



9399 West Higgins Road Suite 1100  
Rosemont, IL 60018

Phone: 847 430 1219  
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## IBWA STANDARD OF QUALITY REPORT

Customer Name: Southeast Texas Water  
Customer Address:  
Customer City, State:

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Sample Date: 5/23/2016  
Sample Description: Spring  
Date Reviewed: 7/5/2016

Sample I.D. 1612367  
Report Date 7/5/2016

### Inorganic Chemicals (IOCs)

CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
7440-36-0	Antimony	<2.00	6.00	2.00	ug/L	200.8
7440-39-3	Barium	<10.00	1,000.00	10.00	ug/L	200.7 Rev. 4.4
7940-41-7	Beryllium	<0.10	4.00	0.10	ug/L	200.8
	Bromate (BrO3)	<2.50	10.00	2.50	ug/L	321.8 Rev. 1
7440-43-9	Cadmium (Cd)	<0.10	5.00	0.10	ug/L	200.8
	Chloramine	<0.02	4.00	0.02	mg/L	330.5
	Chlorine Dioxide	0.00	0.80		mg/L	STND 4500
	Chlorine, Free	0.00	0.10		mg/L	330.5
	Chlorine, Total	0.00	0.10		mg/L	330.5
	Chlorite (ClO2)	ND	1.00		mg/L	
7440-47-3	Chromium	<0.50	50.00	0.50	ug/L	200.8
16984-48-8	Fluoride	<0.20	3.00	0.20	mg/L	300.0
7439-92-1	Lead (Pb)	<1.00	5.00	1.00	ug/L	200.8
7439-97-6	Mercury (Hg)	<0.20	1.00	0.20	ug/L	245.1 Rev. 3
7440-02-0	Nickel (Ni)	<10.00	100.00	10.00	ug/L	200.7 Rev. 4.4
14797-55-8	Nitrate as N	<0.20	10.00	0.20	mg/L	300.0
14797-65-0	Nitrite as N	<0.10	1.00	0.10	mg/L	300.0
	Perchlorate	<0.20	2.00	0.20	ug/L	314.0
7782-49-2	Selenium (Se)	<2.00	10.00	2.00	ug/L	200.8
7440-28-0	Thallium (Tl)	<1.00	2.00	1.00	ug/L	200.8
7440-38-2	Total Arsenic	<1.00	10.00	1.00	ug/L	200.8
	Total Chlorine	0.00			mg/L	330.5

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## IBWA STANDARD OF QUALITY REPORT

### Secondary Inorganic Parameters

CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
7429-90-5	Aluminum	4.97	200.00	2.00	ug/L	200.8
	Chloride	8.25	250.00	0.50	mg/L	300.0
7440-50-8	Copper (Cu)	<0.00	1.00	0.00	mg/L	200.8
	Est TDS By Conductivity	120.98	500.00		mg/L	
7439-89-6	Iron (Fe)	<0.05		0.05	mg/L	200.7 Rev. 4.4
7439-96-5	Manganese (Mn)	<0.02	0.05	0.02	mg/L	200.7 Rev. 4.4
7440-22-4	Silver (Ag)	<0.10	25.00	0.10	ug/L	200.8
14808-79-8	Sulfate	<3.00	250.00	3.00	mg/L	300.0
7440-66-6	Zinc (Zn)	<0.05	5.00	0.05	mg/L	200.7 Rev. 4.4

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### Volatile Organic Chemicals (VOCs)

CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
75-34-3	1,1 Dichloroethane	<1.00		1.00	ug/L	524
75-35-4	1,1 Dichloroethene	<1.00	2.00	1.00	ug/L	524
563-58-6	1,1 Dichloropropene	<1.00		1.00	ug/L	524
71-55-6	1,1,1, Trichloroethane	<1.00	30.00	1.00	ug/L	524
630-20-6	1,1,1,2 Tetrachloroethane	<1.00		1.00	ug/L	524
79-00-5	1,1,2 Trichloroethane	<1.00	3.00	1.00	ug/L	524
107-06-2	1,2 - Dichloroethane	<1.00	2.00	1.00	ug/L	524
96-12-8	1,2 Dibromo-3-chloroprop	<1.00		1.00	ug/L	524
106-93-4	1,2 Dibromoethane (EDB)	<1.00		1.00	ug/L	524
95-50-1	1,2 Dichlorobenzene	<1.00	600.00	1.00	ug/L	524
78-87-5	1,2 Dichloropropane	<1.00	5.00	1.00	ug/L	524
	1,2,3 Trichlorobenzene	<1.00		1.00	ug/L	524
96-18-4	1,2,3 Trichloropropane	<1.00		1.00	ug/L	524
120-82-1	1,2,4 Trichlorobenzene	<1.00	9.00	1.00	ug/L	524
	1,2,4 Trimethylbenzene	<1.00		1.00	ug/L	524
541-73-1	1,3 Dichlorobenzene	<1.00		1.00	ug/L	524
142-28-9	1,3 Dichloropropane	<1.00		1.00	ug/L	524
	1,3,5 Trimethylbenzene	<1.00		1.00	ug/L	524
106-46-7	1,4 Dichlorobenzene	<1.00	75.00	1.00	ug/L	524
590-20-7	2,2 Dichloropropane	<1.00		1.00	ug/L	524
95-49-8	2-Chlorotoluene	<1.00		1.00	ug/L	524
591-78-6	2-Hexanone	<1.00		1.00	ug/L	524
106-43-4	4-Chlorotoluene	<1.00		1.00	ug/L	524
67-64-1	Acetone	<10.00		10.00	ug/L	524
71-43-2	Benzene	<1.00	1.00	1.00	ug/L	524
108-86-1	Bromobenzene	<1.00		1.00	ug/L	524
74-97-5	Bromochloromethane	<1.00		1.00	ug/L	524
75-27-4	Bromodichloromethane	<1.00		1.00	ug/L	524
75-25-2	Bromoform	<1.00		1.00	ug/L	524
74-83-9	Bromomethane	<1.00		1.00	ug/L	524
75-15-0	Carbon Disulfide	<1.00		1.00	ug/L	524
56-23-5	Carbon Tetrachloride	<1.00	5.00	1.00	ug/L	524
108-90-7	Chlorobenzene	<1.00	50.00	1.00	ug/L	524
75-00-3	Chloroethane	<1.00		1.00	ug/L	524
67-66-3	Chloroform	<1.00		1.00	ug/L	524
74-87-3	Chloromethane	<1.00		1.00	ug/L	524
156-59-4	Cis-1,2-Dichloroethene	<1.00	70.00	1.00	ug/L	524
10061-01-5	Cis-1,3-Dichloropropene	<1.00		1.00	ug/L	524
124-48-1	Dibromochloromethane	<1.00		1.00	ug/L	524
74-95-3	Dibromomethane	<1.00		1.00	ug/L	524
75-71-8	Dichlorodifluoromethane	<1.00		1.00	ug/L	524
75-09-2	Dichloromethane	<1.00	3.00	1.00	ug/L	524
100-41-4	Ethylbenzene	<1.00	700.00	1.00	ug/L	524
87-68-3	Hexachlorbutadiene	<1.00		1.00	ug/L	524
74-88-4	Iodomethane	<1.00		1.00	ug/L	524

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98-82-8	Isopropylbenzene	<1.00		1.00	ug/L	524
	m,p-Xylene	<1.00	1.00	1.00	ug/L	524
78-93-3	Methyl Ethyl Ketone	<1.00		1.00	ug/L	524
108-10-1	Methyl Isobutyl Ketone	<1.00		1.00	ug/L	524
	n-Butylbenzene	<1.00		1.00	ug/L	524
	n-Propylbenzene	<1.00		1.00	ug/L	524
95-47-6	o-Xylene	<1.00		1.00	ug/L	524
	p-iso-Propyltoluene	<1.00		1.00	ug/L	524
	sec-Butylbenzene	<1.00		1.00	ug/L	524
100-42-5	Styrene	<1.00	100.00	1.00	ug/L	524
98-06-6	Tert-Butylbenzene	<1.00		1.00	ug/L	524
127-18-4	Tetrachloroethene	<1.00	1.00	1.00	ug/L	524
108-88-3	Toluene	<1.00	1,000.00	1.00	ug/L	524
156-60-5	Trans-1,2-Dichloroethene	<1.00	100.00	1.00	ug/L	524
10061-02-6	Trans-1,3-Dichloropropen	<1.00		1.00	ug/L	524
79-01-6	Trichloroethene	<1.00	1.00	1.00	ug/L	524
75-69-4	Trichlorofluoromethane	<1.00		1.00	ug/L	524
108-05-4	Vinyl Acetate	<1.00		1.00	ug/L	524
75-01-4	Vinyl Chloride	<1.00	2.00	1.00	ug/L	524

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### Additional Regulated Contaminants

CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
79-34-5	1,1,2,2 Tetrachloroethane	<1.00	1.00	1.00	ug/L	524
1634-04-4	Methyl T-Butyl Ether	<1.00	70.00	1.00	ug/L	524
91-20-3	Naphthalene	<1.00	300.00	1.00	ug/L	524
7440-61-1	Uranium (U)	<2.00	30.00	2.00	ug/L	200.8

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Water Properties						
CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
	Color	<5.00	5.00	5.00		SM2120C
	Color after Acidification	<5.00	5.00	5.00		SM2120C
	Conductivity	191.40			µMHOS/CM	120.1
	pH	8.16	8.50			150.1 1982
	Turbidity	0.21	0.50	0.10	NTU	180.1 Rev. 2 1993
	Turbidity Filtered	ND	0.50		NTU	180.1 Rev. 2 1993

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Hardness						
CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
7440-70-2	Calcium	34.20		0.10	mg/L	200.7 Rev. 4.4
	Hardness (CaCO3)	90.32			mg/L	200.7 Rev. 4.4
7439-95-4	Magnesium	1.17		0.10	mg/L	200.7 Rev. 4.4
7440-23-5	Sodium	1.49		0.10	mg/L	200.7 Rev. 4.4

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Uncategorized						
CAS ID#	COMPOUNDS	RESULT	SOQ	MRL	Units	Method
	Bicarbonate	61.24			mg/L	SM 2320 B Rev. 18
	Bromide (Br )	<5.00		5.00	ug/L	321.8 Rev. 1
	Carbonate	NM			mg/L	SM 2320 B Rev. 18
	Contract Lab	See Attached Report				
7440-09-7	Potassium	0.28		0.10	mg/L	200.7 Rev. 4.4
7631-86-9	Silica	6.14		0.01	mg/L	200.7 Rev. 4.4
7440-24-6	Strontium (Sr)	0.19		0.05	mg/L	200.7 Rev. 4.4
	Tannins	<2.00		2.00	mg/L	SM 5550

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# IBWA STANDARD OF QUALITY REPORT



Control Number:

SAMPLE ANALYSIS REQUEST  
 Pace Analytical  
 Attn: Sample Receiving  
 8 East Tower Circle  
 Ormond Beach, FL 32174

<b>SAMPLE SUBMITTED BY:</b>	
Account Number:	42-005
Account Name:	Southeast Texas Water
Phone Number:	409 833 6310
E-MAIL:	matthew@SoutheastTexasWater.com
Person Taking Sample:	mat Gilg
Date Sample Taken:	5/23/16
Time Sample Taken:	8 AM
<b>CUSTOMER INFORMATION:</b>	
Customer Name:	
Address:	
City:	State: Zip:
Customer reported concern:	
<b>SAMPLE INFORMATION:</b>	
Water Supply:	Private <input checked="" type="checkbox"/> Municipal <input type="checkbox"/>
Source:	Surface <input type="checkbox"/> Well <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>
Condition:	Treated <input checked="" type="checkbox"/> Untreated <input type="checkbox"/> Cloudy <input type="checkbox"/>
	Colored <input type="checkbox"/>
Water Type:	Spring Drinking
<b>ANALYSIS REQUESTED:</b>	
IBWA Annual Testing - for Culligan International	

For Questions contact Maria Mozdzen at (847) 430-1219

**LAB USE ONLY:**

Sample received in acceptable condition: Yes  No   
 Received by: SG Date: 5/25/16 Time: 11:10  
 If not reason: \_\_\_\_\_  
 Disposition of sample: \_\_\_\_\_

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# IBWA STANDARD OF QUALITY REPORT



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

## ANALYTICAL RESULTS

Project: Culligan DW 1612367  
 Pace Project No.: 35246422

Sample: 1612367 Lab ID: 35246422001 Collected: 05/26/16 12:52 Received: 05/26/16 12:52 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>504.1 GCS EDB and DBCP</b>									
Analytical Method: EPA 504.1 Preparation Method: EPA 504.1									
1,2-Dibromo-3-chloropropane	<0.0053	ug/L	0.022	0.0053	1	06/01/16 05:37	06/02/16 17:26	96-12-8	
1,2-Dibromoethane (EDB)	<0.0081	ug/L	0.011	0.0081	1	06/01/16 05:37	06/02/16 17:26	106-93-4	
<b>508.1 GCS Pesticides</b>									
Analytical Method: EPA 508.1 Preparation Method: EPA 508.1									
Alachlor	<0.033	ug/L	0.19	0.033	1	06/08/16 10:00	06/13/16 23:09	15972-60-8	
Atrazine	<0.060	ug/L	0.095	0.060	1	06/08/16 10:00	06/13/16 23:09	1912-24-9	
gamma-BHC (Lindane)	<0.0028	ug/L	0.019	0.0028	1	06/08/16 10:00	06/13/16 23:09	58-89-9	
Chlordane (Technical)	<0.045	ug/L	0.19	0.045	1	06/08/16 10:00	06/13/16 23:09	57-74-9	
Endrin	<0.0066	ug/L	0.0095	0.0066	1	06/08/16 10:00	06/13/16 23:09	72-20-8	
Heptachlor	<0.011	ug/L	0.038	0.011	1	06/08/16 10:00	06/13/16 23:09	76-44-8	
Heptachlor epoxide	<0.0028	ug/L	0.019	0.0028	1	06/08/16 10:00	06/13/16 23:09	1024-57-3	
Hexachlorobenzene	<0.018	ug/L	0.095	0.018	1	06/08/16 10:00	06/13/16 23:09	118-74-1	
Hexachlorocyclopentadiene	<0.030	ug/L	0.095	0.030	1	06/08/16 10:00	06/13/16 23:09	77-47-4	
Methoxychlor	<0.048	ug/L	0.095	0.048	1	06/08/16 10:00	06/13/16 23:09	72-43-5	
PCB-1016 (Aroclor 1016)	<0.076	ug/L	0.095	0.076	1	06/08/16 10:00	06/13/16 23:09	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.027	ug/L	0.095	0.027	1	06/08/16 10:00	06/13/16 23:09	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.027	ug/L	0.095	0.027	1	06/08/16 10:00	06/13/16 23:09	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.048	ug/L	0.095	0.048	1	06/08/16 10:00	06/13/16 23:09	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.059	ug/L	0.095	0.059	1	06/08/16 10:00	06/13/16 23:09	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.022	ug/L	0.095	0.022	1	06/08/16 10:00	06/13/16 23:09	11097-69-1	
PCB-1254 (Aroclor 1254)	<0.063	ug/L	0.095	0.063	1	06/08/16 10:00	06/13/16 23:09	11096-82-5	
PCB-1260 (Aroclor 1260)	<0.076	ug/L	0.095	0.076	1	06/08/16 10:00	06/13/16 23:09	1336-36-3	
PCB, Total	<0.065	ug/L	0.066	0.065	1	06/08/16 10:00	06/13/16 23:09	122-34-9	
Simazine	<0.065	ug/L	0.95	0.58	1	06/08/16 10:00	06/13/16 23:09	8001-35-2	
Toxaphene	<0.58	ug/L	0.95	0.58	1	06/08/16 10:00	06/13/16 23:09	8001-35-2	
<b>Surrogates</b>									
Decachlorobiphenyl (S)	20	%	70-130		1	06/08/16 10:00	06/13/16 23:09	2051-24-3	1p,S7
<b>515.3 Chlorinated Herbicides</b>									
Analytical Method: EPA 515.3 Preparation Method: EPA 515.3									
2,4-D	<0.081	ug/L	0.10	0.081	1	06/02/16 08:15	06/04/16 05:33	94-75-7	
Dalapon	<0.89	ug/L	1.0	0.89	1	06/02/16 08:15	06/04/16 05:33	75-99-0	
Dinoseb	<0.16	ug/L	0.20	0.16	1	06/02/16 08:15	06/04/16 05:33	88-85-7	
Pentachlorophenol	<0.030	ug/L	0.040	0.030	1	06/02/16 08:15	06/04/16 05:33	87-86-5	
Picloram	<0.094	ug/L	0.10	0.094	1	06/02/16 08:15	06/04/16 05:33	1918-02-1	
2,4,5-TP (Silvex)	<0.16	ug/L	0.20	0.16	1	06/02/16 08:15	06/04/16 05:33	93-72-1	
<b>Surrogates</b>									
2,4-DCAA (S)	96	%	70-130		1	06/02/16 08:15	06/04/16 05:33	19719-28-9	
<b>531.1 HPLC Carbamates</b>									
Analytical Method: EPA 531.1									
Aldicarb	<0.64	ug/L	2.0	0.64	1		05/29/16 21:15	116-06-3	
Aldicarb sulfone	<0.37	ug/L	2.0	0.37	1		05/29/16 21:15	1646-88-4	
Aldicarb sulfoxide	<0.30	ug/L	2.0	0.30	1		05/29/16 21:15	1646-87-3	
Carbofuran	<0.32	ug/L	2.0	0.32	1		05/29/16 21:15	1563-66-2	
Oxamyl	<0.55	ug/L	2.0	0.55	1		05/29/16 21:15	23135-22-0	
<b>Surrogates</b>									
BDMC (S)	121	%	80-120		1		05/29/16 21:15		S3

## REPORT OF LABORATORY ANALYSIS

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Date: 07/05/2016 11:50 AM

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# IBWA STANDARD OF QUALITY REPORT



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

## ANALYTICAL RESULTS

Project: Culligan DW 1612367  
 Pace Project No.: 35246422

Sample: 1612367 Lab ID: 35246422001 Collected: 05/26/16 12:52 Received: 05/26/16 12:52 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>547 HPLC Glyphosate</b>									
Analytical Method: EPA 547									
Glyphosate	<0.37	ug/L	6.0	2.8	1		06/01/16 20:45		
<b>549.2 HPLC Paraquat Diquat</b>									
Analytical Method: EPA 549.2 Preparation Method: EPA 549.2									
Diquat	<0.30	ug/L	0.40	0.30	1	05/31/16 23:45	06/02/16 06:27	85-00-7	
<b>552.2 Haloacetic Acids</b>									
Analytical Method: EPA 552.2 Preparation Method: EPA 552.2									
Dibromoacetic Acid	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25	631-64-1	
Dichloroacetic Acid	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25	79-43-6	
Haloacetic Acids (Total)	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25		
Monobromoacetic Acid	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25	79-08-3	
Monochloroacetic Acid	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25	79-11-8	
Trichloroacetic Acid	<0.37	ug/L	1.0	0.37	1	06/02/16 11:20	06/04/16 08:25	76-03-9	
<b>Surrogates</b>									
2,3-Dibromopropanoic Acid (S)	75	%	70-130		1	06/02/16 11:20	06/04/16 08:25	600-05-5	
<b>525.2 Base Neutral Extractable</b>									
Analytical Method: EPA 525.2 Preparation Method: EPA 525.2									
Benzo(a)pyrene	<0.012	ug/L	0.095	0.012	1	06/08/16 10:00	06/09/16 11:23	50-32-8	IS
bis(2-Ethylhexyl)adipate	<0.36	ug/L	1.5	0.36	1	06/08/16 10:00	06/09/16 11:23	103-23-1	IS
bis(2-Ethylhexyl)phthalate	1.1J	ug/L	1.9	0.53	1	06/08/16 10:00	06/09/16 11:23	117-81-7	IS
<b>Surrogates</b>									
1,3-Dimethyl-2-nitrobenzene(S)	100	%	70-130		1	06/08/16 10:00	06/09/16 11:23	81209	
Perylene-d12 (S)	113	%	70-130		1	06/08/16 10:00	06/09/16 11:23	1520963	
Triphenylphosphate (S)	29	%	70-130		1	06/08/16 10:00	06/09/16 11:23	115-86-6	1p,IS, S7
<b>548.1 GCS Endothall</b>									
Analytical Method: EPA 548.1 Preparation Method: EPA 548.1									
Endothall	<4.3	ug/L	9.0	4.3	1	06/02/16 08:00	06/03/16 04:21		
<b>300.1 Oxihalide IC Anions 14d</b>									
Analytical Method: EPA 300.1									
Chlorite	<1.4	ug/L	5.0	1.4	1		05/30/16 22:30		
<b>Surrogates</b>									
Dichloroacetate (S)	105	%	90-115		1		05/30/16 22:30	79-43-6	
<b>335.4 Cyanide, Total</b>									
Analytical Method: EPA 335.4 Preparation Method: EPA 335.4									
Cyanide	<0.0050	mg/L	0.010	0.0050	1	06/07/16 10:30	06/07/16 15:42	57-12-5	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>									
Analytical Method: EPA 353.2									
Nitrogen, Nitrate	0.043J	mg/L	0.050	0.025	1		05/27/16 16:17		
Nitrogen, Nitrite	<0.025	mg/L	0.050	0.025	1		05/27/16 16:17		
Nitrogen, NO2 plus NO3	0.043J	mg/L	0.050	0.025	1		05/27/16 16:17		
<b>420.4 Phenolics, Total Low Lvl</b>									
Analytical Method: EPA 420.4 Preparation Method: EPA 420.4									
Phenolics, Total Recoverable LL	<0.0010	mg/L	0.0010	0.0010	1	06/06/16 09:00	06/06/16 17:15		N2

## REPORT OF LABORATORY ANALYSIS

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# IBWA STANDARD OF QUALITY REPORT



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

## ANALYTICAL RESULTS

Project: Culligan DW 1612367  
 Pace Project No.: 35246422

Sample: 1612367 Lab ID: 35246422002 Collected: 05/26/16 12:52 Received: 05/26/16 12:52 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: EPA 8260									
<b>8260 MSV</b>									
Acetone	<10.0	ug/L	20.0	10.0	1		06/01/16 12:48	67-64-1	
Acetonitrile	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	75-05-8	
Benzene	<0.10	ug/L	1.0	0.10	1		06/01/16 12:48	71-43-2	
Bromochloromethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	74-97-5	
Bromodichloromethane	<0.27	ug/L	0.60	0.27	1		06/01/16 12:48	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	75-25-2	
Bromomethane	<0.50	ug/L	5.0	0.50	1		06/01/16 12:48	74-83-9	
2-Butanone (MEK)	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	78-93-3	
Carbon disulfide	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	75-15-0	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	108-90-7	
Chloroethane	<0.50	ug/L	10.0	0.50	1		06/01/16 12:48	75-00-3	
Chloroform	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	67-66-3	
Chloromethane	<0.62	ug/L	1.0	0.62	1		06/01/16 12:48	74-87-3	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	2.0	1.0	1		06/01/16 12:48	96-12-8	
Dibromochloromethane	<0.26	ug/L	0.50	0.26	1		06/01/16 12:48	124-48-1	
1,2-Dibromoethane (EDB)	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	106-93-4	
Dibromomethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	95-50-1	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	106-46-7	
trans-1,4-Dichloro-2-butene	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	110-57-6	
1,1-Dichloroethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	75-34-3	
1,2-Dichloroethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	107-06-2	
1,2-Dichloroethane (Total)	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	540-59-0	N2
1,1-Dichloroethene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	75-35-4	
cis-1,2-Dichloroethene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	156-60-5	
1,2-Dichloropropane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	78-87-5	
cis-1,3-Dichloropropene	<0.25	ug/L	0.50	0.25	1		06/01/16 12:48	10061-01-5	
trans-1,3-Dichloropropene	<0.25	ug/L	0.50	0.25	1		06/01/16 12:48	10061-02-6	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	100-41-4	
2-Hexanone	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	591-78-6	
Iodomethane	<0.50	ug/L	10.0	0.50	1		06/01/16 12:48	74-88-4	
Isopropylbenzene (Cumene)	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	98-82-8	
Methylene Chloride	<2.5	ug/L	5.0	2.5	1		06/01/16 12:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	<5.0	ug/L	10.0	5.0	1		06/01/16 12:48	108-10-1	
Methyl-tert-butyl ether	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	1634-04-4	
Styrene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	100-42-5	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	630-20-6	
1,1,2,2-Tetrachloroethane	<0.12	ug/L	0.50	0.12	1		06/01/16 12:48	79-34-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	127-18-4	
Toluene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	108-88-3	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	71-55-6	
1,1,2-Trichloroethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	79-00-5	
Trichloroethene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	79-01-6	
Trichlorofluoromethane	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	75-69-4	

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NELAP Certifications: IL-100213; PA-68-04623; NY-11756; TX-TX269-2007A

State Certifications: IL-IDPH-17598; CA-2958; MT-CERT0091; IA-369; VT-VT02199; WI-399016200

Maria Mozdzen  
 Analytical Lab Manager

## IBWA STANDARD OF QUALITY REPORT



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

### ANALYTICAL RESULTS

Project: Culligan DW 1612367  
 Pace Project No.: 35246422

Sample: 1612367      Lab ID: 35246422002      Collected: 05/26/16 12:52      Received: 05/26/16 12:52      Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,2,3-Trichloropropane	<0.59	ug/L	1.0	0.59	1		06/01/16 12:48	96-18-4	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	108-67-8	
Vinyl acetate	<1.0	ug/L	2.0	1.0	1		06/01/16 12:48	108-05-4	
Vinyl chloride	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		06/01/16 12:48	1330-20-7	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		06/01/16 12:48	179601-23-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		06/01/16 12:48	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-114		1		06/01/16 12:48	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	86-125		1		06/01/16 12:48	17060-07-0	
Toluene-d8 (S)	100	%	87-113		1		06/01/16 12:48	2037-26-5	

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

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Culligan DW 1612367  
 Pace Project No.: 35246422

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Gross Alpha	EPA 900.0	3.33 ± 1.60 (1.82) C:NA T:NA	pCi/L	06/06/16 07:30	12587-46-1	
Radium-226	EPA 903.1	0.599U ± 0.319 (0.599) C:NA T:94%	pCi/L	06/07/16 21:30	13982-63-3	
Radium-228	EPA 904.0	0.874U ± 0.440 (0.874) C:79% T:77%	pCi/L	06/07/16 16:25	15262-20-1	

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## IBWA STANDARD OF QUALITY REPORT



Pace Analytical Services, Inc.  
 1700 Elm Street - Suite 200  
 Minneapolis, MN 55414

Tel: 612-607-1700  
 Fax: 612-607-6444

### Drinking Water Analysis Results 2,3,7,8-TCDD – USEPA Method 1613B

Sample ID.....1612367  
 Client..... PASI Florida  
 Lab Sample ID..... 35246422001

Date Collected.....05/26/2016  
 Date Received.....05/27/2016  
 Date Extracted.....06/03/2016

	Sample 1612367	Method Blank	Lab Spike	Lab Spike Dup
[2,3,7,8-TCDD]	ND	ND	--	--
EDL	2.1 pg/L	3.3 pg/L	--	--
2,3,7,8-TCDD Recovery	--	--	94%	97%
Spike Recovery Limit	--	--	73-146%	73-146%
RPD				3.8%
IS Recovery	65%	73%	67%	66%
IS Recovery Limits	31-137%	31-137%	25-141%	25-141%
CS Recovery	78%	94%	92%	91%
CS Recovery Limits	42-164%	42-164%	37-158%	37-158%
Filename	Y160604C_13	Y160604C_05	Y160604C_03	Y160604C_04
Analysis Date	06/04/2016	06/04/2016	06/04/2016	06/04/2016
Analysis Time	23:46	20:02	19:07	19:34
Analyst	BAL	BAL	BAL	BAL
Volume	1.033L	1.024L	1.017L	1.029L
Dilution	NA	NA	NA	NA
ICAL Date	05/04/2016	05/04/2016	05/04/2016	05/04/2016
CCAL Filename	Y160604C_02	Y160604C_02	Y160604C_02	Y160604C_02

- ! = Outside the Control Limits
- ND = Not Detected
- EDL = Estimated Detection Limit
- Limits = Control Limits from Method 1613 (10/94 Revision), Tables 6A and 7A
- RPD = Relative Percent Difference of Lab Spike Recoveries
- IS = Internal Standard [2,3,7,8-TCDD-<sup>13</sup>C<sub>12</sub>]
- CS = Cleanup Standard [2,3,7,8-TCDD-<sup>37</sup>Cl<sub>4</sub>]

Analyst: Brian A. Lark

Project No.....10350159  
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Report No.....10350159 1613DW

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