



# FLOWERS CHEMICAL LABORATORIES INC.

P.O. Box 150597, Altamonte Springs, FL 32715-0597  
571 NW Mercantile Pl, Suite 111, Port St. Lucie, FL 34986  
812 SW Harvey Green Dr, Madison, FL 32340  
3980 Overseas Hwy, Suite 103, Marathon, FL 33050

Phone: 407-339-5984 E83018 (Main Lab)  
Phone: 772-343-8006 E86562 (South Lab)  
Phone: 850-973-6878 E82405 (North Lab)  
Phone: 305-743-8598 E35834 (Keys Lab)

Florida Keys Aqueduct Authority-WWTP  
3375 Overseas Hwy  
Marathon, FL 33050

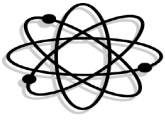
PO #: 15350  
Client Project #: Cudjoe Key -Q- SW  
Date Sampled: Aug 9, 2016  
Aug 21, 2016; Invoice: 306466

## Report Summary

Date Received: Aug 9, 2016

FCL Project Manager: Thomas D. Cross

Laboratory #	Sample Description	Analysis	Chemist	Location	Sample Matrix
306466SW1	C-24	EPA1600	TDC	Keys Lab	Surface Water
		EPA200.7	EVB	Main Lab	
		EPA200.8	EVB	Main Lab	
		EPA245.1	EVB	Main Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	PCW	Main Lab	
		EPA375.2	PCW	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	CLL	Main Lab	
		SM2540 D	CLL	Main Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		SM9222 D	TDC	Keys Lab	
306466SW2	CK-3	EPA1600	TDC	Keys Lab	Surface Water
		EPA200.7	EVB	Main Lab	
		EPA200.8	EVB	Main Lab	
		EPA245.1	EVB	Main Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	PCW	Main Lab	
		EPA375.2	PCW	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	CLL	Main Lab	
		SM2540 D	CLL	Main Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		SM9222 D	TDC	Keys Lab	
306466SW3	CK-2	EPA1600	TDC	Keys Lab	Surface Water
		EPA200.7	EVB	Main Lab	
		EPA200.8	EVB	Main Lab	
		EPA245.1	EVB	Main Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	



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		EPA353.2	PCW	Main Lab	
		EPA365.1	PCW	Main Lab	
		EPA375.2	PCW	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	CLL	Main Lab	
		SM2540 D	CLL	Main Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		SM9222 D	TDC	Keys Lab	
		TotNit			
306466SW4	C-25	EPA1600	TDC	Keys Lab	Surface Water
		EPA200.7	EVB	Main Lab	
		EPA200.8	EVB	Main Lab	
		EPA245.1	EVB	Main Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	PCW	Main Lab	
		EPA375.2	PCW	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	CLL	Main Lab	
		SM2540 D	CLL	Main Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		SM9222 D	TDC	Keys Lab	
		TotNit			

### 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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PO #: 15350  
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 Date Sampled: Aug 9, 2016  
 Aug 21, 2016; Invoice: 306466

## Analysis Report

Lab #:	Sampled:	Desc:										
306466SW1	08/09/16 07:20 AM	C-24	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			Organic Nitrogen	0.799		0				OrgNit		
			Total Nitrogen(as N)	0.895		0				TotNit	17778-88-0	
			Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		08/15/16
			Enterococci	1.00 U	cfu/100mL	1.00	1.00	1.00	10318338	EPA1600		08/09/16 01:10 PM
			Fecal Coliform	1.00 U	cfu/100mL	1.00	1.00	1.00	10318340	SM9222 D	E761792	08/09/16 01:15 PM
			Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10318383	EPA365.1	14265-44-2	08/10/16 03:10 PM
			Nitrate(as N)	0.0658	mg/L	1.00	0.0100	0.0200	10318393	EPA353.2	14797-55-8	08/10/16 02:18 PM
			Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10318393	EPA353.2	14797-65-0	08/10/16 02:18 PM
			Iron	0.0209	mg/L	1.00	0.0100	0.0200	10318413	EPA200.7	7439-89-6	08/10/16
			TSS	5.25	mg/L	1.00	1.00	2.00	10318487	SM2540 D	E1642818	08/10/16
			TOC	3.43	mg/L	1.00	1.00	2.00	10318548	SM5310 C	E701250	08/10/16
			Aluminum	0.0420	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7429-90-5	08/11/16
			Arsenic	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-38-2	08/11/16
			Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10318621	EPA200.8	7440-43-9	08/11/16
			Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-47-3	08/11/16
			Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7439-92-1	08/11/16
			Nickel	0.0192	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-02-0	08/11/16
			Zinc	0.0138 I	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7440-66-6	08/11/16
			Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10318681	EPA350.1	7664-41-7	08/15/16
			Chloride	21400	mg/L	300	1200	2400	10318743	SM4500-CI E	16887-00-6	08/16/16
			Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10318768	EPA245.1	7439-97-6	08/16/16
			Sulfate	3320	mg/L	20.0	100	200	10318785	EPA375.2	14808-79-8	08/17/16
			TKN(as N)	0.809 J	mg/L	1.00	0.200	0.400	10318858	EPA351.2	7727-37-9	08/17/16
			Chlorophyll a	0.200	ug/L	1.00	0.0200	0.150	10318908	SM10200 H	479-61-8	08/08/16
			Total Phosphorus(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10319007	EPA365.1	7723-14-0	08/19/16
			TDS	36900	mg/L	1.00	2.50	5.00	10319130	SM2540 C	10-33-3	08/11/16



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PO #: 15350  
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 Date Sampled: Aug 9, 2016  
 Aug 21, 2016; Invoice: 306466

Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Organic Nitrogen	0.391		0				OrgNit		
Total Nitrogen(as N)	0.431		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		08/15/16
Enterococci	28.0	cfu/100mL	1.00	1.00	1.00	10318338	EPA1600		08/09/16 01:10 PM
Fecal Coliform	60.0	cfu/100mL	1.00	1.00	1.00	10318340	SM9222 D	E761792	08/09/16 01:15 PM
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10318383	EPA365.1	14265-44-2	08/10/16 03:10 PM
Nitrate(as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10318393	EPA353.2	14797-55-8	08/10/16 02:18 PM
Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10318393	EPA353.2	14797-65-0	08/10/16 02:18 PM
Iron	0.0100 U	mg/L	1.00	0.0100	0.0200	10318413	EPA200.7	7439-89-6	08/10/16
TSS	16.3	mg/L	1.00	1.00	2.00	10318487	SM2540 D	E1642818	08/10/16
TOC	2.83	mg/L	1.00	1.00	2.00	10318548	SM5310 C	E701250	08/10/16
Aluminum	0.0614	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7429-90-5	08/11/16
Arsenic	0.00660	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-38-2	08/11/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10318621	EPA200.8	7440-43-9	08/11/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-47-3	08/11/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7439-92-1	08/11/16
Nickel	0.00660	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-02-0	08/11/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7440-66-6	08/11/16
Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10318681	EPA350.1	7664-41-7	08/15/16
TDS	40600	mg/L	1.00	2.50	5.00	10318683	SM2540 C	10-33-3	08/11/16
Chloride	20900	mg/L	300	1200	2400	10318743	SM4500-CI E	16887-00-6	08/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10318768	EPA245.1	7439-97-6	08/16/16
Sulfate	3400	mg/L	20.0	100	200	10318785	EPA375.2	14808-79-8	08/17/16
TKN(as N)	0.401	mg/L	1.00	0.200	0.400	10318858	EPA351.2	7727-37-9	08/17/16
Chlorophyll a	0.190	ug/L	1.00	0.0200	0.150	10318908	SM10200 H	479-61-8	08/08/16
Total Phosphorus(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10319007	EPA365.1	7723-14-0	08/19/16

Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed



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PO #: 15350  
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 Date Sampled: Aug 9, 2016  
 Aug 21, 2016; Invoice: 306466

Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Organic Nitrogen	0.410		0				OrgNit		
Total Nitrogen(as N)	0.454		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		08/15/16
Enterococci	141	cfu/100mL	1.00	1.00	1.00	10318338	EPA1600		08/09/16 01:10 PM
Fecal Coliform	2.00	cfu/100mL	1.00	1.00	1.00	10318340	SM9222 D	E761792	08/09/16 01:15 PM
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10318383	EPA365.1	14265-44-2	08/10/16 03:10 PM
Nitrate(as N)	0.0142 I	mg/L	1.00	0.0100	0.0200	10318393	EPA353.2	14797-55-8	08/10/16 02:18 PM
Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10318393	EPA353.2	14797-65-0	08/10/16 02:18 PM
Iron	0.0100 U	mg/L	1.00	0.0100	0.0200	10318413	EPA200.7	7439-89-6	08/10/16
TSS	5.13	mg/L	1.00	1.00	2.00	10318487	SM2540 D	E1642818	08/10/16
TOC	2.41	mg/L	1.00	1.00	2.00	10318548	SM5310 C	E701250	08/10/16
Aluminum	0.0242	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7429-90-5	08/11/16
Arsenic	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-38-2	08/11/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10318621	EPA200.8	7440-43-9	08/11/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-47-3	08/11/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7439-92-1	08/11/16
Nickel	0.00470	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-02-0	08/11/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7440-66-6	08/11/16
Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10318681	EPA350.1	7664-41-7	08/15/16
Chloride	22600	mg/L	300	1200	2400	10318743	SM4500-CI E	16887-00-6	08/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10318768	EPA245.1	7439-97-6	08/16/16
Sulfate	3380	mg/L	20.0	100	200	10318785	EPA375.2	14808-79-8	08/17/16
TKN(as N)	0.420	mg/L	1.00	0.200	0.400	10318858	EPA351.2	7727-37-9	08/17/16
Chlorophyll a	0.200	ug/L	1.00	0.0200	0.150	10318908	SM10200 H	479-61-8	08/08/16
Total Phosphorus(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10319007	EPA365.1	7723-14-0	08/19/16
TDS	36700	mg/L	1.00	2.50	5.00	10319130	SM2540 C	10-33-3	08/11/16

Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed



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Marathon, FL 33050

PO #: 15350  
Client Project #: Cudjoe Key -Q- SW  
Date Sampled: Aug 9, 2016  
Aug 21, 2016; Invoice: 306466

Lab #: 306466SW4 Sampled: 08/09/16 08:25 AM Desc: C-25

Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analized
Organic Nitrogen	0.278		0				OrgNit		
Total Nitrogen(as N)	0.321		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		08/15/16
Enterococci	4.00	cfu/100mL	1.00	1.00	1.00	10318338	EPA1600		08/09/16 01:10 PM
Fecal Coliform	16.0	cfu/100mL	1.00	1.00	1.00	10318340	SM9222 D	E761792	08/09/16 01:15 PM
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10318383	EPA365.1	14265-44-2	08/10/16 03:10 PM
Nitrate(as N)	0.0128 I	mg/L	1.00	0.0100	0.0200	10318393	EPA353.2	14797-55-8	08/10/16 02:18 PM
Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10318393	EPA353.2	14797-65-0	08/10/16 02:18 PM
Iron	0.0100 U	mg/L	1.00	0.0100	0.0200	10318413	EPA200.7	7439-89-6	08/10/16
TSS	6.75	mg/L	1.00	1.00	2.00	10318487	SM2540 D	E1642818	08/10/16
TOC	1.00 U	mg/L	1.00	1.00	2.00	10318548	SM5310 C	E701250	08/10/16
Aluminum	0.0231	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7429-90-5	08/11/16
Arsenic	0.00590	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-38-2	08/11/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10318621	EPA200.8	7440-43-9	08/11/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-47-3	08/11/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7439-92-1	08/11/16
Nickel	0.00100 U	mg/L	1.00	0.00100	0.00200	10318621	EPA200.8	7440-02-0	08/11/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10318621	EPA200.8	7440-66-6	08/11/16
Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10318681	EPA350.1	7664-41-7	08/15/16
Chloride	23600	mg/L	300	1200	2400	10318743	SM4500-CI E	16887-00-6	08/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10318768	EPA245.1	7439-97-6	08/16/16
Sulfate	3560	mg/L	20.0	100	200	10318785	EPA375.2	14808-79-8	08/17/16
TKN(as N)	0.288 I	mg/L	1.00	0.200	0.400	10318858	EPA351.2	7727-37-9	08/17/16
Chlorophyll a	0.270	ug/L	1.00	0.0200	0.150	10318908	SM10200 H	479-61-8	08/08/16
Total Phosphorus(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10319007	EPA365.1	7723-14-0	08/19/16
TDS	37400	mg/L	1.00	2.50	5.00	10319130	SM2540 C	10-33-3	08/11/16



# FLOWERS CHEMICAL LABORATORIES INC.

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571 NW Mercantile Pl, Suite 111, Port St. Lucie, FL 34986  
812 SW Harvey Green Dr, Madison, FL 32340  
3980 Overseas Hwy, Suite 103, Marathon, FL 33050

Phone: 407-339-5984 E83018 (Main Lab)  
Phone: 772-343-8006 E86562 (South Lab)  
Phone: 850-973-6878 E82405 (North Lab)  
Phone: 305-743-8598 E35834 (Keys Lab)

Florida Keys Aqueduct Authority-WWTP  
3375 Overseas Hwy  
Marathon, FL 33050

PO #: 15350  
Client Project #: Cudjoe Key -Q- SW  
Date Sampled: Aug 9, 2016  
Aug 21, 2016; Invoice: 306466

## Quality Report

<b>Quality Control Batch:</b> 10274203	<b>Analyst:</b> PCW
<b>Blank</b>	<b>Result</b> <b>Units</b>
Unionized NH3(as N)	0.000100U      mg/L

<b>Quality Control Batch:</b> 10318338	<b>Analyst:</b> TDC
<b>Blank</b>	<b>Result</b> <b>Units</b>
Enterococci	1.00U      cfu/100mL

<b>Quality Control Batch:</b> 10318340	<b>Analyst:</b> TDC
<b>Blank</b>	<b>Result</b> <b>Units</b>
Fecal Coliform	1.00U      cfu/100mL

<b>Quality Control Batch:</b> 10318393	<b>Analyst:</b> PCW
<b>Blank</b>	<b>Result</b> <b>Units</b>
Nitrate(as N)	0.0100U      mg/L
Nitrite(as N)	0.0200U      mg/L

<b>Laboratory Control Sample</b>	<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>
Nitrate(as N)	1.04	mg/L	1.00	104.00	85.00-115.00
Nitrite(as N)	1.01	mg/L	1.00	101.00	85.00-115.00

<b>Matrix Spike</b>	<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>
Nitrate(as N)	4.36	mg/L	4.00	107.35	85.00-115.00	0.0658
Nitrite(as N)	4.08	mg/L	4.00	102.00	85.00-115.00	0.0200U



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Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Nitrate(as N)	4.33	mg/L	4.00	106.60	85.00-115.00	0.0658	0.69	20.00
Nitrite(as N)	4.11	mg/L	4.00	102.75	85.00-115.00	0.0200U	0.73	20.00

Quality Control Batch: 10318413

Analyst: EVB

Blank	Result	Units
Iron	0.0100U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Iron	5.07	mg/L	5.00	101.39	85.00-115.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Iron	4.78	mg/L	5.00	95.58	70.00-130.00	0.0100U

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Iron	4.84	mg/L	5.00	96.80	70.00-130.00	0.0100U	1.26	40.00

Quality Control Batch: 10318548

Analyst: PCW

Blank	Result	Units
TOC	1.00U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
TOC	10.9	mg/L	10.0	109.22	80.00-120.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
TOC	22.5	mg/L	10.0	93.54	80.00-120.00	13.2

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
TOC	22.8	mg/L	10.0	95.89	80.00-120.00	13.2	1.04	20.00





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Quality Control Batch: 10318621		Analyst: EVB							
<b>Blank</b>		<b>Result</b>	<b>Units</b>						
Aluminum		0.0100U	mg/L						
Arsenic		0.00100U	mg/L						
Cadmium		0.000200U	mg/L						
Chromium		0.00100U	mg/L						
Lead		0.00100U	mg/L						
Nickel		0.00100U	mg/L						
Zinc		0.0100U	mg/L						
<b>Laboratory Control Sample</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>			
Aluminum		0.0922	mg/L	0.100	92.20	85.00-115.00			
Arsenic		0.106	mg/L	0.100	106.10	85.00-115.00			
Cadmium		0.0929	mg/L	0.100	92.90	85.00-115.00			
Chromium		0.0541	mg/L	0.100	54.10	85.00-115.00			
Lead		0.110	mg/L	0.100	110.40	85.00-115.00			
Nickel		0.110	mg/L	0.100	110.00	85.00-115.00			
Zinc		0.0974	mg/L	0.100	97.40	85.00-115.00			
<b>Matrix Spike</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>		
Aluminum		0.840	mg/L	1.00	83.54	70.00-130.00	0.00460		
Arsenic		0.711	mg/L	1.00	71.09	70.00-130.00	0.00100U		
Cadmium		0.715	mg/L	1.00	71.45	70.00-130.00	0.000200U		
Chromium		0.751	mg/L	1.00	75.11	70.00-130.00	0.00100U		
Lead		0.809	mg/L	1.00	80.42	70.00-130.00	0.00440		
Nickel		0.835	mg/L	1.00	83.46	70.00-130.00	0.00100U		
Zinc		0.813	mg/L	1.00	79.34	70.00-130.00	0.0197		
<b>Matrix Spike Duplicate</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>	<b>RPD</b>	<b>RPD Lim</b>
Aluminum		0.805	mg/L	1.00	80.07	70.00-130.00	0.00460	4.22	20.00
Arsenic		0.791	mg/L	1.00	79.09	70.00-130.00	0.00100U	10.65	20.00



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Quality Control Batch: 10318621		Analyst: EVB							
Matrix Spike Duplicate		Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Cadmium		0.797	mg/L	1.00	79.74	70.00-130.00	0.000200U	10.97	20.00
Chromium		0.732	mg/L	1.00	73.18	70.00-130.00	0.00100U	2.60	20.00
Lead		0.894	mg/L	1.00	88.94	70.00-130.00	0.00440	10.01	20.00
Nickel		0.667	mg/L	1.00	66.72	70.00-130.00	0.00100U	22.29	20.00
Zinc		0.791	mg/L	1.00	77.15	70.00-130.00	0.0197	2.73	20.00

Quality Control Batch: 10318683		Analyst: CLL							
Blank		Result	Units						
TDS		2.50U	mg/L						
Laboratory Control Sample		Result	Units	Spike	%REC	%REC Lim			
TDS		1530	mg/L	1500	102.00	50.00-170.00			

Quality Control Batch: 10318743		Analyst: VLB							
Blank		Result	Units						
Chloride		4.00U	mg/L						
Laboratory Control Sample		Result	Units	Spike	%REC	%REC Lim			
Chloride		99.8	mg/L	100	99.83	80.00-120.00			
Matrix Spike		Result	Units	Spike	%REC	%REC Lim	Sample		
Chloride		132	mg/L	100	110.46	80.00-120.00	21.7		
Matrix Spike Duplicate		Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Chloride		125	mg/L	100	103.26	80.00-120.00	21.7	5.60	20.00



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Quality Control Batch: 10318768		Analyst: EVB						
Blank	Result	Units						
Mercury	0.0000200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Mercury	0.00107	mg/L	0.00100	106.70	80.00-120.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Mercury	0.00289	mg/L	0.00300	96.58	80.00-120.00	-0.00000750		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Mercury	0.00290	mg/L	0.00300	96.92	80.00-120.00	-0.00000750	0.35	20.00
Quality Control Batch: 10318785		Analyst: PCW						
Blank	Result	Units						
Sulfate	5.00U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Sulfate	63.6	mg/L	60.0	106.00	85.00-115.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Sulfate	69.2	mg/L	50.0	100.00	85.00-115.00	19.2		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Sulfate	69.6	mg/L	50.0	100.80	85.00-115.00	19.2	0.58	20.00
Quality Control Batch: 10318858		Analyst: VLB						
Blank	Result	Units						
TKN(as N)	0.200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			



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<b>Quality Control Batch:</b> 10318858		<b>Analyst:</b> VLB							
<b>Laboratory Control Sample</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>			
TKN(as N)		2.78	mg/L	3.00	92.50	80.00-120.00			
<b>Matrix Spike</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>		
TKN(as N)		2.86	mg/L	3.00	68.29	80.00-120.00	0.809		
<b>Matrix Spike Duplicate</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>	<b>RPD</b>	<b>RPD Lim</b>
TKN(as N)		3.04	mg/L	3.00	74.39	80.00-120.00	0.809	6.20	20.00
<b>Quality Control Batch:</b> 10318908		<b>Analyst:</b> TRB							
<b>Blank</b>		<b>Result</b>	<b>Units</b>						
Chlorophyll a		0.0200U	ug/L						
<b>Quality Control Batch:</b> 10319007		<b>Analyst:</b> VLB							
<b>Blank</b>		<b>Result</b>	<b>Units</b>						
Total Phosphorus(as P)		0.00200U	mg/L						
<b>Laboratory Control Sample</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>			
Total Phosphorus(as P)		0.475	mg/L	0.500	94.97	85.00-115.00			
<b>Matrix Spike</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>		
Total Phosphorus(as P)		0.179	mg/L	0.200	89.09	85.00-115.00	0.00100		
<b>Matrix Spike Duplicate</b>		<b>Result</b>	<b>Units</b>	<b>Spike</b>	<b>%REC</b>	<b>%REC Lim</b>	<b>Sample</b>	<b>RPD</b>	<b>RPD Lim</b>
Total Phosphorus(as P)		0.180	mg/L	0.200	89.64	85.00-115.00	0.00100	0.61	20.00
<b>Quality Control Batch:</b> 10319130		<b>Analyst:</b> CLL							
<b>Blank</b>		<b>Result</b>	<b>Units</b>						
TDS		2.50U	mg/L						



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Quality Control Batch: 10319130

Analyst: CLL

Laboratory Control Sample

TDS

Result

Units

Spike

%REC

%REC Lim

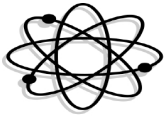
1530

mg/L

1500

102.00

50.00-170.00



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## Narrative Report

### Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by FCL. 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  
Field Data

### 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.