**  
 Attention:  
 Company Name:  
 Address:  
 Regulatory Agency:  
 State / Location:  
 FL

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			START	END				H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other				
			DATE	TIME				Unpreserved										
1	FC-GR2-1'	DW	6/17/19	0854	G	SL	1	X										
2	FC-GR2-2'	WW		0856	G		1	X										
3	FC-I-1'	P		0814	G		1	X										
4	FC-K-1'	SL		0853	G		1	X										
5	FC-K-2'	OL		0850	G		1	X										
6	FC-D-1'	WP		0953	G		1	X										
7	FC-L-1+MB	AR		0957	G		1	X										
8	FC-B-2'	OT		0950	G		1	X										
9	FC-L-1'	TS		1034	G		1	X										
10	EB-1			1030	WTC		1	X										
11																		
12																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Empty Containers	Pace	6/31/19	0650	Mubac	6/6/19	0700	
	Milbus	6/7/19	1222	JR/Pace	6/7/19	1222	Y N Y

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: Milbus & David Williams  
 SIGNATURE of SAMPLER: [Signature]  
 DATE Signed: 6/7/19



Document Name:  
Sample Condition Upon Receipt Form  
Document No.:  
F-FL-C-007 rev. 13

Document Revised:  
May 30, 2018  
Issuing Authority:  
Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #  
Project Manager:  
Client:

WO#: 35473429

PM: LAP Due Date: 06/13/19  
CLIENT: TERCON

Date and Initials of person:  
Examining contents: \_\_\_\_\_  
Label: \_\_\_\_\_  
Deliver: \_\_\_\_\_  
pH: \_\_\_\_\_

Thermometer Used: T-337 Date: 6/7/19 Time: 1221 Initials: JH

State of Origin: \_\_\_\_\_  For WV projects, all containers verified to ≤6 °C

Cooler #1 Temp. °C	5.8 (Visual)	+0.3 (Correction Factor)	6.1 (Actual)	<input checked="" type="checkbox"/>	Samples on ice, cooling process has begun
Cooler #2 Temp. °C	14.8 (Visual)	+0.3 (Correction Factor)	15.1 (Actual)	<input checked="" type="checkbox"/>	Samples on ice, cooling process has begun
Cooler #3 Temp. °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	<input type="checkbox"/>	Samples on ice, cooling process has begun
Cooler #4 Temp. °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	<input type="checkbox"/>	Samples on ice, cooling process has begun
Cooler #5 Temp. °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	<input type="checkbox"/>	Samples on ice, cooling process has begun
Cooler #6 Temp. °C	_____ (Visual)	_____ (Correction Factor)	_____ (Actual)	<input type="checkbox"/>	Samples on ice, cooling process has begun

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other \_\_\_\_\_  
Shipping Method:  First Overnight  Priority Overnight  Standard Overnight  Ground  International Priority  
 Other \_\_\_\_\_

Billing:  Recipient  Sender  Third Party  Credit Card  Unknown

Tracking # 7753 6704 7655

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  No Ice:  Wet  Blue  Dry  None

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Samples shorted to lab (if Yes, complete) Shorted Date: \_\_\_\_\_ Shorted Time: \_\_\_\_\_ Qty: \_\_\_\_\_

Comments:

Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	see notes
All containers needing acid/base preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution (use back for additional comments):

sample #6 labeled on Bottle as  
SC-B-1' - COC says FCB-1"

Project Manager Review: \_\_\_\_\_