



A Waters Company

Thekkekalathil Chandrasekhar
State of Florida DEP Chemistry Laboratory
2600 Blair Stone Road
Room A416D, MS6512
Tallahassee, FL 32399-2400

WP-195



Final Report

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 04/11/11

Close Date: 05/26/11

Report Issued Date: 06/16/11



A Waters Company

June 17, 2011

Thekkekalathil Chandrasekhar
State of Florida DEP Chemistry Laboratory
2600 Blair Stone Road
Room A416D, MS6512
Tallahassee, FL 32399-2400

Enclosed is your final report for ERA's WP-195 WatR™ Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-195 WatR™ Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the most current National Environmental Laboratory Accreditation Conference (NELAC) PT Field of Testing tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the NELAC FoPT tables. If the analyte is not included in the NELAC FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (QuiK™ Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have well over three hundred years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be helpful in helping you work through your technical issues.

Thank you for your participation in ERA's WP-195 WatR™ Pollution Proficiency Testing study. If you have any questions, please contact the proficiency testing department, or myself, at 1-800-372-0122.

Sincerely,

Jay R. McBurney
Quality Program Manager

attachments
jrm



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Report Recipient	Contact/Phone Number	Reporting Type
Florida	Steve Arms / 904-791-1502	All Analytes



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WP-195 Definitions & Study Discussion

Study Dates: 04/11/11 - 05/26/11

Report Issued: 06/16/11

WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current USEPA/NELAC FoPT tables. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards. A parameter not added to the standard is given an Assigned Value of "0" per the guidelines contained in the USEPA's Criteria Document and NELAC standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable	= Reported Value falls within the Acceptance Limits.
Not Acceptable	= Reported Value falls outside the Acceptance Limits.
No Evaluation	= Reported Value cannot be evaluated.
Not Reported	= No Value reported.

The Method Description is the method the laboratory reported to ERA.

WP Study Discussion

ERA's WP-195 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the USEPA's National Standards for Water Proficiency Testing Studies Criteria Document (December 1998), and the criteria contained in the most current NELAC FoPT tables.

ERA's WP-195 WatR™Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the USEPA's National Criteria Document for Water Proficiency Testing Studies, December 1998, and the criteria contained in the most current NELAC FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-195 WatR™Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™Pollution Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.





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Study: **WP-195**

ERA Customer Number: **S744803**

Laboratory Name: **State of Florida DEP
Chemistry Laboratory**

Inorganic Results





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QA Officer
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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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WP Minerals (cat# 581)

0027	Alkalinity as CaCO ₃	mg/L	105	102	90.6 - 112	Acceptable	SM2320B
0028	Chloride	mg/L	50.4	50.5	42.8 - 58.7	Acceptable	EPA 300.0
0020	Conductivity at 25°C	µmhos/cm	430	430	385 - 474	Acceptable	EPA 120.1
0029	Fluoride	mg/L	1.64	1.55	1.23 - 1.87	Acceptable	SM4500F- C
0026	Potassium	mg/L	26.2	26.6	21.9 - 31.7	Acceptable	EPA 200.7
0025	Sodium	mg/L	80.3	77.3	65.6 - 88.6	Acceptable	EPA 200.7
0030	Sulfate	mg/L	27.9	28.8	23.0 - 33.9	Acceptable	EPA 300.0
0021	Total Dissolved Solids at 180°C	mg/L	354	354	268 - 440	Acceptable	SM2540C
1950	Total Solids at 105°C	mg/L		370	326 - 408	Not Reported	

WP Hardness (cat# 580)

0072	Non-Filterable Residue (TSS)	mg/L	44.0	45.8	35.1 - 52.8	Acceptable	SM2540D
0023	Calcium	mg/L	53.2	52.1	46.5 - 59.1	Acceptable	EPA 200.7
0024	Magnesium	mg/L	14.4	14.4	12.3 - 16.5	Acceptable	EPA 200.7
1550	Calcium Hardness as CaCO ₃	mg/L		130	116 - 147	Not Reported	
0022	Total Hardness as CaCO ₃	mg/L		189	167 - 216	Not Reported	

WP pH (cat# 577)

0019	pH	S.U.	7.00	7.03	6.83 - 7.23	Acceptable	SM4500H+ B
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WP Simple Nutrients (cat# 584)

0031	Ammonia as N	mg/L	9.03	9.17	6.77 - 11.5	Acceptable	EPA 350.1
1820	Nitrate + Nitrite as N	mg/L	23.5	22.6	18.4 - 26.2	Acceptable	EPA 353.2
0032	Nitrate as N	mg/L	22.7	22.6	17.6 - 27.2	Acceptable	EPA 300.0
0033	ortho-Phosphate as P	mg/L	1.71	1.77	1.41 - 2.14	Acceptable	EPA 365.1

WP Complex Nutrients (cat# 579)

0034	Total Kjeldahl Nitrogen	mg/L	13.3	13.6	9.02 - 17.6	Acceptable	EPA 351.2
0035	Total phosphorus as P	mg/L	2.24	2.18	1.75 - 2.66	Acceptable	EPA 365.1

WP Nitrite (cat# 888)

1840	Nitrite as N	mg/L	2.03	2.06	1.73 - 2.39	Acceptable	EPA 353.2
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WP Demand (cat# 578)

0038	BOD	mg/L	66.0	71.5	36.0 - 107	Acceptable	SM5210B
0102	CBOD	mg/L	58.0	61.6	27.6 - 95.5	Acceptable	SM5210B
0036	COD	mg/L		116	87.1 - 135	Not Reported	
0037	TOC	mg/L	44.8	45.9	38.3 - 53.0	Acceptable	SM5310B





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WP Trace Metals (cat# 586)

0001	Aluminum	µg/L	660	647	510 - 782	Acceptable	EPA 200.7
0016	Antimony	µg/L	710	815	578 - 978	Acceptable	EPA 200.7
0002	Arsenic	µg/L	768	777	654 - 909	Acceptable	EPA 200.7
1015	Barium	µg/L	448	444	385 - 500	Acceptable	EPA 200.7
0003	Beryllium	µg/L	256	251	213 - 284	Acceptable	EPA 200.7
1025	Boron	µg/L	1930	1870	1520 - 2180	Acceptable	EPA 200.7
0004	Cadmium	µg/L	595	605	516 - 687	Acceptable	EPA 200.7
0006	Chromium	µg/L	960	941	821 - 1060	Acceptable	EPA 200.7
0005	Cobalt	µg/L	705	687	604 - 770	Acceptable	EPA 200.7
0007	Copper	µg/L	261	250	225 - 277	Acceptable	EPA 200.7
0008	Iron	µg/L	460	400	350 - 456	Not Acceptable	EPA 200.7
0012	Lead	µg/L	661	656	573 - 736	Acceptable	EPA 200.7
0010	Manganese	µg/L	398	394	353 - 438	Acceptable	EPA 200.7
0074	Molybdenum	µg/L	268	260	218 - 300	Acceptable	EPA 200.7
0011	Nickel	µg/L	261	257	227 - 290	Acceptable	EPA 200.7
0013	Selenium	µg/L	392	413	326 - 479	Acceptable	EPA 200.7
0017	Silver	µg/L	214	216	185 - 248	Acceptable	EPA 200.7
0075	Strontium	µg/L	281	275	240 - 311	Acceptable	EPA 200.7
0018	Thallium	µg/L	758	765	630 - 909	Acceptable	EPA 200.7
0014	Vanadium	µg/L	903	889	779 - 994	Acceptable	EPA 200.7
0015	Zinc	µg/L	359	345	295 - 400	Acceptable	EPA 200.7





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WP Trace Metals (cat# 586)

0001	Aluminum	µg/L	666	647	510 - 782	Acceptable	EPA 200.8
0016	Antimony	µg/L	789	815	578 - 978	Acceptable	EPA 200.8
0002	Arsenic	µg/L	740	777	654 - 909	Acceptable	EPA 200.8
1015	Barium	µg/L	438	444	385 - 500	Acceptable	EPA 200.8
0003	Beryllium	µg/L	247	251	213 - 284	Acceptable	EPA 200.8
1025	Boron	µg/L		1870	1520 - 2180	Not Reported	
0004	Cadmium	µg/L	583	605	516 - 687	Acceptable	EPA 200.8
0006	Chromium	µg/L	911	941	821 - 1060	Acceptable	EPA 200.8
0005	Cobalt	µg/L	671	687	604 - 770	Acceptable	EPA 200.8
0007	Copper	µg/L	239	250	225 - 277	Acceptable	EPA 200.8
0008	Iron	µg/L		400	350 - 456	Not Reported	
0012	Lead	µg/L	634	656	573 - 736	Acceptable	EPA 200.8
0010	Manganese	µg/L	380	394	353 - 438	Acceptable	EPA 200.8
0074	Molybdenum	µg/L	257	260	218 - 300	Acceptable	EPA 200.8
0011	Nickel	µg/L	248	257	227 - 290	Acceptable	EPA 200.8
0013	Selenium	µg/L	391	413	326 - 479	Acceptable	EPA 200.8
0017	Silver	µg/L	210	216	185 - 248	Acceptable	EPA 200.8
0075	Strontium	µg/L		275	240 - 311	Not Reported	
0018	Thallium	µg/L	718	765	630 - 909	Acceptable	EPA 200.8
0014	Vanadium	µg/L		889	779 - 994	Not Reported	
0015	Zinc	µg/L	339	345	295 - 400	Acceptable	EPA 200.8

WP Mercury (cat# 574)

0009	Mercury	µg/L	4.66	4.73	2.92 - 6.52	Acceptable	EPA 245.1
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WP Low-Level Mercury (cat# 896)

1095	Low Level Mercury	ng/L	57.2	52.6	37.8 - 66.9	Acceptable	EPA 1631E
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WP Tin & Titanium (cat# 573)

1175	Tin	µg/L	2070	1990	1570 - 2420	Acceptable	EPA 200.7
0076	Titanium	µg/L	174	171	146 - 193	Acceptable	EPA 200.7

WP Color (cat# 882)

1605	Color	PC units	42.8	45.0	35.0 - 55.0	Acceptable	SM2120B
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WP Turbidity (cat# 893)

2055	Turbidity	NTU	5.12	5.09	4.19 - 5.92	Acceptable	EPA 180.1
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WP Total Cyanide (cat# 588)

0071	Cyanide, total	mg/L	0.644	0.601	0.366 - 0.838	Acceptable	EPA 335.4
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WP Silica (cat# 890)

1990	Silica as SiO2	mg/L	76.3	73.3	55.0 - 91.6	Acceptable	EPA 200.7
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WP Sulfide (cat# 891)

2005	Sulfide	mg/L	3.25	4.17	1.55 - 6.25	Acceptable	SM4500S2- D
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All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01





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Study: **WP-195**

ERA Customer Number: **S744803**

Laboratory Name: **State of Florida DEP
Chemistry Laboratory**

Organic Results





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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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WP Volatiles (cat# 830)

4315	Acetone	µg/L		48.2	9.34 - 78.0	Not Reported	
4320	Acetonitrile	µg/L		0.00		Not Reported	
4325	Acrolein	µg/L		0.00		Not Reported	
4340	Acrylonitrile	µg/L		0.00		Not Reported	
0065	Benzene	µg/L	18.2	18.9	12.8 - 25.0	Acceptable	EPA 8260C
0060	Bromodichloromethane	µg/L	70.4	70.0	49.6 - 94.5	Acceptable	EPA 8260C
0062	Bromoform	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4950	Bromomethane	µg/L	30.1	32.0	12.8 - 51.2	Acceptable	EPA 8260C
4410	2-Butanone (MEK)	µg/L		0.00		Not Reported	
5000	tert-Butyl methyl ether (MTBE)	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4450	Carbon disulfide	µg/L		0.00		Not Reported	
0058	Carbon tetrachloride	µg/L	< 0.200	0.00		Acceptable	EPA 8260C
0064	Chlorobenzene	µg/L	65.3	63.4	45.7 - 79.4	Acceptable	EPA 8260C
0061	Chlorodibromomethane	µg/L	85.2	85.2	58.4 - 113	Acceptable	EPA 8260C
4485	Chloroethane	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4500	2-Chloroethylvinylether	µg/L		0.00		Not Reported	
0055	Chloroform	µg/L	47.6	45.9	31.7 - 59.5	Acceptable	EPA 8260C
4960	Chloromethane	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4570	1,2-Dibromo-3-chloropropane (DBCP)	µg/L		0.00		Not Reported	
4585	1,2-Dibromoethane (EDB)	µg/L		0.00		Not Reported	
4595	Dibromomethane	µg/L		0.00		Not Reported	
0094	1,2-Dichlorobenzene	µg/L	77.5	70.3	48.8 - 91.2	Acceptable	EPA 8260C
0096	1,3-Dichlorobenzene	µg/L	55.7	52.2	35.2 - 66.6	Acceptable	EPA 8260C
0095	1,4-Dichlorobenzene	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4625	Dichlorodifluoromethane (Freon 12)	µg/L		0.00		Not Reported	
4630	1,1-Dichloroethane	µg/L	16.0	17.0	11.1 - 23.1	Acceptable	EPA 8260C
0054	1,2-Dichloroethane	µg/L	18.1	17.5	12.1 - 24.0	Acceptable	EPA 8260C
4640	1,1-Dichloroethylene	µg/L	37.3	34.2	17.9 - 49.8	Acceptable	EPA 8260C
4645	cis-1,2-Dichloroethylene	µg/L	30.5	28.8	20.0 - 38.5	Acceptable	EPA 8260C
4700	trans-1,2-Dichloroethylene	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4655	1,2-Dichloropropane	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4680	cis-1,3-Dichloropropylene	µg/L	13.6	18.7	13.1 - 24.3	Acceptable	EPA 8260C



All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01





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WP Volatiles (cat# 830) (Continued)

4685	trans-1,3-Dichloropropylene	µg/L	49.6	57.2	36.7 - 77.3	Acceptable	EPA 8260C
0066	Ethylbenzene	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
4835	Hexachlorobutadiene	µg/L		0.00		Not Reported	
4860	2-Hexanone	µg/L	37.0	78.3	39.2 - 114	Not Acceptable	EPA 8260C
0063	Methylene chloride	µg/L	54.8	52.7	32.2 - 73.7	Acceptable	EPA 8260C
4995	4-Methyl-2-pentanone (MIBK)	µg/L	43.0	67.5	30.2 - 102	Acceptable	EPA 8260C
5005	Naphthalene	µg/L		0.00		Not Reported	
5100	Styrene	µg/L	79.5	76.7	48.9 - 105	Acceptable	EPA 8260C
5105	1,1,1,2-Tetrachloroethane	µg/L		0.00		Not Reported	
5110	1,1,2,2-Tetrachloroethane	µg/L	26.2	25.7	13.5 - 39.9	Acceptable	EPA 8260C
0059	Tetrachloroethylene	µg/L	60.7	62.2	34.8 - 81.3	Acceptable	EPA 8260C
0067	Toluene	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
5155	1,2,4-Trichlorobenzene	µg/L		67.0	13.8 - 82.0	Not Reported	
0056	1,1,1-Trichloroethane	µg/L	27.1	28.2	17.7 - 37.7	Acceptable	EPA 8260C
5165	1,1,2-Trichloroethane	µg/L	< 0.200	0.00		Acceptable	EPA 8260C
0057	Trichloroethylene	µg/L	65.0	63.2	40.2 - 82.5	Acceptable	EPA 8260C
5175	Trichlorofluoromethane	µg/L	< 0.500	0.00		Acceptable	EPA 8260C
5180	1,2,3-Trichloropropane (TCP)	µg/L		0.00		Not Reported	
5225	Vinyl acetate	µg/L		0.00		Not Reported	
5235	Vinyl chloride	µg/L	29.5	28.4	11.4 - 45.4	Acceptable	EPA 8260C
5260	Xylenes, total	µg/L	156.3	150	86.0 - 201	Acceptable	EPA 8260C





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WP Chlorinated Acid Herbicides (cat# 829)

8505	Acifluorfen	µg/L		4.93	0.875 - 7.34	Not Reported	
8530	Bentazon	µg/L		6.29	0.629 - 12.0	Not Reported	
8540	Chloramben	µg/L		8.25	0.825 - 12.1	Not Reported	
8545	2,4-D	µg/L	2.35	2.52	0.252 - 4.35	Acceptable	DEPSOP:LC-001-2
8560	2,4-DB	µg/L		5.76	0.576 - 11.0	Not Reported	
8550	Dacthal diacid (DCPA)	µg/L		4.37	0.437 - 7.90	Not Reported	
8555	Dalapon	µg/L		6.74	0.674 - 11.2	Not Reported	
8595	Dicamba	µg/L	5.28	6.95	0.695 - 10.1	Acceptable	DEPSOP:LC-001-2
8600	3,5-Dichlorobenzoic acid	µg/L		7.27	1.92 - 10.8	Not Reported	
8605	Dichlorprop	µg/L		4.03	0.645 - 6.01	Not Reported	
8620	Dinoseb	µg/L		4.35	0.435 - 6.76	Not Reported	
7775	MCPA	µg/L		0.00		Not Reported	
7780	MCPP	µg/L		0.00		Not Reported	
6500	4-Nitrophenol	µg/L		8.53	0.853 - 14.3	Not Reported	
6605	Pentachlorophenol	µg/L		8.70	0.870 - 13.9	Not Reported	
8645	Picloram	µg/L		6.60	0.660 - 11.8	Not Reported	
8655	2,4,5-T	µg/L	9.24	9.90	1.17 - 14.3	Acceptable	DEPSOP:LC-001-2
8650	2,4,5-TP (Silvex)	µg/L	6.4	7.55	1.15 - 10.9	Acceptable	DEPSOP:LC-001-2

WP PCBs in Water (cat# 832S)

0040	Aroclor 1016	µg/L	< 0.200	0.00		Acceptable	EPA 8082A
8885	Aroclor 1221	µg/L	< 0.200	0.00		Acceptable	EPA 8082A
0042	Aroclor 1232	µg/L	< 0.200	0.00		Acceptable	EPA 8082A
0040	Aroclor 1242	µg/L	< 0.300	0.00		Acceptable	EPA 8082A
0044	Aroclor 1248	µg/L	< 0.200	0.00		Acceptable	EPA 8082A
0045	Aroclor 1254	µg/L	3.77	4.38	2.04 - 5.74	Acceptable	EPA 8082A
0046	Aroclor 1260	µg/L	< 0.200	0.00		Acceptable	EPA 8082A

WP PCBs in Oil (cat# 835S)

8880	Aroclor 1016	mg/kg	< 0.300	0.00		Acceptable	EPA 8082
8895	Aroclor 1242	mg/kg	21.4	26.6	3.94 - 37.8	Acceptable	EPA 8082
8905	Aroclor 1254	mg/kg	< 0.200	0.00		Acceptable	EPA 8082
8910	Aroclor 1260	mg/kg	< 0.300	0.00		Acceptable	EPA 8082





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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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WP Base/Neutrals (cat# 833)

5500	Acenaphthene	µg/L	45.5	46.6	19.5 - 56.9	Acceptable	EPA 8270D
5505	Acenaphthylene	µg/L	24.0	26.4	9.67 - 33.9	Acceptable	EPA 8270D
5145	2-Amino-1-methylbenzene (o-toluidine)	µg/L		0.00		Not Reported	
5545	Aniline	µg/L		0.00		Not Reported	
5555	Anthracene	µg/L	21.1	21.8	9.79 - 29.2	Acceptable	EPA 8270D
5595	Benzidine	µg/L	< 100	0.00		Acceptable	EPA 8270D
5575	Benzo(a)anthracene	µg/L	< 0.200	0.00		Acceptable	EPA 8270D
5585	Benzo(b)fluoranthene	µg/L	< 0.200	0.00		Acceptable	EPA 8270D
5600	Benzo(k)fluoranthene	µg/L	< 0.200	0.00		Acceptable	EPA 8270D
5590	Benzo(g,h,i)perylene	µg/L	26.2	24.2	4.81 - 36.5	Acceptable	EPA 8270D
5580	Benzo(a)pyrene	µg/L	27.6	29.8	9.26 - 40.2	Acceptable	EPA 8270D
5630	Benzyl alcohol	µg/L		0.00		Not Reported	
5660	4-Bromophenyl-phenylether	µg/L	134	143	45.9 - 190	Acceptable	EPA 8270D
5670	Butylbenzylphthalate	µg/L	71.2	63.4	7.98 - 94.3	Acceptable	EPA 8270D
5680	Carbazole	µg/L		0.00		Not Reported	
5745	4-Chloroaniline	µg/L		0.00		Not Reported	
5760	bis(2-Chloroethoxy)methane	µg/L	87.8	119	47.0 - 141	Acceptable	EPA 8270D
5765	bis(2-Chloroethyl)ether	µg/L	21.4	29.2	9.58 - 39.4	Acceptable	EPA 8270D
5780	bis(2-Chloroisopropyl)ether	µg/L	35.1	47.6	13.4 - 61.1	Acceptable	EPA 8270D
5790	1-Chloronaphthalene	µg/L		0.00		Not Reported	
5795	2-Chloronaphthalene	µg/L	135	164	50.6 - 197	Acceptable	EPA 8270D
5825	4-Chlorophenyl-phenylether	µg/L	< 2.00	0.00		Acceptable	EPA 8270D
5855	Chrysene	µg/L	35.9	33.8	14.2 - 46.5	Acceptable	EPA 8270D
5895	Dibenz(a,h)anthracene	µg/L	36.3	33.8	8.95 - 49.4	Acceptable	EPA 8270D
5905	Dibenzofuran	µg/L	32.6	33.6	13.0 - 45.4	Acceptable	EPA 8270D
5925	Di-n-butylphthalate	µg/L	< 5.00	0.00		Acceptable	EPA 8270D
4610	1,2-Dichlorobenzene	µg/L		0.00		Not Reported	
4615	1,3-Dichlorobenzene	µg/L		74.6	9.48 - 88.0	Not Reported	
4620	1,4-Dichlorobenzene	µg/L		0.00		Not Reported	
5945	3,3'-Dichlorobenzidine	µg/L	< 40.0	0.00		Acceptable	EPA 8270D
6070	Diethylphthalate	µg/L	92.1	97.6	17.6 - 135	Acceptable	EPA 8270D
6135	Dimethylphthalate	µg/L	146	157	15.7 - 225	Acceptable	EPA 8270D



All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01





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Room A416D, MS6512
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WP Base/Neutrals (cat# 833) (Continued)

6185	2,4-Dinitrotoluene	µg/L	124	127	47.7 - 156	Acceptable	EPA 8270D
6190	2,6-Dinitrotoluene	µg/L	81.7	88.1	36.2 - 110	Acceptable	EPA 8270D
6200	Di-n-octylphthalate	µg/L	79.4	82.0	19.7 - 122	Acceptable	EPA 8270D
6065	bis(2-Ethylhexyl)phthalate	µg/L	48.4	48.6	14.9 - 70.4	Acceptable	EPA 8270D
6265	Fluoranthene	µg/L	60.6	55.7	25.5 - 69.9	Acceptable	EPA 8270D
6270	Fluorene	µg/L	77.6	82.6	35.1 - 99.7	Acceptable	EPA 8270D
6275	Hexachlorobenzene	µg/L	147	149	65.4 - 181	Acceptable	EPA 8270D
4835	Hexachlorobutadiene	µg/L	< 3.00	0.00		Acceptable	EPA 8270D
6285	Hexachlorocyclopentadiene	µg/L	104	152	15.2 - 196	Acceptable	EPA 8270D
4840	Hexachloroethane	µg/L	79.7	150	15.9 - 175	Acceptable	EPA 8270D
6315	Indeno(1,2,3-cd)pyrene	µg/L	43.8	40.7	8.06 - 56.4	Acceptable	EPA 8270D
6320	Isophorone	µg/L	< 1.00	0.00		Acceptable	EPA 8270D
6385	2-Methylnaphthalene	µg/L	64.8	71.3	13.0 - 86.4	Acceptable	EPA 8270D
5005	Naphthalene	µg/L	48.6	62.6	18.0 - 76.6	Acceptable	EPA 8270D
6460	2-Nitroaniline	µg/L		0.00		Not Reported	
6465	3-Nitroaniline	µg/L		0.00		Not Reported	
6470	4-Nitroaniline	µg/L		0.00		Not Reported	
5015	Nitrobenzene	µg/L	< 2.00	0.00		Acceptable	EPA 8270D
6525	N-Nitrosodiethylamine	µg/L		0.00		Not Reported	
6530	N-Nitrosodimethylamine	µg/L	44.7	97.3	9.73 - 116	Acceptable	EPA 8270D
6535	N-Nitrosodiphenylamine	µg/L	< 3.00	0.00		Acceptable	EPA 8270D
6545	N-Nitroso-di-n-propylamine	µg/L	111	125	38.5 - 157	Acceptable	EPA 8270D
6590	Pentachlorobenzene	µg/L		0.00		Not Reported	
6615	Phenanthrene	µg/L	61.1	70.1	33.1 - 85.9	Acceptable	EPA 8270D
6665	Pyrene	µg/L	45.7	43.8	14.2 - 62.9	Acceptable	EPA 8270D
5095	Pyridine	µg/L		0.00		Not Reported	
6715	1,2,4,5-Tetrachlorobenzene	µg/L		0.00		Not Reported	
5155	1,2,4-Trichlorobenzene	µg/L	52.6	73.0	15.3 - 88.8	Acceptable	EPA 8270D





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WP Acids (cat# 834)

5610	Benzoic acid	µg/L		0.00		Not Reported	
5700	4-Chloro-3-methylphenol	µg/L	51.8	55.8	20.7 - 71.8	Acceptable	EPA 8270D
5800	2-Chlorophenol	µg/L	69.9	84.1	25.0 - 106	Acceptable	EPA 8270D
6000	2,4-Dichlorophenol	µg/L	111	126	40.9 - 155	Acceptable	EPA 8270D
6005	2,6-Dichlorophenol	µg/L	164	181	63.6 - 223	Acceptable	EPA 8270D
6130	2,4-Dimethylphenol	µg/L	69.7	88.4	18.0 - 116	Acceptable	EPA 8270D
6360	4,6-Dinitro-2-methylphenol	µg/L	169	193	71.6 - 278	Acceptable	EPA 8270D
6175	2,4-Dinitrophenol	µg/L	96.3	103	10.3 - 149	Acceptable	EPA 8270D
6400	2-Methylphenol	µg/L	73.3	97.8	18.4 - 121	Acceptable	EPA 8270D
6410	4-Methylphenol	µg/L	84.7	112	11.2 - 145	Acceptable	EPA 8270D
6490	2-Nitrophenol	µg/L	< 1.00	0.00		Acceptable	EPA 8270D
6500	4-Nitrophenol	µg/L	73.5	177	17.7 - 237	Acceptable	EPA 8270D
6605	Pentachlorophenol	µg/L	152	150	41.1 - 207	Acceptable	EPA 8270D
6625	Phenol	µg/L	52.6	137	13.7 - 184	Acceptable	EPA 8270D
6735	2,3,4,6-Tetrachlorophenol	µg/L		138	31.0 - 186	Not Reported	
6835	2,4,5-Trichlorophenol	µg/L	176	165	57.0 - 208	Acceptable	EPA 8270D
6840	2,4,6-Trichlorophenol	µg/L	< 1.00	0.00		Acceptable	EPA 8270D

WP Nitroaromatics & Nitramines (cat# 932)

9306	4-Amino-2,6-dinitrotoluene	µg/L		6.02	3.31 - 8.73	Not Reported	
9303	2-Amino-4,6-dinitrotoluene	µg/L		4.57	2.51 - 6.63	Not Reported	
6160	1,3-Dinitrobenzene	µg/L	13.1	13.1	7.20 - 19.0	Acceptable	EPA 8270D
6185	2,4-Dinitrotoluene	µg/L		13.9	7.64 - 20.2	Not Reported	
6190	2,6-Dinitrotoluene	µg/L		18.8	10.3 - 27.3	Not Reported	
9522	HMX	µg/L		9.80	5.39 - 14.2	Not Reported	
5015	Nitrobenzene	µg/L		5.60	3.08 - 8.12	Not Reported	
9507	2-Nitrotoluene	µg/L		10.2	5.61 - 14.8	Not Reported	
9510	3-Nitrotoluene	µg/L		11.6	6.38 - 16.8	Not Reported	
9513	4-Nitrotoluene	µg/L		8.34	4.59 - 12.1	Not Reported	
9432	RDX	µg/L		12.2	6.71 - 17.7	Not Reported	
6415	Tetryl	µg/L		0.00		Not Reported	
6885	1,3,5-Trinitrobenzene	µg/L	1.87	2.99	1.64 - 4.34	Acceptable	EPA 8270D
9651	2,4,6-Trinitrotoluene	µg/L		13.5	7.42 - 19.6	Not Reported	





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WP Low-Level PAHs (cat# 836)

5500	Acenaphthene	µg/L	6.36	8.61	4.70 - 9.94	Acceptable	EPA 8270D
5505	Acenaphthylene	µg/L	4.28	5.40	2.61 - 6.45	Acceptable	EPA 8270D
5555	Anthracene	µg/L	1.81	1.96	0.575 - 2.66	Acceptable	EPA 8270D
5575	Benzo(a)anthracene	µg/L	1.40	1.42	0.885 - 1.59	Acceptable	EPA 8270D
5585	Benzo(b)fluoranthene	µg/L	1.76	1.72	0.718 - 2.10	Acceptable	EPA 8270D
5600	Benzo(k)fluoranthene	µg/L	0.350	0.394	0.158 - 0.534	Acceptable	EPA 8270D
5590	Benzo(g,h,i)perylene	µg/L	0.990	0.939	0.333 - 1.24	Acceptable	EPA 8270D
5580	Benzo(a)pyrene	µg/L	0.48	0.526	0.171 - 0.833	Acceptable	EPA 8270D
5855	Chrysene	µg/L	0.825	0.834	0.469 - 1.08	Acceptable	EPA 8270D
5895	Dibenz(a,h)anthracene	µg/L	1.03	0.979	0.278 - 1.40	Acceptable	EPA 8270D
6265	Fluoranthene	µg/L	1.32	1.25	0.726 - 1.52	Acceptable	EPA 8270D
6270	Fluorene	µg/L	3.73	4.03	1.67 - 4.86	Acceptable	EPA 8270D
6315	Indeno(1,2,3-cd)pyrene	µg/L	1.51	1.43	0.656 - 1.78	Acceptable	EPA 8270D
5005	Naphthalene	µg/L	6.10	9.64	3.91 - 10.6	Acceptable	EPA 8270D
6615	Phenanthrene	µg/L	1.47	1.38	0.702 - 1.66	Acceptable	EPA 8270D
6665	Pyrene	µg/L	0.425	0.442	0.226 - 0.592	Acceptable	EPA 8270D

WP Organochlorine Pesticides (cat# 831)

0047	Aldrin	µg/L	5.53	6.03	1.70 - 8.31	Acceptable	DEPSOP:GC-011-5
7110	alpha-BHC	µg/L	5.78	5.83	2.46 - 8.01	Acceptable	DEPSOP:GC-011-5
7115	beta-BHC	µg/L	13.6	14.2	5.96 - 19.0	Acceptable	DEPSOP:GC-011-5
7105	delta-BHC	µg/L	15.1	14.7	5.67 - 20.5	Acceptable	DEPSOP:GC-011-5
7120	gamma-BHC(Lindane)	µg/L	7.12	7.26	2.97 - 10.0	Acceptable	DEPSOP:GC-011-5
7240	alpha-Chlordane	µg/L	3.24	3.45	1.54 - 4.75	Acceptable	DEPSOP:GC-011-5
7245	gamma-Chlordane	µg/L	2.13	2.27	0.983 - 3.20	Acceptable	DEPSOP:GC-011-5
0049	4,4'-DDD	µg/L	9.05	8.28	3.03 - 11.8	Acceptable	DEPSOP:GC-011-5
0050	4,4'-DDE	µg/L	9.35	9.09	4.06 - 11.7	Acceptable	DEPSOP:GC-011-5
0051	4,4'-DDT	µg/L	4.19	4.08	1.53 - 5.86	Acceptable	DEPSOP:GC-011-5
0048	Dieldrin	µg/L	5.08	5.54	2.69 - 7.56	Acceptable	DEPSOP:GC-011-5
7540	Endrin	µg/L	4.58	3.72	1.43 - 5.66	Acceptable	DEPSOP:GC-011-5
7530	Endrin aldehyde	µg/L	13.3	12.8	3.87 - 19.0	Acceptable	DEPSOP:GC-011-5
7535	Endrin ketone	µg/L	6.79	7.02	3.86 - 10.2	Acceptable	DEPSOP:GC-011-5
7510	Endosulfan I	µg/L	13.0	14.1	4.33 - 20.6	Acceptable	DEPSOP:GC-011-5
7515	Endosulfan II	µg/L	11.2	12.8	3.95 - 17.0	Acceptable	DEPSOP:GC-011-5
7520	Endosulfan sulfate	µg/L	9.87	9.88	3.72 - 14.4	Acceptable	DEPSOP:GC-011-5
0052	Heptachlor	µg/L	9.15	9.17	2.97 - 12.5	Acceptable	DEPSOP:GC-011-5
0078	Heptachlor epoxide (beta)	µg/L	5.54	5.86	2.90 - 8.20	Acceptable	DEPSOP:GC-011-5
7810	Methoxychlor	µg/L	16.2	14.1	3.84 - 22.1	Acceptable	DEPSOP:GC-011-5

WP Chlordane (cat# 837)

0053	Chlordane, technical	µg/L	12.3	12.0	4.50 - 17.3	Acceptable	DEPSOP:GC-011-5
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WP Toxaphene (cat# 838)

8250	Toxaphene	µg/L	23.7	21.0	2.10 - 38.1	Acceptable	DEPSOP:GC-011-5
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WP Organophosphorous Pesticides (OPP) (cat# 934)

7075	Azinphos-methyl (Guthion)	µg/L	6.52	11.0	1.37 - 18.9	Acceptable	DEPSOP:GC-012-3
7220	Carbophenothion	µg/L		3.72	0.372 - 5.78	Not Reported	
7300	Chlorpyrifos	µg/L	2.02	3.85	1.08 - 5.42	Acceptable	DEPSOP:GC-012-3
7395	Demeton-O	µg/L		0.00		Not Reported	
7385	Demeton-S	µg/L		0.00		Not Reported	
7410	Diazinon	µg/L	10.3	12.6	4.65 - 18.5	Acceptable	DEPSOP:GC-012-3
8610	Dichlorvos (DDVP)	µg/L		0.00		Not Reported	
7475	Dimethoate	µg/L		7.12	0.712 - 11.2	Not Reported	
7495	Dioxathion	µg/L		0.00		Not Reported	
8625	Disulfoton	µg/L	14.5	14.4	2.37 - 23.4	Acceptable	DEPSOP:GC-012-3
7565	Ethion	µg/L	7.85	9.33	2.94 - 15.6	Acceptable	DEPSOP:GC-012-3
7570	Ethoprop	µg/L	8.20	10.1	3.42 - 14.0	Acceptable	DEPSOP:GC-012-3
7955	Ethyl Parathion	µg/L	11.1	13.8	7.59 - 20.0	Acceptable	DEPSOP:GC-012-3
7580	Famphur	µg/L		7.02	2.27 - 12.2	Not Reported	
7640	Fonofos	µg/L	4.91	6.56	0.656 - 12.9	Acceptable	DEPSOP:GC-012-3
7770	Malathion	µg/L	11.3	13.6	3.10 - 21.4	Acceptable	DEPSOP:GC-012-3
7825	Methyl Parathion	µg/L	3.65	7.90	2.94 - 11.2	Acceptable	DEPSOP:GC-012-3
7985	Phorate	µg/L	10.6	12.9	4.34 - 16.5	Acceptable	DEPSOP:GC-012-3
8000	Phosmet	µg/L		0.00		Not Reported	
8110	Ronnel	µg/L		4.79	1.83 - 5.84	Not Reported	
8200	Stirophos	µg/L		0.00		Not Reported	
8185	Terbufos	µg/L	15.6	18.8	5.24 - 23.3	Acceptable	DEPSOP:GC-012-3

