



8 East Tower Circle  
 Ormond Beach, FL 32174  
 (386)672-5668

## SAMPLE ACKNOWLEDGMENT

**Samples Submitted By:** Volusia County Solid Waste Management  
**Client Project ID:** Tomoka Monthly Sprayfield  
**Client PO#:**

**Pace Project Manager:** Jeff Baylor  
 Phone (386)672-5668  
 jeff.baylor@pacelabs.com  
**Pace Analytical Project ID:** 3585004  
**Samples Received:** March 4, 2013 04:55 PM  
**Estimated Completion:** March 12, 2013

**CC:** Chris Woodham, Ms. Jennifer Stirk, Rick Wilson

AM  
**RECEIVED**  
**APR 05 2013**  
 DEP Central District

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
Influent	3585004001	Water	03/04/13 10:42	2320B Alkalinity 2540C Total Dissolved Solids 410.4 COD 5210B cBOD, 5 day Field Data
Effluent	3585004002	Water	03/04/13 10:55	200.7 MET ICP Iron, Sodium 200.8 MET ICPMS Silver 2320B Alkalinity 245.1 Mercury 2540C Total Dissolved Solids 2540D Total Suspended Solids 300.0 IC Anions 300.0 IC Anions 28 Days 351.2 Total Kjeldahl Nitrogen 353.2 Nitrogen, NO2/NO3 pres. 365.4 Phosphorus, Total 5310B TOC 8260 MSV Field Data Field Services Charge Total Nitrogen Calculation

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, Inc.



**CHAIN-OF-CUSTODY / Analytical Re**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields

**WO#: 3585004**



<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <i>Volusia County Solid Waste</i>		Report To: <i>MS Jennifer Smith</i>		Attention: <i>1014000</i>	
Address: <i>990 Tomolka Farm Rd</i>		Copy To:		Company Name:	
<i>Daytona Beach, FL 32114</i>		Purchase Order No.:		Address:	
Phone:	Fax:	Project Name: <i>Tomolka Monthly Spray</i>		Pace Quote Reference:	
Requested Due Date/TAT:		Project Number:		Pace Project Manager:	
				Pace Profile #:	
				<b>REGULATORY AGENCY</b>	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
				Site Location	
				STATE: _____	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MTRX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMIP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.								
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other												
					DATE	TIME	DATE	TIME																						
1	<i>Influent</i>		<i>G</i>				<i>3/4/13</i>	<i>1642</i>	<i>2</i>																					
2	<i>Effluent</i>		<i>G</i>				<i>3/4/13</i>	<i>1655</i>	<i>8</i>																					
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	<i>Chris Arnes</i>	<i>3/4/13</i>	<i>1655</i>	<i>Paula H. [Signature]</i>	<i>3/4/13</i>	<i>1655</i>	<i>0.5</i>

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Christopher Jones</i>	DATE Signed (MM/DD/YY): <i>3/4/13</i>				
SIGNATURE of SAMPLER: <i>Chris Arnes</i>					

ORIGINAL

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

T119

# Pace Analytical Field Sampling Log

Site Name: Tomoka WWTP Monthly		Site Location: Volusia County, FL	
Well: <b>INFLUENT</b> EFFLUENT	Sample ID:	Date: 3/4/13	

## PURGING DATA YSI: 2606

Well Diameter:	Tubing Diameter:	Well Screen Interval Depth:	Feet to Static Depth to Water:	Sampling Device:	Grab							
Well Volume Purge: (Total Well Depth - Static Depth to Water) X Well Capacity = Well Volume												
( ) X 0.16 Gallons/Foot = Gallons												
Equipment Volume Purge: Pump Volume + (Tubing Capacity X Tubing Length) + Flow Cell Volume = Equipment Volume												
+ ( X ) = Gallons												
Initial Pump or Tubing Depth in Well (Feet):		Final Pump or Tubing Depth in Well:		Purging Initiated At:	Purging Ended At:							
Total Volume Purged (Gallons):												
Time	Volume Purged (Gal)	CUMUL Volume Purged (Gal)	Purge Rate (gpm)	Depth to Water (Feet)	pH (Standard Units)	Temp. (°C)	Conductivity (µS/cm)	Dissoived Oxygen (mg/L)	Turbidity (NTUs)	Color (Describe)	Odor (Describe)	ORP
					8.58	16.32	9554	1.36	2.01	Dark brown	Low turb	-36.0
Well Capacity (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 Tubing Inside DIA. Capacity (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												

## SAMPLING DATA

Sampled By (Print): Christopher Jones			Sampler(s) Signatures: <i>Christopher Jones</i>			Sampling Initiated At: 1042		Sampling Ended At:		
Pump or Tubing Depth in Well (Feet):		Sample Pump Flow Rate (mL per minute): 100-200ml		Tubing Material Code: PE		Field Decontamination: (Yes) (No)		Field-Filtered: (Yes) (No) Filter Size: µm		Duplicate: (Yes) (No)
Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Total Volume Added in Field (mL)	Final pH	Intended Analysis and/or Method		Sampling Equipment Code	

**Weather Conditions**  
 Sunny  
 Partly Cloudy  
 Cloudy  
 Temperature: 65°  
 Rain: [Yes] [No]  
 Wind Speed: 5-10  
 Wind Direction:

<input type="checkbox"/> Surface Water Total Depth: _____ Type: <input type="checkbox"/> Lake <input type="checkbox"/> Stream <input type="checkbox"/> River <input type="checkbox"/> Other _____ Sheen <input type="checkbox"/> Yes <input type="checkbox"/> No		Taken From: <input type="checkbox"/> Shore <input type="checkbox"/> Surface <input type="checkbox"/> Boat <input type="checkbox"/> Mid-Depth <input type="checkbox"/> Bridge <input type="checkbox"/> Bottom <input type="checkbox"/> Wading <input type="checkbox"/> Other _____		<input type="checkbox"/> Waste Water: Start Time _____ Finish Time _____ Sampling Point: _____ Volume: _____ <input type="checkbox"/> Composite <input type="checkbox"/> Grab mL per: [ ] Hour [ ] 1/2 Hour [ ]	
<input type="checkbox"/> Soils/Sediment Sampling Point: _____		Sample Depth: _____		<input type="checkbox"/> Composite <input type="checkbox"/> Grab	
<input type="checkbox"/> Drum Waste Type: _____		Layers [Yes] [No]		<input type="checkbox"/> Composite <input type="checkbox"/> Grab	
<input type="checkbox"/> Other: Sampling Point: _____		Sample Depth: _____		<input type="checkbox"/> Composite <input type="checkbox"/> Grab	
Discharged Method <input type="checkbox"/> Ground <input type="checkbox"/> Barrel <span style="float: right;">On Ice @</span>					
Field Notes: _____ <span style="float: right;">Bottles Preserved &lt;pH</span>					
<b>See Work Order/Bottle Order</b>					

# Pace Analytical Field Sampling Log

Site Name: Tomoka WWTP Monthly	Site Location: Volusia County, FL
Well: <del>INFLUENT</del> <b>EFFLUENT</b>	Sample ID: _____ Date: <del>3/1/13</del> <b>3/4/13</b>

## PURGING DATA YSI: 2606

Well Diameter:	Tubing Diameter:	Well Screen Interval Depth:	Feet to	Static Depth to Water:	Sampling Device:	<b>Grab</b>						
Well Volume Purge: (Total Well Depth - Static Depth to Water) X Well Capacity = Well Volume												
( ) X 0.16 Gallons/foot = Gallons												
Equipment Volume Purge: Pump Volume + (Tubing Capacity X Tubing Length) + Flow Cell Volume = Equipment Volume												
+ ( ) X ( ) = Gallons												
Initial Pump or Tubing Depth in Well (Feet):		Final Pump or Tubing Depth in Well:		Purging Initiated At:	Purging Ended At:	Total Volume Purged (Gallons):						
Time	Volume Purged (Gal)	CUMUL Volume Purged (Gal)	Purge Rate (gpm)	Depth to Water (Feet)	pH (Standard Units)	Temp. (°C)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color (Describe)	Odor (Describe)	ORP
					7.76	14.77	4324	2.66	117	Brown	None	15.8
Well Capacity (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 6.88 Tubing Inside DIA. Capacity (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018												

## SAMPLING DATA

Sampled By (Print): Christopher Jones / Pace				Sampler(s) Signatures: <i>Chris Jones</i>				Sampling Initiated At: 10:55		Sampling Ended At:	
Pump or Tubing Depth in Well (Feet):		Sample Pump Flow Rate (mL per minute): 100-200ml		Tubing Material Code: PE		Field Decontamination: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Field-Filtered: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Duplicate: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Total Volume Added in Field (mL)	Final pH	Intended Analysis and/or Method	Filter Size: _____ µm			

**Weather Conditions**  
 Sunny  
 Partly Cloudy  
 Cloudy  
 Temperature: 65°  
 Rain: [Yes]  No  
 Wind Speed: 5-10  
 Wind Direction: *W*

<input type="checkbox"/> Surface Water	Taken From:	<input type="checkbox"/> Waste Water: Start Time _____ Finish Time _____
Total Depth: _____	<input type="checkbox"/> Shore <input type="checkbox"/> Surface	Sampling Point: _____ Volume: _____
Type: <input type="checkbox"/> Lake <input type="checkbox"/> Stream	<input type="checkbox"/> Boat <input type="checkbox"/> Mid-Depth	<input type="checkbox"/> Composite <input type="checkbox"/> Grab
<input type="checkbox"/> River <input type="checkbox"/> Other _____	<input type="checkbox"/> Bridge <input type="checkbox"/> Bottom	mL per: [ ] Hour [ ] ½ Hour [ ]
Sheen <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Wading <input type="checkbox"/> Other	
<input type="checkbox"/> Soils/Sediment	Sampling Point: _____	Sample Depth: _____
		<input type="checkbox"/> Composite <input type="checkbox"/> Grab
<input type="checkbox"/> Drum Waste	Type: _____	Layers [Yes] [No]
		<input type="checkbox"/> Composite <input type="checkbox"/> Grab
<input type="checkbox"/> Other:	Sampling Point: _____	Sample Depth: _____
		<input type="checkbox"/> Composite <input type="checkbox"/> Grab
Discharged Method <input type="checkbox"/> Ground <input type="checkbox"/> Barrel		On Ice @ _____
Field Notes:		Bottles Preserved <2pH

See Work Order/Bottle Order

**Sample Condition Upon Receipt Form (SCUR)** Table Number: \_\_\_\_\_

Client Name: \_\_\_\_\_ Project # 3385004

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other \_\_\_\_\_

Tracking # \_\_\_\_\_  
 Custody Seal on Cooler/Box Present:  yes  no    Seals Intact:  yes  no  
 Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_  
 Thermometer Used TA9    Type of Ice:  Wet  Blue  None

Date and Initials of person examining contents: \_\_\_\_\_

Cooler Temperature °C 0.1 (Visual) -0.6 (Correction Factor) -0.5 (Actual)    (Temp should be above freezing to 6°C). If below 0°C, then was sample frozen?  
 Yes  No

Receipt of samples satisfactory:  Yes  No    Rush TAT requested on COC: \_\_\_\_\_  
 If yes, then all conditions below were met:    If no, then mark box & describe issue (use comments area if necessary):

Chain of Custody Present	<input type="checkbox"/>
Chain of Custody Filled Out	<input type="checkbox"/>
Relinquished Signature & Sampler Name COC	<input type="checkbox"/>
Samples Arrived within Hold Time	<input checked="" type="checkbox"/>
Sufficient Volume	<input type="checkbox"/>
Correct Containers Used	<input type="checkbox"/>
Containers Intact	<input type="checkbox"/>
Sample Labels match COC (sample IDs & date/time of collection)	<input type="checkbox"/>
	No Labels: <input type="checkbox"/> No Time/Date on Labels: <input type="checkbox"/>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/>
No Headspace in VOA Vials (>8mm):	<input type="checkbox"/>

Client Notification/ Resolution:  
 Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Comments/ Resolution (use back for additional comments): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: 2/4/12

Finished Product Information Only	
F.P. Sample ID: _____	<b>Size &amp; Qty of Bottles Received</b> _____ x 5 Gal _____ x 2.5 Gal _____ x 1 Gal _____ x 1 Liter _____ x 500 mL _____ x 250 mL _____ x Other: _____
Production Code: _____	
Date/Time Opened: _____	
Number of Unopened Bottles Remaining: _____	
Extra Sample in Shed:    Yes    No	



Pace Analytical Services, Inc.  
8 East Tower Circle  
Ormond Beach, FL 32174  
(386)672-5668

March 12, 2013

Ms. Jennifer Stirk  
Volusia County Solid Waste Management  
1990 Tomoka Farms Road  
Port Orange, FL 32128

RE: Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

Dear Ms. Stirk:

Enclosed are the analytical results for sample(s) received by the laboratory on March 04, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,

Jeff Baylor

jeff.baylor@pacelabs.com  
Project Manager

Enclosures

cc: Rick Wilson, Volusia County Solid Waste Man  
Chris Woodham, Volusia County Solid Waste Man



### REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

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### Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174  
Alabama Certification #: 41320  
Arizona Certification #: AZ0735  
Colorado Certification: FL NELAC Reciprocity  
Connecticut Certification #: PH-0216  
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  
Maine Certification #: FL01264  
Massachusetts Certification #: M-FL1264  
Michigan Certification #: 9911  
Mississippi Certification: FL NELAC Reciprocity  
Missouri Certification #: 236

Montana Certification #: Cert 0074  
Nevada Certification: FL NELAC Reciprocity  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL765  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
Pace Analytical Services - Ormond certification number  
E83509  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
Washington Certification #: C955  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

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## REPORT OF LABORATORY ANALYSIS

### SAMPLE SUMMARY

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3585004001	Influent	Water	03/04/13 10:42	03/04/13 16:55
3585004002	Effluent	Water	03/04/13 10:55	03/04/13 16:55

### REPORT OF LABORATORY ANALYSIS





**SAMPLE ANALYTE COUNT**

Project: Tomoka Monthly Sprayfield  
 Pace Project No.: 3585004

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3585004001	Influent	SM 2320B	AMD	1	PASI-O
		SM 2540C	AGS	1	PASI-O
		SM 5210B	JP1	1	PASI-O
		EPA 410.4	AIS	1	PASI-O
3585004002	Effluent	EPA 200.7	JTJ	12	PASI-O
		EPA 200.8	HEA	2	PASI-O
		EPA 245.1	HEA	1	PASI-O
		EPA 8260	SK	5	PASI-O
		SM 2320B	AMD	1	PASI-O
		SM 2540C	AGS	1	PASI-O
		SM 2540D	AGS	1	PASI-O
		TKN+NOx Calculation	AMD	1	PASI-O
		EPA 300.0	KHC	1	PASI-O
		EPA 300.0	KHC	1	PASI-O
		EPA 351.2	SOA	1	PASI-O
		EPA 353.2	AMD	1	PASI-O
		EPA 365.4	SOA	1	PASI-O
		SM 5310B	HEA	1	PASI-O

**REPORT OF LABORATORY ANALYSIS**

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 without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: Tomoka Monthly Sprayfield  
 Pace Project No.: 3585004

Sample: Influent Lab ID: 3585004001 Collected: 03/04/13 10:42 Received: 03/04/13 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>		Analytical Method:							
Field pH	8.58	Std. Units	0.10	0.10	1		03/05/13 08:41		
Field Temperature	16.32	deg C	0.50	0.50	1		03/05/13 08:41		
Field Specific Conductance	9554	umhos/cm	1.0	1.0	1		03/05/13 08:41		
Oxygen, Dissolved	1.30	mg/L			1		03/05/13 08:41	7782-44-7	
Turbidity	201	NTU	1.0	1.0	1		03/05/13 08:41		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B							
Alkalinity, Total as CaCO3	2740	mg/L	25.0	25.0	5		03/08/13 19:52		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C							
Total Dissolved Solids	5660	mg/L	100	100	1		03/11/13 15:27		
<b>5210B cBOD, 5 day</b>		Analytical Method: SM 5210B Preparation Method: SM 5210B							
Carbonaceous BOD, 5 day	149	mg/L	2.0	2.0	1	03/05/13 11:50	03/10/13 15:54		
<b>410.4 COD</b>		Analytical Method: EPA 410.4							
Chemical Oxygen Demand	2640	mg/L	400	250	20		03/08/13 09:53		



### ANALYTICAL RESULTS

Project: Tomoka Monthly Sprayfield  
 Pace Project No.: 3585004

Sample: Effluent Lab ID: 3585004002 Collected: 03/04/13 10:55 Received: 03/04/13 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method:									
Field pH	7.70	Std. Units	0.10	0.10	1		03/05/13 08:42		
Field Temperature	14.77	deg C	0.50	0.50	1		03/05/13 08:42		
Field Specific Conductance	4324	umhos/cm	1.0	1.0	1		03/05/13 08:42		
Oxygen, Dissolved	2.66	mg/L			1		03/05/13 08:42	7782-44-7	
Turbidity	117	NTU	1.0	1.0	1		03/05/13 08:42		
<b>200.7 MET ICP</b>									
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Aluminum	16600	ug/L	500	250	1	03/05/13 13:26	03/06/13 10:27	7429-90-5	
Arsenic	45.0	ug/L	50.0	25.0	1	03/05/13 13:26	03/06/13 10:27	7440-38-2	
Barium	254	ug/L	50.0	25.0	1	03/05/13 13:26	03/06/13 10:27	7440-39-3	
Cadmium	2.50	ug/L	5.0	2.5	1	03/05/13 13:26	03/06/13 10:27	7440-43-9	
Chromium	131	ug/L	25.0	12.5	1	03/05/13 13:26	03/06/13 10:27	7440-47-3	
Copper	230	ug/L	25.0	12.5	1	03/05/13 13:26	03/06/13 10:27	7440-50-8	
Iron	11.1	mg/L	0.20	0.10	1	03/05/13 13:26	03/06/13 10:27	7439-89-6	
Nickel	27.6	ug/L	25.0	12.5	1	03/05/13 13:26	03/06/13 10:27	7440-02-0	
Selenium	37.50	ug/L	75.0	37.5	1	03/05/13 13:26	03/06/13 10:27	7782-49-2	
Sodium	3100	mg/L	100	50.0	20	03/05/13 13:26	03/06/13 11:08	7440-23-5	D4
Vanadium	25.00	ug/L	50.0	25.0	1	03/05/13 13:26	03/06/13 10:27	7440-62-2	
Zinc	318	ug/L	100	50.0	1	03/05/13 13:26	03/06/13 10:27	7440-66-6	
<b>200.8 MET ICPMS</b>									
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8									
Silver	1.1	ug/L	0.50	0.25	1	03/05/13 13:26	03/06/13 18:28	7440-22-4	
Thallium	2.50	ug/L	5.0	2.5	1	03/05/13 13:26	03/12/13 14:23	7440-28-0	
<b>245.1 Mercury</b>									
Analytical Method: EPA 245.1 Preparation Method: EPA 245.1									
Mercury	0.50U	ug/L	1.0	0.50	1	03/05/13 15:39	03/06/13 10:30	7439-97-6	D3
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
2-Butanone (MEK)	25.0U	ug/L	50.0	25.0	5		03/08/13 22:03	78-93-3	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	32	%	70-114		5		03/08/13 22:03	460-00-4	D3, J(S2)
Dibromofluoromethane (S)	43	%	88-117		5		03/08/13 22:03	1868-53-7	J(S0)
1,2-Dichloroethane-d4 (S)	91	%	86-125		5		03/08/13 22:03	17060-07-0	
Toluene-d8 (S)	5	%	87-113		5		03/08/13 22:03	2037-26-5	J(S0)
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B									
Alkalinity, Total as CaCO3	1640	mg/L	25.0	25.0	5		03/08/13 20:00		
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C									
Total Dissolved Solids	7200	mg/L	100	100	1		03/11/13 15:27		
<b>2540D Total Suspended Solids</b>									
Analytical Method: SM 2540D									
Total Suspended Solids	172	mg/L	27.8	27.8	1		03/11/13 12:00		

**ANALYTICAL RESULTS**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

Sample: Effluent		Lab ID: 3585004002	Collected: 03/04/13 10:55	Received: 03/04/13 16:55	Matrix: Water				
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Total Nitrogen Calculation</b>	Analytical Method: TKN+NOx Calculation								
Total Nitrogen	47.4 mg/L		0.50	0.25	1		03/12/13 18:51		
<b>300.0 IC Anions</b>	Analytical Method: EPA 300.0								
Nitrate as N	4.5 mg/L		1.0	0.50	20		03/05/13 15:48	14797-55-8	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0								
Chloride	1940 mg/L		100	50.0	20		03/05/13 15:48	16887-00-6	
<b>351.2 Total Kjeldahl Nitrogen</b>	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	47.1 mg/L		2.0	0.34	1	03/05/13 08:00	03/06/13 11:57	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	0.35 mg/L		0.050	0.025	1		03/07/13 20:40		
<b>365.4 Phosphorus, Total</b>	Analytical Method: EPA 365.4 Preparation Method: EPA 365.4								
Phosphorus, Total (as P)	13.6 mg/L		0.40	0.20	1	03/05/13 08:00	03/06/13 11:57	7723-14-0	
<b>5310B TOC</b>	Analytical Method: SM 5310B								
Total Organic Carbon	203 mg/L		10.0	5.0	10		03/05/13 23:13	7440-44-0	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: MERP/3577      Analysis Method: EPA 245.1  
QC Batch Method: EPA 245.1      Analysis Description: 245.1 Mercury  
Associated Lab Samples: 3585004002

METHOD BLANK: 576835      Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	0.10U	0.20	03/06/13 09:54	

LABORATORY CONTROL SAMPLE: 576836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2	2.0	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576837      576838

Parameter	Units	3583242001 Result	MS Spike	MSD Spike	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Conc.	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	
Mercury	ug/L	0.10U	2	2	2.0	2.0	101	101	70-130	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576839      576840

Parameter	Units	3584953001 Result	MS Spike	MSD Spike	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Conc.	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	
Mercury	ug/L	ND	2	2	2.2	2.1	108	106	70-130	2	20

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: MPRP/12443      Analysis Method: EPA 200.7  
QC Batch Method: EPA 200.7      Analysis Description: 200.7 MET  
Associated Lab Samples: 3585004002

METHOD BLANK: 576625      Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Barium	ug/L	5.0U	10.0	03/06/13 09:16	
Cadmium	ug/L	0.50U	1.0	03/06/13 09:16	
Chromium	ug/L	2.5U	5.0	03/06/13 09:16	
Iron	mg/L	0.020U	0.040	03/06/13 09:16	
Nickel	ug/L	2.5U	5.0	03/06/13 09:16	
Sodium	mg/L	0.50U	1.0	03/06/13 09:16	
Zinc	ug/L	10.0U	20.0	03/06/13 09:16	

LABORATORY CONTROL SAMPLE: 576626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	250	249	100	85-115	
Cadmium	ug/L	25	24.7	99	85-115	
Chromium	ug/L	250	248	99	85-115	
Iron	mg/L	2.5	2.4	96	85-115	
Nickel	ug/L	250	247	99	85-115	
Sodium	mg/L	12.5	12.5	100	85-115	
Zinc	ug/L	1250	1200	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576627      576628

Parameter	Units	3584081001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	Qual		
Barium	ug/L	6.6 l	250	250	263	260	103	101	70-130	1	20		
Cadmium	ug/L	0.50U	25	25	25.0	24.6	100	98	70-130	2	20		
Chromium	ug/L	2.5U	250	250	256	253	102	101	70-130	1	20		
Iron	mg/L	22.5 l	2.5	2.5	2.5	2.5	99	97	70-130	2	20		
Nickel	ug/L	2.5U	250	250	252	247	100	98	70-130	2	20		
Sodium	mg/L	130000	12.5	12.5	145	142	126	95	70-130	3	20		
Zinc	ug/L	60.7	1250	1250	1310	1270	100	97	70-130	3	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576629      576630

Parameter	Units	3584822001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	Qual		
Barium	ug/L	6.9 l	250	250	262	257	102	100	70-130	2	20		
Cadmium	ug/L	0.50U	25	25	24.4	24.6	98	98	70-130	6	20		

Date: 03/12/2013 09:34 PM

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

Parameter	Units	3584822001		576629		576630		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Chromium	ug/L	2.5U	250	250	253	250	101	100	70-130	1	20			
Iron	mg/L	146	2.5	2.5	2.6	2.6	98	96	70-130	1	20			
Nickel	ug/L	2.5U	250	250	249	249	100	99	70-130	.3	20			
Sodium	mg/L	1700	12.5	12.5	14.5	14.2	103	100	70-130	2	20			
Zinc	ug/L	10.0U	1250	1250	1210	1220	97	97	70-130	.5	20			

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: MPRP/12444 Analysis Method: EPA 200.8  
QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET  
Associated Lab Samples: 3585004002

METHOD BLANK: 576635 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Silver	ug/L	0.050U	0.10	03/06/13 17:30	
Thallium	ug/L	0.50U	1.0	03/06/13 17:30	

LABORATORY CONTROL SAMPLE: 576636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Silver	ug/L	5	5.4	108	85-115	
Thallium	ug/L	50	48.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576637 576638

Parameter	Units	3584472001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Silver	ug/L	0.050U	5	5	4.8	4.7	96	94	70-130	2	20
Thallium	ug/L	0.50U	50	50	50.3	48.9	101	98	70-130	3	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576639 576640

Parameter	Units	3584822002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Silver	ug/L	0.050U	5	5	5.4	5.2	107	104	70-130	3	20
Thallium	ug/L	0.50U	50	50	50.2	49.1	100	98	70-130	2	20



**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: MSV/7954 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 3585004002

METHOD BLANK: 579915 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Butanone (MEK)	ug/L	5.0U	10.0	03/08/13 21:41	
1,2-Dichloroethane-d4 (S)	%	98	86-125	03/08/13 21:41	
4-Bromofluorobenzene (S)	%	91	70-114	03/08/13 21:41	
Dibromofluoromethane (S)	%	98	88-117	03/08/13 21:41	
Toluene-d8 (S)	%	102	87-113	03/08/13 21:41	

LABORATORY CONTROL SAMPLE: 579916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	20	16.7	84	55-167	
1,2-Dichloroethane-d4 (S)	%			92	86-125	
4-Bromofluorobenzene (S)	%			92	70-114	
Dibromofluoromethane (S)	%			94	88-117	
Toluene-d8 (S)	%			101	87-113	

MATRIX SPIKE SAMPLE: 579960

Parameter	Units	3585399005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	5.0U	20	16.2	81	48-138	
1,2-Dichloroethane-d4 (S)	%				96	86-125	
4-Bromofluorobenzene (S)	%				91	70-114	
Dibromofluoromethane (S)	%				91	88-117	
Toluene-d8 (S)	%				100	87-113	

SAMPLE DUPLICATE: 579959

Parameter	Units	3585399004 Result	Dup Result	RPD	Max RPD	Qualifiers
2-Butanone (MEK)	ug/L	5.0U	5.0U		40	
1,2-Dichloroethane-d4 (S)	%	102	99	3		
4-Bromofluorobenzene (S)	%	92	87	6		
Dibromofluoromethane (S)	%	99	97	2		
Toluene-d8 (S)	%	102	103	1		

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WET/18031 Analysis Method: SM 2320B  
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity  
Associated Lab Samples: 3585004001, 3585004002

METHOD BLANK: 580194 Matrix: Water  
Associated Lab Samples: 3585004001, 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5.0U	5.0	03/08/13 18:11	

LABORATORY CONTROL SAMPLE: 580195

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	250	243	97	90-110	

SAMPLE DUPLICATE: 580196

Parameter	Units	3585023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	154	154	.006	20	

SAMPLE DUPLICATE: 580197

Parameter	Units	3584901010 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	145	145	.1	20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WET/18044      Analysis Method: SM 2540C  
QC Batch Method: SM 2540C      Analysis Description: 2540C Total Dissolved Solids  
Associated Lab Samples: 3585004001, 3585004002

METHOD BLANK: 581155      Matrix: Water  
Associated Lab Samples: 3585004001, 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	5.0U	5.0	03/11/13 15:22	

LABORATORY CONTROL SAMPLE: 581156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	292	97	90-110	

SAMPLE DUPLICATE: 581157

Parameter	Units	3585036007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	952	944	.8	20	

SAMPLE DUPLICATE: 581158

Parameter	Units	3585036015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	483	464	4	20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WET/18047 Analysis Method: SM 2540D  
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids  
Associated Lab Samples: 3585004002

METHOD BLANK: 581167 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	5.0U	5.0	03/11/13 12:00	

LABORATORY CONTROL SAMPLE: 581168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	92.0	92	90-110	

SAMPLE DUPLICATE: 581169

Parameter	Units	3584967001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	8.5	8.5	0	20	

SAMPLE DUPLICATE: 581170

Parameter	Units	3584968001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	5.0U		20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WET/17952      Analysis Method: SM 5210B  
QC Batch Method: SM 5210B      Analysis Description: 5210B cBOD, 5 day  
Associated Lab Samples: 3585004001

METHOD BLANK: 576714      Matrix: Water  
Associated Lab Samples: 3585004001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Carbonaceous BOD, 5 day	mg/L	2.0U	2.0	03/10/13 15:12	

LABORATORY CONTROL SAMPLE: 576715

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbonaceous BOD, 5 day	mg/L	198	197	99	85-115	

SAMPLE DUPLICATE: 576716

Parameter	Units	3584962001 Result	Dup Result	RPD	Max RPD	Qualifiers
Carbonaceous BOD, 5 day	mg/L	146	147	.8	20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24347 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 3585004002

METHOD BLANK: 576894 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	0.025U	0.050	03/05/13 07:47	

LABORATORY CONTROL SAMPLE: 576895

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	5	4.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576896 576897

Parameter	Units	3584999001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
										RPD	RPD	
Nitrate as N	mg/L	0.025U	5	5	4.8	4.8	96	96	90-110	.08	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 576898 576899

Parameter	Units	3584999003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
										RPD	RPD	
Nitrate as N	mg/L	0.025U	5	5	4.7	4.7	95	95	90-110	.1	20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24360 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 3585004002

METHOD BLANK: 577427 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	2.5U	5.0	03/05/13 07:47	

LABORATORY CONTROL SAMPLE: 577428

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 577429 577430

Parameter	Units	3584999003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.7	50	50	71.8	71.8	104	104	90-110	.01	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 577431 577432

Parameter	Units	3585022002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	43.4	100	100	149	149	106	106	90-110	.04	20	



**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
 Pace Project No.: 3585004

QC Batch: WETA/24325 Analysis Method: EPA 351.2  
 QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN  
 Associated Lab Samples: 3585004002

METHOD BLANK: 576657 Matrix: Water  
 Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.086U	0.50	03/06/13 11:34	

LABORATORY CONTROL SAMPLE: 576658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	20	20.0	100	90-110	

MATRIX SPIKE SAMPLE: 576660

Parameter	Units	3585023001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.79	20	20.5	99	90-110	

SAMPLE DUPLICATE: 576659

Parameter	Units	3585023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.79	0.82	3	20	



**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24422 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
Associated Lab Samples: 3585004002

METHOD BLANK: 579474 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	0.050	03/07/13 20:30	

LABORATORY CONTROL SAMPLE: 579475

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 579477

Parameter	Units	3584924025 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	2	2.1	104	80-120	

MATRIX SPIKE SAMPLE: 579487

Parameter	Units	3585132001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	2	2.1	105	80-120	

SAMPLE DUPLICATE: 579476

Parameter	Units	3584924025 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	0.025U		20	

SAMPLE DUPLICATE: 579486

Parameter	Units	3585132001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	0.050 I		20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24326 Analysis Method: EPA 365.4  
QC Batch Method: EPA 365.4 Analysis Description: 365.4 Phosphorus  
Associated Lab Samples: 3585004002

METHOD BLANK: 576665 Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphorus, Total (as P)	mg/L	0.050U	0.10	03/06/13 12:12	

LABORATORY CONTROL SAMPLE: 576666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	4	4.1	103	90-110	

MATRIX SPIKE SAMPLE: 576668

Parameter	Units	3585023001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phosphorus, Total (as P)	mg/L	0.054	4	4.1	101	80-120	

SAMPLE DUPLICATE: 576667

Parameter	Units	3585023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phosphorus, Total (as P)	mg/L	0.054	0.057		20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24415 Analysis Method: EPA 410.4  
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD  
Associated Lab Samples: 3585004001

METHOD BLANK: 579216 Matrix: Water  
Associated Lab Samples: 3585004001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	12.5U	20.0	03/08/13 09:53	

LABORATORY CONTROL SAMPLE: 579217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	504	101	90-110	

MATRIX SPIKE SAMPLE: 579219

Parameter	Units	3584735001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	2260	2500	4400	86	90-110 J(M1)	

SAMPLE DUPLICATE: 579218

Parameter	Units	3584735001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	mg/L	2260	2100	7	20	

**QUALITY CONTROL DATA**

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

QC Batch: WETA/24349      Analysis Method: SM 5310B  
QC Batch Method: SM 5310B      Analysis Description: 5310B TOC  
Associated Lab Samples: 3585004002

METHOD BLANK: 576951      Matrix: Water  
Associated Lab Samples: 3585004002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	0.50U	1.0	03/05/13 20:01	

LABORATORY CONTROL SAMPLE: 576952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	20	19.0	95	90-110	

MATRIX SPIKE SAMPLE: 576954

Parameter	Units	3584665001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5.7	20	25.7	100	80-120	

MATRIX SPIKE SAMPLE: 576955

Parameter	Units	3585028003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	15.8	20	34.3	92	80-120	

SAMPLE DUPLICATE: 576953

Parameter	Units	3584665001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	5.7	5.7	.2	20	

SAMPLE DUPLICATE: 576956

Parameter	Units	3585028003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	15.8	15.7	.7	20	

## QUALIFIERS

Project: Tomoka Monthly Sprayfield  
Pace Project No.: 3585004

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

### ANALYTE QUALIFIERS

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

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D4 Sample was diluted due to the presence of high levels of target analytes.

J(M1) Estimated Value. Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

J(S0) Estimated Value. Surrogate recovery outside laboratory control limits.

J(S2) Estimated Value. Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).



**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Tomoka Monthly Sprayfield  
 Pace Project No.: 3585004

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3585004001	Influent		FLD/		
3585004002	Effluent		FLD/		
3585004002	Effluent	EPA 200.7	MPRP/12443	EPA 200.7	ICP/7990
3585004002	Effluent	EPA 200.8	MPRP/12444	EPA 200.8	ICPM/5016
3585004002	Effluent	EPA 245.1	MERP/3577	EPA 245.1	MERC/3574
3585004002	Effluent	EPA 8260	MSV/7954		
3585004001	Influent	SM 2320B	WET/18031		
3585004002	Effluent	SM 2320B	WET/18031		
3585004001	Influent	SM 2540C	WET/18044		
3585004002	Effluent	SM 2540C	WET/18044		
3585004002	Effluent	SM 2540D	WET/18047		
3585004001	Influent	SM 5210B	WET/17952	SM 5210B	WET/18041
3585004002	Effluent	TKN+NOx Calculation	WET/18079		
3585004002	Effluent	EPA 300.0	WETA/24347		
3585004002	Effluent	EPA 300.0	WETA/24360		
3585004002	Effluent	EPA 351.2	WETA/24325	EPA 351.2	WETA/24339
3585004002	Effluent	EPA 353.2	WETA/24422		
3585004002	Effluent	EPA 365.4	WETA/24326	EPA 365.4	WETA/24340
3585004001	Influent	EPA 410.4	WETA/24415		
3585004002	Effluent	SM 5310B	WETA/24349		