



**Water & Sewer**  
P.O. Box 330316 • 3071 SW 38th Avenue  
Miami, Florida 33233-0316  
T 305-665-7471

[miamidade.gov](http://miamidade.gov)

April 15, 2009

Certified Mail: 7003 1680 0004 5547 9904  
Return Receipt  
CNN: 52755

Mr. Joseph R. May, P.G.  
UIC Program Manager  
Florida Department of Environmental Protection  
400 North Congress Avenue, Suite 200  
West Palm Beach, Florida 33401

Subject: Miami-Dade Water and Sewer Department (MDWASD), South District Wastewater Treatment Plant (WWTP), Permits 61787-001-UO through 61787-013-UO, and 61787-014-UC through 61787-017-UC

Dear Mr. May:

In accordance FAC 62-550, specific condition 3.k of the referenced operation permits, and specific condition 6.l of the referenced construction permits, attached please find the 2009 sampling results for the annual wastestream analysis of primary, secondary drinking water standards, and minimum criteria.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact me at (786) 552-8116 or Richard M. O'Rourke at (786) 552-8123, if there are any questions regarding this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read "Vicente E. Arrebola".

Vicente E. Arrebola, P.E.  
Assistant Director, Wastewater System Operations

VEA/RMO/ab

cc: T. Brown, FDEP/SED

Attachment: South District WWTP – 2009 Annual Wastestream Analysis Sampling Results

*Delivering Excellence Every Day*



Genapure Analytical Services, Inc.  
3231 NW 7th Avenue  
Boca Raton, FL 33431  
Phone: (561) 447-7373  
Fax: (561) 447-7374

March 20, 2009

CLIVE POWELL  
MIAMI DADE WATER & SEWER  
SOUTH DISTRICT LABORATORY  
8950 SW 232 ST.  
Miami, FL 33170

RE:  
Workorder: 901842  
Project: ANNUAL SAMPLING

Dear CLIVE POWELL:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, February 19, 2009. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Kimmel", with a stylized flourish at the end.

Mike Kimmel  
mkimmel@genapure.com

FL-NELAC E86240

Statement of uncertainty is available upon request.  
Enclosures

### **CERTIFICATE OF ANALYSIS**

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Genapure Analytical Services, Inc.  
3231 NW 7th Avenue  
Boca Raton, FL 33431  
Phone: (561) 447-7373  
Fax: (561) 447-7374

#### SAMPLE SUMMARY

Lab ID	Sample ID	Collector	Matrix	Date Collected	Date Received
901842001	COMBINED EFFLUENT	CL	Wastewater	2/19/2009	2/19/2009

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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
<b>Wet Chemistry</b>									
Analytical Method: SM 2540 C									
Total Dissolved Solids(TDS)	439		mg/L	35	7.00	1		2/23/2009 1:10:00 PM	ARH O
Preparation Method: EPA 351.2 Analytical Method: EPA 351.2									
Total Kjeldahl Nitrogen	28.5	V	mg/L-N	11	2.2	10	3/2/2009 6:00:00 PM	3/3/2009 11:50:00 AM	IGO N
Preparation Method: EPA 335.2 Analytical Method: EPA 335.4 Cyanide									
Total Cyanide	0.0059I		mg/L	0.02	0.0040	1	2/24/2009 10:22:00 AM	2/24/2009 1:57:00 PM	IGO N
Analytical Method: SM 2120B Color									
Color (True/Apparent)	40.0		pcu	25	5.0	1		2/20/2009 7:45:00 AM	ZES C
Analytical Method: EPA 350.1									
Ammonia	29.0	V	mg/L-N	0.435	0.087	5		2/20/2009 12:53:38 PM	IGO N
Analytical Method: EPA 300.0									
Chloride	118		mg/L	6.65	1.33	20		2/23/2009 4:50:00 PM	ADE S
Fluoride	0.300U		mg/L	1.5	0.300	10		2/20/2009 8:50:00 PM	ADE S
Nitrate	0.074U		mg/L-N	0.37	0.074	10		2/20/2009 8:50:00 PM	ADE S
Nitrite	0.053U		mg/L-N	0.265	0.053	10		2/20/2009 8:50:00 PM	ADE S
Sulfate	37.0		mg/L	3.775	0.755	10		2/20/2009 8:50:00 PM	ADE S
Preparation Method: BOD PREP Analytical Method: SM 5210B BOD									
BOD	5.63	J	mg/L	10	2.0	1	2/20/2009 7:30:00 PM	2/25/2009 9:45:00 AM	LGA R
Analytical Method: EPA 1664A									
Oil and Grease	13.5		mg/L	7	1.4	1		2/23/2009 4:00:00 PM	JSUL
Analytical Method: SM 2150 B									
Odor	16.0		TON	5	1	1		2/20/2009 7:10:00 AM	ZES C
Preparation Method: SM 5540 C Analytical Method: SM 5540 C									
Surfactants	0.114I		mg/L-LAS	0.2	0.040	1	2/20/2009 10:40:00 AM	2/20/2009 10:40:00 AM	ARH O
Analytical Method: EPA 365.1									

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### ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Ortho Phosphate - P	2.38		mg/L-P	0.135	0.027	5		2/20/2009 1:36:56 PM	TAAL
Total Phosphorus	2.51		mg/L	0.11	0.022	5	2/24/2009 8:30:00 AM	2/24/2009 12:30:06 PM	ZES C

#### Analytical Method: SM4500H-B

pH	7.26		pH unit	0.5	0.100	1		2/24/2009 12:55:00 PM	ADE S
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#### Analytical Method: EPA 120.1

Specific Conductance	737		umhos/cm	10	2	1		2/25/2009 12:00:00 PM	ADE S
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#### EDB Analysis

##### Preparation Method: EPA 504.1 Analytical Method: EPA 504.1

1,2-Dibromo-3-chloropropane	0.00310U		ug/L	0.0155	0.00310	1	2/23/2009 5:00:00 PM	2/24/2009 12:22:00 AM	LREL
1,2-Dibromoethane	0.00640U		ug/L	0.032	0.00640	1	2/23/2009 5:00:00 PM	2/24/2009 12:22:00 AM	LREL
4-Bromofluorobenzene (S)	78		%		70-130	1	2/23/2009 5:00:00 PM	2/24/2009 12:22:00 AM	LREL

#### INORGANICS

##### Preparation Method: EPA 245.1 Analytical Method: EPA 245.1

Mercury	0.000056U		mg/L	0.00028	0.000056	1	2/23/2009 11:30:00 AM	2/23/2009 4:01:00 PM	ITUP
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##### Preparation Method: EPA 200.7 Analytical Method: EPA 200.7

Aluminum	0.046U		mg/L	0.23	0.046	1	2/20/2009 11:00:00 AM	2/23/2009 10:26:50 PM	TBU T
Chromium	0.00250I		mg/L	0.0055	0.0011	1	2/20/2009 11:00:00 AM	2/24/2009 2:34:52 PM	TBU T
Copper	0.0096U		mg/L	0.048	0.0096	1	2/20/2009 11:00:00 AM	2/24/2009 2:34:52 PM	TBU T
Iron	0.140		mg/L	0.225	0.045	1	2/20/2009 11:00:00 AM	2/23/2009 10:26:50 PM	TBU T
Nickel	0.0052U		mg/L	0.026	0.0052	1	2/20/2009 11:00:00 AM	2/23/2009 10:26:50 PM	TBU T
Silver	0.0016U		mg/L	0.008	0.0016	1	2/20/2009 11:00:00 AM	2/24/2009 2:34:52 PM	TBU T
Sodium	78.8		mg/L	0.37	0.074	1	2/20/2009 11:00:00 AM	2/24/2009 2:34:52 PM	TBU T
Zinc	0.0133I		mg/L	0.0265	0.0053	1	2/20/2009 11:00:00 AM	2/24/2009 2:34:52 PM	TBU T

##### Preparation Method: EPA 200.8 Analytical Method: EPA 200.8

Antimony	0.0010U		mg/L	0.005	0.0010	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Arsenic	0.0016U		mg/L	0.008	0.0016	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Barium	0.00782		mg/L	0.0075	0.0015	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Beryllium	0.00085U		mg/L	0.00425	0.00085	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR

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### ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Cadmium	0.00011U		mg/L	0.0005 5	0.0001 1	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Lead	0.00075U		mg/L	0.0037 5	0.0007 5	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Manganese	0.0125		mg/L	0.0055	0.0011	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Selenium	0.00082U		mg/L	0.0041	0.0008 2	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR
Thallium	0.00027U		mg/L	0.0013 5	0.0002 7	1	2/20/2009 11:00:00 AM	2/24/2009 12:20:00 AM	DFIR

#### Analytical Method: 1613

2,3,7,8-TCDD	5.0U		ug/L	25	5.0	1		3/4/2009 6:50:00 PM	SUB
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#### Wet Chemistry - Subcontract

#### Analytical Method: EPA 100.2

Asbestos	0.18U	1	MFL	0.9	0.18	1		2/28/2009 1:00:00 PM	SUB
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#### Semivolatiles

#### Preparation Method: EPA 625

#### Analytical Method: EPA 625

1,2,4-Trichlorobenzene	0.23U		ug/L	1.15	0.23	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
1,2-Dichlorobenzene	0.34U		ug/L	1.7	0.34	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
1,2-Diphenylhydrazine	0.23U		ug/L	1.15	0.23	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
1,3-Dichlorobenzene	0.35U		ug/L	1.75	0.35	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
1,4-Dichlorobenzene	0.677I		ug/L	1.4	0.28	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4,6-Trichlorophenol	0.27U		ug/L	1.35	0.27	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4-Dichlorophenol	0.43U		ug/L	2.15	0.43	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4-Dinitrophenol	1.4U		ug/L	7	1.4	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4-Dinitrotoluene	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,6-Dinitrotoluene	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2-Chloronaphthalene	0.32U		ug/L	1.6	0.32	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2-Chlorophenol	0.22U		ug/L	1.1	0.22	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2-Nitrophenol	0.24U		ug/L	1.2	0.24	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
3,3'-Dichlorobenzidine	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
4,6-Dinitro-2-methylphenol	0.35U		ug/L	1.75	0.35	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
4-Chloro-3-methylphenol	0.22U		ug/L	1.1	0.22	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C

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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
4-Chlorophenyl phenyl ether	0.45U		ug/L	2.25	0.45	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Acenaphthene	0.25U		ug/L	1.25	0.25	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Acenaphthylene	0.26U		ug/L	1.3	0.26	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Anthracene	0.25U		ug/L	1.25	0.25	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzidine	9.7U		ug/L	48.5	9.7	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzo(a)anthracene	0.27U		ug/L	1.35	0.27	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzo(a)pyrene	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzo(b)fluoranthene	0.25U		ug/L	1.25	0.25	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzo(g,h,i)perylene	0.28U		ug/L	1.4	0.28	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Benzo(k)fluoranthene	0.39U		ug/L	1.95	0.39	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Bis(2-Chloroethoxy)methane	0.32U		ug/L	1.6	0.32	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Bis(2-Chloroethyl)ether	0.46U		ug/L	2.3	0.46	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Bis(2-Chloroisopropyl)ether	0.34U		ug/L	1.7	0.34	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Bis(2-Ethylhexyl)phthalate	0.45U		ug/L	1	0.20	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
4-Bromophenyl phenyl ether	0.27U		ug/L	1.35	0.27	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Butyl benzyl phthalate	0.36U		ug/L	1.8	0.36	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Chrysene	0.28U		ug/L	1.4	0.28	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Di-n-butyl phthalate	0.21U		ug/L	1.05	0.21	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Di-n-octyl phthalate	0.28U		ug/L	1.4	0.28	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Dibenz(a,h)anthracene	0.55U		ug/L	2.75	0.55	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Diethyl phthalate	0.33U		ug/L	1.65	0.33	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Dimethyl phthalate	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4-Dimethylphenol	0.40U		ug/L	2	0.40	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Fluoranthene	0.20U		ug/L	1	0.20	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Fluorene	0.27U		ug/L	1.35	0.27	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Hexachlorobenzene	0.32U		ug/L	1.6	0.32	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Hexachlorobutadiene	0.45U		ug/L	2.25	0.45	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C

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### ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Hexachlorocyclopentadiene	0.74U		ug/L	3.7	0.74	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Hexachloroethane	0.36U		ug/L	1.8	0.36	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Indeno(1,2,3-cd)pyrene	0.26U		ug/L	1.3	0.26	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Isophorone	0.34U		ug/L	1.7	0.34	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Naphthalene	0.34U		ug/L	1.7	0.34	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Nitrobenzene	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
4-Nitrophenol	0.79U		ug/L	3.95	0.79	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Pentachlorophenol	0.67U		ug/L	3.35	0.67	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Phenanthrene	0.29U		ug/L	1.45	0.29	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Phenol	0.41U		ug/L	2.05	0.41	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Pyrene	0.47U		ug/L	2.35	0.47	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
n-Nitrosodi-n-propylamine	0.33U		ug/L	1.65	0.33	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
n-Nitrosodimethylamine	1.0U		ug/L	5	1.0	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
n-Nitrosodiphenylamine	0.31U		ug/L	1.55	0.31	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Nitrobenzene-d5 (S)	74		%		10-117	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2-Fluorobiphenyl (S)	71		%		10-112	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Terphenyl-d14 (S)	102		%		20-146	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
Phenol-d6 (S)	29		%		10-59	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2-Fluorophenol (S)	48		%		24-64	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C
2,4,6-Tribromophenol (S)	99		%		52-121	1	2/20/2009 9:00:00 AM	2/23/2009 3:35:00 PM	TBU C

#### Pesticides

Preparation Method: EPA 608

Analytical Method: EPA 608

4,4'-DDD	0.000993U		ug/L	0.0049 65	0.0009 93	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
4,4'-DDE	0.00272U	4	ug/L	0.0136	0.0027 2	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
4,4'-DDT	0.00120U		ug/L	0.006	0.0012 0	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Aldrin	0.00139U		ug/L	0.0069 5	0.0013 9	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Chlordane(Technical)	0.00630U		ug/L	0.0315	0.0063 0	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC

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## ANALYTICAL RESULTS

Lab ID: **901842001**

Date Received: 2/19/2009

Matrix: Wastewater

Sample ID: **COMBINED EFFLUENT**

Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Dieldrin	0.00157U	4	ug/L	0.0078 5	0.0015 7	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endosulfan I	0.00215U	4	ug/L	0.0107 5	0.0021 5	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endosulfan II	0.00129U		ug/L	0.0064 5	0.0012 9	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endosulfan sulfate	0.00153U	4	ug/L	0.0076 5	0.0015 3	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endrin	0.000717U		ug/L	0.0035 85	0.0007 17	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endrin aldehyde	0.000695U		ug/L	0.0034 75	0.0006 95	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Endrin ketone	0.000969U		ug/L	0.0048 45	0.0009 69	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Heptachlor	0.00885U	4	ug/L	0.0442 5	0.0088 5	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Heptachlor epoxide	0.00121U		ug/L	0.0060 5	0.0012 1	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Methoxychlor	0.000900U		ug/L	0.0045	0.0009 00	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1016	0.012U		ug/L	0.06	0.012	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1221	0.014U		ug/L	0.07	0.014	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1232	0.190U		ug/L	0.95	0.190	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1242	0.014U		ug/L	0.07	0.014	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1248	0.00850U		ug/L	0.0425	0.0085 0	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1254	0.014U		ug/L	0.07	0.014	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
PCB 1260	0.015U		ug/L	0.075	0.015	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Toxaphene	0.047U		ug/L	0.235	0.047	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
alpha-BHC	0.00313U	4	ug/L	0.0156 5	0.0031 3	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
alpha-Chlordane	0.00118U		ug/L	0.0059	0.0011 8	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
beta-BHC	0.00196U	4	ug/L	0.0098	0.0019 6	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
delta-BHC	0.000904U		ug/L	0.0045 2	0.0009 04	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
gamma-BHC (Lindane)	0.00604U	4	ug/L	0.0302	0.0060 4	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
gamma-Chlordane	0.00130U		ug/L	0.0065	0.0013 0	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Tetrachloro-m-xylene (S)	68		%		32-137	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC
Decachlorobiphenyl (S)	38		%		25-165	1	2/23/2009 3:30:00 PM	2/25/2009 4:37:41 AM	CCIC

### Synthetic Organics

Preparation Method: EPA 531.1

Analytical Method: EPA 531.1

Carbofuran	0.25U	2	ug/L	1.25	0.25	1	2/25/2009 3:30:00 PM	2/28/2009 2:24:00 AM	SUB
Oxamyl	0.18U		ug/L	0.9	0.18	1	2/25/2009 3:30:00 PM	2/28/2009 2:24:00 AM	SUB

Preparation Method: EPA 508.1

Analytical Method: EPA 508.1

Alachlor	0.055U	2	ug/L	0.275	0.055	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Atrazine (Aatrex)	0.026U		ug/L	0.13	0.026	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
gamma-BHC (Lindane)	0.0050U		ug/L	0.025	0.0050	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Chlordane(Technical)	0.035U		ug/L	0.175	0.035	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Endrin	0.0020U		ug/L	0.01	0.0020	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Heptachlor	0.0080U		ug/L	0.04	0.0080	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Heptachlor epoxide	0.0040U		ug/L	0.02	0.0040	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Hexachlorobenzene	0.025U		ug/L	0.125	0.025	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Hexachlorocyclopentadiene	0.021U		ug/L	0.105	0.021	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Methoxychlor	0.021U		ug/L	0.105	0.021	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Simazine (Princep)	0.025U		ug/L	0.125	0.025	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Toxaphene	0.21U		ug/L	1.05	0.21	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB
Polychlorinated Biphenyls-PCBS	0.10U		ug/L	0.5	0.10	1	2/25/2009 10:00:00 AM	2/25/2009 10:30:00 PM	SUB

### Preparation Method: EPA 515.3

### Analytical Method: EPA 515.3

2,4-D	0.030U	2	ug/L	0.15	0.030	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB
Dalapon	0.66U		ug/L	3.3	0.66	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB
Dinoseb	0.090U		ug/L	0.45	0.090	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB
Pentachlorophenol	0.010U		ug/L	0.05	0.010	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB
Picloram	0.010U		ug/L	0.05	0.010	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB
2,4,5-TP (Silvex)	0.080U		ug/L	0.4	0.080	1	2/26/2009 9:00:00 AM	2/27/2009 5:07:00 PM	SUB

### Analytical Method: EPA 547

Glyphosate	2.4U	2	ug/L	12	2.4	1		2/24/2009 4:08:00 AM	SUB
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### Preparation Method: EPA 548.1

### Analytical Method: EPA 548.1

Endothall	0.28U	2	ug/L	1.4	0.28	1	2/25/2009 9:00:00 AM	2/28/2009 6:23:00 PM	SUB
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### Preparation Method: EPA 549.2

### Analytical Method: EPA 549.2

Diquat	0.22U	2	ug/L	1.1	0.22	1	2/26/2009 7:58:00 PM	2/26/2009 7:58:00 PM	SUB
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### Preparation Method: EPA 525.2

### Analytical Method: EPA 525.2

Benzo(a)pyrene	0.019U	2	ug/L	0.095	0.019	1	2/25/2009 4:30:00 PM	2/26/2009 7:59:00 PM	SUB
Di(2-ethylhexyl)adipate	0.39U		ug/L	1.95	0.39	1	2/25/2009 4:30:00 PM	2/26/2009 7:59:00 PM	SUB
Bis(2-Ethylhexyl)phthalate	0.660I	1	ug/L	2.55	0.51	1	2/25/2009 4:30:00 PM	2/26/2009 7:59:00 PM	SUB

## Volatiles

### Analytical Method: EPA 624

1,1,1-Trichloroethane	0.680U		ug/L	3.4	0.680	1		2/23/2009 6:31:00 AM	LNE M
1,1,2,2-Tetrachloroethane	0.570U		ug/L	2.85	0.570	1		2/23/2009 6:31:00 AM	LNE M
1,1,2-Trichloroethane	0.840U		ug/L	4.2	0.840	1		2/23/2009 6:31:00 AM	LNE M
1,1-Dichloroethane	0.410U		ug/L	2.05	0.410	1		2/23/2009 6:31:00 AM	LNE M
1,1-Dichloroethene	0.640U		ug/L	3.2	0.640	1		2/23/2009 6:31:00 AM	LNE M

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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
1,2-Dichloroethane	0.897U		ug/L	4.485	0.897	1		2/23/2009 6:31:00 AM	LNE M
1,2-Dichloropropane	0.725U		ug/L	3.625	0.725	1		2/23/2009 6:31:00 AM	LNE M
2-Chloroethylvinyl ether	0.466U		ug/L	2.33	0.466	1		2/23/2009 6:31:00 AM	LNE M
Acrolein	2.47U		ug/L	12.35	2.47	1		2/23/2009 6:31:00 AM	LNE M
Acrylonitrile	0.955U	3,J	ug/L	4.775	0.955	1		2/23/2009 6:31:00 AM	LNE M
Benzene	0.621U		ug/L	3.105	0.621	1		2/23/2009 6:31:00 AM	LNE M
Bromodichloromethane	0.140U		ug/L	0.7	0.140	1		2/23/2009 6:31:00 AM	LNE M
Bromoform	0.486U		ug/L	2.43	0.486	1		2/23/2009 6:31:00 AM	LNE M
Bromomethane	0.427U		ug/L	2.135	0.427	1		2/23/2009 6:31:00 AM	LNE M
Carbon tetrachloride	0.468U		ug/L	2.34	0.468	1		2/23/2009 6:31:00 AM	LNE M
Chlorobenzene	0.316U		ug/L	1.58	0.316	1		2/23/2009 6:31:00 AM	LNE M
Chloroethane	0.710U		ug/L	3.55	0.710	1		2/23/2009 6:31:00 AM	LNE M
Chloroform	1.64		ug/L	2.86	0.572	1		2/23/2009 6:31:00 AM	LNE M
Chloromethane	0.524U		ug/L	2.62	0.524	1		2/23/2009 6:31:00 AM	LNE M
Dibromochloromethane	0.378U		ug/L	1.89	0.378	1		2/23/2009 6:31:00 AM	LNE M
cis-1,3-Dichloropropene	0.664U		ug/L	3.32	0.664	1		2/23/2009 6:31:00 AM	LNE M
trans-1,3-Dichloropropene	0.522U		ug/L	2.61	0.522	1		2/23/2009 6:31:00 AM	LNE M
Ethylbenzene	0.323U		ug/L	1.615	0.323	1		2/23/2009 6:31:00 AM	LNE M
Methylene chloride	0.240U		ug/L	1.2	0.240	1		2/23/2009 6:31:00 AM	LNE M
Tetrachloroethene	0.370I		ug/L	1.56	0.312	1		2/23/2009 6:31:00 AM	LNE M
Toluene	0.389U		ug/L	1.945	0.389	1		2/23/2009 6:31:00 AM	LNE M
Trichloroethene	0.821U		ug/L	4.105	0.821	1		2/23/2009 6:31:00 AM	LNE M
Vinyl chloride	0.506U		ug/L	2.53	0.506	1		2/23/2009 6:31:00 AM	LNE M
Xylene, m,p-	0.639U		ug/L	3.195	0.639	1		2/23/2009 6:31:00 AM	LNE M
Xylene, o-	0.341U		ug/L	1.705	0.341	1		2/23/2009 6:31:00 AM	LNE M
Xylenes (total)	0.980U		ug/L	4.9	0.980	1		2/23/2009 6:31:00 AM	LNE M
cis-1,2-Dichloroethene	0.442U		ug/L	2.21	0.442	1		2/23/2009 6:31:00 AM	LNE M

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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009 Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
trans-1,2-Dichloroethene	0.410U		ug/L	2.05	0.410	1		2/23/2009 6:31:00 AM	LNE M
Analytical Method: EPA 524.2									
1,1,1-Trichloroethane	0.132U		ug/L	0.66	0.132	1		2/21/2009 6:38:00 AM	LNE M
1,1,2-Trichloroethane	0.088U		ug/L	0.44	0.088	1		2/21/2009 6:38:00 AM	LNE M
1,1-Dichloroethane	0.075U		ug/L	0.375	0.075	1		2/21/2009 6:38:00 AM	LNE M
1,1-Dichloroethene	0.086U		ug/L	0.43	0.086	1		2/21/2009 6:38:00 AM	LNE M
1,2,4-Trichlorobenzene	0.117U		ug/L	0.585	0.117	1		2/21/2009 6:38:00 AM	LNE M
1,2-Dichlorobenzene	0.076U		ug/L	0.38	0.076	1		2/21/2009 6:38:00 AM	LNE M
1,2-Dichloroethane	0.070U		ug/L	0.35	0.070	1		2/21/2009 6:38:00 AM	LNE M
1,2-Dichloropropane	0.093U		ug/L	0.465	0.093	1		2/21/2009 6:38:00 AM	LNE M
1,4-Dichlorobenzene	1.14		ug/L	0.75	0.150	1		2/21/2009 6:38:00 AM	LNE M
Benzene	0.077U		ug/L	0.385	0.077	1		2/21/2009 6:38:00 AM	LNE M
Bromodichloromethane	0.091U		ug/L	0.455	0.091	1		2/21/2009 6:38:00 AM	LNE M
Bromoform	0.15U		ug/L	0.75	0.15	1		2/21/2009 6:38:00 AM	LNE M
Carbon tetrachloride	0.134U		ug/L	0.67	0.134	1		2/21/2009 6:38:00 AM	LNE M
Chlorobenzene	0.113U		ug/L	0.565	0.113	1		2/21/2009 6:38:00 AM	LNE M
Chloroform	1.66		ug/L	0.385	0.077	1		2/21/2009 6:38:00 AM	LNE M
Dibromochloromethane	0.15U		ug/L	0.75	0.15	1		2/21/2009 6:38:00 AM	LNE M
Ethylbenzene	0.070U		ug/L	0.35	0.070	1		2/21/2009 6:38:00 AM	LNE M
Methylene chloride	0.117U		ug/L	0.585	0.117	1		2/21/2009 6:38:00 AM	LNE M
Styrene	0.040U		ug/L	0.2	0.040	1		2/21/2009 6:38:00 AM	LNE M
Tetrachloroethene	0.460I		ug/L	0.74	0.148	1		2/21/2009 6:38:00 AM	LNE M
Toluene	0.140U		ug/L	0.7	0.140	1		2/21/2009 6:38:00 AM	LNE M
Trichloroethene	0.121U		ug/L	0.605	0.121	1		2/21/2009 6:38:00 AM	LNE M
Total Trihalomethanes	1.66I		ug/L	2.35	0.47	1		2/21/2009 6:38:00 AM	LNE M
Vinyl chloride	0.120U		ug/L	0.6	0.120	1		2/21/2009 6:38:00 AM	LNE M
Xylene, m,p-	0.134U		ug/L	0.67	0.134	1		2/21/2009 6:38:00 AM	LNE M

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## ANALYTICAL RESULTS

Lab ID: **901842001**  
Sample ID: **COMBINED EFFLUENT**

Date Received: 2/19/2009      Matrix: Wastewater  
Date Collected: 2/19/2009

Parameters	Results	Qual	Units	PQL	MDL	DF	Prepared	Analyzed	By
Xylene, o-	0.083U		ug/L	0.415	0.083	1		2/21/2009 6:38:00 AM	LNE M
Xylenes (total)	0.210U		ug/L	1.05	0.210	1		2/21/2009 6:38:00 AM	LNE M
cis-1,2-Dichloroethene	0.085U		ug/L	0.425	0.085	1		2/21/2009 6:38:00 AM	LNE M
trans-1,2-Dichloroethene	0.087U		ug/L	0.435	0.087	1		2/21/2009 6:38:00 AM	LNE M

### Analytical Method: EPA 624

4-Bromofluorobenzene (S)	91	%		64-130	1		2/23/2009 6:31:00 AM	LNE M
Dibromofluoromethane (S)	112	%		69-134	1		2/23/2009 6:31:00 AM	LNE M
Toluene d8 (S)	99	%		63-127	1		2/23/2009 6:31:00 AM	LNE M

### Analytical Method: EPA 524.2

4-Bromofluorobenzene (S)	91	%		70-130	1		2/21/2009 6:38:00 AM	LNE M
1,2-Dichlorobenzene-d4 (S)	99	%		70-130	1		2/21/2009 6:38:00 AM	LNE M

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## ANALYTICAL RESULTS QUALIFIERS

### PARAMETER QUALIFIERS

- |     |   |
|-----|---|
| I   | Estimated value; between MDL and PQL  |
| J   | Estimated value.  |
| V   | Present in blank.   |
| [1] | E86772  |
| [2] | E83079  |
| [3] | NCR-LCS and/or LCSD recoveries above acceptable limits. The reported target analyte is below detection limits establishing that there is no high biased result reported |
| [4] | NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.       |

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**CASE NARRATIVE****Sample Analysis Comments**

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**Lab ID 901842001    Client ID COMBINED EFFLUENT****Analyte/2,4-D**

[2] E83079

**Analyte/4,4'-DDE**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/Acrylonitrile**

NCR-LCS and/or LCSD recoveries above acceptable limits. The reported target analyte is below detection limits establishing that there is no high biased result reported

**Analyte/Alachlor**

[2] E83079

**Analyte/Asbestos**

[1] E86772

**Analyte/Benzo(a)pyrene**

[2] E83079

**Analyte/Bis(2-Ethylhexyl)phthalate**

I = Estimated value; between MDL and PQL

**Analyte/Carbofuran**

[2] E83079

**Analyte/Dieldrin**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/Diquat**

[2] E83079

**Analyte/Endosulfan I**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/Endosulfan sulfate**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/Endothall**

[2] E83079

**Analyte/Glyphosate**

[2] E83079

**Analyte/Heptachlor**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**CERTIFICATE OF ANALYSIS**

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## CASE NARRATIVE

### Sample Analysis Comments

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**Lab ID 901842001    Client ID COMBINED EFFLUENT**

**Analyte/alpha-BHC**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/beta-BHC**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

**Analyte/gamma-BHC (Lindane)**

NCR-% difference of results from primary and secondary columns is >40%, possible due to matrix interference. Detection limit elevated above lowest concentration.

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### QUALITY CONTROL DATA

QC Batch: EXT0/1744

Analysis Method: EPA 625

QC Batch Method: EPA 625

Associated Lab Samples: 901780001 901839001 901840001 901842001 901843002 901850001  
901850002 901850003

METHOD BLANK: 17506

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Semivolatiles				
Acenaphthene	ug/L	0.25U	0.25	
Acenaphthylene	ug/L	0.26U	0.26	
Anthracene	ug/L	0.25U	0.25	
Benzidine	ug/L	9.7U	9.7	
Benzo(a)anthracene	ug/L	0.27U	0.27	
Benzo(a)pyrene	ug/L	0.31U	0.31	
Benzo(b)fluoranthene	ug/L	0.25U	0.25	
Benzo(g,h,i)perylene	ug/L	0.28U	0.28	
Benzo(k)fluoranthene	ug/L	0.39U	0.39	
Bis(2-Chloroethoxy)methane	ug/L	0.32U	0.32	
Bis(2-Chloroethyl)ether	ug/L	0.46U	0.46	
Bis(2-Chloroisopropyl)ether	ug/L	0.34U	0.34	
Bis(2-Ethylhexyl)phthalate	ug/L	0.20U	0.20	
4-Bromophenyl phenyl ether	ug/L	0.27U	0.27	
Butyl benzyl phthalate	ug/L	0.36U	0.36	
2-Chloronaphthalene	ug/L	0.32U	0.32	
4-Chlorophenyl phenyl ether	ug/L	0.45U	0.45	
Chrysene	ug/L	0.28U	0.28	
Dibenz(a,h)anthracene	ug/L	0.55U	0.55	
1,2-Dichlorobenzene	ug/L	0.34U	0.34	
1,3-Dichlorobenzene	ug/L	0.35U	0.35	
1,4-Dichlorobenzene	ug/L	0.28U	0.28	
3,3'-Dichlorobenzidine	ug/L	0.31U	0.31	
Diethyl phthalate	ug/L	0.33U	0.33	
Dimethyl phthalate	ug/L	0.31U	0.31	
Di-n-butyl phthalate	ug/L	0.21U	0.21	
2,4-Dinitrotoluene	ug/L	0.31U	0.31	
2,6-Dinitrotoluene	ug/L	0.31U	0.31	
Di-n-octyl phthalate	ug/L	0.28U	0.28	
Fluoranthene	ug/L	0.20U	0.20	
Fluorene	ug/L	0.27U	0.27	
Hexachlorobenzene	ug/L	0.32U	0.32	
Hexachlorobutadiene	ug/L	0.45U	0.45	
Hexachlorocyclopentadiene	ug/L	0.74U	0.74	
Hexachloroethane	ug/L	0.36U	0.36	
Indeno(1,2,3-cd)pyrene	ug/L	0.26U	0.26	
Isophorone	ug/L	0.34U	0.34	
Naphthalene	ug/L	0.34U	0.34	
Nitrobenzene	ug/L	0.31U	0.31	
n-Nitrosodimethylamine	ug/L	1.0U	1.0	
n-Nitrosodi-n-propylamine	ug/L	0.33U	0.33	
n-Nitrosodiphenylamine	ug/L	0.31U	0.31	

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### QUALITY CONTROL DATA

METHOD BLANK: 17506

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Phenanthrene	ug/L	0.29U	0.29	
Pyrene	ug/L	0.47U	0.47	
1,2,4-Trichlorobenzene	ug/L	0.23U	0.23	
2-Chlorophenol	ug/L	0.22U	0.22	
2,4-Dichlorophenol	ug/L	0.43U	0.43	
2,4-Dimethylphenol	ug/L	0.40U	0.40	
4,6-Dinitro-2-methylphenol	ug/L	0.35U	0.35	
2,4-Dinitrophenol	ug/L	1.4U	1.4	
2-Nitrophenol	ug/L	0.24U	0.24	
4-Nitrophenol	ug/L	0.79U	0.79	
4-Chloro-3-methylphenol	ug/L	0.22U	0.22	
Pentachlorophenol	ug/L	0.67U	0.67	
Phenol	ug/L	0.41U	0.41	
2,4,6-Trichlorophenol	ug/L	0.27U	0.27	
Nitrobenzene-d5 (S)	%	83	10-117	
2-Fluorobiphenyl (S)	%	83	10-112	
Terphenyl-d14 (S)	%	111	20-146	
Phenol-d6 (S)	%	33	10-59	
2-Fluorophenol (S)	%	46	24-64	
2,4,6-Tribromophenol (S)	%	95	52-121	

LABORATORY CONTROL SAMPLE: 17507

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Semivolatiles						
Acenaphthylene	ug/L	50	42.5	85	33-145	
Anthracene	ug/L	50	45.4	91	27-133	
Benzo(a)anthracene	ug/L	50	48.5	97	33-143	
Benzo(b)fluoranthene	ug/L	50	38.0	76	24-159	
Benzo(k)fluoranthene	ug/L	50	46.4	93	11-162	
Benzo(g,h,i)perylene	ug/L	50	50.3	101	0-219	
Benzo(a)pyrene	ug/L	50	44.4	89	17-163	
Butyl benzyl phthalate	ug/L	50	52.7	105	0-152	
Bis(2-Chloroethoxy)methane	ug/L	50	41.2	82	33-184	
Bis(2-Chloroethyl)ether	ug/L	50	38.9	78	12-158	
Bis(2-Chloroisopropyl)ether	ug/L	50	38.9	78	36-166	
Bis(2-Ethylhexyl)phthalate	ug/L	50	57.9	116	8-158	
4-Bromophenyl phenyl ether	ug/L	50	48.9	98	53-127	
4-Chlorophenyl phenyl ether	ug/L	50	41.0	82	25-158	
Chrysene	ug/L	50	42.7	85	17-168	
Dibenz(a,h)anthracene	ug/L	50	49.3	99	0-227	
1,2-Dichlorobenzene	ug/L	50	33.9	68	32-129	

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### QUALITY CONTROL DATA

LABORATORY CONTROL SAMPLE: 17507

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	50	32.6	65	0-172	
3,3'-Dichlorobenzidine	ug/L	50	39.6	79	0-262	
2,4-Dichlorophenol	ug/L	50	36.3	73	39-135	
Diethyl phthalate	ug/L	50	44.7	89	0-114	
2,4-Dimethylphenol	ug/L	50	41.5	83	32-119	
Dimethyl phthalate	ug/L	50	44.9	90	0-112	
Di-n-octyl phthalate	ug/L	50	56.7	113	4-146	
2,4-Dinitrophenol	ug/L	50	37.3	75	0-191	
2,6-Dinitrotoluene	ug/L	50	41.9	84	50-158	
Fluoranthene	ug/L	50	47.5	95	26-137	
Fluorene	ug/L	50	42.6	85	59-121	
Hexachlorobenzene	ug/L	50	42.6	85	0-152	
Hexachlorobutadiene	ug/L	50	32.7	65	24-116	
Hexachlorocyclopentadiene	ug/L	50	22.2	44	10-115	
Hexachloroethane	ug/L	50	34.0	68	40-113	
Isophorone	ug/L	50	46.2	92	21-196	
Indeno(1,2,3-cd)pyrene	ug/L	50	48.4	97	0-171	
4,6-Dinitro-2-methylphenol	ug/L	50	32.8	66	0-181	
Naphthalene	ug/L	50	37.3	75	21-133	
Nitrobenzene	ug/L	50	39.7	79	35-180	
n-Nitrosodimethylamine	ug/L	50	27.1	54		
2-Nitrophenol	ug/L	50	36.3	73	29-182	
Phenanthrene	ug/L	50	43.9	88	54-120	
2,4,6-Trichlorophenol	ug/L	50	40.6	81	37-144	
Di-n-butyl phthalate	ug/L	50	51.5	103	57-126	
2-Chloronaphthalene	ug/L	50	39.8	80	60-118	
Phenol	ug/L	50	18.3	37	5-112	
2-Chlorophenol	ug/L	50	34.5	69	23-134	
n-Nitrosodi-n-propylamine	ug/L	50	42.4	85	0-230	
1,4-Dichlorobenzene	ug/L	50	33.9	68	20-124	
n-Nitrosodiphenylamine	ug/L	50	40.4	81	42-113	
1,2,4-Trichlorobenzene	ug/L	50	35.1	70	44-142	
4-Chloro-3-methylphenol	ug/L	50	40.6	81	22-147	
Acenaphthene	ug/L	50	39.7	79	47-145	
4-Nitrophenol	ug/L	50	25.1	50	0-132	
2,4-Dinitrotoluene	ug/L	50	41.1	82	39-139	
Pentachlorophenol	ug/L	50	48.4	97	14-176	
Pyrene	ug/L	50	47.2	94	52-115	
Benzidine	ug/L	50	9.7U	16	10-104	
Nitrobenzene-d5 (S)	%			82	39-117	
2-Fluorobiphenyl (S)	%			83	40-112	
Terphenyl-d14 (S)	%			112	31-146	
Phenol-d6 (S)	%			39	10-59	
2-Fluorophenol (S)	%			49	24-64	
2,4,6-Tribromophenol (S)	%			102	52-121	

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### QUALITY CONTROL DATA

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 17508

17509

Original: 901791008

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
<b>Semivolatiles</b>											
Acenaphthylene	ug/L	0.0859	50	38.4	39.9	77	80	33-145	4	20	
Anthracene	ug/L	0.0575	50	42.2	43.2	84	86	27-133	2	20	
Benzo(a)anthracene	ug/L	0	50	47.6	48.6	95	97	33-143	2	20	
Benzo(b)fluoranthene	ug/L	0	50	36.9	40.6	74	81	24-159	9	20	
Benzo(k)fluoranthene	ug/L	0	50	43.2	39.4	86	79	11-162	8	20	
Benzo(g,h,i)perylene	ug/L	0	50	45.2	46.9	90	94	0-219	4	20	
Benzo(a)pyrene	ug/L	0.0785	50	42.2	43.7	84	87	17-163	4	20	
Butyl benzyl phthalate	ug/L	0	50	51.0	50.9	102	102	0-152	0	20	
Bis(2-Chloroethoxy)methane	ug/L	0	50	38.0	37.1	76	74	33-184	3	20	
Bis(2-Chloroethyl)ether	ug/L	0	50	34.8	36.2	70	72	12-158	3	20	
Bis(2-Chloroisopropyl)ether	ug/L	0	50	35.6	36.7	71	73	36-166	3	20	
Bis(2-Ethylhexyl)phthalate	ug/L	0	50	55.1	54.6	110	109	8-158	0.9	20	
4-Bromophenyl phenyl ether	ug/L	0	50	45.4	45.7	91	91	53-127	0	20	
4-Chlorophenyl phenyl ether	ug/L	0	50	38.0	39.6	76	79	25-158	4	20	
Chrysene	ug/L	0	50	41.2	41.3	82	83	17-168	1	20	
Dibenz(a,h)anthracene	ug/L	0	50	47.2	48.1	94	96	0-227	2	20	
1,2-Dichlorobenzene	ug/L	0	50	31.4	32.1	63	64	32-129	2	20	
1,3-Dichlorobenzene	ug/L	0	50	29.4	30.7	59	61	0-172	3	20	
3,3'-Dichlorobenzidine	ug/L	0	50	40.9	40.1	82	80	0-262	2	20	
2,4-Dichlorophenol	ug/L	0	50	33.1	33.8	66	68	39-135	3	20	
Diethyl phthalate	ug/L	0	50	42.7	45.5	85	91	0-114	7	20	
2,4-Dimethylphenol	ug/L	0	50	38.4	37.1	77	74	32-119	4	20	
Dimethyl phthalate	ug/L	0.0703	50	41.5	42.9	83	86	0-112	4	20	
Di-n-octyl phthalate	ug/L	0	50	54.2	54.1	108	108	4-146	0	20	
2,4-Dinitrophenol	ug/L	0	50	35.5	35.6	71	71	0-191	0	20	
2,6-Dinitrotoluene	ug/L	0	50	38.5	38.2	77	76	50-158	1	20	
Fluoranthene	ug/L	0	50	46.4	45.5	93	91	26-137	2	20	
Fluorene	ug/L	0.0657	50	39.2	40.8	78	82	59-121	5	20	
Hexachlorobenzene	ug/L	0	50	39.1	39.4	78	79	0-152	1	20	
Hexachlorobutadiene	ug/L	0	50	30.3	31.2	61	62	24-116	2	20	
Hexachlorocyclopentadiene	ug/L	0	50	18.4	19.9	37	40	10-115	8	20	
Hexachloroethane	ug/L	0	50	30.0	32.0	60	64	40-113	6	20	
Isophorone	ug/L	0	50	42.6	42.3	85	85	21-196	0	20	
Indeno(1,2,3-cd)pyrene	ug/L	0	50	47.0	48.4	94	97	0-171	3	20	
4,6-Dinitro-2-methylphenol	ug/L	0	50	30.1	29.6	60	59	0-181	2	20	
Naphthalene	ug/L	0	50	33.7	33.9	67	68	21-133	1	20	
Nitrobenzene	ug/L	0	50	35.5	35.5	71	71	35-180	0	20	
n-Nitrosodimethylamine	ug/L	0	50	25.6	26.0	51	52		2		
2-Nitrophenol	ug/L	0	50	32.7	33.6	65	67	29-182	3	20	
Phenanthrene	ug/L	0.0608	50	41.5	41.9	83	84	54-120	1	20	
2,4,6-Trichlorophenol	ug/L	0	50	37.5	38.8	75	78	37-144	4	20	
Di-n-butyl phthalate	ug/L	0	50	48.8	49.8	98	100	57-126	2	20	
2-Chloronaphthalene	ug/L	0.0739	50	35.7	36.8	71	74	60-118	4	20	
Phenol	ug/L	0	50	16.9	16.9	34	34	5-112	0	20	

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### QUALITY CONTROL DATA

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17508

17509

Original: 901791008

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
2-Chlorophenol	ug/L	0	50	31.3	32.9	63	66	23-134	5	20	
n-Nitrosodi-n-propylamine	ug/L	0	50	37.4	38.4	75	77	0-230	3	20	
1,4-Dichlorobenzene	ug/L	0	50	30.4	31.5	61	63	20-124	3	20	
n-Nitrosodiphenylamine	ug/L	0	50	38.9	39.2	78	78	42-113	0	20	
1,2,4-Trichlorobenzene	ug/L	0	50	31.4	32.6	63	65	44-142	3	20	
4-Chloro-3-methylphenol	ug/L	0	50	37.5	37.4	75	75	22-147	0	20	
Acenaphthene	ug/L	0	50	35.9	37.5	72	75	47-145	4	20	
4-Nitrophenol	ug/L	0	50	24.3	24.3	49	49	0-132	0	20	
2,4-Dinitrotoluene	ug/L	0	50	39.3	39.8	79	80	39-139	1	20	
Pentachlorophenol	ug/L	0	50	46.9	46.3	94	93	14-176	1	20	
Pyrene	ug/L	0.0488	50	44.5	44.2	89	88	52-115	1	20	
Benzidine	ug/L	0	50	9.7U	9.7U	16	9	10-104	56	20	6,5
Nitrobenzene-d5 (S)	%					74	74	39-117	0		
2-Fluorobiphenyl (S)	%					76	80	40-112	5		
Terphenyl-d14 (S)	%					106	105	31-146	0.9		
Phenol-d6 (S)	%					36	36	10-59	0		
2-Fluorophenol (S)	%					46	47	24-64	2		
2,4,6-Tribromophenol (S)	%					97	93	52-121	4		

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### QUALITY CONTROL DATA

QC Batch: EXTO/1745 Analysis Method: EPA 1664A

QC Batch Method: EPA 1664A

Associated Lab Samples: 901783001 901783002 901789001 901839001 901842001 901843002  
901850001 901850002 901850003 901853002

METHOD BLANK: 17510

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Wet Chemistry				
Oil and Grease	mg/L	1.4U	1.4	

LABORATORY CONTROL SAMPLE: 17511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Wet Chemistry						
Oil and Grease	mg/L	200	186	93	78-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17512 17513 Original: 901791010

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
Wet Chemistry											
Oil and Grease	mg/L	0.36	200	184	181	92	90	70-130	2	20	

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### QUALITY CONTROL DATA

QC Batch: EXT0/1746 Analysis Method: EPA 504.1

QC Batch Method: EPA 504

Associated Lab Samples:	901742001	901742002	901780001	901780002	901835001	901835003
	901838001	901838002	901840001	901840002	901842001	901852001
	901852002	901852003	901872001	901872002	901873001	901873002

METHOD BLANK: 17514

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDB Analysis				
1,2-Dibromo-3-chloropropane	ug/L	0.00310U	0.00310	
1,2-Dibromoethane	ug/L	0.00640U	0.00640	
4-Bromofluorobenzene (S)	%	78	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 17515 17516

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDB Analysis										
1,2-Dibromo-3-chloropropane	ug/L	0.252	0.278	0.287	110	114	72-150	4	20	
1,2-Dibromoethane	ug/L	0.252	0.288	0.288	114	114	78-142	0	20	
4-Bromofluorobenzene (S)	%				78	77	70-130	1		

MATRIX SPIKE SAMPLE: 17517 Original: 901791009

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
EDB Analysis							
1,2-Dibromo-3-chloropropane	ug/L	0	0.252	0.287	114	70-130	
1,2-Dibromoethane	ug/L	0	0.252	0.288	114	70-130	
4-Bromofluorobenzene (S)	%				76	70-130	

SAMPLE DUPLICATE: 17518 Original: 901742001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
EDB Analysis						
1,2-Dibromo-3-chloropropane	ug/L		0.00310U	0		
1,2-Dibromoethane	ug/L		0.00640U	0		
4-Bromofluorobenzene (S)	%		72	6		

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### QUALITY CONTROL DATA

QC Batch: MISC/1114 Analysis Method: SM 2150 B

QC Batch Method: SM 2150 B

Associated Lab Samples: 901835002 901840001 901842001 901852001 901852002

METHOD BLANK: 17677

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Wet Chemistry Odor	TON	1U	1	

SAMPLE DUPLICATE: 17678

Original: 901840001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Wet Chemistry Odor	TON	16.0	16.0	0	20	

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### QUALITY CONTROL DATA

QC Batch: LACH/1768 Analysis Method: EPA 365.1

QC Batch Method: EPA 365.1

Associated Lab Samples: 901818001 901822001 901840001 901842001

METHOD BLANK: 17679

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Ortho Phosphate - P	mg/L-P	0.005U	0.005

LABORATORY CONTROL SAMPLE & LCSD: 17680 17681

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Ortho Phosphate - P	mg/L-P	0.5	0.520	0.521	104	104	90-110	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17682 17683 Original: 901818001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Ortho Phosphate - P	mg/L-P	0.247	0.5	0.768	0.770	104	105	90-110	1	20

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### QUALITY CONTROL DATA

QC Batch: HACH/1120 Analysis Method: SM 2120B Color  
QC Batch Method: SM 2120B Color  
Associated Lab Samples: 901780001 901835001 901840001 901842001

METHOD BLANK: 17684

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Color (True/Apparent)	pcu	5.0U	5.0

SAMPLE DUPLICATE: 17685

Original: 901780001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
Wet Chemistry Color (True/Apparent)	pcu	300	300	0	20

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### QUALITY CONTROL DATA

QC Batch: DIGM/1602

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Associated Lab Samples: 901823001 901826001 901827001 901828002 901828004 901829001  
901835001 901838001 901840001 901842001 901850001 901850002  
901850003

METHOD BLANK: 17690

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Aluminum	mg/L	0.046U	0.046
Chromium	mg/L	0.0011U	0.0011
Copper	mg/L	0.0096U	0.0096
Iron	mg/L	0.045U	0.045
Nickel	mg/L	0.0052U	0.0052
Silver	mg/L	0.0016U	0.0016
Sodium	mg/L	0.074U	0.074
Zinc	mg/L	0.0053U	0.0053

LABORATORY CONTROL SAMPLE: 17691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
Aluminum	mg/L	5	5.16	103	70-130
Chromium	mg/L	1	1.05	105	70-130
Copper	mg/L	1	1.06	106	70-130
Iron	mg/L	5	5.34	107	70-130
Nickel	mg/L	1	1.05	105	70-130
Silver	mg/L	0.5	0.577	115	70-130
Sodium	mg/L	25	27.4	109	70-130
Zinc	mg/L	1	1.06	106	70-130

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17692 17693 Original: 901838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Aluminum	mg/L	0.112	5	5.42	5.45	106	107	70-130	0.9	20	
Chromium	mg/L	0.00445	1	1.06	1.08	105	107	70-130	2	20	
Copper	mg/L	0.00733	1	1.07	1.08	107	108	70-130	0.9	20	
Iron	mg/L	0.193	5	5.50	5.38	106	104	70-130	2	20	
Nickel	mg/L	0.00367	1	1.04	1.05	104	105	70-130	1	20	
Silver	mg/L	-0.00322	0.5	0.605	0.580	121	116	70-130	4	20	
Sodium	mg/L	238	25	257	252	80	58	70-130	32	20	
Zinc	mg/L	0.0633	1	1.14	1.16	107	109	70-130	2	20	

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### QUALITY CONTROL DATA

QC Batch: DIGM/1603

Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8

Associated Lab Samples:	901738001	901738002	901742001	901742002	901802001	901835001
	901838001	901839001	901840001	901842001	901843002	901850001
	901850002	901850003				

METHOD BLANK: 17694

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Antimony	mg/L	0.0010U	0.0010	
Arsenic	mg/L	0.0016U	0.0016	
Barium	mg/L	0.0015U	0.0015	
Beryllium	mg/L	0.00085U	0.00085	
Cadmium	mg/L	0.00011U	0.00011	
Lead	mg/L	0.00075U	0.00075	
Manganese	mg/L	0.0011U	0.0011	
Selenium	mg/L	0.00082U	0.00082	
Thallium	mg/L	0.00027U	0.00027	

LABORATORY CONTROL SAMPLE: 17695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.2	0.216	108	85-115	
Arsenic	mg/L	0.2	0.207	104	85-115	
Barium	mg/L	0.2	0.204	102	85-115	
Beryllium	mg/L	0.2	0.208	104	85-115	
Cadmium	mg/L	0.2	0.202	101	85-115	
Lead	mg/L	0.2	0.214	107	85-115	
Manganese	mg/L	0.2	0.210	105	85-115	
Selenium	mg/L	0.2	0.199	100	85-115	
Thallium	mg/L	0.2	0.211	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17696 17697 Original: 901838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Antimony	mg/L			0.214	0.222						Q
Arsenic	mg/L			0.200	0.205						Q
Barium	mg/L	0.00704	0.2	0.201	0.208	97	101	70-130	4	20	Q
Beryllium	mg/L			0.202	0.207						Q
Cadmium	mg/L			0.188	0.198						Q
Lead	mg/L			0.212	0.215						Q
Manganese	mg/L	0.0177	0.2	0.207	0.208	95	95	70-130	0	20	Q
Selenium	mg/L			0.187	0.195						Q

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**QUALITY CONTROL DATA**

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17696 17697 Original: 901838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
Thallium	mg/L			0.209	0.210						Q

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### QUALITY CONTROL DATA

QC Batch: LACH/1770 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Associated Lab Samples: 901811001 901811002 901821001 901821002 901823001 901840001  
901841005 901841006 901842001

METHOD BLANK: 17706

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Ammonia	mg/L-N	0.0234l	0.017

LABORATORY CONTROL SAMPLE & LCSD: 17707 17708

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Ammonia	mg/L-N	2.5	2.70	2.70	108	108	90-110	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17709 17710 Original: 901810001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Ammonia	mg/L-N			2.13	2.14				1	20

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### QUALITY CONTROL DATA

QC Batch: INPR/1468 Analysis Method: SM 5540 C

QC Batch Method: SM 5540 C

Associated Lab Samples: 901780001 901835001 901838001 901840001 901842001 901852001  
901852002 901872001 901873001

METHOD BLANK: 17734

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Surfactants	mg/L-LAS	0.040U	0.040

LABORATORY CONTROL SAMPLE & LCSD: 17735 17736

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Surfactants	mg/L-LAS	1	0.997	0.979	100	98	80-120	2	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17737 17738 Original: 901844002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Surfactants	mg/L-LAS	0.271	1	1.28	1.27	101	100	80-120	1	20

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### QUALITY CONTROL DATA

QC Batch: EXT0/1758

Analysis Method: EPA 608

QC Batch Method: EPA 608

Associated Lab Samples:	901839001	901840001	901842001	901843002	901850001	901850002
	901850003	901852001	901852002	901853002	901910001	901910002

METHOD BLANK: 17796

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Pesticides			
alpha-BHC	ug/L	0.000924U	0.000924
beta-BHC	ug/L	0.00123U	0.00123
delta-BHC	ug/L	0.000904U	0.000904
Chlordane(Technical)	ug/L	0.00630U	0.00630
gamma-Chlordane	ug/L	0.00130U	0.00130
alpha-Chlordane	ug/L	0.00118U	0.00118
Heptachlor epoxide	ug/L	0.00121U	0.00121
Endosulfan I	ug/L	0.00103U	0.00103
4,4'-DDE	ug/L	0.00148U	0.00148
Endosulfan II	ug/L	0.00129U	0.00129
4,4'-DDD	ug/L	0.000993U	0.000993
Endosulfan sulfate	ug/L	0.000279U	0.000279
Methoxychlor	ug/L	0.000900U	0.000900
Endrin aldehyde	ug/L	0.000695U	0.000695
Toxaphene	ug/L	0.047U	0.047
Endrin ketone	ug/L	0.000969U	0.000969
PCB 1221	ug/L	0.014U	0.014
PCB 1232	ug/L	0.190U	0.190
PCB 1242	ug/L	0.014U	0.014
PCB 1248	ug/L	0.00850U	0.00850
PCB 1254	ug/L	0.014U	0.014
PCB 1016	ug/L	0.012U	0.012
PCB 1260	ug/L	0.015U	0.015
gamma-BHC (Lindane)	ug/L	0.000563U	0.000563
Heptachlor	ug/L	0.00152U	0.00152
Aldrin	ug/L	0.00139U	0.00139
Dieldrin	ug/L	0.00106U	0.00106
Endrin	ug/L	0.000717U	0.000717
4,4'-DDT	ug/L	0.00120U	0.00120
Tetrachloro-m-xylene (S)	%	49	32-137
Decachlorobiphenyl (S)	%	74	25-165

LABORATORY CONTROL SAMPLE: 17797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
Pesticides					
alpha-BHC	ug/L	0.1	0.067	67	33-150
beta-BHC	ug/L	0.1	0.078	78	37-162

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### QUALITY CONTROL DATA

LABORATORY CONTROL SAMPLE: 17797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
delta-BHC	ug/L	0.1	0.013I	13		
Chlordane(Technical)	ug/L		0.00630U			
gamma-Chlordane	ug/L	0.1	0.076	76	39-147	
alpha-Chlordane	ug/L	0.1	0.076	76	43-151	
Heptachlor epoxide	ug/L	0.1	0.077	77	48-138	
Endosulfan I	ug/L	0.1	0.075	75	42-148	
4,4'-DDE	ug/L	0.1	0.083I	83	38-174	
Endosulfan II	ug/L	0.1	0.084I	84	19-214	
4,4'-DDD	ug/L	0.1	0.087I	87	28-209	
Endosulfan sulfate	ug/L	0.1	0.078I	78	10-218	
Methoxychlor	ug/L	0.1	0.095	95	10-317	
Endrin aldehyde	ug/L	0.1	0.090I	90	12-217	
Toxaphene	ug/L		0.047U			
Endrin ketone	ug/L	0.1	0.076I	76	36-148	
PCB 1221	ug/L		0.014U			
PCB 1232	ug/L		0.190U			
PCB 1242	ug/L		0.014U			
PCB 1248	ug/L		0.00850U			
PCB 1254	ug/L		0.014U			
PCB 1016	ug/L		0.012U			
PCB 1260	ug/L		0.015U			
gamma-BHC (Lindane)	ug/L	0.1	0.070	70	33-155	
Heptachlor	ug/L	0.1	0.070	70	47-148	
Aldrin	ug/L	0.1	0.058	58	43-149	
Dieldrin	ug/L	0.1	0.079	79	47-162	
Endrin	ug/L	0.1	0.087I	87	41-189	
4,4'-DDT	ug/L	0.1	0.087I	87	14-228	
Tetrachloro-m-xylene (S)	%			56	32-137	
Decachlorobiphenyl (S)	%			91	25-165	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 17798

17799

Original: 901874005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Qualifiers
Pesticides										
alpha-BHC	ug/L	0	0.1	0.060	0.058	60	58	33-150	3	28
beta-BHC	ug/L	0	0.1	0.070	0.068	70	68	37-162	3	27
delta-BHC	ug/L	0	0.1	0.012I	0.012I	12	12		0	
Chlordane(Technical)	ug/L			0.00630U	0.00630U					
gamma-Chlordane	ug/L	0	0.1	0.061	0.057	61	57	39-147	7	24
alpha-Chlordane	ug/L	0	0.1	0.073	0.068	73	68	43-151	7	28
Heptachlor epoxide	ug/L	0	0.1	0.075	0.070	75	70	48-138	7	24
Endosulfan I	ug/L	0	0.1	0.074	0.068	74	68	42-148	8	24
4,4'-DDE	ug/L	0	0.1	0.078I	0.074I	78	74	38-174	5	33
Endosulfan II	ug/L	0	0.1	0.080I	0.078I	80	78	19-214	3	33

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### QUALITY CONTROL DATA

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17798

17799

Original: 901874005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
4,4'-DDD	ug/L	0	0.1	0.082I	0.079I	82	79	28-209	4	36	
Endosulfan sulfate	ug/L	0	0.1	0.073I	0.071I	73	71	10-218	3	35	
Methoxychlor	ug/L	0	0.1	0.084	0.083	84	83	10-317	1	26	
Endrin aldehyde	ug/L	0	0.1	0.070I	0.071I	70	71	12-217	1	24	
Toxaphene	ug/L			0.047U	0.047U						
Endrin ketone	ug/L	0	0.1	0.073I	0.072I	73	72	36-148	1	26	
PCB 1221	ug/L			0.014U	0.014U						
PCB 1232	ug/L			0.190U	0.190U						
PCB 1242	ug/L			0.014U	0.014U						
PCB 1248	ug/L			0.00850U	0.00850U						
PCB 1254	ug/L			0.014U	0.014U						
PCB 1016	ug/L			0.012U	0.012U						
PCB 1260	ug/L			0.015U	0.015U						
gamma-BHC (Lindane)	ug/L	0	0.1	0.065	0.061	65	61	33-155	6	26	
Heptachlor	ug/L	0	0.1	0.063	0.062	63	62	47-148	2	30	
Aldrin	ug/L	0	0.1	0.060	0.058	60	58	43-149	3	35	
Dieldrin	ug/L	0	0.1	0.077	0.071	77	71	47-162	8	33	
Endrin	ug/L	0	0.1	0.081I	0.076I	81	76	41-189	6	32	
4,4'-DDT	ug/L	0	0.1	0.078I	0.076I	78	76	14-228	3	28	
Tetrachloro-m-xylene (S)	%					50	50	32-137	0		
Decachlorobiphenyl (S)	%					79	79	25-165	0		

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### QUALITY CONTROL DATA

QC Batch: IC/1189 Analysis Method: EPA 300.0  
 QC Batch Method: EPA 300.0

Associated Lab Samples:	901784001	901821001	901821002	901823001	901831002	901835001
	901838001	901840001	901841001	901841004	901841005	901841006
	901842001	901852001	901852002	901854009	901855003	901872001
	901873001					

METHOD BLANK: 17825

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Wet Chemistry				
Nitrate	mg/L-N	0.007U	0.007	
Nitrite	mg/L-N	0.005U	0.005	
Fluoride	mg/L	0.030U	0.030	
Sulfate	mg/L	0.076U	0.076	

LABORATORY CONTROL SAMPLE & LCSD: 17826 17827

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Wet Chemistry										
Nitrate	mg/L-N	2.5	2.58	2.61	103	104	90-110	1	20	
Nitrite	mg/L-N	2.5	2.44	2.46	97	98	90-110	1	20	
Fluoride	mg/L	2.5	2.54	2.59	102	104	90-110	1.9	20	
Sulfate	mg/L	7.5	7.64	7.69	102	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17828 17829 Original: 901841001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Wet Chemistry											
Nitrate	mg/L-N	0	25	26.7	26.0	107	104	90-110	3	20	
Nitrite	mg/L-N	0	25	25.7	23.9	103	96	90-110	7	20	
Fluoride	mg/L			35.8	35.3						
Sulfate	mg/L			126	120						

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### QUALITY CONTROL DATA

QC Batch: MSV/1452

Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2

Associated Lab Samples:	901834001	901835002	901835003	901838001	901838002	901840001
	901840002	901842001	901852001	901852002	901872001	901872002
	901873001	901873002				

METHOD BLANK: 17837

Parameter	Units	Blank	Reporting	
		Result	Limit	Qualifiers
Volatiles				
Vinyl chloride	ug/L	0.120U	0.120	
1,1-Dichloroethene	ug/L	0.086U	0.086	
Methylene chloride	ug/L	0.117U	0.117	
trans-1,2-Dichloroethene	ug/L	0.087U	0.087	
cis-1,2-Dichloroethene	ug/L	0.085U	0.085	
Chloroform	ug/L	0.077U	0.077	
1,2-Dichloroethane	ug/L	0.070U	0.070	
1,1,1-Trichloroethane	ug/L	0.132U	0.132	
Benzene	ug/L	0.077U	0.077	
Carbon tetrachloride	ug/L	0.134U	0.134	
1,2-Dichloropropane	ug/L	0.093U	0.093	
Trichloroethene	ug/L	0.121U	0.121	
Bromodichloromethane	ug/L	0.091U	0.091	
Toluene	ug/L	0.140U	0.140	
Dibromochloromethane	ug/L	0.15U	0.15	
Tetrachloroethene	ug/L	0.148U	0.148	
Chlorobenzene	ug/L	0.113U	0.113	
Ethylbenzene	ug/L	0.070U	0.070	
Xylene, m,p-	ug/L	0.134U	0.134	
Bromoform	ug/L	0.15U	0.15	
Styrene	ug/L	0.040U	0.040	
Xylene, o-	ug/L	0.083U	0.083	
1,4-Dichlorobenzene	ug/L	0.150U	0.150	
1,2-Dichlorobenzene	ug/L	0.076U	0.076	
1,2,4-Trichlorobenzene	ug/L	0.117U	0.117	
1,1-Dichloroethane	ug/L	0.075U	0.075	
4-Bromofluorobenzene (S)	%	88	70-130	
1,2-Dichlorobenzene-d4 (S)	%	93	70-130	
Xylenes (total)	ug/L	0.210U	0.210	

LABORATORY CONTROL SAMPLE: 17838

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Volatiles						
Vinyl chloride	ug/L	5	5.32	106	70-130	
1,1-Dichloroethene	ug/L	5	4.50	90	70-130	
Methylene chloride	ug/L	5	3.82	76	70-130	

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### QUALITY CONTROL DATA

LABORATORY CONTROL SAMPLE: 17838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5	4.47	89	70-130	
cis-1,2-Dichloroethene	ug/L	5	4.14	83	70-130	
Chloroform	ug/L	5	4.35	87	70-130	
1,2-Dichloroethane	ug/L	5	4.32	86	70-130	
1,1,1-Trichloroethane	ug/L	5	4.31	86	70-130	
Benzene	ug/L	5	4.18	84	70-130	
Carbon tetrachloride	ug/L	5	4.38	88	70-130	
1,2-Dichloropropane	ug/L	5	4.32	86	70-130	
Trichloroethene	ug/L	5	4.52	90	70-130	
Bromodichloromethane	ug/L	5	4.08	81.6	70-130	
Toluene	ug/L	5	4.45	89	70-130	
Dibromochloromethane	ug/L	5	4.62	92.4	70-130	
Tetrachloroethene	ug/L	5	4.66	93	70-130	
Chlorobenzene	ug/L	5	4.76	95	70-130	
Ethylbenzene	ug/L	5	4.51	90	70-130	
Xylene, m,p-	ug/L	10	9.01	90	70-130	
Bromoform	ug/L	5	4.06	81.2	70-130	
Styrene	ug/L	5	4.23	85	70-130	
Xylene, o-	ug/L	5	4.35	87	70-130	
1,4-Dichlorobenzene	ug/L	5	4.71	94	70-130	
1,2-Dichlorobenzene	ug/L	5	4.62	92	70-130	
1,2,4-Trichlorobenzene	ug/L	5	4.29	86	70-130	
1,1-Dichloroethane	ug/L	5	4.46	89	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
Xylenes (total)	ug/L		13.4			

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### QUALITY CONTROL DATA

QC Batch: MICP/1259 Analysis Method: SM 5210B BOD

QC Batch Method: BOD PREP

Associated Lab Samples: 901835002 901840001 901842001 901852001 901852002 901853003  
 901872001 901873001

METHOD BLANK: 17849

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Wet Chemistry BOD	mg/L	2.0U	2.0	

LABORATORY CONTROL SAMPLE: 17851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Wet Chemistry BOD	mg/L	198	107	54	85-115	J

SAMPLE DUPLICATE: 17852

Original: 901842001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Wet Chemistry BOD	mg/L	5.63	5.68	0.9	20	

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### QUALITY CONTROL DATA

QC Batch: SOLI/1497 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C

Associated Lab Samples:	901780001	901828002	901828004	901835001	901840001	901842001
	901852001	901852002	901872001	901873001	901880001	901894001
	901894002	901922001	901922002	901922003	901922004	901922005
	901922006					

METHOD BLANK: 17860

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry			
Total Dissolved Solids(TDS)	mg/L	7.00U	7.00

SAMPLE DUPLICATE: 17861 Original: 901828002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
Wet Chemistry					
Total Dissolved Solids(TDS)	mg/L	101	96.0	5.1	20

SAMPLE DUPLICATE: 17862 Original: 901922006

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
Wet Chemistry					
Total Dissolved Solids(TDS)	mg/L	772	744	3.7	20

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### QUALITY CONTROL DATA

QC Batch: MSV/1454

Analysis Method: EPA 624

QC Batch Method: EPA 624

Associated Lab Samples:	901839001	901842001	901843002	901850002	901850003	901852002
	901852003	901853002	901908001	901908002	901910001	901910002

METHOD BLANK: 17874

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Volatiles				
Acrolein	ug/L	2.47U	2.47	
Chloromethane	ug/L	0.524U	0.524	
Vinyl chloride	ug/L	0.506U	0.506	
Bromomethane	ug/L	0.427U	0.427	
Chloroethane	ug/L	0.710U	0.710	
1,1-Dichloroethene	ug/L	0.640U	0.640	
Methylene chloride	ug/L	0.240U	0.240	
trans-1,2-Dichloroethene	ug/L	0.410U	0.410	
Acrylonitrile	ug/L	0.955U	0.955	
1,1-Dichloroethane	ug/L	0.410U	0.410	
cis-1,2-Dichloroethene	ug/L	0.442U	0.442	
Chloroform	ug/L	0.572U	0.572	
1,1,1-Trichloroethane	ug/L	0.680U	0.680	
Carbon tetrachloride	ug/L	0.468U	0.468	
Benzene	ug/L	0.621U	0.621	
1,2-Dichloroethane	ug/L	0.897U	0.897	
Trichloroethene	ug/L	0.821U	0.821	
1,2-Dichloropropane	ug/L	0.725U	0.725	
2-Chloroethylvinyl ether	ug/L	0.466U	0.466	
Bromodichloromethane	ug/L	0.140U	0.140	
cis-1,3-Dichloropropene	ug/L	0.664U	0.664	
Toluene	ug/L	0.389U	0.389	
trans-1,3-Dichloropropene	ug/L	0.522U	0.522	
1,1,2-Trichloroethane	ug/L	0.840U	0.840	
Tetrachloroethene	ug/L	0.312U	0.312	
Dibromochloromethane	ug/L	0.378U	0.378	
Chlorobenzene	ug/L	0.316U	0.316	
Ethylbenzene	ug/L	0.323U	0.323	
Bromoform	ug/L	0.486U	0.486	
1,1,2,2-Tetrachloroethane	ug/L	0.570U	0.570	
Xylene, m,p-	ug/L	0.639U	0.639	
Xylene, o-	ug/L	0.341U	0.341	
4-Bromofluorobenzene (S)	%	92	64-130	
Dibromofluoromethane (S)	%	117	69-134	
Toluene d8 (S)	%	102	63-127	

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### QUALITY CONTROL DATA

LABORATORY CONTROL SAMPLE: 17875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Volatiles						
Acrolein	ug/L	100	69.1	69	2-93	
Chloromethane	ug/L	20	23.2	116	46-173	
Vinyl chloride	ug/L	20	25.4	127	60-162	
Bromomethane	ug/L	20	19.2	96	33-170	
Chloroethane	ug/L	20	30.0	150	50-163	
1,1-Dichloroethene	ug/L	20	22.2	111	54-157	
Methylene chloride	ug/L	20	23.1	115	42-182	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	49-164	
Acrylonitrile	ug/L	100	113	113	3-107	3,J
1,1-Dichloroethane	ug/L	20	22.0	110	60-167	
cis-1,2-Dichloroethene	ug/L	20	19.4	97	51-157	
Chloroform	ug/L	20	19.2	96	60-164	
1,1,1-Trichloroethane	ug/L	20	19.4	97	45-154	
Carbon tetrachloride	ug/L	20	20.2	101	45-154	
Benzene	ug/L	20	18.7	94	59-158	
1,2-Dichloroethane	ug/L	20	20.9	104	45-166	
Trichloroethene	ug/L	20	19.0	95	59-152	
1,2-Dichloropropane	ug/L	20	19.3	97	65-155	
2-Chloroethylvinyl ether	ug/L	20	13.8	69	2-176	
Bromodichloromethane	ug/L	20	18.2	91	64-146	
cis-1,3-Dichloropropene	ug/L	20	19.3	96	53-146	
Toluene	ug/L	20	19.7	99	62-149	
trans-1,3-Dichloropropene	ug/L	20	17.9	89	51-150	
1,1,2-Trichloroethane	ug/L	20	19.9	99	62-159	
Tetrachloroethene	ug/L	20	16.7	84	50-150	
Dibromochloromethane	ug/L	20	17.2	86	51-139	
Chlorobenzene	ug/L	20	17.2	86	64-144	
Ethylbenzene	ug/L	20	18.2	91	59-149	
Bromoform	ug/L	20	12.8	64	16-166	
1,1,2,2-Tetrachloroethane	ug/L	20	16.1	80	52-177	
Xylene, m,p-	ug/L	40	36.7	92	57-153	
Xylene, o-	ug/L	20	17.4	87	69-144	
4-Bromofluorobenzene (S)	%			95	64-130	
Dibromofluoromethane (S)	%			103	69-134	
Toluene d8 (S)	%			103	63-127	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 17876

17877

Original: 901852002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Volatiles											
Acrolein	ug/L	0	100	33.7	35.1	34	35	2-93	3	20	
Chloromethane	ug/L	0	20	23.3	23.8	116	119	46-173	3	20	
Vinyl chloride	ug/L	0	20	24.4	23.6	122	118	60-162	3	20	

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### QUALITY CONTROL DATA

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 17876

17877

Original: 901852002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
Bromomethane	ug/L	0	20	12.7	13.3	64	66	33-170	3	20	
Chloroethane	ug/L	0	20	29.1	27.7	145	138	50-163	5	20	
1,1-Dichloroethene	ug/L	0	20	23.5	22.9	118	115	54-157	3	20	
Methylene chloride	ug/L	0	20	24.8	23.4	124	117	42-182	6	20	
trans-1,2-Dichloroethene	ug/L	0	20	24.3	23.3	121	116	49-164	4	20	
Acrylonitrile	ug/L	0	100	125	122	125	122	3-107	2	20	J,5
1,1-Dichloroethane	ug/L	0	20	23.2	23.1	116	116	60-167	0	20	
cis-1,2-Dichloroethene	ug/L	0	20	19.8	19.8	99	99	51-157	0	20	
Chloroform	ug/L	1.93	20	21.6	21.5	98	98	60-164	0	20	
1,1,1-Trichloroethane	ug/L	0	20	19.9	20.3	100	102	45-154	2	20	
Carbon tetrachloride	ug/L	0	20	20.9	20.7	105	104	45-154	1	20	
Benzene	ug/L	0	20	19.3	19.2	96	96	59-158	0	20	
1,2-Dichloroethane	ug/L	0	20	21.7	21.7	109	108	45-166	0.9	20	
Trichloroethene	ug/L	0	20	20.2	20.0	101	100	59-152	1	20	
1,2-Dichloropropane	ug/L	0	20	19.8	19.6	99	98	65-155	1	20	
2-Chloroethylvinyl ether	ug/L	0	20	17.0	19.7	85	99	2-176	15	20	
Bromodichloromethane	ug/L	0	20	19.4	19.3	97	96	64-146	1	20	
cis-1,3-Dichloropropene	ug/L	0	20	19.3	20.0	96	100	53-146	4	20	
Toluene	ug/L	0.31	20	20.3	20.5	102	103	62-149	1	20	
trans-1,3-Dichloropropene	ug/L	0	20	18.3	18.5	91	93	51-150	2	20	
1,1,2-Trichloroethane	ug/L	0	20	20.8	20.9	104	104	62-159	0	20	
Tetrachloroethene	ug/L	0.34	20	17.5	17.3	86	85	50-150	1	20	
Dibromochloromethane	ug/L	0	20	18.0	18.3	90	91	51-139	1	20	
Chlorobenzene	ug/L	0	20	17.4	17.9	87	90	64-144	3	20	
Ethylbenzene	ug/L	0	20	18.0	18.6	90	93	59-149	3	20	
Bromoform	ug/L	0	20	13.9	15.1	70	75	16-166	7	20	
1,1,2,2-Tetrachloroethane	ug/L	0	20	15.5	16.5	78	82	52-177	5	20	
Xylene, m,p-	ug/L	0	40	36.7	38.4	92	96	57-153	4	20	
Xylene, o-	ug/L	0	20	17.0	17.4	85	87	69-144	2	20	
4-Bromofluorobenzene (S)	%	90				92	96	64-130	4	20	
Dibromofluoromethane (S)	%	110				107	104	69-134	3	20	
Toluene d8 (S)	%	99				102	104	63-127	2	20	

MATRIX SPIKE SAMPLE: 18014

Original: 901853002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Volatiles							
Acrolein	ug/L	0	100	66.2	66	2-93	
Chloromethane	ug/L	0	20	23.2	116	46-173	
Vinyl chloride	ug/L	0	20	25.0	125	60-162	
Bromomethane	ug/L	0	20	16.5	82	33-170	
Chloroethane	ug/L	0	20	28.5	143	50-163	
1,1-Dichloroethene	ug/L	0	20	23.9	119	54-157	
Methylene chloride	ug/L	0.15	20	25.6	128	42-182	
trans-1,2-Dichloroethene	ug/L	0	20	25.9	129	49-164	
Acrylonitrile	ug/L	0	100	126	126	3-107	J,5

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### QUALITY CONTROL DATA

MATRIX SPIKE SAMPLE: 18014

Original: 901853002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	0	20	24.4	122	60-167	
cis-1,2-Dichloroethene	ug/L	0	20	21.5	108	51-157	
Chloroform	ug/L	18.9	20	37.2	92	60-164	J,5
1,1,1-Trichloroethane	ug/L	0	20	21.2	106	45-154	
Carbon tetrachloride	ug/L	0	20	22.1	110	45-154	
Benzene	ug/L	0	20	20.2	101	59-158	
1,2-Dichloroethane	ug/L	0	20	21.7	109	45-166	
Trichloroethene	ug/L	0	20	20.8	104	59-152	
1,2-Dichloropropane	ug/L	0	20	21.0	105	65-155	
2-Chloroethylvinyl ether	ug/L	0	20	2.651	13	2-176	
Bromodichloromethane	ug/L	2.63	20	22.5	99	64-146	
cis-1,3-Dichloropropene	ug/L	0	20	18.4	92	53-146	
Toluene	ug/L	8.84	20	29.4	103	62-149	
trans-1,3-Dichloropropene	ug/L	0	20	18.5	92	51-150	
1,1,2-Trichloroethane	ug/L	0	20	21.0	105	62-159	
Tetrachloroethene	ug/L	0	20	18.4	92	50-150	
Dibromochloromethane	ug/L	0.32	20	19.5	98	51-139	
Chlorobenzene	ug/L	0	20	19.1	95	64-144	
Ethylbenzene	ug/L	0	20	19.9	100	59-149	
Bromoform	ug/L	0	20	15.6	78	16-166	
1,1,2,2-Tetrachloroethane	ug/L	0	20	17.5	88	52-177	
Xylene, m,p-	ug/L	0.24	40	40.5	101	57-153	
Xylene, o-	ug/L	0	20	19.0	95	69-144	
4-Bromofluorobenzene (S)	%	86			96	64-130	
Dibromofluoromethane (S)	%	116			102	69-134	
Toluene d8 (S)	%	100			101	63-127	

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### QUALITY CONTROL DATA

QC Batch: INPR/1470 Analysis Method: EPA 335.4 Cyanide

QC Batch Method: EPA 335.2

Associated Lab Samples:	901742001	901742002	901780001	901825001	901835001	901839001
	901840001	901842001	901843002	901850001	901850002	901850003
	901852001	901852002	901853002	901907001	901907002	901907003
	901910001					

METHOD BLANK: 17913

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Total Cyanide	mg/L	0.0040U	0.0040

LABORATORY CONTROL SAMPLE & LCSD: 17914 17915

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Total Cyanide	mg/L	0.2	0.2132	0.2143	107	107	90-110	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17916 17917 Original: 901742001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Total Cyanide	mg/L	0	0.2	0.1988	0.2040	99	102	90-110	3	20

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### QUALITY CONTROL DATA

QC Batch: DIGM/1613 Analysis Method: EPA 245.1

QC Batch Method: EPA 245.1

Associated Lab Samples: 901835001 901838001 901840001 901842001 901852001 901852002  
901872001 901873001 901901001 901910001 901919001

METHOD BLANK: 17974

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Mercury	mg/L	0.000056U	0.000056

LABORATORY CONTROL SAMPLE: 17975

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
Mercury	mg/L	0.002	0.00175	88	80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17976 17977 Original: 901838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	mg/L	3.3e-005	0.002	0.00200	0.00192	100	96	80-120	4	20	Q

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### QUALITY CONTROL DATA

QC Batch: INPR/1473 Analysis Method: EPA 365.1

QC Batch Method: EPA 365.1

Associated Lab Samples:	901780001	901840001	901841002	901841004	901842001	901852001
	901852002	901853003	901854003	901854005	901854006	901854007
	901855003	901857001	901896001	901896002	901896003	901896004
	901896005	901896006				

METHOD BLANK: 17990

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Total Phosphorus	mg/L	0.004U	0.004

LABORATORY CONTROL SAMPLE & LCSD: 17991 17992

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Total Phosphorus	mg/L	0.5	0.512	0.521	102	104	90-110	1.9	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17995 17996 Original: 901896005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Total Phosphorus	mg/L	0.027	0.5	0.478	0.478	90.2	90.4	90-110	0.22	20

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### QUALITY CONTROL DATA

QC Batch: IC/1193 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Associated Lab Samples:	901778002	901821001	901833017	901835001	901838001	901840001
	901841005	901842001	901852001	901852002	901872001	901896001
	901896002	901896004	901896006	901907003		

METHOD BLANK: 18051

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry Chloride	mg/L	0.066U	0.066

LABORATORY CONTROL SAMPLE & LCSD: 18052 18053

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Chloride	mg/L	5	5.10	5.19	102	104	90-110	2	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 18054 18055 Original: 901833017

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry Chloride	mg/L			203	207					

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**QUALITY CONTROL DATA**

QC Batch: PH/1052 Analysis Method: SM4500H-B

QC Batch Method: SM4500H-B

Associated Lab Samples:	901835001	901838001	901840001	901842001	901852001	901852002
	901854001	901854004	901854005	901854009	901894001	901894002
	901896001	901896002	901896003	901896004	901896005	901896006
	901909001					

SAMPLE DUPLICATE: 18165

Original: 901896001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Wet Chemistry						
pH	pH unit	7.24	7.29	0.7	20	

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### QUALITY CONTROL DATA

QC Batch: SPCD/1026 Analysis Method: EPA 120.1

QC Batch Method: EPA 120.1

Associated Lab Samples:	901784001	901785010	901785011	901841004	901841005	901842001
	901852001	901852002	901894001	901894002	901989001	901989002
	901989003	901989004	901989005	901989006		

METHOD BLANK: 18272

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Wet Chemistry Specific Conductance	umhos/c	2U	2	

SAMPLE DUPLICATE: 18273

Original: 901784001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Wet Chemistry Specific Conductance	umhos/c	1384	1407	2		

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### QUALITY CONTROL DATA

QC Batch: INPR/1484 Analysis Method: EPA 351.2

QC Batch Method: EPA 351.2

Associated Lab Samples:	901780001	901811002	901821001	901821002	901823001	901840001
	901841004	901841005	901841006	901842001	901852001	901852002
	901853003	901854003	901854006	901854008	901855003	901857001
	901880001					

METHOD BLANK: 18613

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Wet Chemistry			
Total Kjeldahl Nitrogen	mg/L-N	0.2661	0.22

LABORATORY CONTROL SAMPLE & LCSD: 18614 18615

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry									
Total Kjeldahl Nitrogen	mg/L-N	5	4.56	5.22	91.1	104	90-110	13.2	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 18616 18617 Original: 901811002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
Wet Chemistry										
Total Kjeldahl Nitrogen	mg/L-N	6.44	5	9.74	11.0	66.1	92.1	90-110	32.9	20

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## QUALITY CONTROL DATA QUALIFIERS

### QUALITY CONTROL PARAMETER QUALIFIERS

- |     |   |
|-----|---|
| J   | Estimated value.  |
| Q   | Holding time exceeded.  |
| V   | Present in blank.   |
| [3] | NCR-LCS and/or LCSD recoveries above acceptable limits. The reported target analyte is below detection limits establishing that there is no high biased result reported |
| [5] | MS and/or MSD recoveries outside control limits. However, LCS and/or LCSD within limits. Data reported.   |
| [6] | NCR-% RPD exceeds control limits  |

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### QUALITY CONTROL CROSS REFERENCE TABLE

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
901842001	COMBINED EFFLUENT	EPA 625	EXTO/1744	EPA 625	MSSV/1248
901842001	COMBINED EFFLUENT	EPA 1664A	EXTO/1745		
901842001	COMBINED EFFLUENT	EPA 504.1	EXTO/1746	EPA 504.1	GCSV/1399
901842001	COMBINED EFFLUENT	SM 2150 B	MISC/1114		
901842001	COMBINED EFFLUENT	EPA 365.1	LACH/1768		
901842001	COMBINED EFFLUENT	SM 2120B Color	HACH/1120		
901842001	COMBINED EFFLUENT	EPA 200.7	DIGM/1602	EPA 200.7	ICP/1374
901842001	COMBINED EFFLUENT	EPA 200.8	DIGM/1603	EPA 200.8	ICPM/1076
901842001	COMBINED EFFLUENT	EPA 350.1	LACH/1770		
901842001	COMBINED EFFLUENT	SM 5540 C	INPR/1468	SM 5540 C	HACH/1123
901842001	COMBINED EFFLUENT	EPA 608	EXTO/1758	EPA 608	GCSV/1401
901842001	COMBINED EFFLUENT	EPA 300.0	IC/1189		
901842001	COMBINED EFFLUENT	EPA 524.2	MSV/1452		
901842001	COMBINED EFFLUENT	BOD PREP	MICP/1259	SM 5210B BOD	BOD/1220
901842001	COMBINED EFFLUENT	SM 2540 C	SOLI/1497		
901842001	COMBINED EFFLUENT	EPA 624	MSV/1454		
901842001	COMBINED EFFLUENT	EPA 335.2	INPR/1470	EPA 335.4 Cyanide	LACH/1791

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### QUALITY CONTROL CROSS REFERENCE TABLE

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
901842001	COMBINED EFFLUENT	EPA 245.1	DIGM/1613	EPA 245.1	HG/1081
901842001	COMBINED EFFLUENT	EPA 365.1	INPR/1473	EPA 365.1	LACH/1784
901842001	COMBINED EFFLUENT	EPA 300.0	IC/1193		
901842001	COMBINED EFFLUENT	SM4500H-B	PH/1052		
901842001	COMBINED EFFLUENT	EPA 120.1	SPCD/1026		
901842001	COMBINED EFFLUENT	EPA 351.2	INPR/1484	EPA 351.2	LACH/1828
901842001	COMBINED EFFLUENT	1613	S_06/	1613	S_06/
901842001	COMBINED EFFLUENT	EPA 100.2	S_09/	EPA 100.2	S_09/
901842001	COMBINED EFFLUENT	EPA 508.1	S_05/	EPA 508.1	S_05/
901842001	COMBINED EFFLUENT	EPA 515.3	S_05/	EPA 515.3	S_05/
901842001	COMBINED EFFLUENT	EPA 525.2	S_05/	EPA 525.2	S_05/
901842001	COMBINED EFFLUENT	EPA 531.1	S_05/	EPA 531.1	S_05/
901842001	COMBINED EFFLUENT	EPA 547	S_05/	EPA 547	S_05/
901842001	COMBINED EFFLUENT	EPA 548.1	S_05/	EPA 548.1	S_05/
901842001	COMBINED EFFLUENT	EPA 549.2	S_05/	EPA 549.2	S_05/

### CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Genapure Analytical Services, Inc..



# CHAIN OF CUSTODY RECORD

Log# 901842

T#S

Quote: 156703

Page 1 of 1

Company Name: MIAMI DADE WSD PO# 58591  
Address: 9950 SW 22 ST  
City: Miami State: FL Zip: 33170  
Attn: CLIVE POWELL Fax# 3052598520  
email: CPOWELL@MIAMI DADE.FL.GOV

Project Name: Annual Sampling Proj#

Sampler Signature: [Signature] Phone# 3052598508

#	Sample Label (Client ID)	Collect Date	Collect Time	Matrix Code*	Field Filtered	Integrity OK(Y/N)	Total # of containers
1	MW-1	6/16/04	11:35	GW	X		1
2	Combined Effluent	2/19/09	12:40	WW			29
3	Trip Blank						
4							
5							
6							
7							
8							
9							
10							

Sample	TRC	pH	Pres Codes	Parameters	# of Containers	Size/Type
				COMPLET PRELIMINARY FOURTHINGS OIL & GREASE DIOXIN (GCMS) 2/19/09 Fanning Bank WATER STANDARDS SECONDARY DRINKING WATER STANDARDS MUNICIPAL WW MIAMI CALIFORNIA	1	16ozP

**Container Type Codes**

AV	Amber Vial	ES	Encon Sampler
CV	Clear Vial	PPV	Prepreserved vial
P	Plastic	PLC	Plastic container
AL	Amber Litter	PLJ	Plastic Jar
CL	Clear Litter	ZIPC	Ziploc bag
AP	Amber Plastic	TEDLAR B	Tedlar bag
AG	Amber Glass	WHALP	Whirl pool
SJ	Soil Jar	G	Gallon Jug

Other: \_\_\_\_\_  
See(s): 2oz, 4oz, 8oz, 16oz, 32oz or 1L, 50ml other  
Example: 4ozP = 4oz Plastic, 6ozSJ = 6oz Soil Jar

**Matrix Codes\***

SD	Solid Waste	WW	Waste Water
SO	Soil	APW	Analyte Free Water
SE	Sediment	DW	Drinking Water
OL	Oil	SW	Surface Water
PE	Petroleum	AD	Aqueous
NA	Nonaqueous	SW	Source Water
ML	Misc. Liquid	A	Air
GW	Ground Water	O	Other
EFF	Effluent		(Please Specify)
INF	Influent		

**Pres/Codes**

A. None	E. HCL	I. Ios
B. HNO3	F. MeOH	J. MCAA
C. H2SO4	G. Na2S2O3	K. Zn Acetate
D. NaOH	H. NaHSO4	O. Other

**REMARKS**

Please include  
Dibromomethane  
2-METHYL-4,6-DINITROPHENOL  
2,3,7,8-TETRACHLORODIBENZO-  
-P-DIOXIN  
CALL 3059893399

TAT REQUEST		Short Hold		QA/QC Report Level		COC OK		Initials		Required State Certification		Coolers #'s	
Standard	Rush												
Item	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time	Lab Use Only				
	Clive Powell	MDWSD	2/19/09	12:30	[Signature]	GRS	2/19/09	12:30	Sample INTACT upon arrival?				
	John Fure	GRS	2/19/09	15:25	[Signature]	GRS	2/19/09	15:25	Received on Wet Ice? Temp				
									Proper Preservatives Indicated?				
									Received within holding time?				
									Custody seals intact?				
									Volatile m/c without headspace?				
									Proper Containers Used?				

3/17/2009 11:01:49AM

Client: Miami Dade County  
8950 SW 232 Street  
Miami, FL 33170

Attn: Clive Powell

Work Order: NSB1859  
Project Name: Annual Rads - South District WWTP  
Project Number: Requisition # 0000058565  
Date Received: 02/23/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
Combined Effluent	NSB1859-01	02/19/09 08:00
Reuse Effluent	NSB1859-02	02/19/09 10:20

subcontract analysis performed at Lab ID: E83033

Samples were received into laboratory at a temperature of 22.00 °C.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have recieved this material in error, please notify us immediately.

Results are reported on a wet weight basis unless otherwise noted

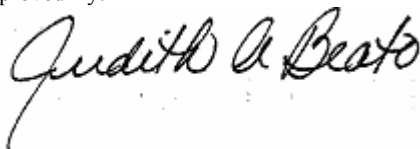
The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

These results relate only to the items tested

Estimated uncertainty is available upon request.

This report has been electronically signed.

Approved By:



TestAmerica Nashville  
Judith A Beato  
Project Manager

Client: Miami Dade County  
8950 SW 232 Street  
Miami, FL 33170  
Attn: Clive Powell

Work Order: NSB1859  
Project: Annual Rads - South District WWTP  
Project Number: Requisition # 0000058565

Sampled: 02/19/09  
Received: 02/23/09

## LABORATORY REPORT

Sample ID: Combined Effluent - Lab Number: NSB1859-01 - Matrix: Water

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Subcontracted Analysis</b>											
N/A	Gross Alpha	1.2+/-0.8	U	pCi/l	1.2	1.2	1	02/26/09 13:18	MJN	EPA 900.0	NONE
N/A	Gross Beta	19.6+/-1.1		pCi/l	1.3	1.3	1	02/26/09 13:18	MJN	EPA 900.0	NONE
13982-63-3	Radium 226	0.3+/-0.2		pCi/l	0.1	0.1	1	03/04/09 15:04	MJN	EPA 903.1	NONE
15262-20-1	Radium 228	0.7+/-0.5	U	pCi/l	0.7	0.7	1	03/02/09 14:12	PJ	EPA Ra-05	NONE

## LABORATORY REPORT

Sample ID: Reuse Effluent - Lab Number: NSB1859-02 - Matrix: Water

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Subcontracted Analysis</b>											
N/A	Gross Alpha	1.3+/-0.9	U	pCi/l	1.3	1.3	1	02/26/09 13:18	MJN	EPA 900.0	NONE
N/A	Gross Beta	22.4+/-1.2		pCi/l	1.4	1.4	1	02/26/09 13:18	MJN	EPA 900.0	NONE
13982-63-3	Radium 226	0.2+/-0.1		pCi/l	0.1	0.1	1	03/04/09 15:04	MJN	EPA 903.1	NONE
15262-20-1	Radium 228	0.7+/-0.4	U	pCi/l	0.7	0.7	1	03/02/09 14:12	PJ	EPA Ra-05	NONE



Client: Miami Dade County  
8950 SW 232 Street  
Miami, FL 33170  
Attn: Clive Powell

Work Order: NSB1859  
Project: Annual Rads - South District WWTP  
Project Number: Requisition # 0000058565

Sampled: 02/19/09  
Received: 02/23/09

## CERTIFICATION SUMMARY

### Subcontracted Laboratories

FLA Radiochemistry (11936) Florida Cert #E83033  
5456 Hoffner Avenue, Suite 201 - Orlando, FL 32812

Method Performed: EPA 900.0  
Samples: NSB1859-01, NSB1859-02

Method Performed: EPA 903.1  
Samples: NSB1859-01, NSB1859-02

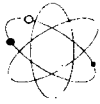
Method Performed: EPA Ra-05  
Samples: NSB1859-01, NSB1859-02

## DATA QUALIFIERS AND DEFINITIONS

**U** The compound was analyzed for but not detected

## ADDITIONAL COMMENTS

When insufficient sample volume is received for Matrix Spike and Matrix Spike Duplicate, Laboratory Control Spike and Laboratory Control Spike Duplicate data is used for batch QC.



# Florida Radiochemistry Services, Inc.

Contact: Michael J. Naumann

5456 Hoffner Ave., Suite 201 Orlando, FL 32812

Phone: (407) 382-7733 Fax: (407) 382-7744

Work Order #: 0902169

Report Date: 03/05/09

Report to:

TestAmerica, Inc.

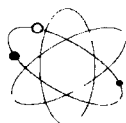
2960 Foster Creighton Dr.

Nashville, TN 37204

Attention: Judy Beato

I do hereby affirm that this record contains no willful misrepresentations and that this information given by me is true to the best of my knowledge and belief. I further certify that the methods and quality control measures used to produce these laboratory results were implemented in accordance with the requirements of this laboratory's certification and NELAC Standards. The test results in this report relate only to the samples received.

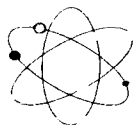
Signed Michael J. Naumann Date 3-5-09  
President



## Florida Radiochemistry Services, Inc.

### Sample Login

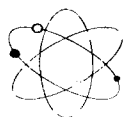
<b>Client:</b>	<b>TestAmerica-Nashville</b>	<b>Date / Time Received</b>	<b>Work order #</b>
		<b>02/24/09 11:08</b>	<b>0902169</b>
<b>Client Contact:</b>	<b>Judy Beato</b>		
<b>Client P.O.</b>			
<b>Project I.D.</b>	<b>NSB1859</b>		
<b>Lab Sample I.D.</b>	<b>Client Sample I.D.</b>	<b>Sample Date/Time</b>	<b>Analysis Requested</b>
<b>0902169-01</b>	<b>NSB1859-01</b>	<b>02/19/09 00:00</b>	<b>Ga, Gb, Ra226, Ra228</b>
<b>0902169-02</b>	<b>NSB1859-02</b>	<b>02/19/09 10:20</b>	<b>Ga, Gb, Ra226, Ra228</b>



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	0902169-01	0902169-02
Client I.D.	NSB1859-01	NSB1859-02
Gross Alpha	1.2U	1.3U
Error +/-	0.8	0.9
MDL	1.2	1.3
EPA Method	900.0	900.0
Prep Date/Time	02/25/09 06:32	02/25/09 06:32
Analysis Date/Time	02/26/09 13:18	02/26/09 13:18
Analyst	MJN	MJN
Gross Beta	19.6	22.4
Error +/-	1.1	1.2
MDL	1.3	1.4
EPA Method	900.0	900.0
Prep Date/Time	02/25/09 06:32	02/25/09 06:32
Analysis Date/Time	02/26/09 13:18	02/26/09 13:18
Analyst	MJN	MJN
Radium 226	0.3	0.2
Error +/-	0.2	0.1
MDL	0.1	0.1
EPA Method	903.1	903.1
Prep Date/Time	02/25/09 08:30	02/25/09 08:30
Analysis Date/Time	03/04/09 15:04	03/04/09 15:04
Analyst	MJN	MJN
Radium 228	0.7U	0.7U
Error +/-	0.5	0.4
MDL	0.7	0.7
EPA Method	Ra-05	Ra-05
Prep Date/Time	02/25/09 08:30	02/25/09 08:30
Analysis Date/Time	03/02/09 14:12	03/02/09 14:12
Analyst	PJ	PJ
Units	pCi/l	pCi/l



# Florida Radiochemistry Services, Inc.

## QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	0902166-01	02/26/09	<1.2	10.2	9.9	10.2	97	3.0
Gross Beta	0902166-01	02/26/09	2.5	15.7	19.3	18.3	107	5.3
Radium 226	0902169-02	03/04/09	0.2	25.2	24.4	25.0	96	2.4
Radium 228	0902169-02	03/02/09	<0.7	5.8	5.4	5.9	93	8.8

	Quality	Control	Limits
	% RPD		% Rec.
Gross Alpha	23.5		62-121
Gross Beta	16.7		80-116
Radium 226	25.0		72-125
Radium 228	20.5		80-123

**SUBCONTRACT ORDER****TestAmerica Nashville****NSB1859****SENDING LABORATORY:**

TestAmerica Nashville  
2960 Foster Creighton Road  
Nashville, TN 37204  
Phone: 800-765-0980  
Fax: 615-726-3404  
Project Manager: Judith A Beato

**RECEIVING LABORATORY:**

FLA Radiochemistry (11936)  
5456 Hoffner Avenue, Suite 201  
Orlando, FL 32812  
Phone : (407) 382-7733  
Fax: (407) 382-7744  
Project Location: Florida  
Receipt Temperature: \_\_\_\_\_ °C      Ice: Y / N

Analysis	Units	Due	Expires	Comments
<b>Sample ID: NSB1859-01      Water      Sampled: 02/19/09 00:00</b>				
Subcontract - Gross Alpha	pCi/L	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Gross Beta	%	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Radium 226	%	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Radium 228	%	03/05/09	11/14/11 23:00	FL Rad
<i>Containers Supplied:</i>				
R_1 L Plastic HNO3 (A)	R_1 L Plastic HNO3 (B)			

<b>Sample ID: NSB1859-02      Water      Sampled: 02/19/09 10:20</b>				
Subcontract - Gross Alpha	pCi/L	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Gross Beta	%	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Radium 226	%	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Radium 228	%	03/05/09	11/15/11 09:20	FL Rad
<i>Containers Supplied:</i>				
R_1 L Plastic HNO3 (A)	R_1 L Plastic HNO3 (B)			

Wesley Hester  
Released By

2/24/09  
Date/Time

Lwoods 2/24/09 11:08  
Received By      Date/Time

Released By

Date/Time

Received By

Date/Time

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4310 East Anderson Road \* Orlando, FL 32812 \* 407-851-2560 \* Fax: 407-856-0886 \* 800-851-

Client: Miami Dade County

Project: NSB1859

Shipped By: Fed Ex

Tracking Number: 869244073494

Cooler Received On: 02/23/09 14:50

And Opened On (Date/time): 2/23/09 14:50

Received By: Wesley Hoertt

Logged in by: Wesley Hoertt

Were custody seals on the outside of cooler? YES ☐ NO ☒ If Yes # ☐ Location ☐

Were custody seals intact? YES ☐ NO ☐ N/A ☒ (no seals present)

Chain of Custody Complete? YES ☒ NO ☐

Discrepancy Comments:

Cooler Tempature When Opened: 22.00 Degrees Celsius

Tempature Blank Included: YES ☐ NO ☒

Packing Material: Bubblewrap ☐ NONE ☐ Other: Plastic

Received on Ice: YES ☒ NO ☐ Other: ☐ Total # Of Containers: 4 # Vials ☐

Any Bottles Broken? YES ☐ NO ☒ If Yes Which One(s)? ☐

Any Missing Samples? YES ☐ NO ☒ If Yes Which One(s)? ☐

pH Levels: H2SO4 <=2? ☐ HNO3 <=2? ☐ HCL <=2? ☐ NaOH >=10? ☐

# Of Containers Unpreserved between 6 and 8? ☐

Any Air Bubbles in VOA Vials? YES ☐ NO ☐ N/A ☒ (no VOA vials received)

Was there enough sample shipped in each container? YES ☒ NO ☒ with 2/23/09

Correct Preservatives Used? YES ☐ NO ☒ If No, see comments:

Project Manager: Judith A Beato

Corrective Actions Taken

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To assist us in using the proper analytical methods,  
is this work being conducted for regulatory purposes?

Compliance Monitoring

NSB1859

Sampler Signature: 

Quote #: PO#: 58565

[illegible]

**Special Instructions:**

LABORATORY COMMENTS

### Init Lab Temp

Rec Lab Temp:

Custody Seals:	Y	N	N/A
----------------	---	---	-----

Bottles Supplied by TestAmerica: Y N

**Method of Shipment:**

Relinquished By: [Signature] Date: 2/19/19 Time: 15:00 Received By: [Signature] Date: 2/23/19 Time: 14:50

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_:\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_:\_\_\_\_

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
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TAL-0017 (1107)



**SUBCONTRACT ORDER****TestAmerica Nashville****NSB1859****SENDING LABORATORY:**

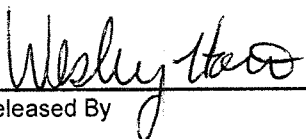
TestAmerica Nashville  
2960 Foster Creighton Road  
Nashville, TN 37204  
Phone: 800-765-0980  
Fax: 615-726-3404  
Project Manager: Judith A Beato

**RECEIVING LABORATORY:**

FLA Radiochemistry (11936)  
5456 Hoffner Avenue, Suite 201  
Orlando, FL 32812  
Phone : (407) 382-7733  
Fax: (407) 382-7744  
Project Location: Florida  
Receipt Temperature: \_\_\_\_\_ °C      Ice: Y / N

Analysis	Units	Due	Expires	Comments
<b>Sample ID: NSB1859-01</b>				
	<b>Water</b>		<b>Sampled: 02/19/09 00:00</b>	
Subcontract - Gross Alpha	pCi/L	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Gross Beta	%	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Radium 226	%	03/05/09	11/14/11 23:00	FL Rad
Subcontract - Radium 228	%	03/05/09	11/14/11 23:00	FL Rad
<i>Containers Supplied:</i>				
R_1 L Plastic HNO3 (A)	R_1 L Plastic HNO3 (B)			

<b>Sample ID: NSB1859-02</b>				
	<b>Water</b>		<b>Sampled: 02/19/09 10:20</b>	
Subcontract - Gross Alpha	pCi/L	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Gross Beta	%	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Radium 226	%	03/05/09	11/15/11 09:20	FL Rad
Subcontract - Radium 228	%	03/05/09	11/15/11 09:20	FL Rad
<i>Containers Supplied:</i>				
R_1 L Plastic HNO3 (A)	R_1 L Plastic HNO3 (B)			

  
Released By

2/24/09  
Date/Time

Received By Date/Time

Released By Date/Time

Received By Date/Time