

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

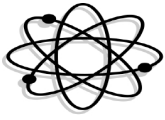
PO #: 15349
Client Project #: Cudjoe Key WWTP -Q- MW's
Date Sampled: Nov 15, 2016
Nov 30, 2016; Invoice: 315364

Report Summary

Date Received: Nov 15, 2016

FCL Project Manager: Thomas D. Cross

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
315364GW1	OW-1	COLILERT-18	TDC	Keys Lab	Ground Water
		ENTEROLERT	TDC	Keys Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	VLB	Main Lab	
		EPA375.2	PCW	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7470	EVB	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	PLB	Main Lab	
		SM2540 D	TDC	Keys Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
315364GW2	OW-3	COLILERT-18	TDC	Keys Lab	Ground Water
		ENTEROLERT	TDC	Keys Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	VLB	Main Lab	
		EPA375.2	PCW	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7470	EVB	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	PLB	Main Lab	
		SM2540 D	TDC	Keys Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
315364GW3	OW-5	COLILERT-18	TDC	Keys Lab	Ground Water
		ENTEROLERT	TDC	Keys Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	VLB	Main Lab	



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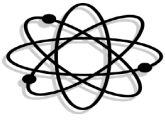
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		EPA375.2	PCW	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7470	EVB	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	PLB	Main Lab	
		SM2540 D	TDC	Keys Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		TotNit			
315364GW4	OW-4	COLILERT-18	TDC	Keys Lab	Ground Water
		ENTEROLERT	TDC	Keys Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	VLB	Main Lab	
		EPA375.2	PCW	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7470	EVB	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	PLB	Main Lab	
		SM2540 D	TDC	Keys Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	
		TotNit			
315364GW5	OW-2	COLILERT-18	TDC	Keys Lab	Ground Water
		ENTEROLERT	TDC	Keys Lab	
		EPA350.1	PCW	Main Lab	
		EPA351.2	VLB	Main Lab	
		EPA353.2	PCW	Main Lab	
		EPA365.1	VLB	Main Lab	
		EPA375.2	PCW	Main Lab	
		EPA6010	EVB	Main Lab	
		EPA6020	EVB	Main Lab	
		EPA7470	EVB	Main Lab	
		FDEP DEP-SOP	PCW	Main Lab	
		OrgNit			
		SM10200 H	TRB	Main Lab	
		SM2540 C	PLB	Main Lab	
		SM2540 D	TDC	Keys Lab	
		SM4500-CI E	VLB	Main Lab	
		SM5310 C	PCW	Main Lab	



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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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Analysis Report

Lab #:	Sampled:	Desc:										
315364GW1	11/15/16 06:47 AM	OW-1	Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
			Organic Nitrogen	0.679		0				OrgNit		
			Total Nitrogen(as N)	1.000		0				TotNit	17778-88-0	
			Unionized NH3(as N)	0.00193	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		11/22/16
			TSS	1.00 U	mg/L	1.00	1.00	2.00	10326110	SM2540 D	E1642818	11/15/16
			Fecal Coliform	1.00 U	mpn/100mL	1.00	1.00	1.00	10326133	COLILERT-18	E761792	11/15/16 01:00 PM
			Nitrate(as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10326230	EPA353.2	14797-55-8	11/16/16 01:38 PM
			Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10326230	EPA353.2	14797-65-0	11/16/16 01:38 PM
			Iron	0.151	mg/L	1.00	0.0100	0.0200	10326278	EPA6010	7439-89-6	11/16/16
			Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10326298	EPA7470	7439-97-6	11/17/16
			Chloride	926	mg/L	5.00	20.0	40.0	10326444	SM4500-Cl E	16887-00-6	11/18/16
			TDS	2290	mg/L	1.00	2.50	5.00	10326487	SM2540 C	10-33-3	11/16/16
			Aluminum	0.0151 I	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7429-90-5	11/17/16
			Arsenic	0.00500	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-38-2	11/17/16
			Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10326520	EPA6020	7440-43-9	11/17/16
			Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-47-3	11/17/16
			Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7439-92-1	11/17/16
			Nickel	0.00560	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-02-0	11/17/16
			Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7440-66-6	11/17/16
			Enterococci	10.0 U	mpn/100mL	10.0	10.0	10.0	10326524	ENTEROLERT		11/15/16 10:35 AM
			Chlorophyll a	0.0200 U	ug/L	1.00	0.0200	0.150	10326583	SM10200 H	479-61-8	11/15/16
			Ammonia (as N)	0.321	mg/L	1.00	0.0100	0.0200	10326626	EPA350.1	7664-41-7	11/21/16
			TOC	12.6	mg/L	1.00	1.00	2.00	10326629	SM5310 C	E701250	11/21/16
			Total Phosphorus(as P)	0.00690	mg/L	1.00	0.00200	0.00400	10326705	EPA365.1	7723-14-0	11/22/16
			Sulfate	321	mg/L	1.00	5.00	10.0	10326710	EPA375.2	14808-79-8	11/22/16
			TKN(as N)	1.000	mg/L	1.00	0.200	0.400	10326722	EPA351.2	7727-37-9	11/22/16
			Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10327558	EPA365.1	14265-44-2	11/16/16 03:48 PM



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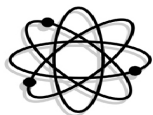
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Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Organic Nitrogen	1.54		0				OrgNit		
Total Nitrogen(as N)	3.39		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.0130	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		11/22/16
TSS	9.00	mg/L	1.00	1.00	2.00	10326110	SM2540 D	E1642818	11/15/16
Fecal Coliform	802	mpn/100mL	1.00	1.00	1.00	10326133	COLILERT-18	E761792	11/15/16 01:00 PM
Nitrate(as N)	0.0254	mg/L	1.00	0.0100	0.0200	10326230	EPA353.2	14797-55-8	11/16/16 01:38 PM
Nitrite(as N)	0.0269 I	mg/L	1.00	0.0200	0.0400	10326230	EPA353.2	14797-65-0	11/16/16 01:38 PM
Iron	0.0877	mg/L	1.00	0.0100	0.0200	10326278	EPA6010	7439-89-6	11/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10326298	EPA7470	7439-97-6	11/17/16
Chloride	9670	mg/L	100	400		10326444	SM4500-CI E	16887-00-6	11/18/16
TDS	17800	mg/L	1.00	2.50	5.00	10326487	SM2540 C	10-33-3	11/16/16
Aluminum	0.0234	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7429-90-5	11/17/16
Arsenic	0.00720	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-38-2	11/17/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10326520	EPA6020	7440-43-9	11/17/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-47-3	11/17/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7439-92-1	11/17/16
Nickel	0.00160 I	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-02-0	11/17/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7440-66-6	11/17/16
Enterococci	477	mpn/100mL	10.0	10.0	10.0	10326524	ENTEROLERT		11/15/16 10:35 AM
Chlorophyll a	1.13	ug/L	1.00	0.0200	0.150	10326583	SM10200 H	479-61-8	11/15/16
Ammonia (as N)	1.80	mg/L	1.00	0.0100	0.0200	10326626	EPA350.1	7664-41-7	11/21/16
TOC	12.7	mg/L	1.00	1.00	2.00	10326629	SM5310 C	E701250	11/21/16
Total Phosphorus(as P)	0.485	mg/L	1.00	0.00200	0.00400	10326705	EPA365.1	7723-14-0	11/22/16
Sulfate	2000	mg/L	10.0	50.0	100	10326710	EPA375.2	14808-79-8	11/22/16
TKN(as N)	3.34	mg/L	1.00	0.200	0.400	10326722	EPA351.2	7727-37-9	11/22/16
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10327558	EPA365.1	14265-44-2	11/16/16 03:48 PM

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



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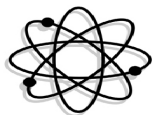
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Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Organic Nitrogen	1.66		0				OrgNit		
Total Nitrogen(as N)	5.71		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.0129	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		11/22/16
TSS	1.00 I	mg/L	1.00	1.00	2.00	10326110	SM2540 D	E1642818	11/15/16
Fecal Coliform	1.00 U	mpn/100mL	1.00	1.00	1.00	10326133	COLILERT-18	E761792	11/15/16 01:00 PM
Nitrate(as N)	0.0294	mg/L	1.00	0.0100	0.0200	10326230	EPA353.2	14797-55-8	11/16/16 01:38 PM
Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10326230	EPA353.2	14797-65-0	11/16/16 01:38 PM
Iron	0.0114 I	mg/L	1.00	0.0100	0.0200	10326278	EPA6010	7439-89-6	11/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10326298	EPA7470	7439-97-6	11/17/16
Chloride	1170	mg/L	5.00	20.0	40.0	10326444	SM4500-Cl E	16887-00-6	11/18/16
TDS	2900	mg/L	1.00	2.50	5.00	10326487	SM2540 C	10-33-3	11/16/16
Aluminum	0.0197 I	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7429-90-5	11/17/16
Arsenic	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-38-2	11/17/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10326520	EPA6020	7440-43-9	11/17/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-47-3	11/17/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7439-92-1	11/17/16
Nickel	0.00160 I	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-02-0	11/17/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7440-66-6	11/17/16
Enterococci	10.0 U	mpn/100mL	10.0	10.0	10.0	10326524	ENTEROLERT		11/15/16 10:35 AM
Chlorophyll a	0.0200 U	ug/L	1.00	0.0200	0.150	10326583	SM10200 H	479-61-8	11/15/16
Ammonia (as N)	4.02	mg/L	5.00	0.0500	0.100	10326626	EPA350.1	7664-41-7	11/21/16
TOC	22.2	mg/L	1.00	1.00	2.00	10326629	SM5310 C	E701250	11/21/16
Total Phosphorus(as P)	0.0114	mg/L	1.00	0.00200	0.00400	10326705	EPA365.1	7723-14-0	11/22/16
Sulfate	368	mg/L	1.00	5.00	10.0	10326710	EPA375.2	14808-79-8	11/22/16
TKN(as N)	5.68	mg/L	1.00	0.200	0.400	10326722	EPA351.2	7727-37-9	11/22/16
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10327558	EPA365.1	14265-44-2	11/16/16 03:48 PM

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



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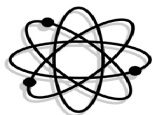
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Lab #: 315364GW4 Sampled: 11/15/16 08:26 AM Desc: OW-4									
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Organic Nitrogen	1.05		0				OrgNit		
Total Nitrogen(as N)	1.13		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		11/22/16
TSS	1.80 I	mg/L	1.00	1.00	2.00	10326110	SM2540 D	E1642818	11/15/16
Fecal Coliform	1.11	mpn/100mL	1.00	1.00	1.00	10326133	COLILERT-18	E761792	11/15/16 01:00 PM
Nitrate(as N)	0.0759	mg/L	1.00	0.0100	0.0200	10326230	EPA353.2	14797-55-8	11/16/16 01:38 PM
Nitrite(as N)	0.0200 U	mg/L	1.00	0.0200	0.0400	10326230	EPA353.2	14797-65-0	11/16/16 01:38 PM
Iron	0.0208	mg/L	1.00	0.0100	0.0200	10326278	EPA6010	7439-89-6	11/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10326298	EPA7470	7439-97-6	11/17/16
Chloride	808	mg/L	5.00	20.0	40.0	10326444	SM4500-CI E	16887-00-6	11/18/16
TDS	2350	mg/L	1.00	2.50	5.00	10326487	SM2540 C	10-33-3	11/16/16
Aluminum	0.0132 I	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7429-90-5	11/17/16
Arsenic	0.00430	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-38-2	11/17/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10326520	EPA6020	7440-43-9	11/17/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-47-3	11/17/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7439-92-1	11/17/16
Nickel	0.00120 I	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-02-0	11/17/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7440-66-6	11/17/16
Enterococci	10.0 U	mpn/100mL	10.0	10.0	10.0	10326524	ENTEROLERT		11/15/16 10:35 AM
Chlorophyll a	0.0200 U	ug/L	1.00	0.0200	0.150	10326583	SM10200 H	479-61-8	11/15/16
Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10326626	EPA350.1	7664-41-7	11/21/16
TOC	13.3	mg/L	1.00	1.00	2.00	10326629	SM5310 C	E701250	11/21/16
Total Phosphorus(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10326705	EPA365.1	7723-14-0	11/22/16
Sulfate	450	mg/L	10.0	50.0	100	10326710	EPA375.2	14808-79-8	11/22/16
TKN(as N)	1.05	mg/L	1.00	0.200	0.400	10326722	EPA351.2	7727-37-9	11/22/16
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10327558	EPA365.1	14265-44-2	11/16/16 03:48 PM

Lab #: 315364GW5 Sampled: 11/15/16 08:53 AM Desc: OW-2									
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analyzed



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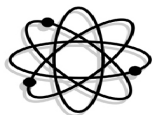
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Florida Keys Aqueduct Authority-WWTP
3375 Overseas Hwy
Marathon, FL 33050

PO #: 15349
Client Project #: Cudjoe Key WWTP -Q- MW's
Date Sampled: Nov 15, 2016
Nov 30, 2016; Invoice: 315364

Lab #:	Sampled:	Desc:							
Parameter	Result	Units	DF	MDL	PQL	QC Batch	Method	CAS #	Analized
Organic Nitrogen	0.586		0				OrgNit		
Total Nitrogen(as N)	2.62		0				TotNit	17778-88-0	
Unionized NH3(as N)	0.000100 U	mg/L	1.00	0.000100	0.000200	10274203	FDEP DEP-SOF		11/22/16
TSS	1.00 U	mg/L	1.00	1.00	2.00	10326110	SM2540 D	E1642818	11/15/16
Fecal Coliform	2.22	mpn/100mL	1.00	1.00	1.00	10326133	COLILERT-18	E761792	11/15/16 01:00 PM
Nitrate(as N)	1.95	mg/L	1.00	0.0100	0.0200	10326230	EPA353.2	14797-55-8	11/16/16 01:38 PM
Nitrite(as N)	0.0842	mg/L	1.00	0.0200	0.0400	10326230	EPA353.2	14797-65-0	11/16/16 01:38 PM
Iron	0.0148 I	mg/L	1.00	0.0100	0.0200	10326278	EPA6010	7439-89-6	11/16/16
Mercury	0.0000200 U	mg/L	1.00	0.0000200	0.0000400	10326298	EPA7470	7439-97-6	11/17/16
Chloride	13.9	mg/L	1.00	4.00	8.00	10326444	SM4500-CI E	16887-00-6	11/18/16
TDS	390	mg/L	1.00	2.50	5.00	10326487	SM2540 C	10-33-3	11/16/16
Aluminum	0.0182 I	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7429-90-5	11/17/16
Arsenic	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-38-2	11/17/16
Cadmium	0.000200 U	mg/L	1.00	0.000200	0.000400	10326520	EPA6020	7440-43-9	11/17/16
Chromium	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-47-3	11/17/16
Lead	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7439-92-1	11/17/16
Nickel	0.00100 U	mg/L	1.00	0.00100	0.00200	10326520	EPA6020	7440-02-0	11/17/16
Zinc	0.0100 U	mg/L	1.00	0.0100	0.0200	10326520	EPA6020	7440-66-6	11/17/16
Enterococci	10.0 U	mpn/100mL	10.0	10.0	10.0	10326524	ENTEROLERT		11/15/16 10:35 AM
Chlorophyll a	0.0200 U	ug/L	1.00	0.0200	0.150	10326583	SM10200 H	479-61-8	11/15/16
Ammonia (as N)	0.0100 U	mg/L	1.00	0.0100	0.0200	10326626	EPA350.1	7664-41-7	11/21/16
TOC	3.32	mg/L	1.00	1.00	2.00	10326629	SM5310 C	E701250	11/21/16
Total Phosphorus(as P)	0.00422	mg/L	1.00	0.00200	0.00400	10326705	EPA365.1	7723-14-0	11/22/16
Sulfate	20.6	mg/L	1.00	5.00	10.0	10326710	EPA375.2	14808-79-8	11/22/16
TKN(as N)	0.586	mg/L	1.00	0.200	0.400	10326722	EPA351.2	7727-37-9	11/22/16
Orthophosphate(as P)	0.00200 U	mg/L	1.00	0.00200	0.00400	10327558	EPA365.1	14265-44-2	11/16/16 03:48 PM



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

PO #: 15349
Client Project #: Cudjoe Key WWTP -Q- MW's
Date Sampled: Nov 15, 2016
Nov 30, 2016; Invoice: 315364

Quality Report

Quality Control Batch: 10274203		Analyst: PCW				
Blank	Result	Units				
Unionized NH3(as N)	0.000100U	mg/L				
Quality Control Batch: 10326110		Analyst: TDC				
Blank	Result	Units				
TSS	1.00U	mg/L				
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim	
TSS	84.0	mg/L	100	84.00	50.00-150.00	
Quality Control Batch: 10326133		Analyst: TDC				
Blank	Result	Units				
Fecal Coliform	1.00U	mpn/100mL				
Quality Control Batch: 10326230		Analyst: PCW				
Blank	Result	Units				
Nitrate(as N)	0.0100U	mg/L				
Nitrite(as N)	0.0200U	mg/L				
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim	
Nitrate(as N)	1.03	mg/L	1.00	103.00	85.00-115.00	
Nitrite(as N)	1.09	mg/L	1.00	109.00	85.00-115.00	
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Nitrate(as N)	10.8	mg/L	4.00	109.25	85.00-115.00	6.43



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Quality Control Batch: 10326230		Analyst: PCW						
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Nitrite(as N)	4.31	mg/L	4.00	107.75	85.00-115.00	0.0200U		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Nitrate(as N)	10.7	mg/L	4.00	106.75	85.00-115.00	6.43	0.93	20.00
Nitrite(as N)	4.26	mg/L	4.00	106.50	85.00-115.00	0.0200U	1.17	20.00
Quality Control Batch: 10326278		Analyst: EVB						
Blank	Result	Units						
Iron	0.0100U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Iron	5.16	mg/L	5.00	103.25	80.00-120.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Iron	5.10	mg/L	5.00	101.32	75.00-125.00	0.0296		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Iron	4.75	mg/L	5.00	94.38	75.00-125.00	0.0296	7.05	20.00
Quality Control Batch: 10326298		Analyst: EVB						
Blank	Result	Units						
Mercury	0.0000200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Mercury	0.00109	mg/L	0.00100	108.70	80.00-120.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Mercury	0.00333	mg/L	0.00300	111.73	80.00-120.00	-0.0000259		



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Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Mercury	0.00338	mg/L	0.00300	113.56	80.00-120.00	-0.0000259	1.64	20.00

Quality Control Batch: 10326444

Analyst: VLB

Blank	Result	Units
Chloride	4.00U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Chloride	199	mg/L	200	99.30	80.00-120.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Chloride	115	mg/L	100	101.11	80.00-120.00	13.9

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Chloride	110	mg/L	100	95.88	80.00-120.00	13.9	4.65	20.00

Quality Control Batch: 10326487

Analyst: PLB

Blank	Result	Units
TDS	2.50U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
TDS	1490	mg/L	1500	99.07	50.00-150.00

Quality Control Batch: 10326520

Analyst: EVB

Blank	Result	Units
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



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Quality Control Batch: 10326520		Analyst: EVB							
Blank		Result	Units						
Nickel		0.00100U	mg/L						
Zinc		0.0100U	mg/L						
Laboratory Control Sample		Result	Units	Spike	%REC	%REC Lim			
Aluminum		0.101	mg/L	0.100	100.80	80.00-120.00			
Arsenic		0.106	mg/L	0.100	106.40	80.00-120.00			
Cadmium		0.104	mg/L	0.100	104.30	80.00-120.00			
Chromium		0.0928	mg/L	0.100	92.80	80.00-120.00			
Lead		0.0956	mg/L	0.100	95.60	80.00-120.00			
Nickel		0.103	mg/L	0.100	103.00	80.00-120.00			
Zinc		0.107	mg/L	0.100	106.90	80.00-120.00			
Matrix Spike		Result	Units	Spike	%REC	%REC Lim	Sample		
Aluminum		0.0961	mg/L	0.100	96.10	75.00-125.00	0.0100U		
Arsenic		0.108	mg/L	0.100	108.10	75.00-125.00	0.00100U		
Cadmium		0.0965	mg/L	0.100	96.50	75.00-125.00	0.000200U		
Chromium		0.0913	mg/L	0.100	91.30	75.00-125.00	0.00100U		
Lead		0.0820	mg/L	0.100	82.00	75.00-125.00	0.00100U		
Nickel		0.0977	mg/L	0.100	97.70	75.00-125.00	0.00100U		
Zinc		0.119	mg/L	0.100	119.00	75.00-125.00	0.0100U		
Matrix Spike Duplicate		Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Aluminum		0.0934	mg/L	0.100	93.40	75.00-125.00	0.0100U	2.85	20.00
Arsenic		0.110	mg/L	0.100	109.50	75.00-125.00	0.00100U	1.29	20.00
Cadmium		0.0958	mg/L	0.100	95.80	75.00-125.00	0.000200U	0.73	20.00
Chromium		0.0917	mg/L	0.100	91.70	75.00-125.00	0.00100U	0.44	20.00
Lead		0.0829	mg/L	0.100	82.90	75.00-125.00	0.00100U	1.09	20.00
Nickel		0.0977	mg/L	0.100	97.70	75.00-125.00	0.00100U	0.00	20.00
Zinc		0.118	mg/L	0.100	118.10	75.00-125.00	0.0100U	0.76	20.00



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Quality Control Batch: 10326524	Analyst: TDC	
Blank	Result	Units
Enterococci	1.00U	mpn/100mL

Quality Control Batch: 10326583	Analyst: TRB	
Blank	Result	Units
Chlorophyll a	0.0200U	ug/L

Quality Control Batch: 10326626	Analyst: PCW	
Blank	Result	Units
Ammonia (as N)	0.0100U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
Ammonia (as N)	0.505	mg/L	0.500	101.00	85.00-115.00

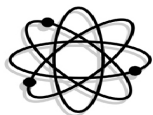
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
Ammonia (as N)	1.49	mg/L	1.56	95.51	85.00-115.00	0.0100U

Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Ammonia (as N)	1.37	mg/L	1.56	87.82	85.00-115.00	0.0100U	8.39	20.00

Quality Control Batch: 10326629	Analyst: PCW	
Blank	Result	Units
TOC	1.00U	mg/L

Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim
TOC	10.2	mg/L	10.0	101.62	80.00-120.00

Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample
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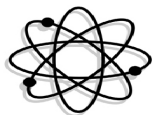
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Quality Control Batch: 10326629		Analyst: PCW						
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
TOC	20.3	mg/L	10.0	86.01	80.00-120.00	11.7		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
TOC	20.6	mg/L	10.0	89.05	80.00-120.00	11.7	1.48	20.00
Quality Control Batch: 10326705		Analyst: VLB						
Blank	Result	Units						
Total Phosphorus(as P)	0.00200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Total Phosphorus(as P)	0.422	mg/L	0.500	84.40	85.00-115.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Total Phosphorus(as P)	0.159	mg/L	0.200	71.49	85.00-115.00	0.0165		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Total Phosphorus(as P)	0.164	mg/L	0.200	73.98	85.00-115.00	0.0165	3.08	20.00
Quality Control Batch: 10326710		Analyst: PCW						
Blank	Result	Units						
Sulfate	5.00U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Sulfate	66.0	mg/L	60.0	110.00	85.00-115.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Sulfate	368	mg/L	50.0	94.00	85.00-115.00	321		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim



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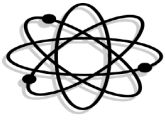
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Quality Control Batch: 10326710		Analyst: PCW						
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Sulfate	362	mg/L	50.0	82.00	85.00-115.00	321	1.64	20.00
Quality Control Batch: 10326722		Analyst: VLB						
Blank	Result	Units						
TKN(as N)	0.200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
TKN(as N)	2.98	mg/L	3.00	99.39	80.00-120.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
TKN(as N)	3.23	mg/L	3.00	88.21	80.00-120.00	0.586		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
TKN(as N)	3.27	mg/L	3.00	89.50	80.00-120.00	0.586	1.19	20.00
Quality Control Batch: 10327558		Analyst: PCW						
Blank	Result	Units						
Orthophosphate(as P)	0.00200U	mg/L						
Laboratory Control Sample	Result	Units	Spike	%REC	%REC Lim			
Orthophosphate(as P)	1.01	mg/L	1.00	100.78	80.00-120.00			
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Sample		
Orthophosphate(as P)	0.500	mg/L	0.500	99.99	80.00-120.00	0.00200U		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD Lim
Orthophosphate(as P)	0.480	mg/L	0.500	95.99	80.00-120.00	0.00200U	4.08	20.00



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

PO #: 15349
Client Project #: Cudjoe Key WWTP -Q- MW's
Date Sampled: Nov 15, 2016
Nov 30, 2016; Invoice: 315364

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.

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.