

Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: n/a
Date Sampled: Apr 21, 2022
May 18, 2022; Invoice: 506030

Report Summary

Date Received: Apr 22, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
506030SO1	0-1 #1	Subcontract	SUB	Subcontractor	Soil
506030SO2	0-1 #1	EPA365.4	AMT	Main Lab	Soil
		EPA6020B	EVB	Main Lab	
		EPA7471A	PCW	Main Lab	
		SM2540 B	SWS	Main Lab	
506030SO3	1-2 #1	Subcontract	SUB	Subcontractor	Soil
506030SO4	1-2 #1	EPA365.4	AMT	Main Lab	Soil
		EPA6020B	EVB	Main Lab	
		EPA7471A	PCW	Main Lab	
		SM2540 B	SWS	Main Lab	
506030SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
506030SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
506030SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
Technical Director

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PO #: n/a
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Date Sampled: Apr 21, 2022
May 18, 2022; Invoice: 506030

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
506030SO1	04/21/22 01:30 PM	0-1 #1	Subcontract	1.00	Attached Report	1.00			10509417	Subcontract		04/26/22
506030SO2	04/21/22 01:30 PM	0-1 #1	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			% Moisture	82.9	%Wt	1.00	0.000250	0.000500	10506941	SM2540 B		
			Arsenic	1.25	J mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-38-2	04/25/22
			Barium	55.3	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7440-39-3	04/25/22
			Cadmium	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-43-9	04/25/22
			Chromium	1.84	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-47-3	04/25/22
			Lead	0.714	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7439-92-1	04/25/22
			Selenium	2.14	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7782-49-2	04/25/22
			Silver	0.0500	U mg/kg	1.00	0.0500	0.100	10507130	EPA6020B	7440-22-4	04/25/22
			Mercury	0.00320	U mg/kg	160	0.00320	0.00640	10509272	EPA7471A	7439-97-6	04/28/22
			Total Phosphorus(as P)	10.0	U mg/kg	100	10.0	20.0	10509588	EPA365.4	7723-14-0	05/18/22
506030SO3	04/21/22 01:30 PM	1-2 #1	Subcontract	1.00	Attached Report	1.00			10509417	Subcontract		04/26/22
506030SO4	04/21/22 01:30 PM	1-2 #1	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			% Moisture	88.3	%Wt	1.00	0.000250	0.000500	10506941	SM2540 B		
			Arsenic	1.39	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-38-2	04/25/22
			Barium	30.4	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7440-39-3	04/25/22
			Cadmium	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-43-9	04/25/22
			Chromium	1.30	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-47-3	04/25/22
			Lead	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7439-92-1	04/25/22

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Lab #: 506030SO4 Sampled: 04/21/22 01:30 PM Desc: 1-2#1										
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed	
Selenium	0.200 U	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7782-49-2	04/25/22	
Silver	0.0500 U	mg/kg	1.00	0.0500	0.100	10507130	EPA6020B	7440-22-4	04/25/22	
Mercury	0.00320 U	mg/kg	160	0.00320	0.00640	10509272	EPA7471A	7439-97-6	04/28/22	
Total Phosphorus(as P)	250	mg/kg	200	20.0	40.0	10509588	EPA365.4	7723-14-0	05/18/22	

Lab #: 506030SW1 Sampled: 04/21/22 08:30 AM Desc: E1										
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed	
Total Phosphorus(as P)	0.113	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22	

Lab #: 506030SW2 Sampled: 04/21/22 03:15 PM Desc: P1										
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed	
Total Phosphorus(as P)	0.883	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22	

Lab #: 506030SW3 Sampled: 04/21/22 12:30 PM Desc: P2										
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed	
Total Phosphorus(as P)	0.0323	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22	

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Quality Report

Quality Control Batch: 10507130		Analyst: EVB					
Blank	Result	Units					
Arsenic	0.100U	mg/kg					
Barium	0.200U	mg/kg					
Cadmium	0.100U	mg/kg					
Chromium	0.100U	mg/kg					
Lead	0.100U	mg/kg					
Selenium	0.200U	mg/kg					
Silver	0.0500U	mg/kg					
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim		
Arsenic	0.0979	mg/kg	0.100	97.90	80.00-120.00		
Barium	0.0860	mg/kg	0.100	86.00	80.00-120.00		
Cadmium	0.102	mg/kg	0.100	102.00	80.00-120.00		
Chromium	0.0990	mg/kg	0.100	99.00	80.00-120.00		
Lead	0.111	mg/kg	0.100	110.70	80.00-120.00		
Selenium	0.0979	mg/kg	0.100	97.90	80.00-120.00		
Silver	0.0995	mg/kg	0.100	99.50	80.00-120.00		
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Arsenic	0.700	mg/kg	1.00	69.78	75.00-125.00	0.00210	506030SO2
Barium	0.947	mg/kg	1.00	85.38	75.00-125.00	0.0930	506030SO2
Cadmium	0.909	mg/kg	1.00	90.93	75.00-125.00	0.100U	506030SO2
Chromium	1.05	mg/kg	1.00	104.84	75.00-125.00	0.00310	506030SO2
Lead	1.12	mg/kg	1.00	111.57	75.00-125.00	0.00120	506030SO2
Selenium	0.938	mg/kg	1.00	93.43	75.00-125.00	0.00360	506030SO2
Silver	0.985	mg/kg	1.00	98.53	75.00-125.00	0.0500U	506030SO2

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Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Arsenic	0.717	mg/kg	1.00	71.44	75.00-125.00	0.00210	2.34	40.00
Barium	0.950	mg/kg	1.00	85.72	75.00-125.00	0.0930	0.36	40.00
Cadmium	0.947	mg/kg	1.00	94.72	75.00-125.00	0.100U	4.08	40.00
Chromium	1.12	mg/kg	1.00	112.07	75.00-125.00	0.00310	6.65	40.00
Lead	1.12	mg/kg	1.00	111.39	75.00-125.00	0.00120	0.16	40.00
Selenium	0.945	mg/kg	1.00	94.17	75.00-125.00	0.00360	0.79	40.00
Silver	1.01	mg/kg	1.00	100.72	75.00-125.00	0.0500U	2.20	40.00

Quality Control Batch: 10509268 Analyst: PCW

Blank	Result	Units
Total Phosphorus(as P)	0.00300U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Total Phosphorus(as P)	0.474	mg/L	0.500	94.80	90.00-110.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Total Phosphorus(as P)	0.440	mg/L	0.400	107.33	85.00-115.00	0.0107	505925SW2

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.446	mg/L	0.400	108.83	85.00-115.00	0.0107	1.35	20.00

Quality Control Batch: 10509272 Analyst: PCW

Blank	Result	Units
Mercury	0.0000200U	mg/kg

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Mercury	0.000973	mg/kg	0.00100	97.27	80.00-120.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Mercury	0.457	mg/kg	0.480	95.16	80.00-120.00	0.000175	505323SO1

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Quality Control Batch: 10509272		Analyst: PCW						
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Mercury	0.454	mg/kg	0.480	94.60	80.00-120.00	0.000175	0.60	20.00

Quality Control Batch: 10509588		Analyst: AMT						
Blank	Result	Units						
Total Phosphorus(as P)	0.100U	mg/kg						

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	1.49	mg/kg	1.50	99.33	90.00-110.00			

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number		
Total Phosphorus(as P)	1.94	mg/kg	1.50	95.19	90.00-110.00	0.512	999999SO1		

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	1.94	mg/kg	1.50	95.19	90.00-110.00	0.512	0.00	20.00



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Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or Lab criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below. A "J" flag indicates that the sample was used for QC and the MS/MSD did not recover within method limits. The LCS still validates the data.

Attachments

Chain of Custody
Subcontractor Laboratory Report

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

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PO #: n/a
Client Project #: Emeraldal Marsh
Date Sampled: May 18, 2022
May 31, 2022; Invoice: 508577

Report Summary

Date Received: May 18, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
508577SW1	E-1	EPA365.1	PCW	Main Lab	Surface Water
508577SW2	P-1	EPA365.1	PCW	Main Lab	Surface Water
508577SW3	P-2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAP Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



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Technical Director

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PO #: n/a
Client Project #: Emerald Marsh
Date Sampled: May 18, 2022
May 31, 2022; Invoice: 508577

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
508577SW1	05/18/22 01:50 PM	E-1	Total Phosphorus(as P)	0.139	mg/L	1.00	0.00300	0.0100	10511490	EPA365.1	7723-14-0	05/31/22
508577SW2	05/18/22 01:40 PM	P-1	Total Phosphorus(as P)	0.169	mg/L	1.00	0.00300	0.0100	10511490	EPA365.1	7723-14-0	05/31/22
508577SW3	05/18/22 01:30 PM	P-2	Total Phosphorus(as P)	0.0427	mg/L	1.00	0.00300	0.0100	10511490	EPA365.1	7723-14-0	05/31/22

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PO #: n/a
Client Project #: Emerald Marsh
Date Sampled: May 18, 2022
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Quality Report

Quality Control Batch: 10511490		Analyst: PCW						
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.511	mg/L	0.500	102.20	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.410	mg/L	0.400	90.27	85.00-115.00	0.0489	508411SW1	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.417	mg/L	0.400	92.02	85.00-115.00	0.0489	1.69	20.00



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Narrative Report

Sample Handling

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Quality Control

Enclosed analyses met method or Lab criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

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Report Summary

Date Received: Apr 22, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
506030SO1	0-1 #1	Subcontract	SUB	Subcontractor	Soil
506030SO2	0-1 #1	EPA365.4	AMT	Main Lab	Soil
		EPA6020B	EVB	Main Lab	
		EPA7471A	PCW	Main Lab	
		SM2540 B	SWS	Main Lab	
506030SO3	1-2 #1	Subcontract	SUB	Subcontractor	Soil
506030SO4	1-2 #1	EPA365.4	AMT	Main Lab	Soil
		EPA6020B	EVB	Main Lab	
		EPA7471A	PCW	Main Lab	
		SM2540 B	SWS	Main Lab	
506030SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
506030SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
506030SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

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Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
506030SO1	04/21/22 01:30 PM	0-1 #1	Subcontract	1.00	Attached Report	1.00			10509417	Subcontract		04/26/22
506030SO2	04/21/22 01:30 PM	0-1 #1	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			% Moisture	82.9	%Wt	1.00	0.000250	0.000500	10506941	SM2540 B		
			Arsenic	1.25	J mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-38-2	04/25/22
			Barium	55.3	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7440-39-3	04/25/22
			Cadmium	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-43-9	04/25/22
			Chromium	1.84	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-47-3	04/25/22
			Lead	0.714	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7439-92-1	04/25/22
			Selenium	2.14	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7782-49-2	04/25/22
			Silver	0.0500	U mg/kg	1.00	0.0500	0.100	10507130	EPA6020B	7440-22-4	04/25/22
			Mercury	0.00320	U mg/kg	160	0.00320	0.00640	10509272	EPA7471A	7439-97-6	04/28/22
			Total Phosphorus(as P)	10.0	U mg/kg	100	10.0	20.0	10509588	EPA365.4	7723-14-0	05/18/22
506030SO3	04/21/22 01:30 PM	1-2 #1	Subcontract	1.00	Attached Report	1.00			10509417	Subcontract		04/26/22
506030SO4	04/21/22 01:30 PM	1-2 #1	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			% Moisture	88.3	%Wt	1.00	0.000250	0.000500	10506941	SM2540 B		
			Arsenic	1.39	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-38-2	04/25/22
			Barium	30.4	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7440-39-3	04/25/22
			Cadmium	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-43-9	04/25/22
			Chromium	1.30	mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7440-47-3	04/25/22
			Lead	0.100	U mg/kg	1.00	0.100	0.200	10507130	EPA6020B	7439-92-1	04/25/22

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Lab #: 506030SO4 Sampled: 04/21/22 01:30 PM Desc: 1-2#1

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Selenium	0.200 U	mg/kg	1.00	0.200	0.400	10507130	EPA6020B	7782-49-2	04/25/22
Silver	0.0500 U	mg/kg	1.00	0.0500	0.100	10507130	EPA6020B	7440-22-4	04/25/22
Mercury	0.00320 U	mg/kg	160	0.00320	0.00640	10509272	EPA7471A	7439-97-6	04/28/22
Total Phosphorus(as P)	250	mg/kg	200	20.0	40.0	10509588	EPA365.4	7723-14-0	05/18/22

Lab #: 506030SW1 Sampled: 04/21/22 08:30 AM Desc: E1

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Total Phosphorus(as P)	0.113	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22

Lab #: 506030SW2 Sampled: 04/21/22 03:15 PM Desc: P1

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Total Phosphorus(as P)	0.883	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22

Lab #: 506030SW3 Sampled: 04/21/22 12:30 PM Desc: P2

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Total Phosphorus(as P)	0.0323	mg/L	1.00	0.00300	0.0100	10509268	EPA365.1	7723-14-0	05/13/22

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PO #: n/a
Client Project #: n/a
Date Sampled: Apr 21, 2022
May 18, 2022; Invoice: 506030

Quality Report

Quality Control Batch: 10507130		Analyst: EVB					
Blank	Result	Units					
Arsenic	0.100U	mg/kg					
Barium	0.200U	mg/kg					
Cadmium	0.100U	mg/kg					
Chromium	0.100U	mg/kg					
Lead	0.100U	mg/kg					
Selenium	0.200U	mg/kg					
Silver	0.0500U	mg/kg					
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim		
Arsenic	0.0979	mg/kg	0.100	97.90	80.00-120.00		
Barium	0.0860	mg/kg	0.100	86.00	80.00-120.00		
Cadmium	0.102	mg/kg	0.100	102.00	80.00-120.00		
Chromium	0.0990	mg/kg	0.100	99.00	80.00-120.00		
Lead	0.111	mg/kg	0.100	110.70	80.00-120.00		
Selenium	0.0979	mg/kg	0.100	97.90	80.00-120.00		
Silver	0.0995	mg/kg	0.100	99.50	80.00-120.00		
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Arsenic	0.700	mg/kg	1.00	69.78	75.00-125.00	0.00210	506030SO2
Barium	0.947	mg/kg	1.00	85.38	75.00-125.00	0.0930	506030SO2
Cadmium	0.909	mg/kg	1.00	90.93	75.00-125.00	0.100U	506030SO2
Chromium	1.05	mg/kg	1.00	104.84	75.00-125.00	0.00310	506030SO2
Lead	1.12	mg/kg	1.00	111.57	75.00-125.00	0.00120	506030SO2
Selenium	0.938	mg/kg	1.00	93.43	75.00-125.00	0.00360	506030SO2
Silver	0.985	mg/kg	1.00	98.53	75.00-125.00	0.0500U	506030SO2

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Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Arsenic	0.717	mg/kg	1.00	71.44	75.00-125.00	0.00210	2.34	40.00
Barium	0.950	mg/kg	1.00	85.72	75.00-125.00	0.0930	0.36	40.00
Cadmium	0.947	mg/kg	1.00	94.72	75.00-125.00	0.100U	4.08	40.00
Chromium	1.12	mg/kg	1.00	112.07	75.00-125.00	0.00310	6.65	40.00
Lead	1.12	mg/kg	1.00	111.39	75.00-125.00	0.00120	0.16	40.00
Selenium	0.945	mg/kg	1.00	94.17	75.00-125.00	0.00360	0.79	40.00
Silver	1.01	mg/kg	1.00	100.72	75.00-125.00	0.0500U	2.20	40.00

Quality Control Batch: 10509268 Analyst: PCW

Blank	Result	Units
Total Phosphorus(as P)	0.00300U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Total Phosphorus(as P)	0.474	mg/L	0.500	94.80	90.00-110.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Total Phosphorus(as P)	0.440	mg/L	0.400	107.33	85.00-115.00	0.0107	505925SW2

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.446	mg/L	0.400	108.83	85.00-115.00	0.0107	1.35	20.00

Quality Control Batch: 10509272 Analyst: PCW

Blank	Result	Units
Mercury	0.0000200U	mg/kg

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Mercury	0.000973	mg/kg	0.00100	97.27	80.00-120.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number
Mercury	0.457	mg/kg	0.480	95.16	80.00-120.00	0.000175	505323SO1

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PO #: n/a
Client Project #: n/a
Date Sampled: Apr 21, 2022
May 18, 2022; Invoice: 506030

Quality Control Batch: 10509272		Analyst: PCW						
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Mercury	0.454	mg/kg	0.480	94.60	80.00-120.00	0.000175	0.60	20.00

Quality Control Batch: 10509588		Analyst: AMT						
Blank	Result	Units						
Total Phosphorus(as P)	0.100U	mg/kg						

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	1.49	mg/kg	1.50	99.33	90.00-110.00			

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number		
Total Phosphorus(as P)	1.94	mg/kg	1.50	95.19	90.00-110.00	0.512	999999SO1		

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	1.94	mg/kg	1.50	95.19	90.00-110.00	0.512	0.00	20.00



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Gainesville, FL 32653

PO #: n/a
Client Project #: n/a
Date Sampled: Apr 21, 2022
May 18, 2022; Invoice: 506030

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or Lab criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below. A "J" flag indicates that the sample was used for QC and the MS/MSD did not recover within method limits. The LCS still validates the data.

Attachments

Chain of Custody
Subcontractor Laboratory Report

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Emeralda Marsh Monitoring

Data point: E-1 Date: 4/21/2022 Time: 8:30 am

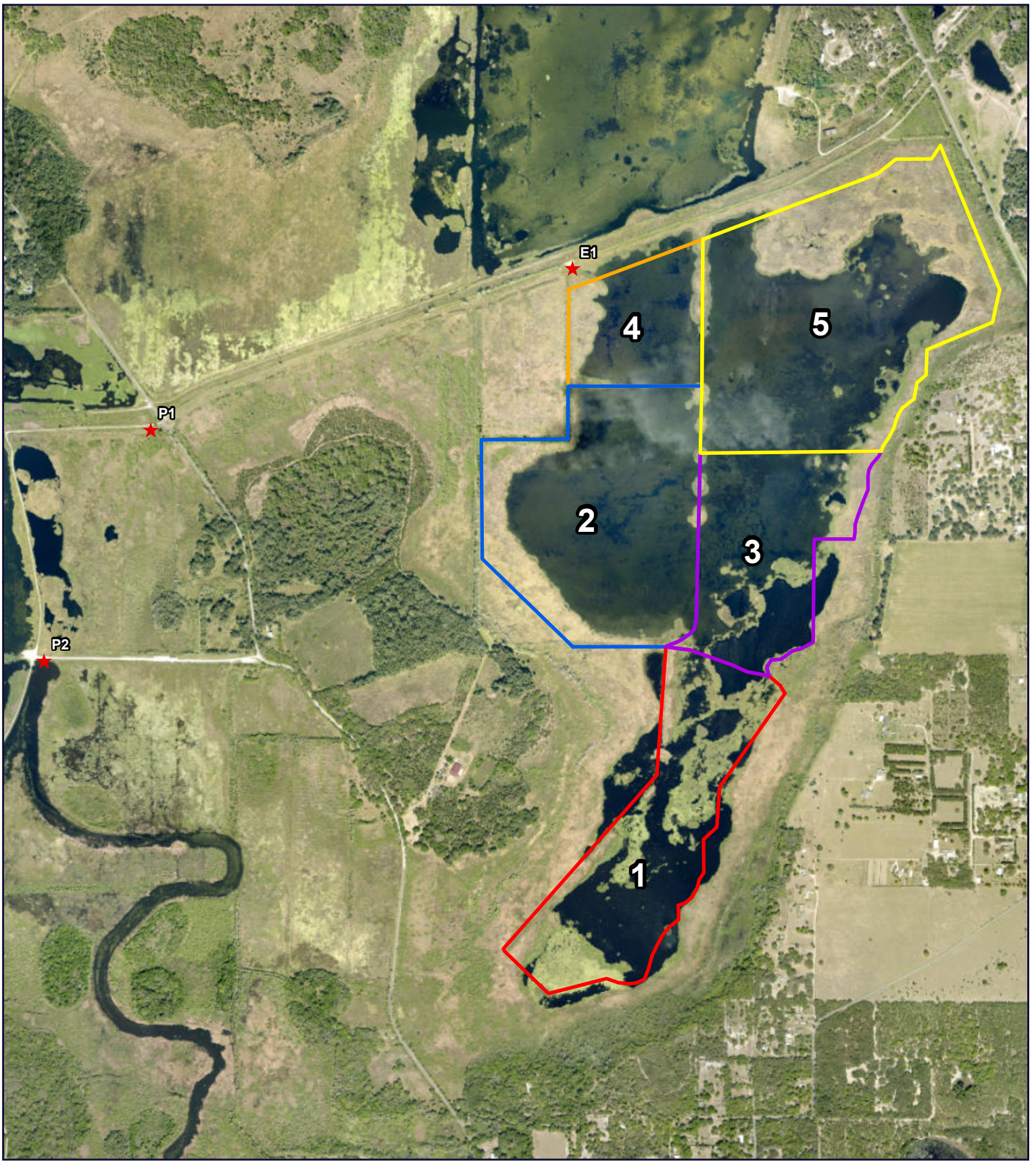
Parameter	Measurement	Units
pH	7.2	
Temperature	20.99	Celsius
Dissolved Oxygen	1.1	%
Total Dissolved Solids	106	ppm

Data point: P-1 Date: 4/21/2022 Time: 3:15 pm

Parameter	Measurement	Units
pH	6.97	
Temperature	22.60	Celsius
Dissolved Oxygen	4.1	%
Total Dissolved Solids	111	ppm

Data point: P-2 Date: 4/21/2022 Time: 12:30 pm

Parameter	Measurement	Units
pH	8.20	
Temperature	23.78	Celsius
Dissolved Oxygen	10.4	%
Total Dissolved Solids	127	ppm



**EMERALDA MARSH
WATER SAMPLE
LOCATIONS**

2020 TRUE COLOR AERIAL
LAKE COUNTY, FLORIDA

1 INCH = 1,500 FEET



MAP SCALE IS SET FOR MAPS PRINTED ON 8.5X11 PAPER.

Legend

★ Water Sample Locations

Excavation Areas

- 1 (± 111.9 AC)
- 2 (± 145.1 AC)
- 3 (± 87.6 AC)
- 4 (± 49.5 AC)
- 5 (± 196.7 AC)



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Environment Testing
Flowers Laboratories

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E83018 (Main Lab)
E86562 (South Lab)
E82405 (North Lab)
E35834 (Keys Lab)

Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Report Summary

Date Received: Apr 6, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
504259SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
504259SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
504259SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
Technical Director

Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Analysis Report

Lab #:	Sampled:	Desc:	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Lab #: 504259SW1	Sampled: 04/05/22 10:20 AM	Desc: E1							
Parameter	Result	Units							
Total Phosphorus(as P)	0.611	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22
Lab #: 504259SW2	Sampled: 04/05/22 10:30 AM	Desc: P1							
Parameter	Result	Units							
Total Phosphorus(as P)	0.0606	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22
Lab #: 504259SW3	Sampled: 04/05/22 10:35 AM	Desc: P2							
Parameter	Result	Units							
Total Phosphorus(as P)	0.0941	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22

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PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Quality Report

Quality Control Batch: 10506376		Analyst: PCW						
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.440	mg/L	0.470	93.65	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.323	mg/L	0.400	80.05	85.00-115.00	0.00277	504016WW1	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.322	mg/L	0.400	79.93	85.00-115.00	0.00277	0.15	20.00



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PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or Lab criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Emeralda Marsh Monitoring

Data point: E-1 Date: 4/5/2022 Time: 10:00 am

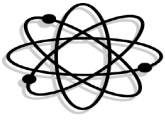
Parameter	Measurement	Units
pH	6.77	
Temperature	21.81	Celsius
Dissolved Oxygen	15	%
Total Dissolved Solids	101	ppm

Data point: P-1 Date: 4/5/2022 Time: 10:30 am

Parameter	Measurement	Units
pH	7.13	
Temperature	23.51	Celsius
Dissolved Oxygen	30	%
Total Dissolved Solids	106	ppm

Data point: P-2 Date: 4/5/2022 Time: 10:35 am

Parameter	Measurement	Units
pH	7.05	
Temperature	22.64	Celsius
Dissolved Oxygen	8	%
Total Dissolved Solids	131	ppm



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Phone: 305-743-8598 E35834 (Keys Lab)

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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Report Summary

Date Received: Feb 17, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
499560SW1	P1	EPA365.1	PCW	Main Lab	Surface Water
499560SW2	E1	EPA365.1	PCW	Main Lab	Surface Water
499560SW3	E2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
499560SW1	02/17/22 10:40 AM	P1	Total Phosphorus(as P)	0.0699	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22
499560SW2	02/17/22 11:00 AM	E1	Total Phosphorus(as P)	0.166	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22
499560SW3	02/17/22 11:10 AM	E2	Total Phosphorus(as P)	0.0300	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22



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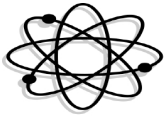
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PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Quality Report

Quality Control Batch: 10495007	Analyst: PCW							
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.485	mg/L	0.500	96.95	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.157	mg/L	0.200	65.69	85.00-115.00	0.0254	4997791SW	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.159	mg/L	0.200	66.61	85.00-115.00	0.0254	1.17	20.00



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Emeralda Marsh Monitoring

Data point: E-1 Date: 9/21 Time: 9:30 am

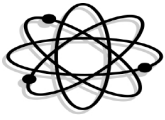
Parameter	Measurement	Units
pH	6.3	
Temperature	27.33	Celsius
Dissolved Oxygen	14%	
Total Dissolved Solids	114	ppmTDS

Data point: P-1 Date: 9/21 Time: 10:30 am

Parameter	Measurement	Units
pH	6.80	
Temperature	28.45	Celsius
Dissolved Oxygen	6.3%	
Total Dissolved Solids	117	ppmTDS

Data point: P-2 Date: 9/21 Time: 10:00 am

Parameter	Measurement	Units
pH	7.08	
Temperature	28.46	Celsius
Dissolved Oxygen	35.3%	
Total Dissolved Solids	121	ppmTDS



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Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Report Summary

Date Received: Sep 21, 2021

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
483920SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
483920SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
483920SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



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Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
483920SW1	09/21/21 09:30 AM	E1	Total Phosphorus(as P)	0.203	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21
483920SW2	09/21/21 10:30 AM	P1	Total Phosphorus(as P)	0.0668	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21
483920SW3	09/21/21 10:00 AM	P2	Total Phosphorus(as P)	0.0928	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21



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Phone: 407-339-5984 E83018 (Main Lab)
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Phone: 305-743-8598 E35834 (Keys Lab)

Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Quality Report

Quality Control Batch: 10477348

Analyst: PCW

Blank

Total Phosphorus(as P)

Result

0.00300U

Units

mg/L

Laboratory Control Sample

Total Phosphorus(as P)

Result

0.472

Units

mg/L

Spike

0.500

%REC

94.47

%REC Lim

90.00-110.00

Matrix Spike

Total Phosphorus(as P)

Result

0.189

Units

mg/L

Spike

0.200

%REC

80.69

%REC Lim

85.00-115.00

Sample

0.0278

Lab Number

483916SW3

Matrix Spike Duplicate

Total Phosphorus(as P)

Result

0.189

Units

mg/L

Spike

0.200

%REC

80.65

%REC Lim

85.00-115.00

Sample

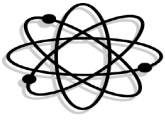
0.0278

RPD

0.04

RPD Lim

20.00



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Environmental Consulting & Design
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Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

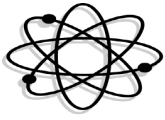
Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
Z	Too numerous to count colonies on plate.
A	Absent
P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Invoice

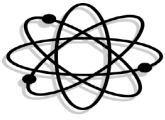
Description	Amount	Units	Extension
TPSurfaceWater	20.00	6	120.00
TOTAL			120.00

This invoice is due upon receipt.

Please remit to: P.O. Box 150597
Altamonte Springs, FL 32715-0597

VISA, MasterCard, and American Express cards will be accepted.

There will be a 1.5% service charge per month on all unpaid balances.



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Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Report Summary

Date Received: Jun 4, 2021

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
472802SW1	E1	EPA365.1	CCP	Main Lab	Surface Water
472802SW2	P1	EPA365.1	CCP	Main Lab	Surface Water
472802SW3	P2	EPA365.1	CCP	Main Lab	Surface Water
472802SW4	E1	EPA365.1	CCP	Main Lab	Surface Water
472802SW5	P1	EPA365.1	CCP	Main Lab	Surface Water
472802SW6	P2	EPA365.1	CCP	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAP Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
472802SW1	06/03/21 09:43 AM	E1	Total Phosphorus(as P)	0.418	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW2	06/03/21 09:55 AM	P1	Total Phosphorus(as P)	0.184	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW3	06/03/21 10:05 AM	P2	Total Phosphorus(as P)	2.32	mg/L	2.00	0.00600	0.0200	10466959	EPA365.1	7723-14-0	06/08/21
472802SW4	06/04/21 12:50 PM	E1	Total Phosphorus(as P)	0.129	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW5	06/04/21 01:00 PM	P1	Total Phosphorus(as P)	0.365	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW6	06/04/21 01:10 PM	P2	Total Phosphorus(as P)	0.163	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21



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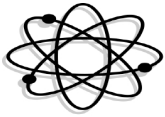
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Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Quality Report

Quality Control Batch: 10466959	Analyst: CCP							
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.487	mg/L	0.500	97.40	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.336	mg/L	0.200	92.50	85.00-115.00	0.151	472394SW1	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.339	mg/L	0.200	94.00	85.00-115.00	0.151	0.89	20.00



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PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

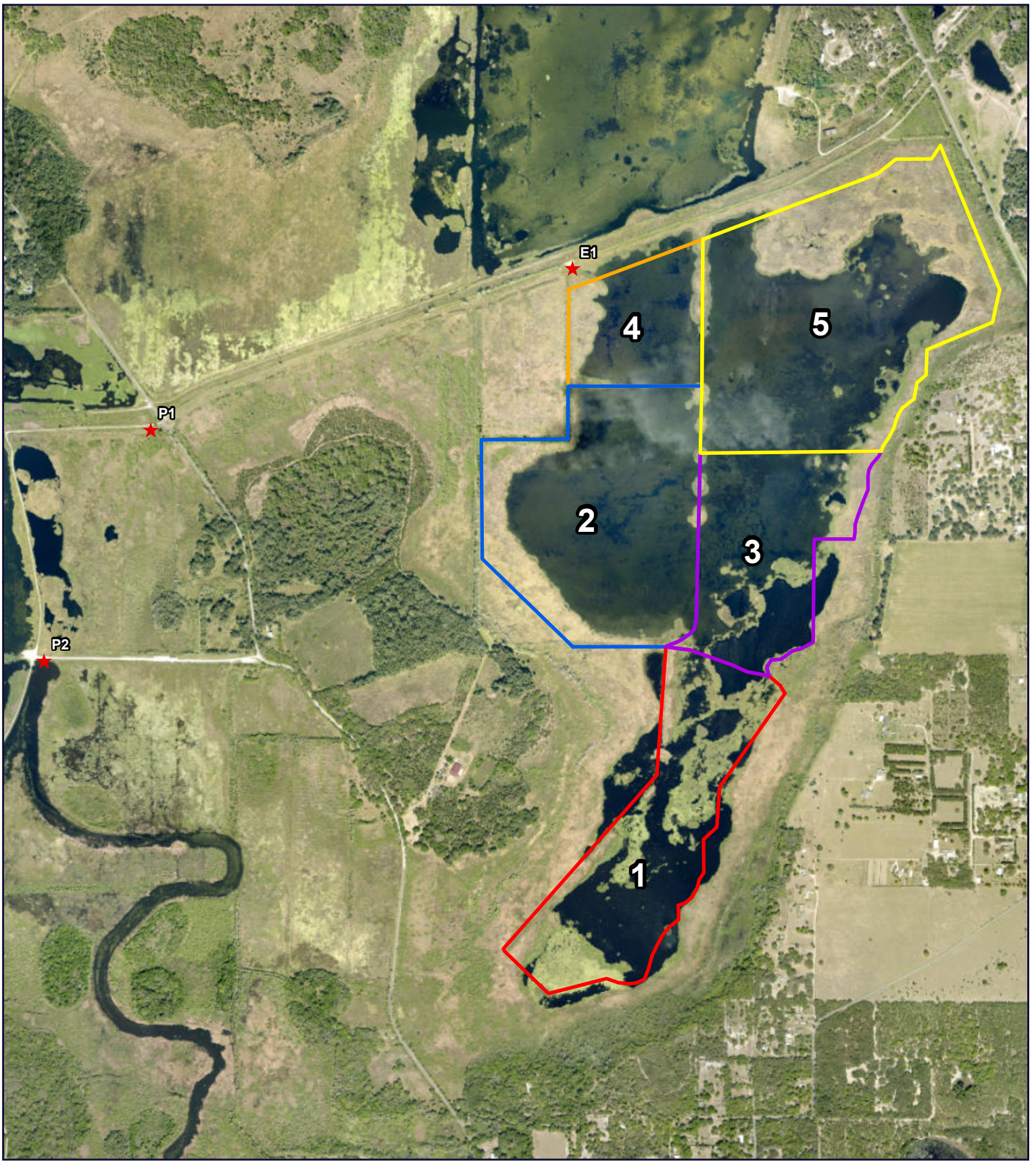
Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
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Z	Too numerous to count colonies on plate.
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P	Present
T	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
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O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
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Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.



**EMERALDA MARSH
WATER SAMPLE
LOCATIONS**

2020 TRUE COLOR AERIAL
LAKE COUNTY, FLORIDA

1 INCH = 1,500 FEET



MAP SCALE IS SET FOR MAPS PRINTED ON 8.5X11 PAPER.

Legend

★ Water Sample Locations

Excavation Areas

- 1 (± 111.9 AC)
- 2 (± 145.1 AC)
- 3 (± 87.6 AC)
- 4 (± 49.5 AC)
- 5 (± 196.7 AC)



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Environment Testing
Flowers Laboratories

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E83018 (Main Lab)
E86562 (South Lab)
E82405 (North Lab)
E35834 (Keys Lab)

Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Report Summary

Date Received: Apr 6, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
504259SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
504259SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
504259SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
Technical Director

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Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Analysis Report

Lab #:	Sampled:	Desc:	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Lab #: 504259SW1	Sampled: 04/05/22 10:20 AM	Desc: E1							
Parameter	Result	Units							
Total Phosphorus(as P)	0.611	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22
Lab #: 504259SW2	Sampled: 04/05/22 10:30 AM	Desc: P1							
Parameter	Result	Units							
Total Phosphorus(as P)	0.0606	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22
Lab #: 504259SW3	Sampled: 04/05/22 10:35 AM	Desc: P2							
Parameter	Result	Units							
Total Phosphorus(as P)	0.0941	mg/L	1.00	0.00300	0.0100	10506376	EPA365.1	7723-14-0	04/15/22

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PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Quality Report

Quality Control Batch: 10506376		Analyst: PCW						
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.440	mg/L	0.470	93.65	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.323	mg/L	0.400	80.05	85.00-115.00	0.00277	504016WW1	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.322	mg/L	0.400	79.93	85.00-115.00	0.00277	0.15	20.00



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Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh (TP)
Date Sampled: Apr 5, 2022
Apr 15, 2022; Invoice: 504259

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or Lab criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
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I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
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Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Emeralda Marsh Monitoring

Data point: E-1 Date: 4/5/2022 Time: 10:00 am

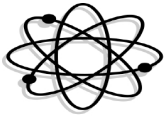
Parameter	Measurement	Units
pH	6.77	
Temperature	21.81	Celsius
Dissolved Oxygen	15	%
Total Dissolved Solids	101	ppm

Data point: P-1 Date: 4/5/2022 Time: 10:30 am

Parameter	Measurement	Units
pH	7.13	
Temperature	23.51	Celsius
Dissolved Oxygen	30	%
Total Dissolved Solids	106	ppm

Data point: P-2 Date: 4/5/2022 Time: 10:35 am

Parameter	Measurement	Units
pH	7.05	
Temperature	22.64	Celsius
Dissolved Oxygen	8	%
Total Dissolved Solids	131	ppm



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PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Report Summary

Date Received: Feb 17, 2022

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
499560SW1	P1	EPA365.1	PCW	Main Lab	Surface Water
499560SW2	E1	EPA365.1	PCW	Main Lab	Surface Water
499560SW3	E2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
499560SW1	02/17/22 10:40 AM	P1	Total Phosphorus(as P)	0.0699	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22
499560SW2	02/17/22 11:00 AM	E1	Total Phosphorus(as P)	0.166	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22
499560SW3	02/17/22 11:10 AM	E2	Total Phosphorus(as P)	0.0300	mg/L	1.00	0.00300	0.0100	10495007	EPA365.1	7723-14-0	02/24/22



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Quality Report

Quality Control Batch: 10495007

Analyst: PCW

Blank

Total Phosphorus(as P)

Result

0.00300U

Units

mg/L

Laboratory Control Sample

Total Phosphorus(as P)

Result

0.485

Units

mg/L

Spike

0.500

%REC

96.95

%REC Lim

90.00-110.00

Matrix Spike

Total Phosphorus(as P)

Result

0.157

Units

mg/L

Spike

0.200

%REC

65.69

%REC Lim

85.00-115.00

Sample

0.0254

Lab Number

4997791SW

Matrix Spike Duplicate

Total Phosphorus(as P)

Result

0.159

Units

mg/L

Spike

0.200

%REC

66.61

%REC Lim

85.00-115.00

Sample

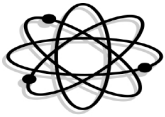
0.0254

RPD

1.17

RPD Lim

20.00



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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: TP
Date Sampled: Feb 17, 2022
Mar 1, 2022; Invoice: 499560

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
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V	Analyte was detected in both the sample and the associated method blank.
W	The dissolved oxygen blank was above 0.2 mg/L but less than the MDL.
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M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
O	Result is greater than (over) the specified value.
I	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

Emeralda Marsh Monitoring

Data point: E-1 Date: 9/21 Time: 9:30 am

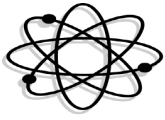
Parameter	Measurement	Units
pH	6.3	
Temperature	27.33	Celsius
Dissolved Oxygen	14%	
Total Dissolved Solids	114	ppmTDS

Data point: P-1 Date: 9/21 Time: 10:30 am

Parameter	Measurement	Units
pH	6.80	
Temperature	28.45	Celsius
Dissolved Oxygen	6.3%	
Total Dissolved Solids	117	ppmTDS

Data point: P-2 Date: 9/21 Time: 10:00 am

Parameter	Measurement	Units
pH	7.08	
Temperature	28.46	Celsius
Dissolved Oxygen	35.3%	
Total Dissolved Solids	121	ppmTDS



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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Report Summary

Date Received: Sep 21, 2021

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
483920SW1	E1	EPA365.1	PCW	Main Lab	Surface Water
483920SW2	P1	EPA365.1	PCW	Main Lab	Surface Water
483920SW3	P2	EPA365.1	PCW	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
President/Technical Director



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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
483920SW1	09/21/21 09:30 AM	E1	Total Phosphorus(as P)	0.203	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21
483920SW2	09/21/21 10:30 AM	P1	Total Phosphorus(as P)	0.0668	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21
483920SW3	09/21/21 10:00 AM	P2	Total Phosphorus(as P)	0.0928	mg/L	1.00	0.00300	0.0100	10477348	EPA365.1	7723-14-0	09/28/21



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PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Quality Report

Quality Control Batch: 10477348

Analyst: PCW

Blank

Total Phosphorus(as P)

Result

0.00300U

Units

mg/L

Laboratory Control Sample

Total Phosphorus(as P)

Result

0.472

Units

mg/L

Spike

0.500

%REC

94.47

%REC Lim

90.00-110.00

Matrix Spike

Total Phosphorus(as P)

Result

0.189

Units

mg/L

Spike

0.200

%REC

80.69

%REC Lim

85.00-115.00

Sample

0.0278

Lab Number

483916SW3

Matrix Spike Duplicate

Total Phosphorus(as P)

Result

0.189

Units

mg/L

Spike

0.200

%REC

80.65

%REC Lim

85.00-115.00

Sample

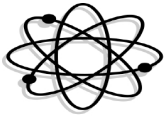
0.0278

RPD

0.04

RPD Lim

20.00



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Sep 21, 2021
Sep 28, 2021; Invoice: 483920

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted.

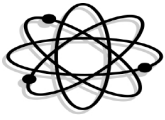
Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	Estimated value; one or more QC components associated with this data value exceed current QC limits.
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B	Results based upon colony plate count outside ideal range.
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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emeraldal Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Invoice

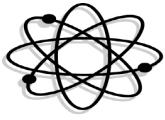
Description	Amount	Units	Extension
TPSurfaceWater	20.00	6	120.00
TOTAL			120.00

This invoice is due upon receipt.

Please remit to: P.O. Box 150597
Altamonte Springs, FL 32715-0597

VISA, MasterCard, and American Express cards will be accepted.

There will be a 1.5% service charge per month on all unpaid balances.



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4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Report Summary

Date Received: Jun 4, 2021

FCL Project Manager: Willow A. King

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
472802SW1	E1	EPA365.1	CCP	Main Lab	Surface Water
472802SW2	P1	EPA365.1	CCP	Main Lab	Surface Water
472802SW3	P2	EPA365.1	CCP	Main Lab	Surface Water
472802SW4	E1	EPA365.1	CCP	Main Lab	Surface Water
472802SW5	P1	EPA365.1	CCP	Main Lab	Surface Water
472802SW6	P2	EPA365.1	CCP	Main Lab	Surface Water

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



Jefferson S. Flowers, Ph.D.
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Environmental Consulting & Design
4703 NW 53rd Ave, Ste B2
Gainesville, FL 32653

PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Analysis Report

Lab #:	Sampled:	Desc:	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
472802SW1	06/03/21 09:43 AM	E1	Total Phosphorus(as P)	0.418	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW2	06/03/21 09:55 AM	P1	Total Phosphorus(as P)	0.184	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW3	06/03/21 10:05 AM	P2	Total Phosphorus(as P)	2.32	mg/L	2.00	0.00600	0.0200	10466959	EPA365.1	7723-14-0	06/08/21
472802SW4	06/04/21 12:50 PM	E1	Total Phosphorus(as P)	0.129	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW5	06/04/21 01:00 PM	P1	Total Phosphorus(as P)	0.365	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21
472802SW6	06/04/21 01:10 PM	P2	Total Phosphorus(as P)	0.163	mg/L	1.00	0.00300	0.0100	10466959	EPA365.1	7723-14-0	06/08/21



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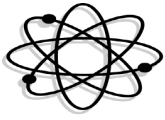
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PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Quality Report

Quality Control Batch: 10466959	Analyst: CCP							
Blank	Result	Units						
Total Phosphorus(as P)	0.00300U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.487	mg/L	0.500	97.40	90.00-110.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample	Lab Number	
Total Phosphorus(as P)	0.336	mg/L	0.200	92.50	85.00-115.00	0.151	472394SW1	
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.339	mg/L	0.200	94.00	85.00-115.00	0.151	0.89	20.00



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PO #: n/a
Client Project #: Emerald Marsh Restoration
Date Sampled: Jun 3, 2021
Jun 8, 2021; Invoice: 472802

Narrative Report

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