



Advanced
Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

SAMPLE SUMMARY

Workorder: T1816011 UCMR4

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1816011001	RAW 1 (North)	Drinking Water	9/17/2018 14:40	9/18/2018 14:00
T1816011002	RAW 2 (South)	Drinking Water	9/17/2018 14:30	9/18/2018 14:00

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





ANALYTICAL RESULTS

Workorder: T1816011 UCMR4

Lab ID: T1816011001 Date Received: 09/18/18 14:00 Matrix: Drinking Water
Sample ID: RAW 1 (North) Date Collected: 09/17/18 14:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: IC, E300.0 Water			Analytical Method: EPA 300.0					
Bromide	0.88		mg/L	2	0.20	0.20	9/28/2018 22:00	T
Analysis Desc: TOC, SM5310B Water			Analytical Method: SM 5310B					
Total Organic Carbon	7.9		mg/L	1	1.0	0.57	9/20/2018 18:04	T

Lab ID: T1816011002 Date Received: 09/18/18 14:00 Matrix: Drinking Water
Sample ID: RAW 2 (South) Date Collected: 09/17/18 14:30

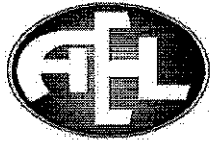
Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: IC, E300.0 Water			Analytical Method: EPA 300.0					
Bromide	0.58		mg/L	2	0.20	0.20	9/28/2018 22:16	T
Analysis Desc: TOC, SM5310B Water			Analytical Method: SM 5310B					
Total Organic Carbon	2.2		mg/L	1	1.0	0.57	9/20/2018 18:22	T

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced
Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580

Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS QUALIFIERS

Workorder: T1816011 UCMR4

PARAMETER QUALIFIERS

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





QUALITY CONTROL DATA

Workorder: T1816011 UCMR4

QC Batch: WCAV/6172 Analysis Method: SM 5310B
QC Batch Method: SM 5310B Prepared:
Associated Lab Samples: T1816011001, T1816011002

METHOD BLANK: 2847165

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Organic Carbon	mg/L	0.57	0.57 U

QC Batch: WCAV/6220 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: T1816011001, T1816011002

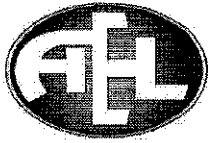
METHOD BLANK: 2850110

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Bromide	mg/L	0.10	0.10 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





**Advanced
Environmental Laboratories, Inc.**

Advanced Environmental Laboratories, Inc
 9610 Princess Palm Ave Tampa, FL 33619
 Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
 Phone: (813)630-9616
 Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

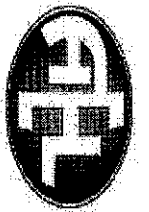
Workorder: T1816011 UCMR4

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1816011001	RAW 1 (North)			SM 5310B	WCAV/6172
T1816011002	RAW 2 (South)			SM 5310B	WCAV/6172
T1816011001	RAW 1 (North)			EPA 300.0	WCAV/6220
T1816011002	RAW 2 (South)			EPA 300.0	WCAV/6220

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Advanced Environmental Laboratories, Inc.





Environmental Laboratories, Inc.
 Environmental Laboratories, Inc.

Jacksonville: 9901 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.393.9950 • Fax 904.393.9364
 Tampa: 9910 Phoenicia Palm Ave. • Tampa, FL 33619 • 813.630.9916 • Fax 813.630.4327
 Gainesville: 9815 SW Archer Road • Gainesville, FL 32608 • 352.377.2348 • Fax 352.395.9939
 Midamar: 10200 USA Today Way, Midamar, FL 33025 • 954.889.2288 • Fax 954.889.2281
 Altamonte Springs: 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597

Page ____ of ____ LAB NUMBER: 77816011

CLIENT NAME: City of Dunedin Water Division
ADDRESS: 1401 County Rd 1
Dunedin, Florida
PHONE: 727-298-3100
FAX:
CONTACT: John Van Amburg
SAMPLED BY: John Van Amburg
TURN AROUND TIME: STANDARD RUSH

PROJECT NAME: UCMR4
P.O. or PROJECT NUMBER: 6520486
PROJECT LOCATION:
REMARKS/SPECIAL INSTRUCTIONS:

BOTTLE SIZE & TYPE:
 BROMIDE
 TOC

LABORATORY I.D. NUMBER

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED		LABORATORY I.D. NUMBER
			DATE	TIME				BROMIDE	TOC	
RAW 1 (NORTH)		Grab	9-17-18	1440	GW	3		X	X	201
RAW 2 (SOUTH)		Grab	9-17-18	1430	GW	3		X	X	202

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
Received on Ice: Yes No Temp taken from sample Temp from blank
Form revised 11/18/2006
Returned by: _____ **Date:** _____ **Time:** _____
Received by: _____ **Date:** _____ **Time:** _____
Device used for measuring Temp by unique identifier (circle IR temp gun used): J: 9A G: LT-1 TT-2 T: 10A A: 3A M: 1A
 Where required, pH checked Temperature when received 25 (in degrees Celsius)

FOR DRINKING WATER USE (when PWS information not otherwise supplied)
PWS ID: _____
Contact Person: _____
Supplier of Water: _____
Site Address: _____
Phone: _____

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI00034

Printed: 10/12/18 Page 1 of 1

Client: Advanced Environmental Laboratories - Tampa
 Attn: Heidi Parker
 9610 Princess Palm Ave
 Tampa, FL 33619

NLS Project: 308293

NLS Customer: 96704

Fax: 813 630 4327 Phone: 813 630 9616

Project: Dunedin Water - UCMR4-SE2 PWS#FL6520486

Dist System - 11 Ventura NLS ID: 1081581

Matrix: DW

Collected: 09/17/18 15:20 Received: 09/19/18

Parameter	Result	Units	Dilution	MRL	Analyzed	Method	Lab
UCMR4 - EPA Method 552.3	see attached				09/26/18	EPA 552.3	721026460
UCMR4 - Micro extraction - (552.3)	yes				09/25/18	EPA 552.3	721026460

Dist System - 2180 Evans NLS ID: 1081582

Matrix: DW

Collected: 09/17/18 15:35 Received: 09/19/18

Parameter	Result	Units	Dilution	MRL	Analyzed	Method	Lab
UCMR4 - EPA Method 552.3	see attached				09/26/18	EPA 552.3	721026460
UCMR4 - Micro extraction - (552.3)	yes				09/25/18	EPA 552.3	721026460

Dist System - 1025 Jackmar NLS ID: 1081583

Matrix: DW

Collected: 09/17/18 15:50 Received: 09/19/18

Parameter	Result	Units	Dilution	MRL	Analyzed	Method	Lab
UCMR4 - EPA Method 552.3	see attached				09/26/18	EPA 552.3	721026460
UCMR4 - Micro extraction - (552.3)	yes				09/25/18	EPA 552.3	721026460

Dist System - 2 Causeway NLS ID: 1081584

Matrix: DW

Collected: 09/17/18 16:10 Received: 09/19/18

Parameter	Result	Units	Dilution	MRL	Analyzed	Method	Lab
UCMR4 - EPA Method 552.3	see attached				09/26/18	EPA 552.3	721026460
UCMR4 - Micro extraction - (552.3)	yes				09/25/18	EPA 552.3	721026460

Entry Point to the Distribution System NLS ID: 1081585

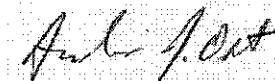
Matrix: DW

Collected: 09/17/18 17:00 Received: 09/19/18

Parameter	Result	Units	Dilution	MRL	Analyzed	Method	Lab
UCMR4 - Metals digestion - tot. recov.ICP-MS	yes				09/27/18	EPA 200.8	721026460
UCMR4 - Germanium by EPA Method 200.8	ND	ug/L	1	0.30	09/29/18	EPA 200.8	721026460
UCMR4 - Manganese by EPA Method 200.8	1.0	ug/L	1	0.40	09/29/18	EPA 200.8	721026460
UCMR4 - EPA Method 525.3	see attached				09/26/18	EPA 525.3	721026460
UCMR4 - EPA 525.3 Solid Phase Extraction	yes				09/25/18	EPA 525.3	721026460
UCMR4 - EPA Method 541	see attached				10/08/18	EPA 541	721026460
UCMR4 - Extraction - (541)	yes				10/05/18	EPA 541	721026460
UCMR4 - EPA Method 530	see attached				09/26/18	EPA 530	721026460
UCMR4 - Extraction - (530)	yes				09/26/18	EPA 530	721026460

ND = Not Detected (< MRL)
 MRL = Minimum Reporting Limit
 NA = Not Applicable

Reviewed by:



Authorized by:
 R. T. Krueger
 President

ANALYTICAL RESULTS: 525.3 UCMR4 Safe Drinking Water Analysis

Customer: Advanced Environmental Laboratories - Tampa NLS Project: 308293

Project Description: Dunedin Water - UCMR4-SE2

Project Title: PWS#FL6520486

Template: 5253UCMR4 Printed: 10/12/2018 09:55

Sample: 1081586 Entry Point to the Distribution System Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 9

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
Ethoprop	ND	ug/L	1	0.030		
alpha-Hexachlorocyclohexane	ND	ug/L	1	0.010		
Dimethipin	ND	ug/L	1	0.20		
Chlorpyrifos	ND	ug/L	1	0.030		
Profenofos	ND	ug/L	1	0.30		
Tribufos	ND	ug/L	1	0.070		
Oxyfluorfen	ND	ug/L	1	0.050		
Tebuconazole	ND	ug/L	1	0.20		
Total permethrin (cis & trans)	ND	ug/L	1	0.040		
1,3-dimethyl-2-nitrobenzene (SURR)	93.041%		1			S
Triphenyl phosphate (SURR)	94.202%		1			S
Benzo[a]pyrene-d12 (SURR)	102.382%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: 530 UCMR4 Safe Drinking Water Analysis

Customer: Advanced Environmental Laboratories - Tampa NLS Project: 308293

Project Description: Dunedin Water - UCMR4-SE2

Project Title: PWS#FL6520486

Template: 530UCMR4 Printed: 10/12/2018 09:56

Sample: 1081585 Entry Point to the Distribution System Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 3

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
o-Toluidine	ND	ug/L	1	0.0070		
Quinoline	ND	ug/L	1	0.020		
Butylated hydroxyanisole	ND	ug/L	1	0.030		
o-toluidine-d9 (SURR)	77.74%		1			S
quinoline-d7 (SURR)	75.06%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: 541 UCMR4 Safe Drinking Water Analysis

Customer: Advanced Environmental Laboratories - Tampa NLS Project: 308293

Project Description: Dunedin Water - UCMR4-SE2

Project Title: PWS#FL6520486

Template: 541UCMR4 Printed: 10/12/2018 09:55

Sample: 1081585 Entry Point to the Distribution System Collected: 09/17/18 Analyzed: 10/08/18 Analytes: 3

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
2-Propen-1-ol	ND	ug/L	1	0.50		
1-Butanol	ND	ug/L	1	2.0		
2-Methoxyethanol	ND	ug/L	1	0.40		
2-Propen-1-ol-d6 (SURR)	82.688%		1			S
1-Butanol-d10 (SURR)	88.296%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: 552.3 UCMR4 Safe Drinking Water Analysis

Customer: Advanced Environmental Laboratories - Tampa NLS Project: 308293

Project Description: Dunedin Water - UCMR4-SE2

Project Title: PWS#FL6520486

Template: 5523UCMR4 Printed: 10/12/2018 09:56

Sample: 1081581 Dist System: 11 Ventura Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 9

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
Bromochloroacetic acid (BCAA)	3.0	ug/L	1	0.30		
Bromodichloroacetic acid (BDCAA)	3.2	ug/L	1	0.50		
Chlorodibromoacetic acid (CDBAA)	1.9	ug/L	1	0.30		
Tribromoacetic acid (TBAA)	3.7	ug/L	1	2.0		
Monobromoacetic acid (MBAA)	1.9	ug/L	1	0.30		
Dibromoacetic acid (DBAA)	10	ug/L	1	0.30		
Dichloroacetic acid (DCAA)	0.54	ug/L	1	0.20		
Monochloroacetic acid (MCAA)	ND	ug/L	1	2.0		
Trichloroacetic acid (TCAA)	ND	ug/L	1	0.50		
2-Bromobutanoic Acid (SURR)	104.24%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1081582 Dist System: 2180 Evaris Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 9

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
Bromochloroacetic acid (BCAA)	2.7	ug/L	1	0.30		
Bromodichloroacetic acid (BDCAA)	3.5	ug/L	1	0.50		
Chlorodibromoacetic acid (CDBAA)	2.0	ug/L	1	0.30		
Tribromoacetic acid (TBAA)	3.9	ug/L	1	2.0		
Monobromoacetic acid (MBAA)	1.7	ug/L	1	0.30		
Dibromoacetic acid (DBAA)	9.4	ug/L	1	0.30		
Dichloroacetic acid (DCAA)	0.49	ug/L	1	0.20		
Monochloroacetic acid (MCAA)	ND	ug/L	1	2.0		
Trichloroacetic acid (TCAA)	ND	ug/L	1	0.50		
2-Bromobutanoic Acid (SURR)	100.27%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1081583 Dist System: 1025 Jackmar Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 9

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
Bromochloroacetic acid (BCAA)	2.1	ug/L	1	0.30		
Bromodichloroacetic acid (BDCAA)	4.8	ug/L	1	0.50		
Chlorodibromoacetic acid (CDBAA)	1.9	ug/L	1	0.30		
Tribromoacetic acid (TBAA)	3.6	ug/L	1	2.0		
Monobromoacetic acid (MBAA)	1.6	ug/L	1	0.30		
Dibromoacetic acid (DBAA)	6.7	ug/L	1	0.30		
Dichloroacetic acid (DCAA)	0.50	ug/L	1	0.20		
Monochloroacetic acid (MCAA)	ND	ug/L	1	2.0		
Trichloroacetic acid (TCAA)	ND	ug/L	1	0.50		
2-Bromobutanoic Acid (SURR)	104.79%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: 552.3 UCMR4 Safe Drinking Water Analysis

Customer: Advanced Environmental Laboratories - Tampa NLS Project: 308293

Project Description: Dunedin Water - UCMR4-SE2

Project Title: PWS#FL6520486

Template: 5523UCMR4 Printed: 10/12/2018 09:56

Sample: 1081584 Dist System: 2 Causeway Collected: 09/17/18 Analyzed: 09/26/18 Analytes: 9

ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
Bromochloroacetic acid (BCAA)	2.6	ug/L	1	0.30		
Bromodichloroacetic acid (BDCAA)	4.4	ug/L	1	0.50		
Chlorodibromoacetic acid (CDBAA)	2.1	ug/L	1	0.30		
Tribromoacetic acid (TBAA)	3.7	ug/L	1	2.0		
Monobromoacetic acid (MBAA)	1.5	ug/L	1	0.30		
Dibromoacetic acid (DBAA)	8.2	ug/L	1	0.30		
Dichloroacetic acid (DCAA)	0.60	ug/L	1	0.20		
Monochloroacetic acid (MCAA)	ND	ug/L	1	2.0		
Trichloroacetic acid (TCAA)	ND	ug/L	1	0.50		
2-Bromobutanoic Acid (SURR)	99.74%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

HAA5=Sum of MCAA,MBAA,DCAA,TCAA,and DBAA. HAA6Br=Sum of MBAA,DBAA,BCAA,BDCAA,CDBAA,and TBAA. HAA9=Sum of all 9 compounds.



Customer # 96704
BO # 61871

UCMR4
SAMPLE COLLECTION AND
CHAIN OF CUSTODY RECORD

NORTHERN LAKE SERVICE, INC
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520 - 1298
Tel: (715) 478-2777 Fax (715) 478-3060

Lab Use Only Lab	Sample Point ID Code	Collection Date/Time	Sample Point Type ID Code	Point Type	AM1(EP)				AM2(DS/SR)			AM3(EP)		
					200.8	525.3	541	530	552.3	TOC	Brdm	545	546	544
108/1581	Dist System - 11 Ventura	9/12/18 1520	3	DS					X					
108/1582	Dist System - 2180 Evans	9/12/18 1535	4	DS					X					
108/1583	Dist System - 1025 Jackmar	9/12/18 1550	6	DS					X					
108/1584	Dist System - 2 Causeway	9/12/18 1600	ST11	DS					X					
108/1585	Entry Point to the Distribution System		0486001	EP	X	X	X	X						

(Client please fill in shaded areas only)

The EPA Unregulated Contaminant Monitoring Program has specific sample receipt temperature requirements. Samples received less than 48 hours after collection must be received at ≤ 10 degrees C. Samples received by the laboratory more than 48 hours from collection must be received at ≤ 6 degrees C. Samples that are received greater than 48 hours from the time of collection require that the municipality pre-chill and maintain the samples at 6 degrees or less prior to shipment. I attest that samples collected and shipped to the laboratory meet these requirements.

Collected by (signature)	<i>[Signature]</i>
Method of Transport	UPS Tracking # 1Z 577 189 84 6495 0605
Sample Collection Comments (Optional)	

PWS # FL6520486
SAMPLING EVENT: SEH2
SOURCE: GW

(To be filled out by lab upon arrival)

Received at NLS by (signature)	<i>[Signature]</i>	Date/Time	9/12/18 1000	Condition	
Remarks and other information					

IMPORTANT

TO MEET REGULATORY REQUIREMENTS, THIS FORM MUST BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED. PLEASE USE ONE LINE PER SAMPLE, NOT PER BOTTLE. RETURN THIS FORM WITH SAMPLES

CLIENT PLEASE MAKE COPY FOR YOUR RECORDS

AM1		200.8	525 b1	525 b2	530 b1	530 b2	541 b1	541 b2
EP	Chlorine		/	/	/	/	/	/
	pH		5.5	/	6.1	/	6.4	/
	Temp		5.5		6.1		6.4	

AM2		DBP1	DBP2	DBP3	DBP4	DBP5		TOC
bottle 1	Chlorine	/	/					pH
	Temp	6.6						

Add'l								
-------	--	--	--	--	--	--	--	--