

August 24, 2018

John Z. French
LDHH-OPH-Engineering Services
628 N. Fourth Street
Baton Rouge, LA 70821

RE: Project: LDH/OPH/Engineering R7 Ph2/5
Pace Project No.: 35411393

Dear John French:

Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Bo Garcia
bo.garcia@pacelabs.com
(386)672-5668
Project Manager

Enclosures

cc: Parker Allen
Jeremy Harris
Spencer Hillyard
Sean Nolan
Brandon Taylor



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14

Nevada Certification: FL NELAC Reciprocity
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

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SAMPLE SUMMARY

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35411393001	LA1031007 7AJZ 1031007-011	Drinking Water	08/15/18 10:00	08/16/18 11:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
35411393001	LA1031007 7AJZ 1031007-011	EPA 504.1	SMH	2	PASI-O
		EPA 508.1	NS1	20	PASI-O
		EPA 515.3	LJM	7	PASI-O
		EPA 525.2	NS1	7	PASI-O
		EPA 531.1	LAJ	3	PASI-O
		EPA 547	LAJ	1	PASI-O
		EPA 549.2	NS1	1	PASI-O
		EPA 548.1	CB1	1	PASI-O
		EPA 524.2	JLR	24	PASI-O
		EPA 300.0	ALD	1	PASI-O
		EPA 335.4	BMU	1	PASI-O
		EPA 353.2	AMP	1	PASI-O

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Sample: LA1031007 7AJZ 1031007-011 **Lab ID:** 35411393001 Collected: 08/15/18 10:00 Received: 08/16/18 11:00 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
504.1 GCS EDB and DBCP									
Analytical Method: EPA 504.1 Preparation Method: EPA 504.1									
1,2-Dibromo-3-chloropropane	<0.0061	ug/L	0.019	0.0061	1	08/17/18 00:52	08/17/18 08:06	96-12-8	
1,2-Dibromoethane (EDB)	<0.0071	ug/L	0.0095	0.0071	1	08/17/18 00:52	08/17/18 08:06	106-93-4	
508.1 GCS Pesticides									
Analytical Method: EPA 508.1 Preparation Method: EPA 508.1									
Alachlor	<0.033	ug/L	0.19	0.033	1	08/17/18 14:45	08/20/18 11:39	15972-60-8	
gamma-BHC (Lindane)	<0.0029	ug/L	0.019	0.0029	1	08/17/18 14:45	08/20/18 11:39	58-89-9	
Chlordane (Technical)	<0.045	ug/L	0.19	0.045	1	08/17/18 14:45	08/20/18 11:39	57-74-9	
Endrin	<0.0067	ug/L	0.0096	0.0067	1	08/17/18 14:45	08/20/18 11:39	72-20-8	
Heptachlor	<0.011	ug/L	0.038	0.011	1	08/17/18 14:45	08/20/18 11:39	76-44-8	
Heptachlor epoxide	<0.0029	ug/L	0.019	0.0029	1	08/17/18 14:45	08/20/18 11:39	1024-57-3	
Hexachlorobenzene	<0.018	ug/L	0.096	0.018	1	08/17/18 14:45	08/20/18 11:39	118-74-1	
Hexachlorocyclopentadiene	<0.031	ug/L	0.096	0.031	1	08/17/18 14:45	08/20/18 11:39	77-47-4	
Methoxychlor	<0.086	ug/L	0.096	0.086	1	08/17/18 14:45	08/20/18 11:39	72-43-5	L1
PCB-1016 (Aroclor 1016)	<0.076	ug/L	0.096	0.076	1	08/17/18 14:45	08/20/18 11:39	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.028	ug/L	0.096	0.028	1	08/17/18 14:45	08/20/18 11:39	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.028	ug/L	0.096	0.028	1	08/17/18 14:45	08/20/18 11:39	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.049	ug/L	0.096	0.049	1	08/17/18 14:45	08/20/18 11:39	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.059	ug/L	0.096	0.059	1	08/17/18 14:45	08/20/18 11:39	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.022	ug/L	0.096	0.022	1	08/17/18 14:45	08/20/18 11:39	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.063	ug/L	0.096	0.063	1	08/17/18 14:45	08/20/18 11:39	11096-82-5	
PCB, Total	<0.076	ug/L	0.096	0.076	1	08/17/18 14:45	08/20/18 11:39	1336-36-3	
Simazine	<0.066	ug/L	0.17	0.066	1	08/17/18 14:45	08/20/18 11:39	122-34-9	
Toxaphene	<0.58	ug/L	0.96	0.58	1	08/17/18 14:45	08/20/18 11:39	8001-35-2	
Surrogates									
Decachlorobiphenyl (S)	98	%	70-130		1	08/17/18 14:45	08/20/18 11:39	2051-24-3	
515.3 Chlorinated Herbicides									
Analytical Method: EPA 515.3 Preparation Method: EPA 515.3									
2,4-D	<0.081	ug/L	0.10	0.081	1	08/17/18 00:27	08/20/18 21:47	94-75-7	
Dalapon	<0.89	ug/L	1.0	0.89	1	08/17/18 00:27	08/20/18 21:47	75-99-0	
Dinoseb	<0.16	ug/L	0.20	0.16	1	08/17/18 00:27	08/20/18 21:47	88-85-7	
Pentachlorophenol	<0.030	ug/L	0.040	0.030	1	08/17/18 00:27	08/20/18 21:47	87-86-5	
Picloram	<0.094	ug/L	0.10	0.094	1	08/17/18 00:27	08/20/18 21:47	1918-02-1	
2,4,5-TP (Silvex)	<0.16	ug/L	0.20	0.16	1	08/17/18 00:27	08/20/18 21:47	93-72-1	
Surrogates									
2,4-DCAA (S)	72	%	70-130		1	08/17/18 00:27	08/20/18 21:47	19719-28-9	
525.2 Semi Volatile Compounds									
Analytical Method: EPA 525.2 Preparation Method: EPA 525.2									
Atrazine	<0.074	ug/L	0.094	0.074	1	08/21/18 15:15	08/22/18 15:27	1912-24-9	
Benzo(a)pyrene	<0.012	ug/L	0.094	0.012	1	08/21/18 15:15	08/22/18 15:27	50-32-8	
bis(2-Ethylhexyl)adipate	<0.36	ug/L	1.5	0.36	1	08/21/18 15:15	08/22/18 15:27	103-23-1	
bis(2-Ethylhexyl)phthalate	<0.47	ug/L	1.9	0.47	1	08/21/18 15:15	08/22/18 15:27	117-81-7	
Surrogates									
1,3-Dimethyl-2-nitrobenzene(S)	112	%	70-130		1	08/21/18 15:15	08/22/18 15:27	81209	
Perylene-d12 (S)	108	%	70-130		1	08/21/18 15:15	08/22/18 15:27	1520963	
Triphenylphosphate (S)	125	%	70-130		1	08/21/18 15:15	08/22/18 15:27	115-86-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Sample: LA1031007 7AJZ 1031007-011 **Lab ID:** 35411393001 Collected: 08/15/18 10:00 Received: 08/16/18 11:00 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
531.1 HPLC Carbamates									
Analytical Method: EPA 531.1									
Carbofuran	<0.21	ug/L	2.0	0.21	1		08/18/18 06:59	1563-66-2	
Oxamyl	<0.18	ug/L	2.0	0.18	1		08/18/18 06:59	23135-22-0	
Surrogates									
BDMC (S)	106	%	80-120		1		08/18/18 06:59		
547 HPLC Glyphosate									
Analytical Method: EPA 547									
Glyphosate	<4.2	ug/L	6.0	4.2	1		08/21/18 16:31		L1
549.2 HPLC Paraquat Diquat									
Analytical Method: EPA 549.2 Preparation Method: EPA 549.2									
Diquat	<0.30	ug/L	0.40	0.30	1	08/16/18 23:15	08/20/18 11:20	85-00-7	L1
548.1 GCS Endothall									
Analytical Method: EPA 548.1 Preparation Method: EPA 548.1									
Endothall	<4.3	ug/L	9.0	4.3	1	08/17/18 08:03	08/20/18 21:55		
524.2 MSV									
Analytical Method: EPA 524.2									
Benzene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	71-43-2	
Carbon tetrachloride	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	56-23-5	
Chlorobenzene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	108-90-7	
1,2-Dichlorobenzene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	95-50-1	
1,4-Dichlorobenzene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	106-46-7	
1,2-Dichloroethane	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	107-06-2	
1,1-Dichloroethene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	75-35-4	
cis-1,2-Dichloroethene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	156-59-2	
trans-1,2-Dichloroethene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	156-60-5	
1,2-Dichloropropane	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	78-87-5	
Ethylbenzene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	100-41-4	
Methylene Chloride	<0.44	ug/L	0.50	0.44	1		08/20/18 21:52	75-09-2	
Styrene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	100-42-5	
Tetrachloroethene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	127-18-4	
Toluene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	108-88-3	
1,2,4-Trichlorobenzene	<0.41	ug/L	0.50	0.41	1		08/20/18 21:52	120-82-1	
1,1,1-Trichloroethane	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	71-55-6	
1,1,2-Trichloroethane	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	79-00-5	
Trichloroethene	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	79-01-6	
Vinyl chloride	<0.39	ug/L	0.50	0.39	1		08/20/18 21:52	75-01-4	
Xylene (Total)	<0.25	ug/L	0.50	0.25	1		08/20/18 21:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		08/20/18 21:52	460-00-4	
Toluene-d8 (S)	98	%	70-130		1		08/20/18 21:52	2037-26-5	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		08/20/18 21:52	17060-07-0	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Fluoride	0.34	mg/L	0.050	0.034	1		08/18/18 18:38	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Sample: LA1031007 7AJZ 1031007-011 **Lab ID:** 35411393001 Collected: 08/15/18 10:00 Received: 08/16/18 11:00 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4 Preparation Method: EPA 335.4								
Cyanide	<0.0050	mg/L	0.010	0.0050	1	08/21/18 07:30	08/21/18 12:16	57-12-5	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	<0.025	mg/L	0.050	0.025	1		08/17/18 16:50		

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch:	470169	Analysis Method:	EPA 531.1
QC Batch Method:	EPA 531.1	Analysis Description:	531.1 HPLC Carbamate
Associated Lab Samples:	35411393001		

METHOD BLANK: 2542024 Matrix: Water

Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Carbofuran	ug/L	<0.21	2.0	0.21	08/17/18 17:07	
Oxamyl	ug/L	<0.18	2.0	0.18	08/17/18 17:07	
BDMC (S)	%	104	80-120		08/17/18 17:07	

LABORATORY CONTROL SAMPLE: 2542025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbofuran	ug/L	10	9.1	91	80-120	
Oxamyl	ug/L	10	8.7	87	80-120	
BDMC (S)	%			96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2542026 2542027

Parameter	Units	2542026		2542027		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		35410917001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						MSD Result
Carbofuran	ug/L	<0.21	10	10	10.8	10.9	108	109	80-120	1	20
Oxamyl	ug/L	<0.18	10	10	11.2	11.0	112	110	80-120	2	20
BDMC (S)	%						120	110	80-120		

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5
Pace Project No.: 35411393

QC Batch: 470887 Analysis Method: EPA 547
QC Batch Method: EPA 547 Analysis Description: 547 HPLC Glyphosate
Associated Lab Samples: 35411393001

METHOD BLANK: 2545674 Matrix: Water
Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Glyphosate	ug/L	<4.2	6.0	4.2	08/21/18 12:06	

LABORATORY CONTROL SAMPLE: 2545675

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Glyphosate	ug/L	50	60.5	121	80-120	L1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2545676 2545677

Parameter	Units	10443802001 Result	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Conc.	Result	Result	% Rec	% Rec						
Glyphosate	ug/L	<0.0060 mg/L	50	50	38.0	38.3	76	77	80-120	1	30	M0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2545678 2545679

Parameter	Units	35411391001 Result	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Conc.	Result	Result	% Rec	% Rec						
Glyphosate	ug/L	4.2U	50	50	50.7	56.1	101	112	80-120	10	30			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470637 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Analysis Description: 524.2 MSV
Associated Lab Samples: 35411393001

METHOD BLANK: 2544564 Matrix: Water
Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,1,2-Trichloroethane	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,1-Dichloroethene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,2,4-Trichlorobenzene	ug/L	<0.41	0.50	0.41	08/20/18 21:03	
1,2-Dichlorobenzene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,2-Dichloroethane	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,2-Dichloropropane	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,4-Dichlorobenzene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Benzene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Carbon tetrachloride	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Chlorobenzene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
cis-1,2-Dichloroethene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Ethylbenzene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Methylene Chloride	ug/L	<0.44	0.50	0.44	08/20/18 21:03	
Styrene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Tetrachloroethene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Toluene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
trans-1,2-Dichloroethene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Trichloroethene	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
Vinyl chloride	ug/L	<0.39	0.50	0.39	08/20/18 21:03	
Xylene (Total)	ug/L	<0.25	0.50	0.25	08/20/18 21:03	
1,2-Dichloroethane-d4 (S)	%	98	70-130		08/20/18 21:03	
4-Bromofluorobenzene (S)	%	93	70-130		08/20/18 21:03	
Toluene-d8 (S)	%	98	70-130		08/20/18 21:03	

LABORATORY CONTROL SAMPLE & LCSD: 2544565

Parameter	Units	2544566							Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD		
1,1,1-Trichloroethane	ug/L	10	9.0	8.4	90	84	70-130	7	40	
1,1,2-Trichloroethane	ug/L	10	9.4	10.1	94	101	70-130	8	40	
1,1-Dichloroethene	ug/L	10	8.6	8.5	86	85	70-130	2	40	
1,2,4-Trichlorobenzene	ug/L	10	10.4	10.4	104	104	70-130	0	40	
1,2-Dichlorobenzene	ug/L	10	9.6	9.8	96	98	70-130	2	40	
1,2-Dichloroethane	ug/L	10	8.9	9.0	89	90	70-130	0	40	
1,2-Dichloropropane	ug/L	10	9.7	9.4	97	94	70-130	2	40	
1,4-Dichlorobenzene	ug/L	10	9.7	9.4	97	94	70-130	3	40	
Benzene	ug/L	10	9.8	9.7	98	97	70-130	1	40	
Carbon tetrachloride	ug/L	10	9.0	8.9	90	89	70-130	2	40	
Chlorobenzene	ug/L	10	9.4	9.3	94	93	70-130	1	40	
cis-1,2-Dichloroethene	ug/L	10	9.5	9.3	95	93	70-130	3	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Parameter	Units	2544565		2544566			% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec				
Ethylbenzene	ug/L	10	9.9	9.8	99	98	70-130	1	40	
Methylene Chloride	ug/L	10	8.2	8.4	82	84	70-130	2	40	
Styrene	ug/L	10	8.5	8.6	85	86	70-130	1	40	
Tetrachloroethene	ug/L	10	9.0	9.0	90	90	70-130	0	40	
Toluene	ug/L	10	9.4	9.2	94	92	70-130	2	40	
trans-1,2-Dichloroethene	ug/L	10	9.4	9.0	94	90	70-130	4	40	
Trichloroethene	ug/L	10	9.4	9.3	94	93	70-130	2	40	
Vinyl chloride	ug/L	10	8.3	8.1	83	81	70-130	2	40	
Xylene (Total)	ug/L	30	30.2	30.4	101	101	70-130	0	40	
1,2-Dichloroethane-d4 (S)	%				96	98	70-130			
4-Bromofluorobenzene (S)	%				98	98	70-130			
Toluene-d8 (S)	%				100	100	70-130			

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470027

Analysis Method: EPA 504.1

QC Batch Method: EPA 504.1

Analysis Description: 504 EDB DBCP

Associated Lab Samples: 35411393001

METHOD BLANK: 2541100

Matrix: Water

Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	<0.0064	0.020	0.0064	08/17/18 06:08	
1,2-Dibromoethane (EDB)	ug/L	<0.0075	0.010	0.0075	08/17/18 06:08	

LABORATORY CONTROL SAMPLE: 2541101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	.25	0.27	110	70-130	
1,2-Dibromoethane (EDB)	ug/L	.25	0.26	106	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541545 2541546

Parameter	Units	35411166003		2541546		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
1,2-Dibromo-3-chloropropane	ug/L	<0.0061	.44	.44	0.61	0.60	140	138	65-135	1	40	M1
1,2-Dibromoethane (EDB)	ug/L	<0.0072	.44	.44	0.60	0.067	137	15	65-135	160	40	M1,R1

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470249 Analysis Method: EPA 508.1
 QC Batch Method: EPA 508.1 Analysis Description: 508 GCS Pest / PCB
 Associated Lab Samples: 35411393001

METHOD BLANK: 2542348 Matrix: Water

Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alachlor	ug/L	<0.035	0.20	0.035	08/20/18 09:05	
Chlordane (Technical)	ug/L	<0.047	0.20	0.047	08/20/18 09:05	
Endrin	ug/L	<0.0070	0.010	0.0070	08/20/18 09:05	
gamma-BHC (Lindane)	ug/L	<0.0030	0.020	0.0030	08/20/18 09:05	
Heptachlor	ug/L	<0.012	0.040	0.012	08/20/18 09:05	
Heptachlor epoxide	ug/L	<0.0030	0.020	0.0030	08/20/18 09:05	
Hexachlorobenzene	ug/L	<0.019	0.10	0.019	08/20/18 09:05	
Hexachlorocyclopentadiene	ug/L	<0.032	0.10	0.032	08/20/18 09:05	
Methoxychlor	ug/L	<0.090	0.10	0.090	08/20/18 09:05	
PCB-1016 (Aroclor 1016)	ug/L	<0.080	0.10	0.080	08/20/18 09:05	
PCB-1221 (Aroclor 1221)	ug/L	<0.029	0.10	0.029	08/20/18 09:05	
PCB-1232 (Aroclor 1232)	ug/L	<0.029	0.10	0.029	08/20/18 09:05	
PCB-1242 (Aroclor 1242)	ug/L	<0.051	0.10	0.051	08/20/18 09:05	
PCB-1248 (Aroclor 1248)	ug/L	<0.062	0.10	0.062	08/20/18 09:05	
PCB-1254 (Aroclor 1254)	ug/L	<0.023	0.10	0.023	08/20/18 09:05	
PCB-1260 (Aroclor 1260)	ug/L	<0.066	0.10	0.066	08/20/18 09:05	
Simazine	ug/L	<0.069	0.18	0.069	08/20/18 09:05	
Toxaphene	ug/L	<0.61	1.0	0.61	08/20/18 09:05	
Decachlorobiphenyl (S)	%	107	70-130		08/20/18 09:05	

LABORATORY CONTROL SAMPLE: 2542349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alachlor	ug/L	1	1.2	124	70-130	
Endrin	ug/L	.05	0.064	129	70-130	
gamma-BHC (Lindane)	ug/L	.1	0.12	122	70-130	
Heptachlor	ug/L	.2	0.25	127	70-130	
Heptachlor epoxide	ug/L	.1	0.13	130	70-130	
Hexachlorobenzene	ug/L	.5	0.55	110	70-130	
Hexachlorocyclopentadiene	ug/L	.5	0.46	93	70-130	
Methoxychlor	ug/L	.5	0.70	141	70-130 L1	
Simazine	ug/L	.88	0.76	86	70-130	
Decachlorobiphenyl (S)	%			110	70-130	

LABORATORY CONTROL SAMPLE: 2542350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alachlor	ug/L	.2	0.24	121	50-150	

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

LABORATORY CONTROL SAMPLE: 2542350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	.01	0.012	123	50-150	
gamma-BHC (Lindane)	ug/L	.02	0.026	132	50-150	
Heptachlor	ug/L	.04	0.045	112	50-150	
Heptachlor epoxide	ug/L	.02	0.024	118	50-150	
Hexachlorobenzene	ug/L	.1	0.11	106	50-150	
Hexachlorocyclopentadiene	ug/L	.1	0.10J	100	50-150	
Methoxychlor	ug/L	.1	0.12	122	50-150	
Simazine	ug/L	.18	0.15J	87	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2542591 2542592

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		35411389001 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Alachlor	ug/L	0.033U	.96	.98	1.1	1.1	112	110	65-135	0	40	
Chlordane (Technical)	ug/L	0.045U			<0.045	<0.046					40	
Endrin	ug/L	0.0067U	.048	.049	0.066	0.065	137	134	65-135	0	40	M1
gamma-BHC (Lindane)	ug/L	0.0029U	.096	.098	0.13	0.13	141	137	65-135	1	40	M1
Heptachlor	ug/L	0.011U	.19	.2	0.24	0.24	123	126	65-135	4	40	
Heptachlor epoxide	ug/L	0.0029U	.096	.098	0.13	0.13	138	137	65-135	1	40	M1
Hexachlorobenzene	ug/L	0.018U	.48	.49	0.58	0.59	121	121	65-135	2	40	
Hexachlorocyclopentadiene	ug/L	0.031U	.48	.49	0.62	0.65	129	132	65-135	5	40	
Methoxychlor	ug/L	0.086U	.48	.49	0.64	0.68	134	140	65-135	7	40	M1
PCB-1016 (Aroclor 1016)	ug/L	0.076U			<0.076	<0.078					40	
PCB-1221 (Aroclor 1221)	ug/L	0.028U			<0.028	<0.028					40	
PCB-1232 (Aroclor 1232)	ug/L	0.028U			<0.028	<0.028					40	
PCB-1242 (Aroclor 1242)	ug/L	0.049U			<0.049	<0.050					40	
PCB-1248 (Aroclor 1248)	ug/L	0.059U			<0.059	<0.060					40	
PCB-1254 (Aroclor 1254)	ug/L	0.022U			<0.022	<0.022					40	
PCB-1260 (Aroclor 1260)	ug/L	0.063U			<0.063	<0.064					40	
Simazine	ug/L	0.066U	.84	.85	0.34	0.24	41	28	65-135	36	40	M1
Toxaphene	ug/L	0.58U			<0.58	<0.59					40	
Decachlorobiphenyl (S)	%						102	107	70-130		40	

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470025 Analysis Method: EPA 515.3
 QC Batch Method: EPA 515.3 Analysis Description: 5153 GCS Herbicides
 Associated Lab Samples: 35411393001

METHOD BLANK: 2541092 Matrix: Water
 Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4,5-TP (Silvex)	ug/L	<0.16	0.20	0.16	08/20/18 19:19	
2,4-D	ug/L	<0.081	0.10	0.081	08/20/18 19:19	
Dalapon	ug/L	<0.89	1.0	0.89	08/20/18 19:19	
Dinoseb	ug/L	<0.16	0.20	0.16	08/20/18 19:19	
Pentachlorophenol	ug/L	<0.030	0.040	0.030	08/20/18 19:19	
Picloram	ug/L	<0.094	0.10	0.094	08/20/18 19:19	
2,4-DCAA (S)	%	96	70-130		08/20/18 19:19	

LABORATORY CONTROL SAMPLE: 2541093

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	ug/L	.8	0.87	108	70-130	
2,4-D	ug/L	.4	0.43	106	70-130	
Dalapon	ug/L	4	4.2	105	70-130	
Dinoseb	ug/L	.8	0.84	106	70-130	
Pentachlorophenol	ug/L	.16	0.13	80	70-130	
Picloram	ug/L	.4	0.48	121	70-130	
2,4-DCAA (S)	%			96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541535 2541536

Parameter	Units	25411388001		2541536		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
2,4,5-TP (Silvex)	ug/L	<0.16	.8	.8	0.90	0.90	113	112	70-130	1	40
2,4-D	ug/L	<0.081	.4	.4	0.48	0.49	121	122	70-130	0	40
Dalapon	ug/L	<0.89	4	4	4.0	3.8	99	94	70-130	5	40
Dinoseb	ug/L	<0.16	.8	.8	0.77	0.76	96	95	70-130	1	40
Pentachlorophenol	ug/L	<0.030	.16	.16	0.13	0.12	78	77	70-130	1	40
Picloram	ug/L	<0.094	.4	.4	0.53	0.54	133	135	70-130	1	40 M1
2,4-DCAA (S)	%						81	88	70-130		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541537 2541538

Parameter	Units	25411508001		2541538		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
2,4,5-TP (Silvex)	ug/L	ND	.8	.8	0.79	0.80	99	100	70-130	1	40
2,4-D	ug/L	ND	.4	.4	0.36	0.37	91	92	70-130	2	40

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Parameter	Units	2541537		2541538		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		35411508001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Dalapon	ug/L	ND	4	4	3.8	3.7	94	92	70-130	2	40	
Dinoseb	ug/L	ND	.8	.8	0.72	0.72	90	90	70-130	0	40	
Pentachlorophenol	ug/L	ND	.16	.16	0.12	0.12	75	75	70-130	0	40	
Picloram	ug/L	ND	.4	.4	0.44	0.44	111	110	70-130	1	40	
2,4-DCAA (S)	%						87	87	70-130			

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470914

Analysis Method: EPA 525.2

QC Batch Method: EPA 525.2

Analysis Description: 525.2 DW Semivolatiles

Associated Lab Samples: 35411393001

METHOD BLANK: 2545743

Matrix: Water

Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Atrazine	ug/L	<0.079	0.10	0.079	08/22/18 11:31	
Benzo(a)pyrene	ug/L	<0.013	0.10	0.013	08/22/18 11:31	
bis(2-Ethylhexyl)adipate	ug/L	<0.38	1.6	0.38	08/22/18 11:31	
bis(2-Ethylhexyl)phthalate	ug/L	0.75J	2.0	0.50	08/22/18 11:31	
1,3-Dimethyl-2-nitrobenzene(S)	%	101	70-130		08/22/18 11:31	
Perylene-d12 (S)	%	104	70-130		08/22/18 11:31	
Triphenylphosphate (S)	%	115	70-130		08/22/18 11:31	

LABORATORY CONTROL SAMPLE: 2545744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Atrazine	ug/L	.4	0.49	124	70-130	
Benzo(a)pyrene	ug/L	.4	0.36	90	70-130	
bis(2-Ethylhexyl)adipate	ug/L	6.4	5.7	89	70-130	
bis(2-Ethylhexyl)phthalate	ug/L	8	7.9	98	70-130	
1,3-Dimethyl-2-nitrobenzene(S)	%			101	70-130	
Perylene-d12 (S)	%			104	70-130	
Triphenylphosphate (S)	%			112	70-130	

LABORATORY CONTROL SAMPLE: 2545745

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Atrazine	ug/L	.1	0.10	103	50-150	
Benzo(a)pyrene	ug/L	.1	0.081J	81	50-150	
bis(2-Ethylhexyl)adipate	ug/L	1.6	1.3J	79	50-150	
bis(2-Ethylhexyl)phthalate	ug/L	2	2.1	107	50-150	
1,3-Dimethyl-2-nitrobenzene(S)	%			102	70-130	
Perylene-d12 (S)	%			106	70-130	
Triphenylphosphate (S)	%			111	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2546312

2546313

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		Spike Conc.	Result	Spike Conc.	Result						
Atrazine	ug/L	<0.076	.39	.39	0.48	0.47	125	122	70-130	2	40
Benzo(a)pyrene	ug/L	<0.013	.39	.39	0.30	0.31	77	79	70-130	3	40
bis(2-Ethylhexyl)adipate	ug/L	<0.37	6.2	6.2	5.6	5.7	91	92	70-130	1	40

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Parameter	Units	2546312		2546313		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		35410631001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
bis(2-Ethylhexyl)phthalate	ug/L	<0.48	7.7	7.7	7.4	7.8	90	95	70-130	6	40	
1,3-Dimethyl-2-nitrobenzene(S)	%						102	102	70-130			
Perylene-d12 (S)	%						104	103	70-130			
Triphenylphosphate (S)	%						118	119	70-130			

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5
Pace Project No.: 35411393

QC Batch: 470023 Analysis Method: EPA 548.1
QC Batch Method: EPA 548.1 Analysis Description: 548 GCS Endothall
Associated Lab Samples: 35411393001

METHOD BLANK: 2541081 Matrix: Water
Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Endothall	ug/L	<4.3	9.0	4.3	08/20/18 18:26	

LABORATORY CONTROL SAMPLE: 2541082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endothall	ug/L	50	44.9	90	64-137	

LABORATORY CONTROL SAMPLE: 2541083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endothall	ug/L	9	8.9J	99	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541897 2541898

Parameter	Units	35411385001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Endothall	ug/L	4.3U	50	50	42.6	27.2	85	54	64-137	44	30	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541899 2541900

Parameter	Units	35411640001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Endothall	ug/L	4.3U	50	50	35.2	24.4	70	49	64-137	36	30	M1,R1

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470017	Analysis Method: EPA 549.2
QC Batch Method: EPA 549.2	Analysis Description: 549 HPLC Paraquat Diquat
Associated Lab Samples: 35411393001	

METHOD BLANK: 2541053 Matrix: Water
Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diquat	ug/L	<0.30	0.40	0.30	08/20/18 10:13	

LABORATORY CONTROL SAMPLE: 2541054

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diquat	ug/L	2	2.0	99	70-130	

LABORATORY CONTROL SAMPLE: 2541055

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diquat	ug/L	.4	0.69	173	50-150 L1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541508 2541509

Parameter	Units	35411388001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
										RPD	RPD	
Diquat	ug/L	<0.30	2	2	1.6	1.8	79	90	70-130	14	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541510 2541511

Parameter	Units	35411388002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
										RPD	RPD	
Diquat	ug/L	<0.30	2	2	1.8	1.9	89	93	70-130	5	30	

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470488

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 35411393001

METHOD BLANK: 2544033

Matrix: Water

Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.034	0.050	0.034	08/18/18 15:28	

LABORATORY CONTROL SAMPLE: 2544034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	5	4.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2544035 2544036

Parameter	Units	35409536001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.081	5	5	5.0	5.0	98	99	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2544037 2544038

Parameter	Units	35410806001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.10	5	5	5.0	5.0	98	97	90-110	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

QC Batch: 470853 Analysis Method: EPA 335.4
 QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
 Associated Lab Samples: 35411393001

METHOD BLANK: 2545590 Matrix: Water
 Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	mg/L	<0.0050	0.010	0.0050	08/21/18 12:12	

LABORATORY CONTROL SAMPLE: 2545591

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.05	0.053	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2545592 2545593

Parameter	Units	35411019002		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec				
Cyanide	mg/L	0.0050U	.025	.025	<0.0050	0.0061J	-4	9	90-110		20	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2545594 2545595

Parameter	Units	35410787001		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec				
Cyanide	mg/L	5.0U ug/L	.025	.025	0.025	0.025	92	90	90-110	2	20		

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QUALITY CONTROL DATA

Project: LDH/OPH/Engineering R7 Ph2/5
Pace Project No.: 35411393

QC Batch: 470295 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 35411393001

METHOD BLANK: 2542511 Matrix: Water
Associated Lab Samples: 35411393001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.025	0.050	0.025	08/17/18 16:25	

LABORATORY CONTROL SAMPLE: 2542512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 2542514

Parameter	Units	35411364005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.025	2	1.7	87	90-110	M1

MATRIX SPIKE SAMPLE: 2542516

Parameter	Units	35411381003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	2	1.9	93	90-110	

SAMPLE DUPLICATE: 2542513

Parameter	Units	35411364005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.025	<0.025		20	

SAMPLE DUPLICATE: 2542515

Parameter	Units	35411381003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.025U	<0.025		20	

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QUALIFIERS

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-O Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LDH/OPH/Engineering R7 Ph2/5

Pace Project No.: 35411393

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35411393001	LA1031007 7AJZ 1031007-011	EPA 504.1	470027	EPA 504.1	470082
35411393001	LA1031007 7AJZ 1031007-011	EPA 508.1	470249	EPA 508.1	470529
35411393001	LA1031007 7AJZ 1031007-011	EPA 515.3	470025	EPA 515.3	470677
35411393001	LA1031007 7AJZ 1031007-011	EPA 525.2	470914	EPA 525.2	471169
35411393001	LA1031007 7AJZ 1031007-011	EPA 531.1	470169		
35411393001	LA1031007 7AJZ 1031007-011	EPA 547	470887		
35411393001	LA1031007 7AJZ 1031007-011	EPA 549.2	470017	EPA 549.2	470590
35411393001	LA1031007 7AJZ 1031007-011	EPA 548.1	470023	EPA 548.1	470570
35411393001	LA1031007 7AJZ 1031007-011	EPA 524.2	470637		
35411393001	LA1031007 7AJZ 1031007-011	EPA 300.0	470488		
35411393001	LA1031007 7AJZ 1031007-011	EPA 335.4	470853	EPA 335.4	470941
35411393001	LA1031007 7AJZ 1031007-011	EPA 353.2	470295		



REPORT OF LABORATORY ANALYSIS

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EXPEDITE

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A: Originator LDH/OPH/Engineering R7 1525 Fairfield Ave., Rm 569 Shreveport LA 71101 John.French@LA.gov		Section B: Project Information Report To: John Z. French, PE John.French@LA.gov PO #: 2000338900 Interim Analysis for LDH/OPH/BR Lab		Section C: Ship to Destination Pace Analytical Services - Florida Attn: Bo Garcia 8 East Tower Circle Ormond Beach, FL 32174 386-676-4810 Bo.Garcia@pacelabs.com		RETURN Ice Chest to LDH/OPH/Engineering R7 1525 Fairfield Ave., Rm 569 Shreveport LA 71101 John.French@LA.gov							
Section D Required Client Information		W0#: 35411393 		# OF CONTAINERS		ice Project Number Lab I.D.							
# ITEM	SAMPLE ID	COLLECTED		DATE	TIME	RELEASED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
		MATRIX CODE	SAMPLE TYPE						G-GRAB	C-COMP	Received on	Custody	Sealed Cooler
1	LA1031007 7AJZ 1031007-011 KEATCHIE WATER SYSTEM	DW	G	8/15/2018	10:00	TIFFANY ROBERSON/LDH	15-Aug	15:30	8/16/18 1100	4.8	Y/N	Y/N	Y/N
2		DW	G								Y/N	Y/N	Y/N
3		DW	G								Y/N	Y/N	Y/N
4		DW	G								Y/N	Y/N	Y/N
5		DW	G								Y/N	Y/N	Y/N
6		DW	G								Y/N	Y/N	Y/N
7		DW	G								Y/N	Y/N	Y/N
8		DW	G								Y/N	Y/N	Y/N
9		DW	G								Y/N	Y/N	Y/N
10		DW	G								Y/N	Y/N	Y/N
# of Ice Chests in this Shipment 2		COMPOSITE START TIME COMPOSITE END OR GRAB TIME		DATE TIME		ACCEPTED BY / AFFILIATION DATE		TIME DATE		SAMPLE CONDITIONS Received on Custody Sealed Cooler Samples			
Ice Chest (No _ of _)		DATE TIME		DATE TIME		ACCEPTED BY / AFFILIATION DATE		TIME DATE		SAMPLE CONDITIONS Received on Custody Sealed Cooler Samples			
Additional Comments: EXPEDITE		SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:		TISSY ROBERSON 		DATE Signed (MM / DD / YY) 8/15/2018		Temp in °C		Intact			



Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-FL-C-007 rev. 13

Document Revised:
May 30, 2018
Issuing Authority:
Pace Florida Quality Office

WO#: 35411393

(SCUR)

Project # PM: VEG **Due Date:** 08/21/18
Project Manager: CLIENT: LDHOPH
Client:

Date and Initials of person:
Examining contents: MM
Label: _____
Deliver: _____
pH: _____

Thermometer Used: T345 Date: 8/16/14 Time: 1100 Initials: DRL

State of Origin: _____ For WW projects, all containers verified to ≤6 °C

Cooler #1 Temp. °C 1.1 (Visual) 10.2 (Correction Factor) 1.3 (Actual)
Cooler #2 Temp. °C 4.6 (Visual) 10.2 (Correction Factor) 4.8 (Actual)
Cooler #3 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)
Cooler #4 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)
Cooler #5 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)
Cooler #6 Temp. °C _____ (Visual) _____ (Correction Factor) _____ (Actual)

- Samples on ice, cooling process has begun
- Samples on ice, cooling process has begun
- Samples on ice, cooling process has begun
- Samples on ice, cooling process has begun
- Samples on ice, cooling process has begun
- Samples on ice, cooling process has begun

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Shipping Method: First Overnight Priority Overnight Standard Overnight Ground International Priority
 Other _____

Billing: Recipient Sender Third Party Credit Card Unknown

Tracking # MSTR 7729 8366 7977

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Ice: Wet Blue Dry None

Packing Material: Bubble Wrap Bubble Bags None Other _____

Samples shorted to lab (If Yes, complete) Shorted Date: _____ Shorted Time: _____ Qty: _____

Comments:

Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>EXPEDITE</u>
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing acid/base preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: VOA, Coliform, TOC, O&G, Carbamates	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution (use back for additional comments): _____

Project Manager Review: _____

Date: _____