



August 7, 2012

Mr. Michael V. Saar, P.E.
Water Resources Manager
Division of Wastewater/Solid Waste
Jamestown Board of Public Utilities
P.O. Box 700
Jamestown, NY 14702-0700

**Subject: Essex/Hope Site
Semi-Annual Self Monitoring Report
January through June 2012
BPU Permit No. 26
URS Project No. 41569181**

Dear Mr. Saar:

This submittal represents the January through June 2012 monitoring report in accordance with the City of Jamestown Board of Public Utilities Industrial Wastewater Discharge Permit Number 26 for the Essex Specialty Products, Inc facility referenced above. For reporting purposes, Essex Specialty Products, Inc., is classified as a Significant Industrial User subject to Categorical Pretreatment Standards. As such, this report has been developed in accordance with the requirements of 40 CFR 403.12(e).

Specific requirements included in this report as shown on Table 1 are as follows:

- Concentrations of Total Toxic Organics (TTOs) in discharge to POTW as measured monthly. Note: The Baseline Monitoring conducted for the discharge identified volatile organic compounds (VOCs) as approximately 98% of the influent TTO component. Non-volatile components historically were not a major component of chemical usage at the site. Based on these conditions, the permit requires sampling of VOCs to measure TTO concentration.
- pH of discharge to POTW as measured monthly.
- Flow rate of discharge to POTW as measured monthly.
- Estimated daily average and maximum flow rates.

URS Corporation
Foster Plaza 4, Suite 300
501 Holiday Drive
Pittsburgh, PA 15205
Tel: 412-503-4700
Fax: 412-503-4701
www.urscorp.com

This Semi-Annual Report contains system influent and effluent data for January through June 2012. No noncompliance events occurred during this reporting period. The system carbon was changed out on January 4, 2012 and May 1, 2012. Table 1 summarizes the monthly discharge rates, and the total VOCs and constituents detected in the discharge to the POTW for each month. Discharge flow rates for the reporting period ranged from 105,413 to 158,964 gallons per month over the reporting period. The daily average flow rates shown on Table 1 were estimated based upon the total volume of water discharged per month. Daily maximum flow rates were estimated to be 20 percent greater than daily averages. The supporting Laboratory Certificates of Analysis for the reported concentrations of VOCs are also attached.

We trust that this submittal satisfies our reporting obligation pursuant to 40 CFR 403.12. If you have any questions or require additional information, please contact me at (412) 503-4672.

Sincerely,

URS

A handwritten signature in black ink that reads "Mark Dowiak /vs.". The signature is written in a cursive, flowing style.

Mark Dowiak, P.E.
Project Manager

Attachment

cc: Tim King (Dow)
Maurice Moore (NYSDEC)
Valerie Sibeto (URS)

Table 1
January - June 2012
Post Carbon (Effluent) Monitoring Data
Essex/Hope Site
Jamestown, NY

Reporting Requirements for Pre-Treated Discharge (System Effluent to POTW)	Industrial Wastewater Discharge Permit #26 Limits	January	February	March	April	May	June
POTW Discharge Analytical Data							
Total TTOs (µg/L)	2,130 µg/L (TTO)	381	773	867	1,002	51	35
Detected Compounds	Report	cis-1,2-DCE, TCE, Vinyl Chloride	cis-1,2-DCE, TCE, Vinyl Chloride	cis-1,2-DCE, TCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride
pH (Standard Units)	5.5 to 10	7.20	7.20	7.13	7.60	7.60	7.00
		7.20	7.20	7.16	7.60	7.60	7.00
		7.20	7.20	7.23	7.60	7.60	7.00
		7.20	7.20	7.31	7.60	7.60	7.00
POTW Discharge Flow Data							
Monthly Total Flow (gallons)	Report	146,245	149,219	118,895	115,230	158,964	105,413
Average Daily Flow (gallons)	Report	4,718	5,329	3,835	3,841	5,128	3,154
Maximum Daily Flow (gallons)	Report	5,661	6,395	4,602	4,609	6,153	4,217

Notes:

Jamestown BPU Industrial Wastewater Discharge Permit #26 effective 11/5/07 through 11/4/12.

Maximum Daily Flow is estimated to be 20% greater than Average Daily Flow.

VOCs sample is a laboratory prepared composite of 4 grab samples collected from the pre-treatment system discharge to the POTW at 30 minute intervals.

pH measurements recorded are concurrent with the time of each grab sample. Italicized measurements are approximate.

TTO = Total Toxic Organics

System Carbon was changed out on January 4, 2012 and May 1, 2012.

January 23, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

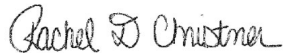
RE: Project: 41569181.100000 Essex/Hope
Pace Project No.: 3061307

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on January 18, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Rachel Christner

rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/NELAC Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/NELAC Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/NELAC Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/NELAC Certification #: LA080002

Louisiana/NELAC Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/NELAC Certification #: 2976

New Jersey/NELAC Certification #: PA 051

New Mexico Certification

New York/NELAC Certification #: 10888

North Carolina Certification #: 42706

Oregon/NELAC Certification #: PA200002

Pennsylvania/NELAC Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/NELAC Certification #: T104704188-09 TX

Utah/NELAC Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C1941

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Sample: PRE-CARB		Lab ID: 3061307001	Collected: 01/17/12 11:20	Received: 01/18/12 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		01/20/12 15:19	67-64-1	
Benzene	4.0	ug/L	1.0	1		01/20/12 15:19	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/20/12 15:19	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/20/12 15:19	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/20/12 15:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		01/20/12 15:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/20/12 15:19	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/20/12 15:19	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/20/12 15:19	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/20/12 15:19	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/20/12 15:19	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/20/12 15:19	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/20/12 15:19	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 15:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 15:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 15:19	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/20/12 15:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/20/12 15:19	107-06-2	
1,1-Dichloroethene	10.9	ug/L	5.0	1		01/20/12 15:19	75-35-4	
cis-1,2-Dichloroethene	2800	ug/L	100	20		01/20/12 15:43	156-59-2	
trans-1,2-Dichloroethene	56.2	ug/L	5.0	1		01/20/12 15:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/20/12 15:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 15:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 15:19	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/20/12 15:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/20/12 15:19	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/20/12 15:19	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/20/12 15:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/20/12 15:19	108-10-1	
Styrene	ND	ug/L	5.0	1		01/20/12 15:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/20/12 15:19	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/20/12 15:19	127-18-4	
Toluene	ND	ug/L	5.0	1		01/20/12 15:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/20/12 15:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/20/12 15:19	79-00-5	
Trichloroethene	476	ug/L	100	20		01/20/12 15:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/20/12 15:19	75-69-4	
Vinyl chloride	346	ug/L	1.0	1		01/20/12 15:19	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/20/12 15:19	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/20/12 15:19	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		01/20/12 15:19	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		01/20/12 15:19	17060-07-0	
Toluene-d8 (S)	92	%	70-130	1		01/20/12 15:19	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Sample: PRIMARY-EFF		Lab ID: 3061307002	Collected: 01/17/12 11:25	Received: 01/18/12 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		01/20/12 16:07	67-64-1	
Benzene	ND	ug/L	1.0	1		01/20/12 16:07	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/20/12 16:07	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/20/12 16:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/20/12 16:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		01/20/12 16:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/20/12 16:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/20/12 16:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/20/12 16:07	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/20/12 16:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/20/12 16:07	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/20/12 16:07	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/20/12 16:07	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:07	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/20/12 16:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/20/12 16:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/20/12 16:07	75-35-4	
cis-1,2-Dichloroethene	12.5	ug/L	5.0	1		01/20/12 16:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/20/12 16:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/20/12 16:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 16:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 16:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/20/12 16:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/20/12 16:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/20/12 16:07	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/20/12 16:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/20/12 16:07	108-10-1	
Styrene	ND	ug/L	5.0	1		01/20/12 16:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/20/12 16:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/20/12 16:07	127-18-4	
Toluene	ND	ug/L	5.0	1		01/20/12 16:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/20/12 16:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/20/12 16:07	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		01/20/12 16:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/20/12 16:07	75-69-4	
Vinyl chloride	564	ug/L	20.0	20		01/20/12 16:31	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/20/12 16:07	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/20/12 16:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	107	%	70-130	1		01/20/12 16:07	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		01/20/12 16:07	17060-07-0	
Toluene-d8 (S)	93	%	70-130	1		01/20/12 16:07	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Sample: POST-CARB **Lab ID: 3061307003** Collected: 01/17/12 13:00 Received: 01/18/12 09:45 Matrix: Water

Comments: • Grab samples taken at 11:30, 12:00, 12:30, and 13:00. Compositied in laboratory prior to analysis.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		01/20/12 16:56	67-64-1	
Benzene	ND	ug/L	1.0	1		01/20/12 16:56	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/20/12 16:56	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/20/12 16:56	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/20/12 16:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		01/20/12 16:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/20/12 16:56	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/20/12 16:56	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/20/12 16:56	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/20/12 16:56	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/20/12 16:56	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/20/12 16:56	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/20/12 16:56	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 16:56	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/20/12 16:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/20/12 16:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/20/12 16:56	75-35-4	
cis-1,2-Dichloroethene	255	ug/L	5.0	1		01/20/12 16:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/20/12 16:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/20/12 16:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 16:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 16:56	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/20/12 16:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/20/12 16:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/20/12 16:56	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/20/12 16:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/20/12 16:56	108-10-1	
Styrene	ND	ug/L	5.0	1		01/20/12 16:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/20/12 16:56	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/20/12 16:56	127-18-4	
Toluene	ND	ug/L	5.0	1		01/20/12 16:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/20/12 16:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/20/12 16:56	79-00-5	
Trichloroethene	7.2	ug/L	5.0	1		01/20/12 16:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/20/12 16:56	75-69-4	
Vinyl chloride	119	ug/L	1.0	1		01/20/12 16:56	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/20/12 16:56	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/20/12 16:56	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	108	%	70-130	1		01/20/12 16:56	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		01/20/12 16:56	17060-07-0	
Toluene-d8 (S)	91	%	70-130	1		01/20/12 16:56	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Sample: TB-01		Lab ID: 3061307004	Collected: 01/17/12 00:01	Received: 01/18/12 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		01/20/12 12:53	67-64-1	
Benzene	ND	ug/L	1.0	1		01/20/12 12:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/20/12 12:53	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/20/12 12:53	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/20/12 12:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		01/20/12 12:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/20/12 12:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/20/12 12:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/20/12 12:53	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/20/12 12:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/20/12 12:53	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/20/12 12:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/20/12 12:53	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 12:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 12:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/20/12 12:53	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/20/12 12:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/20/12 12:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/20/12 12:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/20/12 12:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/20/12 12:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/20/12 12:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 12:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/20/12 12:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/20/12 12:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/20/12 12:53	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/20/12 12:53	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/20/12 12:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/20/12 12:53	108-10-1	
Styrene	ND	ug/L	5.0	1		01/20/12 12:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/20/12 12:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/20/12 12:53	127-18-4	
Toluene	ND	ug/L	5.0	1		01/20/12 12:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/20/12 12:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/20/12 12:53	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		01/20/12 12:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/20/12 12:53	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		01/20/12 12:53	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/20/12 12:53	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/20/12 12:53	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	110	%	70-130	1		01/20/12 12:53	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		01/20/12 12:53	17060-07-0	
Toluene-d8 (S)	92	%	70-130	1		01/20/12 12:53	2037-26-5	

QUALITY CONTROL DATA

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

QC Batch: MSV/11731 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3061307001, 3061307002, 3061307003, 3061307004

METHOD BLANK: 394067 Matrix: Water

Associated Lab Samples: 3061307001, 3061307002, 3061307003, 3061307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/20/12 12:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	01/20/12 12:05	
1,1,2-Trichloroethane	ug/L	ND	5.0	01/20/12 12:05	
1,1-Dichloroethane	ug/L	ND	5.0	01/20/12 12:05	
1,1-Dichloroethene	ug/L	ND	5.0	01/20/12 12:05	
1,2-Dichlorobenzene	ug/L	ND	5.0	01/20/12 12:05	
1,2-Dichloroethane	ug/L	ND	5.0	01/20/12 12:05	
1,2-Dichloropropane	ug/L	ND	5.0	01/20/12 12:05	
1,3-Dichlorobenzene	ug/L	ND	5.0	01/20/12 12:05	
1,4-Dichlorobenzene	ug/L	ND	5.0	01/20/12 12:05	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/12 12:05	
2-Hexanone	ug/L	ND	10.0	01/20/12 12:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/12 12:05	
Acetone	ug/L	ND	10.0	01/20/12 12:05	
Benzene	ug/L	ND	1.0	01/20/12 12:05	
Bromodichloromethane	ug/L	ND	5.0	01/20/12 12:05	
Bromoform	ug/L	ND	5.0	01/20/12 12:05	
Bromomethane	ug/L	ND	5.0	01/20/12 12:05	
Carbon disulfide	ug/L	ND	5.0	01/20/12 12:05	
Carbon tetrachloride	ug/L	ND	5.0	01/20/12 12:05	
Chlorobenzene	ug/L	ND	5.0	01/20/12 12:05	
Chloroethane	ug/L	ND	5.0	01/20/12 12:05	
Chloroform	ug/L	ND	5.0	01/20/12 12:05	
Chloromethane	ug/L	ND	5.0	01/20/12 12:05	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/20/12 12:05	
cis-1,3-Dichloropropene	ug/L	ND	5.0	01/20/12 12:05	
Dibromochloromethane	ug/L	ND	5.0	01/20/12 12:05	
Ethylbenzene	ug/L	ND	5.0	01/20/12 12:05	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	01/20/12 12:05	
m&p-Xylene	ug/L	ND	5.0	01/20/12 12:05	
Methylene Chloride	ug/L	ND	5.0	01/20/12 12:05	
o-Xylene	ug/L	ND	5.0	01/20/12 12:05	
Styrene	ug/L	ND	5.0	01/20/12 12:05	
Tetrachloroethene	ug/L	ND	5.0	01/20/12 12:05	
Toluene	ug/L	ND	5.0	01/20/12 12:05	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/20/12 12:05	
trans-1,3-Dichloropropene	ug/L	ND	5.0	01/20/12 12:05	
Trichloroethene	ug/L	ND	5.0	01/20/12 12:05	
Trichlorofluoromethane	ug/L	ND	5.0	01/20/12 12:05	
Vinyl chloride	ug/L	ND	1.0	01/20/12 12:05	
1,2-Dichloroethane-d4 (S)	%	96	70-130	01/20/12 12:05	
4-Bromofluorobenzene (S)	%	108	70-130	01/20/12 12:05	
Toluene-d8 (S)	%	91	70-130	01/20/12 12:05	

Date: 01/23/2012 01:58 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

LABORATORY CONTROL SAMPLE: 394068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	64.6-121	
1,1,2-Trichloroethane	ug/L	20	18.5	92	75.6-120	
1,1-Dichloroethane	ug/L	20	19.7	98	68.5-122	
1,1-Dichloroethene	ug/L	20	18.9	95	57.1-120	
1,2-Dichlorobenzene	ug/L	20	19.3	96	69.6-120	
1,2-Dichloroethane	ug/L	20	18.8	94	60.5-133	
1,2-Dichloropropane	ug/L	20	17.5	88	71-120	
1,3-Dichlorobenzene	ug/L	20	19.1	96	68.4-121	
1,4-Dichlorobenzene	ug/L	20	19.1	96	68.5-123	
2-Butanone (MEK)	ug/L	20	20.3	102	55.7-138	
2-Hexanone	ug/L	20	17.8	89	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	18.7	94	64.5-121	
Acetone	ug/L	20	22.0	110	57.6-168	
Benzene	ug/L	20	18.2	91	69.8-120	
Bromodichloromethane	ug/L	20	16.5	83	66.5-120	
Bromoform	ug/L	20	15.5	78	61.1-120	
Bromomethane	ug/L	20	28.6	143	10.6-200	
Carbon disulfide	ug/L	20	20.8	104	60.2-122	
Carbon tetrachloride	ug/L	20	18.1	91	60.1-127	
Chlorobenzene	ug/L	20	19.9	99	72-120	
Chloroethane	ug/L	20	17.8	89	36.8-142	
Chloroform	ug/L	20	19.6	98	69-122	
Chloromethane	ug/L	20	12.9	65	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	19.5	97	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	16.7	84	74.3-120	
Dibromochloromethane	ug/L	20	16.8	84	66.1-120	
Ethylbenzene	ug/L	20	20.2	101	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	19.7	99	68.3-129	
m&p-Xylene	ug/L	40	41.5	104	70.4-130	
Methylene Chloride	ug/L	20	16.8	84	61.5-125	
o-Xylene	ug/L	20	19.5	98	70.6-127	
Styrene	ug/L	20	18.7	94	69.9-120	
Tetrachloroethene	ug/L	20	19.9	100	63.4-121	
Toluene	ug/L	20	19.3	96	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	18.8	94	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	16.7	84	71-120	
Trichloroethene	ug/L	20	18.8	94	65.9-120	
Trichlorofluoromethane	ug/L	20	19.1	95	44.8-137	
Vinyl chloride	ug/L	20	16.4	82	51-127	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			95	70-130	

QUALITY CONTROL DATA

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 394143 394144											
Parameter	Units	3061025002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	24.3	21.0	122	105	64.3-127	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.5	16.8	97	84	64.6-121	14	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.5	17.9	102	89	75.6-120	14	
1,1-Dichloroethane	ug/L	ND	20	20	23.1	19.7	116	98	68.5-122	16	
1,1-Dichloroethene	ug/L	ND	20	20	23.5	19.7	118	98	57.1-120	18	
1,2-Dichlorobenzene	ug/L	ND	20	20	21.5	18.4	107	92	69.6-120	15	
1,2-Dichloroethane	ug/L	ND	20	20	21.6	18.7	108	94	60.5-133	14	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	16.5	98	83	71-120	17	
1,3-Dichlorobenzene	ug/L	ND	20	20	21.3	18.4	107	92	68.4-121	15	
1,4-Dichlorobenzene	ug/L	ND	20	20	21.4	18.2	107	91	68.5-123	16	
2-Butanone (MEK)	ug/L	ND	20	20	21.0	22.2	102	108	55.7-138	6	
2-Hexanone	ug/L	ND	20	20	17.6	18.5	88	92	67-133	5	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	19.6	20.2	98	101	64.5-121	3	
Acetone	ug/L	ND	20	20	21.6	22.2	94	97	57.6-168	3	
Benzene	ug/L	ND	20	20	20.7	17.7	103	88	69.8-120	16	
Bromodichloromethane	ug/L	ND	20	20	18.3	15.8	91	79	66.5-120	15	
Bromoform	ug/L	ND	20	20	17.4	15.7	87	79	61.1-120	10	
Bromomethane	ug/L	ND	20	20	25.7	27.9	128	139	10.6-200	8	
Carbon disulfide	ug/L	ND	20	20	21.6	22.9	108	115	60.2-122	6	
Carbon tetrachloride	ug/L	ND	20	20	20.3	18.5	102	93	60.1-127	9	
Chlorobenzene	ug/L	ND	20	20	22.2	19.4	111	97	72-120	13	
Chloroethane	ug/L	ND	20	20	20.2	21.3	101	106	36.8-142	5	
Chloroform	ug/L	ND	20	20	23.0	20.0	115	100	69-122	14	
Chloromethane	ug/L	ND	20	20	14.5	15.8	72	79	37.2-129	9	
cis-1,2-Dichloroethene	ug/L	ND	20	20	22.8	19.5	114	98	69.5-123	16	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.5	16.0	93	80	74.3-120	15	
Dibromochloromethane	ug/L	ND	20	20	18.7	16.4	94	82	66.1-120	13	
Ethylbenzene	ug/L	ND	20	20	22.3	19.7	112	99	70.9-124	12	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	22.3	19.5	112	97	68.3-129	14	
m&p-Xylene	ug/L	ND	40	40	46.5	41.2	116	103	70.4-130	12	
Methylene Chloride	ug/L	ND	20	20	19.2	16.3	96	81	61.5-125	16	
o-Xylene	ug/L	ND	20	20	21.8	19.1	109	96	70.6-127	13	
Styrene	ug/L	ND	20	20	20.2	18.2	101	91	69.9-120	11	
Tetrachloroethene	ug/L	ND	20	20	23.1	20.2	115	101	63.4-121	13	
Toluene	ug/L	ND	20	20	22.0	19.0	110	95	71.5-120	15	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.9	19.1	109	95	64.1-120	14	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.5	16.0	93	80	71-120	15	
Trichloroethene	ug/L	ND	20	20	21.4	18.6	107	93	65.9-120	14	
Trichlorofluoromethane	ug/L	ND	20	20	21.9	24.0	110	120	44.8-137	9	
Vinyl chloride	ug/L	ND	20	20	18.3	20.3	91	101	51-127	10	
1,2-Dichloroethane-d4 (S)	%						99	101	70-130		
4-Bromofluorobenzene (S)	%						98	99	70-130		
Toluene-d8 (S)	%						93	92	70-130		

QUALIFIERS

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181.100000 Essex/Hope

Pace Project No.: 3061307

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3061307001	PRE-CARB	EPA 8260	MSV/11731		
3061307002	PRIMARY-EFF	EPA 8260	MSV/11731		
3061307003	POST-CARB	EPA 8260	MSV/11731		
3061307004	TB-01	EPA 8260	MSV/11731		

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

Page: 1	of 1
1359886	
NCY	
GROUND WATER	DRINKING WATER
RA	OTHER
14	

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	URS CORP	Report To:	MARK DOWNAK	Attention:	
Address:	FOSTER PLAZA 4, 501 HOLIDAY DR., STE. 200 PITTSBURGH, PA 15220	Copy To:	VALERIE SIBETO	Company Name:	
Email To:				Address:	
Phone:	412-583-4700	Purchase Order No.:	41569181	Pace Quote Reference:	
Fax:	412-583-4701	Project Name:	ESSEX/HOPE JAYESTOWN	Pace Project Manager:	
Requested Due Date/TAT:	STANDARD	Project Number:	41569181 10000	Pace Profile #:	
				Site Location	
				STATE:	
				REGULATORY AGENCY	
				NPDES	
				UST	
				RCRA	

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
							Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)	
COMPOSITE FOUR (4) POST-CAB SAMPLES IN LAB AND REPORT AS POST-CAB COMPOSITE	Valerie Sibero / WES	1-17-12	1330	Valerie Sibero	1-17-12	~1330				

ORIGINAL

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	VALERIE SIBERO
SIGNATURE of SAMPLER:	Valerie Sibero
DATE Signed (MM/DD/YY):	1-17-12



Sample Condition Upon Receipt

JMS

Client Name: URS

Project # 3061307

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 872640756816

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 3 5 6

Type of Ice: Wet Blue None ☒ Samples on ice, cooling process has begun

Cooler Temperature 0.6

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 1-18-12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>AL</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [Signature]

Date: 1/18/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

February 23, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

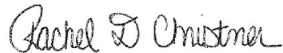
RE: Project: Essex/Hope Jamestown
Pace Project No.: 3063297

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on February 16, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Rachel Christner

rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/NELAC Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/NELAC Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/NELAC Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/NELAC Certification #: LA080002

Louisiana/NELAC Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/NELAC Certification #: 2976

New Jersey/NELAC Certification #: PA 051

New Mexico Certification

New York/NELAC Certification #: 10888

North Carolina Certification #: 42706

Oregon/NELAC Certification #: PA200002

Pennsylvania/NELAC Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/NELAC Certification #: T104704188-09 TX

Utah/NELAC Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C1941

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Sample: PRE-CARB		Lab ID: 3063297001	Collected: 02/15/12 11:50		Received: 02/16/12 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		02/21/12 21:16	67-64-1	
Benzene	8.3	ug/L	1.0	1		02/21/12 21:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/21/12 21:16	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/21/12 21:16	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/21/12 21:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		02/21/12 21:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/21/12 21:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/21/12 21:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/21/12 21:16	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/21/12 21:16	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/21/12 21:16	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/21/12 21:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/21/12 21:16	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 21:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 21:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 21:16	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/21/12 21:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/21/12 21:16	107-06-2	
1,1-Dichloroethene	23.0	ug/L	5.0	1		02/21/12 21:16	75-35-4	
cis-1,2-Dichloroethene	5650	ug/L	100	20		02/21/12 21:42	156-59-2	
trans-1,2-Dichloroethene	87.5	ug/L	5.0	1		02/21/12 21:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/21/12 21:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 21:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 21:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/21/12 21:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/21/12 21:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/21/12 21:16	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/21/12 21:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/21/12 21:16	108-10-1	
Styrene	ND	ug/L	5.0	1		02/21/12 21:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/21/12 21:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/21/12 21:16	127-18-4	
Toluene	ND	ug/L	5.0	1		02/21/12 21:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/21/12 21:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/21/12 21:16	79-00-5	
Trichloroethene	649	ug/L	100	20		02/21/12 21:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/21/12 21:16	75-69-4	
Vinyl chloride	630	ug/L	20.0	20		02/21/12 21:42	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/21/12 21:16	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/21/12 21:16	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	1		02/21/12 21:16	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		02/21/12 21:16	17060-07-0	
Toluene-d8 (S)	93	%	70-130	1		02/21/12 21:16	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Sample: PRIMARY-EFF		Lab ID: 3063297002	Collected: 02/15/12 11:55	Received: 02/16/12 09:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		02/21/12 20:23	67-64-1	
Benzene	ND	ug/L	1.0	1		02/21/12 20:23	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/21/12 20:23	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/21/12 20:23	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/21/12 20:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		02/21/12 20:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/21/12 20:23	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/21/12 20:23	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/21/12 20:23	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/21/12 20:23	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/21/12 20:23	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/21/12 20:23	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/21/12 20:23	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 20:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 20:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 20:23	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/21/12 20:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/21/12 20:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/21/12 20:23	75-35-4	
cis-1,2-Dichloroethene	15.1	ug/L	5.0	1		02/21/12 20:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/21/12 20:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/21/12 20:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 20:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 20:23	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/21/12 20:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/21/12 20:23	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/21/12 20:23	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/21/12 20:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/21/12 20:23	108-10-1	
Styrene	ND	ug/L	5.0	1		02/21/12 20:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/21/12 20:23	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/21/12 20:23	127-18-4	
Toluene	ND	ug/L	5.0	1		02/21/12 20:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/21/12 20:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/21/12 20:23	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/21/12 20:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/21/12 20:23	75-69-4	
Vinyl chloride	637	ug/L	20.0	20		02/21/12 20:50	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/21/12 20:23	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/21/12 20:23	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		02/21/12 20:23	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		02/21/12 20:23	17060-07-0	
Toluene-d8 (S)	96	%	70-130	1		02/21/12 20:23	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Sample: POST-CARB **Lab ID: 3063297003** Collected: 02/15/12 13:30 Received: 02/16/12 09:30 Matrix: Water

Comments: • Post-Carb grabs for composite collected at 12:00, 12:30, 13:00, and 13:30

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		02/21/12 19:57	67-64-1	
Benzene	ND	ug/L	1.0	1		02/21/12 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/21/12 19:57	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/21/12 19:57	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/21/12 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		02/21/12 19:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/21/12 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/21/12 19:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/21/12 19:57	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/21/12 19:57	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/21/12 19:57	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/21/12 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/21/12 19:57	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 19:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 19:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/21/12 19:57	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/21/12 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/21/12 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/21/12 19:57	75-35-4	
cis-1,2-Dichloroethene	268	ug/L	5.0	1		02/21/12 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/21/12 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/21/12 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/21/12 19:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/21/12 19:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/21/12 19:57	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/21/12 19:57	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/21/12 19:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/21/12 19:57	108-10-1	
Styrene	ND	ug/L	5.0	1		02/21/12 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/21/12 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/21/12 19:57	127-18-4	
Toluene	ND	ug/L	5.0	1		02/21/12 19:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/21/12 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/21/12 19:57	79-00-5	
Trichloroethene	9.5	ug/L	5.0	1		02/21/12 19:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/21/12 19:57	75-69-4	
Vinyl chloride	495	ug/L	10.0	10		02/22/12 16:26	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/21/12 19:57	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/21/12 19:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		02/21/12 19:57	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		02/21/12 19:57	17060-07-0	
Toluene-d8 (S)	110	%	70-130	1		02/21/12 19:57	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Sample: TB-01		Lab ID: 3063297004		Collected: 02/15/12 00:01		Received: 02/16/12 09:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L	10.0	1			02/21/12 14:14	67-64-1		
Benzene	ND ug/L	1.0	1			02/21/12 14:14	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			02/21/12 14:14	75-27-4		
Bromoform	ND ug/L	5.0	1			02/21/12 14:14	75-25-2		
Bromomethane	ND ug/L	5.0	1			02/21/12 14:14	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			02/21/12 14:14	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			02/21/12 14:14	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			02/21/12 14:14	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			02/21/12 14:14	108-90-7		
Chloroethane	ND ug/L	5.0	1			02/21/12 14:14	75-00-3		
Chloroform	ND ug/L	5.0	1			02/21/12 14:14	67-66-3		
Chloromethane	ND ug/L	5.0	1			02/21/12 14:14	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			02/21/12 14:14	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			02/21/12 14:14	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			02/21/12 14:14	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			02/21/12 14:14	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			02/21/12 14:14	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			02/21/12 14:14	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			02/21/12 14:14	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			02/21/12 14:14	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			02/21/12 14:14	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			02/21/12 14:14	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			02/21/12 14:14	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			02/21/12 14:14	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			02/21/12 14:14	100-41-4		
2-Hexanone	ND ug/L	10.0	1			02/21/12 14:14	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			02/21/12 14:14	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			02/21/12 14:14	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			02/21/12 14:14	108-10-1		
Styrene	ND ug/L	5.0	1			02/21/12 14:14	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			02/21/12 14:14	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			02/21/12 14:14	127-18-4		
Toluene	ND ug/L	5.0	1			02/21/12 14:14	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			02/21/12 14:14	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			02/21/12 14:14	79-00-5		
Trichloroethene	ND ug/L	5.0	1			02/21/12 14:14	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			02/21/12 14:14	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			02/21/12 14:14	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			02/21/12 14:14	179601-23-1		
o-Xylene	ND ug/L	5.0	1			02/21/12 14:14	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	97 %	70-130	1			02/21/12 14:14	460-00-4		
1,2-Dichloroethane-d4 (S)	98 %	70-130	1			02/21/12 14:14	17060-07-0		
Toluene-d8 (S)	101 %	70-130	1			02/21/12 14:14	2037-26-5		

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

QC Batch: MSV/11992 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3063297001, 3063297002, 3063297003, 3063297004

METHOD BLANK: 407095 Matrix: Water

Associated Lab Samples: 3063297001, 3063297002, 3063297003, 3063297004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	02/21/12 12:03	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	02/21/12 12:03	
1,1,2-Trichloroethane	ug/L	ND	5.0	02/21/12 12:03	
1,1-Dichloroethane	ug/L	ND	5.0	02/21/12 12:03	
1,1-Dichloroethene	ug/L	ND	5.0	02/21/12 12:03	
1,2-Dichlorobenzene	ug/L	ND	5.0	02/21/12 12:03	
1,2-Dichloroethane	ug/L	ND	5.0	02/21/12 12:03	
1,2-Dichloropropane	ug/L	ND	5.0	02/21/12 12:03	
1,3-Dichlorobenzene	ug/L	ND	5.0	02/21/12 12:03	
1,4-Dichlorobenzene	ug/L	ND	5.0	02/21/12 12:03	
2-Butanone (MEK)	ug/L	ND	10.0	02/21/12 12:03	
2-Hexanone	ug/L	ND	10.0	02/21/12 12:03	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	02/21/12 12:03	
Acetone	ug/L	ND	10.0	02/21/12 12:03	
Benzene	ug/L	ND	1.0	02/21/12 12:03	
Bromodichloromethane	ug/L	ND	5.0	02/21/12 12:03	
Bromoform	ug/L	ND	5.0	02/21/12 12:03	
Bromomethane	ug/L	ND	5.0	02/21/12 12:03	
Carbon disulfide	ug/L	ND	5.0	02/21/12 12:03	
Carbon tetrachloride	ug/L	ND	5.0	02/21/12 12:03	
Chlorobenzene	ug/L	ND	5.0	02/21/12 12:03	
Chloroethane	ug/L	ND	5.0	02/21/12 12:03	
Chloroform	ug/L	ND	5.0	02/21/12 12:03	
Chloromethane	ug/L	ND	5.0	02/21/12 12:03	
cis-1,2-Dichloroethene	ug/L	ND	5.0	02/21/12 12:03	
cis-1,3-Dichloropropene	ug/L	ND	5.0	02/21/12 12:03	
Dibromochloromethane	ug/L	ND	5.0	02/21/12 12:03	
Ethylbenzene	ug/L	ND	5.0	02/21/12 12:03	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	02/21/12 12:03	
m&p-Xylene	ug/L	ND	5.0	02/21/12 12:03	
Methylene Chloride	ug/L	ND	5.0	02/21/12 12:03	
o-Xylene	ug/L	ND	5.0	02/21/12 12:03	
Styrene	ug/L	ND	5.0	02/21/12 12:03	
Tetrachloroethene	ug/L	ND	5.0	02/21/12 12:03	
Toluene	ug/L	ND	5.0	02/21/12 12:03	
trans-1,2-Dichloroethene	ug/L	ND	5.0	02/21/12 12:03	
trans-1,3-Dichloropropene	ug/L	ND	5.0	02/21/12 12:03	
Trichloroethene	ug/L	ND	5.0	02/21/12 12:03	
Trichlorofluoromethane	ug/L	ND	5.0	02/21/12 12:03	
Vinyl chloride	ug/L	ND	1.0	02/21/12 12:03	
1,2-Dichloroethane-d4 (S)	%	100	70-130	02/21/12 12:03	
4-Bromofluorobenzene (S)	%	100	70-130	02/21/12 12:03	
Toluene-d8 (S)	%	99	70-130	02/21/12 12:03	

Date: 02/23/2012 05:13 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

LABORATORY CONTROL SAMPLE: 407096

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	24.4	122	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	20.0	100	64.6-121	
1,1,2-Trichloroethane	ug/L	20	22.2	111	75.6-120	
1,1-Dichloroethane	ug/L	20	21.3	107	68.5-122	
1,1-Dichloroethene	ug/L	20	22.5	112	57.1-120	
1,2-Dichlorobenzene	ug/L	20	20.7	103	69.6-120	
1,2-Dichloroethane	ug/L	20	21.4	107	60.5-133	
1,2-Dichloropropane	ug/L	20	19.6	98	71-120	
1,3-Dichlorobenzene	ug/L	20	21.7	108	68.4-121	
1,4-Dichlorobenzene	ug/L	20	21.4	107	68.5-123	
2-Butanone (MEK)	ug/L	20	24.0	120	55.7-138	
2-Hexanone	ug/L	20	17.4	87	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	23.3	117	64.5-121	
Acetone	ug/L	20	28.6	143	57.6-168	
Benzene	ug/L	20	21.2	106	69.8-120	
Bromodichloromethane	ug/L	20	19.6	98	66.5-120	
Bromoform	ug/L	20	19.1	95	61.1-120	
Bromomethane	ug/L	20	26.0	130	10.6-200	
Carbon disulfide	ug/L	20	35.7	179	60.2-122	L3
Carbon tetrachloride	ug/L	20	23.2	116	60.1-127	
Chlorobenzene	ug/L	20	22.2	111	72-120	
Chloroethane	ug/L	20	16.9	85	36.8-142	
Chloroform	ug/L	20	21.5	107	69-122	
Chloromethane	ug/L	20	21.6	108	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	22.1	111	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	23.5	118	74.3-120	
Dibromochloromethane	ug/L	20	22.0	110	66.1-120	
Ethylbenzene	ug/L	20	22.2	111	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	20.7	104	68.3-129	
m&p-Xylene	ug/L	40	45.4	113	70.4-130	
Methylene Chloride	ug/L	20	22.0	110	61.5-125	
o-Xylene	ug/L	20	22.0	110	70.6-127	
Styrene	ug/L	20	20.4	102	69.9-120	
Tetrachloroethene	ug/L	20	24.5	122	63.4-121	L1
Toluene	ug/L	20	24.3	122	71.5-120	L1
trans-1,2-Dichloroethene	ug/L	20	22.2	111	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	22.7	113	71-120	
Trichloroethene	ug/L	20	20.4	102	65.9-120	
Trichlorofluoromethane	ug/L	20	22.7	113	44.8-137	
Vinyl chloride	ug/L	20	23.5	118	51-127	
1,2-Dichloroethane-d4 (S)	%			108	70-130	
4-Bromofluorobenzene (S)	%			88	70-130	
Toluene-d8 (S)	%			110	70-130	

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 407683 407684											
Parameter	Units	3062883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	26.8	24.5	134	123	64.3-127	9	M0
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	22.6	21.7	113	108	64.6-121	4	
1,1,2-Trichloroethane	ug/L	ND	20	20	22.6	21.3	113	106	75.6-120	6	
1,1-Dichloroethane	ug/L	ND	20	20	23.7	22.0	118	110	68.5-122	7	
1,1-Dichloroethene	ug/L	ND	20	20	24.8	23.3	124	116	57.1-120	6	M0
1,2-Dichlorobenzene	ug/L	ND	20	20	22.5	20.2	112	101	69.6-120	11	
1,2-Dichloroethane	ug/L	ND	20	20	23.8	23.2	119	116	60.5-133	3	
1,2-Dichloropropane	ug/L	ND	20	20	22.9	22.0	114	110	71-120	4	
1,3-Dichlorobenzene	ug/L	ND	20	20	22.3	20.6	111	103	68.4-121	8	
1,4-Dichlorobenzene	ug/L	ND	20	20	22.5	20.9	112	104	68.5-123	7	
2-Butanone (MEK)	ug/L	ND	20	20	26.5	28.7	133	144	55.7-138	8	M0
2-Hexanone	ug/L	ND	20	20	22.4	21.0	112	105	67-133	7	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	25.0	23.5	125	117	64.5-121	6	M0
Acetone	ug/L	ND	20	20	30.4	28.8	152	144	57.6-168	5	
Benzene	ug/L	ND	20	20	23.5	22.5	117	112	69.8-120	4	
Bromodichloromethane	ug/L	ND	20	20	21.6	21.0	108	105	66.5-120	3	
Bromoform	ug/L	ND	20	20	18.4	17.1	92	86	61.1-120	7	
Bromomethane	ug/L	ND	20	20	19.2	21.4	96	107	10.6-200	11	
Carbon disulfide	ug/L	ND	20	20	30.1	28.6	150	143	60.2-122	5	M0
Carbon tetrachloride	ug/L	ND	20	20	24.3	22.4	122	112	60.1-127	8	
Chlorobenzene	ug/L	ND	20	20	22.8	22.0	114	110	72-120	4	
Chloroethane	ug/L	ND	20	20	23.5	23.8	118	119	36.8-142	1	
Chloroform	ug/L	ND	20	20	23.8	22.6	119	113	69-122	5	
Chloromethane	ug/L	ND	20	20	23.1	24.6	115	123	37.2-129	6	
cis-1,2-Dichloroethene	ug/L	ND	20	20	24.7	23.2	124	116	69.5-123	6	M0
cis-1,3-Dichloropropene	ug/L	ND	20	20	22.3	22.1	112	111	74.3-120	.8	
Dibromochloromethane	ug/L	ND	20	20	20.2	18.8	101	94	66.1-120	7	
Ethylbenzene	ug/L	ND	20	20	24.0	22.3	120	111	70.9-124	8	
Isopropylbenzene (Cumene)	ug/L				23.8	22.1				7	
m&p-Xylene	ug/L	ND	40	40	47.8	45.1	120	113	70.4-130	6	
Methylene Chloride	ug/L	ND	20	20	22.3	22.0	112	110	61.5-125	1	
o-Xylene	ug/L	ND	20	20	23.4	21.8	117	109	70.6-127	7	
Styrene	ug/L	ND	20	20	21.1	19.7	106	99	69.9-120	7	
Tetrachloroethene	ug/L	ND	20	20	24.0	22.3	120	112	63.4-121	7	
Toluene	ug/L	ND	20	20	23.6	22.0	118	110	71.5-120	7	
trans-1,2-Dichloroethene	ug/L	ND	20	20	23.6	23.0	118	115	64.1-120	2	
trans-1,3-Dichloropropene	ug/L	ND	20	20	23.4	21.8	117	109	71-120	7	
Trichloroethene	ug/L	ND	20	20	21.6	20.8	107	103	65.9-120	4	
Trichlorofluoromethane	ug/L				25.8	25.0				3	
Vinyl chloride	ug/L	ND	20	20	28.3	29.3	141	147	51-127	4	M0
1,2-Dichloroethane-d4 (S)	%						112	117	70-130		
4-Bromofluorobenzene (S)	%						96	95	70-130		
Toluene-d8 (S)	%						99	102	70-130		

QUALIFIERS

Project: Essex/Hope Jamestown
Pace Project No.: 3063297

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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. |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Essex/Hope Jamestown

Pace Project No.: 3063297

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3063297001	PRE-CARB	EPA 8260	MSV/11992		
3063297002	PRIMARY-EFF	EPA 8260	MSV/11992		
3063297003	POST-CARB	EPA 8260	MSV/11992		
3063297004	TB-01	EPA 8260	MSV/11992		

[illegible]

Important Note: By signing this form you are accepting Pace's **NET 30** day payment terms and agreeing to late charges of **1.5%** per month for any invoices not paid within 30 days.

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Sample Condition Upon Receipt



Client Name: URS Project # 3063297

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 872640756827

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other _____

Thermometer Used 3 5 6 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.4

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: <u>JMS 2-10-12</u>
--

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>JMS</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☒ Yes ☐ No ☐ N/A	15. <u>TB-01(1)</u>
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [Signature] Date: 2/10/12

April 04, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

RE: Project: ESSEX/HOPE JAMESTOWN
Pace Project No.: 3065542

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Timothy Reed for
Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Sample: PRE-CARB		Lab ID: 3065542001	Collected: 03/20/12 10:40	Received: 03/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		03/31/12 21:05	67-64-1	
Benzene	7.3	ug/L	1.0	1		03/31/12 21:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		03/31/12 21:05	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/31/12 21:05	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/31/12 21:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		03/31/12 21:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		03/31/12 21:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/31/12 21:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/31/12 21:05	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/31/12 21:05	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/31/12 21:05	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/31/12 21:05	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		03/31/12 21:05	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:05	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:05	107-06-2	
1,1-Dichloroethene	17.6	ug/L	5.0	1		03/31/12 21:05	75-35-4	
cis-1,2-Dichloroethene	5210	ug/L	500	100		04/02/12 17:01	156-59-2	
trans-1,2-Dichloroethene	67.8	ug/L	5.0	1		03/31/12 21:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/31/12 21:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/31/12 21:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		03/31/12 21:05	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/31/12 21:05	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		03/31/12 21:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/31/12 21:05	108-10-1	
Styrene	ND	ug/L	5.0	1		03/31/12 21:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/31/12 21:05	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/31/12 21:05	127-18-4	
Toluene	ND	ug/L	5.0	1		03/31/12 21:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:05	79-00-5	
Trichloroethene	611	ug/L	500	100		04/02/12 17:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/31/12 21:05	75-69-4	
Vinyl chloride	427	ug/L	100	100		04/02/12 17:01	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		03/31/12 21:05	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		03/31/12 21:05	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		03/31/12 21:05	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		03/31/12 21:05	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1		03/31/12 21:05	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Sample: PRIMARY-EFF		Lab ID: 3065542002	Collected: 03/20/12 10:45	Received: 03/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		03/31/12 21:31	67-64-1	
Benzene	ND	ug/L	1.0	1		03/31/12 21:31	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		03/31/12 21:31	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/31/12 21:31	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/31/12 21:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		03/31/12 21:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		03/31/12 21:31	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/31/12 21:31	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/31/12 21:31	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/31/12 21:31	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/31/12 21:31	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/31/12 21:31	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		03/31/12 21:31	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:31	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/31/12 21:31	75-35-4	
cis-1,2-Dichloroethene	1730	ug/L	250	50		04/02/12 17:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/31/12 21:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/31/12 21:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:31	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/31/12 21:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		03/31/12 21:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/31/12 21:31	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		03/31/12 21:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/31/12 21:31	108-10-1	
Styrene	ND	ug/L	5.0	1		03/31/12 21:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/31/12 21:31	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/31/12 21:31	127-18-4	
Toluene	ND	ug/L	5.0	1		03/31/12 21:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:31	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/31/12 21:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/31/12 21:31	75-69-4	
Vinyl chloride	767	ug/L	50.0	50		04/02/12 17:28	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		03/31/12 21:31	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		03/31/12 21:31	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		03/31/12 21:31	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		03/31/12 21:31	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		03/31/12 21:31	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Sample: POST-CARB **Lab ID: 3065542003** Collected: 03/20/12 12:20 Received: 03/21/12 10:00 Matrix: Water

Comments: • Sample Collection times 3/20/12 10:50, 11:20, 11:50, and 12:20
• This sample composited from four vials prior to analysis for 8260B VOA.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		03/31/12 21:57	67-64-1	
Benzene	ND	ug/L	1.0	1		03/31/12 21:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		03/31/12 21:57	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/31/12 21:57	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/31/12 21:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		03/31/12 21:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		03/31/12 21:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/31/12 21:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/31/12 21:57	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/31/12 21:57	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/31/12 21:57	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/31/12 21:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		03/31/12 21:57	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/31/12 21:57	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/31/12 21:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/31/12 21:57	75-35-4	
cis-1,2-Dichloroethene	206	ug/L	5.0	1		03/31/12 21:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/31/12 21:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/31/12 21:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/31/12 21:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/31/12 21:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		03/31/12 21:57	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/31/12 21:57	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		03/31/12 21:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/31/12 21:57	108-10-1	
Styrene	ND	ug/L	5.0	1		03/31/12 21:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/31/12 21:57	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/31/12 21:57	127-18-4	
Toluene	ND	ug/L	5.0	1		03/31/12 21:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/31/12 21:57	79-00-5	
Trichloroethene	6.2	ug/L	5.0	1		03/31/12 21:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/31/12 21:57	75-69-4	
Vinyl chloride	655	ug/L	10.0	10		04/02/12 17:54	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		03/31/12 21:57	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		03/31/12 21:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		03/31/12 21:57	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		03/31/12 21:57	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		03/31/12 21:57	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Sample: TB-01		Lab ID: 3065542007	Collected: 03/20/12 00:01	Received: 03/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND ug/L		10.0	1		03/31/12 18:01	67-64-1	
Benzene	ND ug/L		1.0	1		03/31/12 18:01	71-43-2	
Bromodichloromethane	ND ug/L		5.0	1		03/31/12 18:01	75-27-4	
Bromoform	ND ug/L		5.0	1		03/31/12 18:01	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/31/12 18:01	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		03/31/12 18:01	78-93-3	
Carbon disulfide	ND ug/L		5.0	1		03/31/12 18:01	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		03/31/12 18:01	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		03/31/12 18:01	108-90-7	
Chloroethane	ND ug/L		5.0	1		03/31/12 18:01	75-00-3	
Chloroform	ND ug/L		5.0	1		03/31/12 18:01	67-66-3	
Chloromethane	ND ug/L		5.0	1		03/31/12 18:01	74-87-3	
Dibromochloromethane	ND ug/L		5.0	1		03/31/12 18:01	124-48-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		03/31/12 18:01	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		03/31/12 18:01	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		03/31/12 18:01	106-46-7	
1,1-Dichloroethane	ND ug/L		5.0	1		03/31/12 18:01	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		03/31/12 18:01	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		03/31/12 18:01	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		03/31/12 18:01	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		03/31/12 18:01	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		03/31/12 18:01	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		03/31/12 18:01	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		03/31/12 18:01	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		03/31/12 18:01	100-41-4	
2-Hexanone	ND ug/L		10.0	1		03/31/12 18:01	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		03/31/12 18:01	98-82-8	
Methylene Chloride	ND ug/L		5.0	1		03/31/12 18:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		03/31/12 18:01	108-10-1	
Styrene	ND ug/L		5.0	1		03/31/12 18:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		03/31/12 18:01	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		03/31/12 18:01	127-18-4	
Toluene	ND ug/L		5.0	1		03/31/12 18:01	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		03/31/12 18:01	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		03/31/12 18:01	79-00-5	
Trichloroethene	ND ug/L		5.0	1		03/31/12 18:01	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		03/31/12 18:01	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		03/31/12 18:01	75-01-4	
m&p-Xylene	ND ug/L		5.0	1		03/31/12 18:01	179601-23-1	
o-Xylene	ND ug/L		5.0	1		03/31/12 18:01	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105 %		70-130	1		03/31/12 18:01	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130	1		03/31/12 18:01	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		03/31/12 18:01	2037-26-5	

QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

QC Batch: MSV/12348 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3065542001, 3065542002, 3065542003, 3065542007

METHOD BLANK: 424271 Matrix: Water

Associated Lab Samples: 3065542001, 3065542002, 3065542003, 3065542007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/31/12 17:35	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/31/12 17:35	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/31/12 17:35	
1,1-Dichloroethane	ug/L	ND	5.0	03/31/12 17:35	
1,1-Dichloroethene	ug/L	ND	5.0	03/31/12 17:35	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/31/12 17:35	
1,2-Dichloroethane	ug/L	ND	5.0	03/31/12 17:35	
1,2-Dichloropropane	ug/L	ND	5.0	03/31/12 17:35	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/31/12 17:35	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/31/12 17:35	
2-Butanone (MEK)	ug/L	ND	10.0	03/31/12 17:35	
2-Hexanone	ug/L	ND	10.0	03/31/12 17:35	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/31/12 17:35	
Acetone	ug/L	ND	10.0	03/31/12 17:35	
Benzene	ug/L	ND	1.0	03/31/12 17:35	
Bromodichloromethane	ug/L	ND	5.0	03/31/12 17:35	
Bromoform	ug/L	ND	5.0	03/31/12 17:35	
Bromomethane	ug/L	ND	5.0	03/31/12 17:35	
Carbon disulfide	ug/L	ND	5.0	03/31/12 17:35	
Carbon tetrachloride	ug/L	ND	5.0	03/31/12 17:35	
Chlorobenzene	ug/L	ND	5.0	03/31/12 17:35	
Chloroethane	ug/L	ND	5.0	03/31/12 17:35	
Chloroform	ug/L	ND	5.0	03/31/12 17:35	
Chloromethane	ug/L	ND	5.0	03/31/12 17:35	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/31/12 17:35	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/31/12 17:35	
Dibromochloromethane	ug/L	ND	5.0	03/31/12 17:35	
Ethylbenzene	ug/L	ND	5.0	03/31/12 17:35	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/31/12 17:35	
m&p-Xylene	ug/L	ND	5.0	03/31/12 17:35	
Methylene Chloride	ug/L	ND	5.0	03/31/12 17:35	
o-Xylene	ug/L	ND	5.0	03/31/12 17:35	
Styrene	ug/L	ND	5.0	03/31/12 17:35	
Tetrachloroethene	ug/L	ND	5.0	03/31/12 17:35	
Toluene	ug/L	ND	5.0	03/31/12 17:35	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/31/12 17:35	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/31/12 17:35	
Trichloroethene	ug/L	ND	5.0	03/31/12 17:35	
Trichlorofluoromethane	ug/L	ND	5.0	03/31/12 17:35	
Vinyl chloride	ug/L	ND	1.0	03/31/12 17:35	
1,2-Dichloroethane-d4 (S)	%	102	70-130	03/31/12 17:35	
4-Bromofluorobenzene (S)	%	104	70-130	03/31/12 17:35	
Toluene-d8 (S)	%	102	70-130	03/31/12 17:35	

Date: 04/04/2012 02:04 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

LABORATORY CONTROL SAMPLE: 424272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	104	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	20.3	101	64.6-121	
1,1,2-Trichloroethane	ug/L	20	21.2	106	75.6-120	
1,1-Dichloroethane	ug/L	20	20.1	100	68.5-122	
1,1-Dichloroethene	ug/L	20	19.3	97	57.1-120	
1,2-Dichlorobenzene	ug/L	20	19.8	99	69.6-120	
1,2-Dichloroethane	ug/L	20	19.7	99	60.5-133	
1,2-Dichloropropane	ug/L	20	22.3	112	71-120	
1,3-Dichlorobenzene	ug/L	20	19.8	99	68.4-121	
1,4-Dichlorobenzene	ug/L	20	20.0	100	68.5-123	
2-Butanone (MEK)	ug/L	20	20.5	102	55.7-138	
2-Hexanone	ug/L	20	19.0	95	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.4	97	64.5-121	
Acetone	ug/L	20	15.5	78	57.6-168	
Benzene	ug/L	20	21.7	109	69.8-120	
Bromodichloromethane	ug/L	20	19.9	100	66.5-120	
Bromoform	ug/L	20	19.8	99	61.1-120	
Bromomethane	ug/L	20	19.9	99	10.6-200	
Carbon disulfide	ug/L	20	14.1	70	60.2-122	
Carbon tetrachloride	ug/L	20	20.2	101	60.1-127	
Chlorobenzene	ug/L	20	20.5	102	72-120	
Chloroethane	ug/L	20	14.1	71	36.8-142	
Chloroform	ug/L	20	19.8	99	69-122	
Chloromethane	ug/L	20	17.0	85	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	20.4	102	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	20.9	105	74.3-120	
Dibromochloromethane	ug/L	20	19.9	100	66.1-120	
Ethylbenzene	ug/L	20	20.5	103	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	23.4	117	68.3-129	
m&p-Xylene	ug/L	40	41.9	105	70.4-130	
Methylene Chloride	ug/L	20	20.8	104	61.5-125	
o-Xylene	ug/L	20	21.0	105	70.6-127	
Styrene	ug/L	20	20.5	103	69.9-120	
Tetrachloroethene	ug/L	20	20.3	101	63.4-121	
Toluene	ug/L	20	21.5	107	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	19.1	95	71-120	
Trichloroethene	ug/L	20	20.1	101	65.9-120	
Trichlorofluoromethane	ug/L	20	15.9	79	44.8-137	
Vinyl chloride	ug/L	20	16.3	81	51-127	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			104	70-130	

QUALIFIERS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

BATCH QUALIFIERS

Batch: MSV/12348

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3065542

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3065542001	PRE-CARB	EPA 8260	MSV/12348		
3065542002	PRIMARY-EFF	EPA 8260	MSV/12348		
3065542003	POST-CARB	EPA 8260	MSV/12348		
3065542007	TB-01	EPA 8260	MSV/12348		

[illegible]

*Important Note: By signing this form you are accepting People's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Client Name: URS CORP

Project # 3065542

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 8126 4075 6860

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional

Proj. Due Date:

Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Bags

Thermometer Used 3 5 6

Type of Ice: Wet Blue None

☒ Samples on ice, cooling process has begun

Cooler Temperature 1.4

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: AD 3/21/12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions <u>VOA</u> coliform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>AD</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Chanelle D. Chismore

Date: 3/27/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

April 30, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

RE: Project: 41569181.10000/Essex-Hope
Pace Project No.: 3067863

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 11

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ANALYTICAL RESULTS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Sample: PRE-CARB		Lab ID: 3067863001	Collected: 04/19/12 11:05	Received: 04/20/12 10:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		04/25/12 20:14	67-64-1	
Benzene	6.2	ug/L	1.0	1		04/25/12 20:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		04/25/12 20:14	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/25/12 20:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/25/12 20:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		04/25/12 20:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		04/25/12 20:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/25/12 20:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/25/12 20:14	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/25/12 20:14	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/25/12 20:14	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/25/12 20:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		04/25/12 20:14	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:14	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/25/12 20:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/25/12 20:14	107-06-2	
1,1-Dichloroethene	14.9	ug/L	5.0	1		04/25/12 20:14	75-35-4	
cis-1,2-Dichloroethene	4840	ug/L	125	25		04/27/12 01:59	156-59-2	
trans-1,2-Dichloroethene	107	ug/L	5.0	1		04/25/12 20:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/25/12 20:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 20:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 20:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/25/12 20:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		04/25/12 20:14	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/25/12 20:14	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		04/25/12 20:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/25/12 20:14	108-10-1	
Styrene	ND	ug/L	5.0	1		04/25/12 20:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/25/12 20:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/25/12 20:14	127-18-4	
Toluene	ND	ug/L	5.0	1		04/25/12 20:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/25/12 20:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/25/12 20:14	79-00-5	
Trichloroethene	469	ug/L	125	25		04/27/12 01:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/25/12 20:14	75-69-4	
Vinyl chloride	368	ug/L	25.0	25		04/27/12 01:59	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		04/25/12 20:14	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		04/25/12 20:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		04/25/12 20:14	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		04/25/12 20:14	17060-07-0	
Toluene-d8 (S)	95	%	70-130	1		04/25/12 20:14	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Sample: PRIMARY-EFF		Lab ID: 3067863002		Collected: 04/19/12 11:10		Received: 04/20/12 10:15		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND	ug/L	10.0	1		04/25/12 20:41	67-64-1		
Benzene	ND	ug/L	1.0	1		04/25/12 20:41	71-43-2		
Bromodichloromethane	ND	ug/L	5.0	1		04/25/12 20:41	75-27-4		
Bromoform	ND	ug/L	5.0	1		04/25/12 20:41	75-25-2		
Bromomethane	ND	ug/L	5.0	1		04/25/12 20:41	74-83-9		
2-Butanone (MEK)	ND	ug/L	10.0	1		04/25/12 20:41	78-93-3		
Carbon disulfide	ND	ug/L	5.0	1		04/25/12 20:41	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		04/25/12 20:41	56-23-5		
Chlorobenzene	ND	ug/L	5.0	1		04/25/12 20:41	108-90-7		
Chloroethane	ND	ug/L	5.0	1		04/25/12 20:41	75-00-3		
Chloroform	ND	ug/L	5.0	1		04/25/12 20:41	67-66-3		
Chloromethane	ND	ug/L	5.0	1		04/25/12 20:41	74-87-3		
Dibromochloromethane	ND	ug/L	5.0	1		04/25/12 20:41	124-48-1		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:41	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:41	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 20:41	106-46-7		
1,1-Dichloroethane	ND	ug/L	5.0	1		04/25/12 20:41	75-34-3		
1,2-Dichloroethane	ND	ug/L	5.0	1		04/25/12 20:41	107-06-2		
1,1-Dichloroethene	5.5	ug/L	5.0	1		04/25/12 20:41	75-35-4		
cis-1,2-Dichloroethene	3450	ug/L	125	25		04/27/12 02:23	156-59-2		
trans-1,2-Dichloroethene	27.8	ug/L	5.0	1		04/25/12 20:41	156-60-5		
1,2-Dichloropropane	ND	ug/L	5.0	1		04/25/12 20:41	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 20:41	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 20:41	10061-02-6		
Ethylbenzene	ND	ug/L	5.0	1		04/25/12 20:41	100-41-4		
2-Hexanone	ND	ug/L	10.0	1		04/25/12 20:41	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/25/12 20:41	98-82-8		
Methylene Chloride	ND	ug/L	5.0	1		04/25/12 20:41	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/25/12 20:41	108-10-1		
Styrene	ND	ug/L	5.0	1		04/25/12 20:41	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/25/12 20:41	79-34-5		
Tetrachloroethene	ND	ug/L	5.0	1		04/25/12 20:41	127-18-4		
Toluene	ND	ug/L	5.0	1		04/25/12 20:41	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/25/12 20:41	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/25/12 20:41	79-00-5		
Trichloroethene	7.7	ug/L	5.0	1		04/25/12 20:41	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		04/25/12 20:41	75-69-4		
Vinyl chloride	488	ug/L	25.0	25		04/27/12 02:23	75-01-4		
m&p-Xylene	ND	ug/L	5.0	1		04/25/12 20:41	179601-23-1		
o-Xylene	ND	ug/L	5.0	1		04/25/12 20:41	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130	1		04/25/12 20:41	460-00-4		
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		04/25/12 20:41	17060-07-0		
Toluene-d8 (S)	94	%	70-130	1		04/25/12 20:41	2037-26-5		

ANALYTICAL RESULTS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Sample: POST-CARB **Lab ID: 3067863003** Collected: 04/19/12 12:45 Received: 04/20/12 10:15 Matrix: Water

Comments: • This sample composted from four vial prior to 8260B VOA analysis.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		04/25/12 21:07	67-64-1	
Benzene	ND	ug/L	1.0	1		04/25/12 21:07	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		04/25/12 21:07	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/25/12 21:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/25/12 21:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		04/25/12 21:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		04/25/12 21:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/25/12 21:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/25/12 21:07	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/25/12 21:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/25/12 21:07	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/25/12 21:07	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		04/25/12 21:07	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 21:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 21:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/25/12 21:07	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/25/12 21:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/25/12 21:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/25/12 21:07	75-35-4	
cis-1,2-Dichloroethene	169	ug/L	5.0	1		04/25/12 21:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/25/12 21:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/25/12 21:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 21:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/25/12 21:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/25/12 21:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		04/25/12 21:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/25/12 21:07	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		04/25/12 21:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/25/12 21:07	108-10-1	
Styrene	ND	ug/L	5.0	1		04/25/12 21:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/25/12 21:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/25/12 21:07	127-18-4	
Toluene	ND	ug/L	5.0	1		04/25/12 21:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/25/12 21:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/25/12 21:07	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/25/12 21:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/25/12 21:07	75-69-4	
Vinyl chloride	833	ug/L	10.0	10		04/27/12 02:48	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		04/25/12 21:07	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		04/25/12 21:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	106	%	70-130	1		04/25/12 21:07	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		04/25/12 21:07	17060-07-0	
Toluene-d8 (S)	92	%	70-130	1		04/25/12 21:07	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Sample: TB-01		Lab ID: 3067863004	Collected: 04/19/12 00:01	Received: 04/20/12 10:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND ug/L		10.0	1		04/25/12 13:14	67-64-1	
Benzene	ND ug/L		1.0	1		04/25/12 13:14	71-43-2	
Bromodichloromethane	ND ug/L		5.0	1		04/25/12 13:14	75-27-4	
Bromoform	ND ug/L		5.0	1		04/25/12 13:14	75-25-2	
Bromomethane	ND ug/L		5.0	1		04/25/12 13:14	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		04/25/12 13:14	78-93-3	
Carbon disulfide	ND ug/L		5.0	1		04/25/12 13:14	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		04/25/12 13:14	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		04/25/12 13:14	108-90-7	
Chloroethane	ND ug/L		5.0	1		04/25/12 13:14	75-00-3	
Chloroform	ND ug/L		5.0	1		04/25/12 13:14	67-66-3	
Chloromethane	ND ug/L		5.0	1		04/25/12 13:14	74-87-3	
Dibromochloromethane	ND ug/L		5.0	1		04/25/12 13:14	124-48-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		04/25/12 13:14	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		04/25/12 13:14	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		04/25/12 13:14	106-46-7	
1,1-Dichloroethane	ND ug/L		5.0	1		04/25/12 13:14	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		04/25/12 13:14	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		04/25/12 13:14	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		04/25/12 13:14	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		04/25/12 13:14	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		04/25/12 13:14	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		04/25/12 13:14	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		04/25/12 13:14	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		04/25/12 13:14	100-41-4	
2-Hexanone	ND ug/L		10.0	1		04/25/12 13:14	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		04/25/12 13:14	98-82-8	
Methylene Chloride	ND ug/L		5.0	1		04/25/12 13:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		04/25/12 13:14	108-10-1	
Styrene	ND ug/L		5.0	1		04/25/12 13:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		04/25/12 13:14	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		04/25/12 13:14	127-18-4	
Toluene	ND ug/L		5.0	1		04/25/12 13:14	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		04/25/12 13:14	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		04/25/12 13:14	79-00-5	
Trichloroethene	ND ug/L		5.0	1		04/25/12 13:14	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		04/25/12 13:14	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		04/25/12 13:14	75-01-4	
m&p-Xylene	ND ug/L		5.0	1		04/25/12 13:14	179601-23-1	
o-Xylene	ND ug/L		5.0	1		04/25/12 13:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102 %		70-130	1		04/25/12 13:14	460-00-4	
1,2-Dichloroethane-d4 (S)	111 %		70-130	1		04/25/12 13:14	17060-07-0	
Toluene-d8 (S)	93 %		70-130	1		04/25/12 13:14	2037-26-5	

QUALITY CONTROL DATA

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

QC Batch: MSV/12566 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3067863001, 3067863002, 3067863003, 3067863004

METHOD BLANK: 433104 Matrix: Water

Associated Lab Samples: 3067863001, 3067863002, 3067863003, 3067863004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	04/25/12 12:47	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/25/12 12:47	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/25/12 12:47	
1,1-Dichloroethane	ug/L	ND	5.0	04/25/12 12:47	
1,1-Dichloroethene	ug/L	ND	5.0	04/25/12 12:47	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/25/12 12:47	
1,2-Dichloroethane	ug/L	ND	5.0	04/25/12 12:47	
1,2-Dichloropropane	ug/L	ND	5.0	04/25/12 12:47	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/25/12 12:47	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/25/12 12:47	
2-Butanone (MEK)	ug/L	ND	10.0	04/25/12 12:47	
2-Hexanone	ug/L	ND	10.0	04/25/12 12:47	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/25/12 12:47	
Acetone	ug/L	ND	10.0	04/25/12 12:47	
Benzene	ug/L	ND	1.0	04/25/12 12:47	
Bromodichloromethane	ug/L	ND	5.0	04/25/12 12:47	
Bromoform	ug/L	ND	5.0	04/25/12 12:47	
Bromomethane	ug/L	ND	5.0	04/25/12 12:47	
Carbon disulfide	ug/L	ND	5.0	04/25/12 12:47	
Carbon tetrachloride	ug/L	ND	5.0	04/25/12 12:47	
Chlorobenzene	ug/L	ND	5.0	04/25/12 12:47	
Chloroethane	ug/L	ND	5.0	04/25/12 12:47	
Chloroform	ug/L	ND	5.0	04/25/12 12:47	
Chloromethane	ug/L	ND	5.0	04/25/12 12:47	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/25/12 12:47	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/25/12 12:47	
Dibromochloromethane	ug/L	ND	5.0	04/25/12 12:47	
Ethylbenzene	ug/L	ND	5.0	04/25/12 12:47	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/25/12 12:47	
m&p-Xylene	ug/L	ND	5.0	04/25/12 12:47	
Methylene Chloride	ug/L	ND	5.0	04/25/12 12:47	B,C9
o-Xylene	ug/L	ND	5.0	04/25/12 12:47	
Styrene	ug/L	ND	5.0	04/25/12 12:47	
Tetrachloroethene	ug/L	ND	5.0	04/25/12 12:47	
Toluene	ug/L	ND	5.0	04/25/12 12:47	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/25/12 12:47	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/25/12 12:47	
Trichloroethene	ug/L	ND	5.0	04/25/12 12:47	
Trichlorofluoromethane	ug/L	ND	5.0	04/25/12 12:47	
Vinyl chloride	ug/L	ND	1.0	04/25/12 12:47	
1,2-Dichloroethane-d4 (S)	%	111	70-130	04/25/12 12:47	
4-Bromofluorobenzene (S)	%	101	70-130	04/25/12 12:47	
Toluene-d8 (S)	%	93	70-130	04/25/12 12:47	

Date: 04/30/2012 04:31 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

LABORATORY CONTROL SAMPLE: 433105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.7	94	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	16.5	83	64.6-121	
1,1,2-Trichloroethane	ug/L	20	16.4	82	75.6-120	
1,1-Dichloroethane	ug/L	20	17.8	89	68.5-122	
1,1-Dichloroethene	ug/L	20	16.9	84	57.1-120	
1,2-Dichlorobenzene	ug/L	20	16.6	83	69.6-120	
1,2-Dichloroethane	ug/L	20	17.6	88	60.5-133	
1,2-Dichloropropane	ug/L	20	15.7	78	71-120	
1,3-Dichlorobenzene	ug/L	20	16.2	81	68.4-121	
1,4-Dichlorobenzene	ug/L	20	16.7	83	68.5-123	
2-Butanone (MEK)	ug/L	20	23.0	115	55.7-138	
2-Hexanone	ug/L	20	21.4	107	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.0	95	64.5-121	
Acetone	ug/L	20	24.7	123	57.6-168	
Benzene	ug/L	20	16.2	81	69.8-120	
Bromodichloromethane	ug/L	20	15.2	76	66.5-120	
Bromoform	ug/L	20	15.8	79	61.1-120	
Bromomethane	ug/L	20	32.6	163	10.6-200	
Carbon disulfide	ug/L	20	20.5	103	60.2-122	
Carbon tetrachloride	ug/L	20	17.6	88	60.1-127	
Chlorobenzene	ug/L	20	16.0	80	72-120	
Chloroethane	ug/L	20	18.6	93	36.8-142	
Chloroform	ug/L	20	17.9	89	69-122	
Chloromethane	ug/L	20	16.9	85	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	17.4	87	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	15.7	78	74.3-120	
Dibromochloromethane	ug/L	20	17.0	85	66.1-120	
Ethylbenzene	ug/L	20	16.3	82	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	17.7	88	68.3-129	
m&p-Xylene	ug/L	40	33.0	82	70.4-130	
Methylene Chloride	ug/L	20	19.3	96	61.5-125	
o-Xylene	ug/L	20	15.9	79	70.6-127	
Styrene	ug/L	20	15.9	79	69.9-120	
Tetrachloroethene	ug/L	20	16.2	81	63.4-121	
Toluene	ug/L	20	16.0	80	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	17.4	87	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	16.1	80	71-120	
Trichloroethene	ug/L	20	15.8	79	65.9-120	
Trichlorofluoromethane	ug/L	20	19.9	99	44.8-137	
Vinyl chloride	ug/L	20	17.4	87	51-127	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			93	70-130	

QUALITY CONTROL DATA

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 433106 433107											
Parameter	Units	3067783004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.4	19.8	102	99	64.3-127	3	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.2	15.8	81	79	64.6-121	2	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.0	16.1	85	80	75.6-120	6	
1,1-Dichloroethane	ug/L	ND	20	20	19.9	18.8	99	94	68.5-122	5	
1,1-Dichloroethene	ug/L	ND	20	20	19.9	19.3	99	96	57.1-120	3	
1,2-Dichlorobenzene	ug/L	ND	20	20	16.3	16.1	81	81	69.6-120	1	
1,2-Dichloroethane	ug/L	ND	20	20	19.0	18.0	95	90	60.5-133	5	
1,2-Dichloropropane	ug/L	ND	20	20	17.8	16.6	89	83	71-120	7	
1,3-Dichlorobenzene	ug/L	ND	20	20	16.8	16.5	84	82	68.4-121	2	
1,4-Dichlorobenzene	ug/L	ND	20	20	16.3	15.8	81	79	68.5-123	3	
2-Butanone (MEK)	ug/L	ND	20	20	19.9	20.6	99	103	55.7-138	3	
2-Hexanone	ug/L	ND	20	20	19.7	20.2	98	101	67-133	3	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	17.9	18.2	89	91	64.5-121	2	
Acetone	ug/L	ND	20	20	10.9	14.1	55	70	57.6-168	25	M0
Benzene	ug/L	ND	20	20	18.0	17.1	90	85	69.8-120	5	
Bromodichloromethane	ug/L	ND	20	20	15.7	15.2	79	76	66.5-120	3	
Bromoform	ug/L	ND	20	20	13.6	14.0	68	70	61.1-120	3	
Bromomethane	ug/L	ND	20	20	23.5	24.1	118	121	10.6-200	2	
Carbon disulfide	ug/L	ND	20	20	15.1	15.0	75	75	60.2-122	.8	
Carbon tetrachloride	ug/L	ND	20	20	18.2	17.8	91	89	60.1-127	2	
Chlorobenzene	ug/L	ND	20	20	17.3	16.5	86	83	72-120	4	
Chloroethane	ug/L	ND	20	20	19.2	19.3	96	96	36.8-142	.3	
Chloroform	ug/L	ND	20	20	19.2	18.4	96	92	69-122	4	
Chloromethane	ug/L	ND	20	20	19.9	19.6	99	98	37.2-129	1	
cis-1,2-Dichloroethene	ug/L	ND	20	20	19.7	18.6	99	93	69.5-123	6	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.0	15.8	80	79	74.3-120	1	
Dibromochloromethane	ug/L	ND	20	20	16.7	16.2	84	81	66.1-120	3	
Ethylbenzene	ug/L	ND	20	20	17.7	17.4	89	87	70.9-124	2	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.4	18.5	97	93	68.3-129	4	
m&p-Xylene	ug/L	ND	40	40	35.3	34.3	88	86	70.4-130	3	
Methylene Chloride	ug/L	ND	20	20	19.4	18.7	97	94	61.5-125	4	
o-Xylene	ug/L	ND	20	20	17.5	17.2	87	86	70.6-127	2	
Styrene	ug/L	ND	20	20	16.8	16.2	84	81	69.9-120	4	
Tetrachloroethene	ug/L	ND	20	20	17.6	16.8	88	84	63.4-121	5	
Toluene	ug/L	ND	20	20	18.1	17.2	90	86	71.5-120	5	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.9	19.0	100	95	64.1-120	5	
trans-1,3-Dichloropropene	ug/L	ND	20	20	15.9	15.5	79	77	71-120	3	
Trichloroethene	ug/L	ND	20	20	17.4	16.6	87	83	65.9-120	5	
Trichlorofluoromethane	ug/L	ND	20	20	22.7	22.6	113	113	44.8-137	.3	
Vinyl chloride	ug/L	ND	20	20	19.5	19.4	97	97	51-127	.3	
1,2-Dichloroethane-d4 (S)	%						94	93	70-130		
4-Bromofluorobenzene (S)	%						99	100	70-130		
Toluene-d8 (S)	%						94	93	70-130		

QUALIFIERS

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

C9 Common Laboratory Contaminant.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181.10000/Essex-Hope

Pace Project No.: 3067863

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3067863001	PRE-CARB	EPA 8260	MSV/12566		
3067863002	PRIMARY-EFF	EPA 8260	MSV/12566		
3067863003	POST-CARB	EPA 8260	MSV/12566		
3067863004	TB-01	EPA 8260	MSV/12566		

CHAIN-OF-CUSTODY / Analytical Request Document

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



Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: URS CORP	Report To: MARK DOWIAK	Company Name:	Address:	Attention:	Page: 1 of 1
Address: FOSTER PLAZA 4	Copy To: VALERIE SIBERT	Address:	Pace Quote Reference:	Company Name:	Page: 1534286
Address: 501 HOLIDAY DR, STE. 300	Purchase Order No.: 41569181	Address:	Pace Project Manager:	REGULATORY AGENCY	
Address: PITTSBURGH, PA 15228	Project Name: ESSEX/HOPE TOWN	Address:	Pace Profile #:	NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐	
Email To: 412-503-4400	Project Number: 41569181, 10000	Address:		UST ☐ RCRA ☐ OTHER ☐	
Fax: 412-503-4400	Requested Due Date/TIME: STANDARD	Address:		Site Location: NY	
Requested Due Date/TIME: STANDARD		Address:		STATE: NY	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE DW Drinking Water WT Water WW Waste Water P Product SL Soil/Solid OL Oil WP Wipe AR Air TS Tissue OT Other	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Analysis Test ↑	Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START	COMPOSITE END/GRAB			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other						
1	PRE-CARB		WTG			DATE	TIME	DATE	TIME	XXXXXXXXXX									Analysis Test ↑			3067803
2	PRIMARY-EFF		WTG			4/19/12	1105			XXXXXXXXXX									Analysis Test ↑			001
3	POST-CARB		WTG				1110			XXXXXXXXXX									Analysis Test ↑			002
4	POST-CARB		WTG				1115			XXXXXXXXXX									Analysis Test ↑			} 003
5	POST-CARB		WTG				1145			XXXXXXXXXX									Analysis Test ↑			
6	POST-CARB		WTG				1215			XXXXXXXXXX									Analysis Test ↑			} 004
7	TB-01		WTG			4/19/12	1245			XXXXXXXXXX									Analysis Test ↑			
8																			Analysis Test ↑			
9																			Analysis Test ↑			
10																			Analysis Test ↑			
11																			Analysis Test ↑			
12																			Analysis Test ↑			

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
COMPOSITE FOUR (4)		Valerie Sibert / URS	4/19/12	1330	Fed Ex Air	4/19/12	1330	Temp in °C	Received on
POST-CARB SAMPLES IN					Valerie Sibert	4/19/12	1330	Sealed Cooler (Y/N)	Custody (Y/N)
LAB AND REPORT AS								Ice (Y/N)	Samples Intact (Y/N)
POST-CARB COMPOSITE									

ORIGINAL

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: **VALERIE SIBERT**
 SIGNATURE of SAMPLER: *Valerie Sibert*
 DATE Signed (MM/DD/YY): **4-19-12**

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007



Sample Condition Upon Receipt

Client Name: URS

Project # 306 7863

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 872640756882

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 5 (6) 7

Type of Ice: Wet Blue None

☒ Samples on ice, cooling process has begun

Cooler Temperature 1.8

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: WJ 4/20/12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WA</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, W-DRO (water)	☒ Yes ☐ No	Initial when completed
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	☒ Yes ☐ No ☐ N/A	15. <u>TB</u>
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 4-20-12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

May 29, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

RE: Project: Essex-Hope Jamestown 41569181
Pace Project No.: 3069925

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on May 19, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Timothy Reed

timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Sample: PRE-CARB		Lab ID: 3069925001	Collected: 05/18/12 10:40		Received: 05/19/12 11:30		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		05/21/12 15:51	67-64-1	
Benzene	7.7	ug/L	1.0	1		05/21/12 15:51	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		05/21/12 15:51	75-27-4	
Bromoform	ND	ug/L	5.0	1		05/21/12 15:51	75-25-2	
Bromomethane	ND	ug/L	5.0	1		05/21/12 15:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		05/21/12 15:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		05/21/12 15:51	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		05/21/12 15:51	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		05/21/12 15:51	108-90-7	
Chloroethane	ND	ug/L	5.0	1		05/21/12 15:51	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/21/12 15:51	67-66-3	
Chloromethane	ND	ug/L	5.0	1		05/21/12 15:51	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		05/21/12 15:51	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 15:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 15:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 15:51	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		05/21/12 15:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		05/21/12 15:51	107-06-2	
1,1-Dichloroethene	17.9	ug/L	5.0	1		05/21/12 15:51	75-35-4	
cis-1,2-Dichloroethene	4650	ug/L	125	25		05/21/12 16:16	156-59-2	
trans-1,2-Dichloroethene	84.1	ug/L	5.0	1		05/21/12 15:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		05/21/12 15:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 15:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 15:51	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		05/21/12 15:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		05/21/12 15:51	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		05/21/12 15:51	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		05/21/12 15:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		05/21/12 15:51	108-10-1	
Styrene	ND	ug/L	5.0	1		05/21/12 15:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		05/21/12 15:51	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		05/21/12 15:51	127-18-4	
Toluene	ND	ug/L	5.0	1		05/21/12 15:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		05/21/12 15:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		05/21/12 15:51	79-00-5	
Trichloroethene	839	ug/L	125	25		05/21/12 16:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/21/12 15:51	75-69-4	
Vinyl chloride	394	ug/L	25.0	25		05/21/12 16:16	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		05/21/12 15:51	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		05/21/12 15:51	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		05/21/12 15:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/21/12 15:51	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		05/21/12 15:51	2037-26-5	

ANALYTICAL RESULTS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Sample: PRIMARY-EFF		Lab ID: 3069925002	Collected: 05/18/12 10:45	Received: 05/19/12 11:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		05/21/12 16:41	67-64-1	
Benzene	ND	ug/L	1.0	1		05/21/12 16:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		05/21/12 16:41	75-27-4	
Bromoform	ND	ug/L	5.0	1		05/21/12 16:41	75-25-2	
Bromomethane	ND	ug/L	5.0	1		05/21/12 16:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		05/21/12 16:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		05/21/12 16:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		05/21/12 16:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		05/21/12 16:41	108-90-7	
Chloroethane	ND	ug/L	5.0	1		05/21/12 16:41	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/21/12 16:41	67-66-3	
Chloromethane	ND	ug/L	5.0	1		05/21/12 16:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		05/21/12 16:41	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 16:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 16:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 16:41	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		05/21/12 16:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		05/21/12 16:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		05/21/12 16:41	75-35-4	
cis-1,2-Dichloroethene	11.0	ug/L	5.0	1		05/21/12 16:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		05/21/12 16:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		05/21/12 16:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 16:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 16:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		05/21/12 16:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		05/21/12 16:41	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		05/21/12 16:41	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		05/21/12 16:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		05/21/12 16:41	108-10-1	
Styrene	ND	ug/L	5.0	1		05/21/12 16:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		05/21/12 16:41	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		05/21/12 16:41	127-18-4	
Toluene	ND	ug/L	5.0	1		05/21/12 16:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		05/21/12 16:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		05/21/12 16:41	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		05/21/12 16:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/21/12 16:41	75-69-4	
Vinyl chloride	4.5	ug/L	1.0	1		05/21/12 16:41	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		05/21/12 16:41	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		05/21/12 16:41	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		05/21/12 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		05/21/12 16:41	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		05/21/12 16:41	2037-26-5	

ANALYTICAL RESULTS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Sample: POST-CARB		Lab ID: 3069925003	Collected: 05/18/12 12:20	Received: 05/19/12 11:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		05/21/12 17:30	67-64-1	
Benzene	ND	ug/L	1.0	1		05/21/12 17:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		05/21/12 17:30	75-27-4	
Bromoform	ND	ug/L	5.0	1		05/21/12 17:30	75-25-2	
Bromomethane	ND	ug/L	5.0	1		05/21/12 17:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		05/21/12 17:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		05/21/12 17:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		05/21/12 17:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		05/21/12 17:30	108-90-7	
Chloroethane	ND	ug/L	5.0	1		05/21/12 17:30	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/21/12 17:30	67-66-3	
Chloromethane	ND	ug/L	5.0	1		05/21/12 17:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		05/21/12 17:30	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 17:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 17:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		05/21/12 17:30	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		05/21/12 17:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		05/21/12 17:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		05/21/12 17:30	75-35-4	
cis-1,2-Dichloroethene	49.5	ug/L	5.0	1		05/21/12 17:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		05/21/12 17:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		05/21/12 17:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 17:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		05/21/12 17:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		05/21/12 17:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		05/21/12 17:30	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		05/21/12 17:30	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		05/21/12 17:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		05/21/12 17:30	108-10-1	
Styrene	ND	ug/L	5.0	1		05/21/12 17:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		05/21/12 17:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		05/21/12 17:30	127-18-4	
Toluene	ND	ug/L	5.0	1		05/21/12 17:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		05/21/12 17:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		05/21/12 17:30	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		05/21/12 17:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/21/12 17:30	75-69-4	
Vinyl chloride	1.8	ug/L	1.0	1		05/21/12 17:30	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		05/21/12 17:30	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		05/21/12 17:30	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		05/21/12 17:30	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		05/21/12 17:30	17060-07-0	
Toluene-d8 (S)	94	%	70-130	1		05/21/12 17:30	2037-26-5	

ANALYTICAL RESULTS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Sample: TB-O1		Lab ID: 3069925004		Collected: 05/18/12 00:01		Received: 05/19/12 11:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L		10.0	1		05/21/12 13:24	67-64-1		
Benzene	ND ug/L		1.0	1		05/21/12 13:24	71-43-2		
Bromodichloromethane	ND ug/L		5.0	1		05/21/12 13:24	75-27-4		
Bromoform	ND ug/L		5.0	1		05/21/12 13:24	75-25-2		
Bromomethane	ND ug/L		5.0	1		05/21/12 13:24	74-83-9		
2-Butanone (MEK)	ND ug/L		10.0	1		05/21/12 13:24	78-93-3		
Carbon disulfide	ND ug/L		5.0	1		05/21/12 13:24	75-15-0		
Carbon tetrachloride	ND ug/L		5.0	1		05/21/12 13:24	56-23-5		
Chlorobenzene	ND ug/L		5.0	1		05/21/12 13:24	108-90-7		
Chloroethane	ND ug/L		5.0	1		05/21/12 13:24	75-00-3		
Chloroform	ND ug/L		5.0	1		05/21/12 13:24	67-66-3		
Chloromethane	ND ug/L		5.0	1		05/21/12 13:24	74-87-3		
Dibromochloromethane	ND ug/L		5.0	1		05/21/12 13:24	124-48-1		
1,2-Dichlorobenzene	ND ug/L		5.0	1		05/21/12 13:24	95-50-1		
1,3-Dichlorobenzene	ND ug/L		5.0	1		05/21/12 13:24	541-73-1		
1,4-Dichlorobenzene	ND ug/L		5.0	1		05/21/12 13:24	106-46-7		
1,1-Dichloroethane	ND ug/L		5.0	1		05/21/12 13:24	75-34-3		
1,2-Dichloroethane	ND ug/L		5.0	1		05/21/12 13:24	107-06-2		
1,1-Dichloroethene	ND ug/L		5.0	1		05/21/12 13:24	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		5.0	1		05/21/12 13:24	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		5.0	1		05/21/12 13:24	156-60-5		
1,2-Dichloropropane	ND ug/L		5.0	1		05/21/12 13:24	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		5.0	1		05/21/12 13:24	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		5.0	1		05/21/12 13:24	10061-02-6		
Ethylbenzene	ND ug/L		5.0	1		05/21/12 13:24	100-41-4		
2-Hexanone	ND ug/L		10.0	1		05/21/12 13:24	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		05/21/12 13:24	98-82-8		
Methylene Chloride	ND ug/L		5.0	1		05/21/12 13:24	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		05/21/12 13:24	108-10-1		
Styrene	ND ug/L		5.0	1		05/21/12 13:24	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		05/21/12 13:24	79-34-5		
Tetrachloroethene	ND ug/L		5.0	1		05/21/12 13:24	127-18-4		
Toluene	ND ug/L		5.0	1		05/21/12 13:24	108-88-3		
1,1,1-Trichloroethane	ND ug/L		5.0	1		05/21/12 13:24	71-55-6		
1,1,2-Trichloroethane	ND ug/L		5.0	1		05/21/12 13:24	79-00-5		
Trichloroethene	ND ug/L		5.0	1		05/21/12 13:24	79-01-6		
Trichlorofluoromethane	ND ug/L		5.0	1		05/21/12 13:24	75-69-4		
Vinyl chloride	ND ug/L		1.0	1		05/21/12 13:24	75-01-4		
m&p-Xylene	ND ug/L		5.0	1		05/21/12 13:24	179601-23-1		
o-Xylene	ND ug/L		5.0	1		05/21/12 13:24	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	100 %		70-130	1		05/21/12 13:24	460-00-4		
1,2-Dichloroethane-d4 (S)	104 %		70-130	1		05/21/12 13:24	17060-07-0		
Toluene-d8 (S)	96 %		70-130	1		05/21/12 13:24	2037-26-5		

QUALITY CONTROL DATA

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

QC Batch: MSV/12793 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3069925001, 3069925002, 3069925003, 3069925004

METHOD BLANK: 443535 Matrix: Water
Associated Lab Samples: 3069925001, 3069925002, 3069925003, 3069925004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	05/21/12 12:34	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	05/21/12 12:34	
1,1,2-Trichloroethane	ug/L	ND	5.0	05/21/12 12:34	
1,1-Dichloroethane	ug/L	ND	5.0	05/21/12 12:34	
1,1-Dichloroethene	ug/L	ND	5.0	05/21/12 12:34	
1,2-Dichlorobenzene	ug/L	ND	5.0	05/21/12 12:34	
1,2-Dichloroethane	ug/L	ND	5.0	05/21/12 12:34	
1,2-Dichloropropane	ug/L	ND	5.0	05/21/12 12:34	
1,3-Dichlorobenzene	ug/L	ND	5.0	05/21/12 12:34	
1,4-Dichlorobenzene	ug/L	ND	5.0	05/21/12 12:34	
2-Butanone (MEK)	ug/L	ND	10.0	05/21/12 12:34	
2-Hexanone	ug/L	ND	10.0	05/21/12 12:34	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	05/21/12 12:34	
Acetone	ug/L	ND	10.0	05/21/12 12:34	
Benzene	ug/L	ND	1.0	05/21/12 12:34	
Bromodichloromethane	ug/L	ND	5.0	05/21/12 12:34	
Bromoform	ug/L	ND	5.0	05/21/12 12:34	
Bromomethane	ug/L	ND	5.0	05/21/12 12:34	
Carbon disulfide	ug/L	ND	5.0	05/21/12 12:34	
Carbon tetrachloride	ug/L	ND	5.0	05/21/12 12:34	
Chlorobenzene	ug/L	ND	5.0	05/21/12 12:34	
Chloroethane	ug/L	ND	5.0	05/21/12 12:34	
Chloroform	ug/L	ND	5.0	05/21/12 12:34	
Chloromethane	ug/L	ND	5.0	05/21/12 12:34	
cis-1,2-Dichloroethene	ug/L	ND	5.0	05/21/12 12:34	
cis-1,3-Dichloropropene	ug/L	ND	5.0	05/21/12 12:34	
Dibromochloromethane	ug/L	ND	5.0	05/21/12 12:34	
Ethylbenzene	ug/L	ND	5.0	05/21/12 12:34	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	05/21/12 12:34	
m&p-Xylene	ug/L	ND	5.0	05/21/12 12:34	
Methylene Chloride	ug/L	ND	5.0	05/21/12 12:34	
o-Xylene	ug/L	ND	5.0	05/21/12 12:34	
Styrene	ug/L	ND	5.0	05/21/12 12:34	
Tetrachloroethene	ug/L	ND	5.0	05/21/12 12:34	
Toluene	ug/L	ND	5.0	05/21/12 12:34	
trans-1,2-Dichloroethene	ug/L	ND	5.0	05/21/12 12:34	
trans-1,3-Dichloropropene	ug/L	ND	5.0	05/21/12 12:34	
Trichloroethene	ug/L	ND	5.0	05/21/12 12:34	
Trichlorofluoromethane	ug/L	ND	5.0	05/21/12 12:34	
Vinyl chloride	ug/L	ND	1.0	05/21/12 12:34	
1,2-Dichloroethane-d4 (S)	%	102	70-130	05/21/12 12:34	
4-Bromofluorobenzene (S)	%	96	70-130	05/21/12 12:34	
Toluene-d8 (S)	%	100	70-130	05/21/12 12:34	

Date: 05/29/2012 03:54 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

LABORATORY CONTROL SAMPLE: 443536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.3	117	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	64.6-121	
1,1,2-Trichloroethane	ug/L	20	21.7	108	75.6-120	
1,1-Dichloroethane	ug/L	20	23.0	115	68.5-122	
1,1-Dichloroethene	ug/L	20	22.4	112	57.1-120	
1,2-Dichlorobenzene	ug/L	20	22.4	112	69.6-120	
1,2-Dichloroethane	ug/L	20	22.8	114	60.5-133	
1,2-Dichloropropane	ug/L	20	20.7	104	71-120	
1,3-Dichlorobenzene	ug/L	20	21.9	110	68.4-121	
1,4-Dichlorobenzene	ug/L	20	21.8	109	68.5-123	
2-Butanone (MEK)	ug/L	20	26.5	132	55.7-138	
2-Hexanone	ug/L	20	20.4	102	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	20.5	102	64.5-121	
Acetone	ug/L	20	20.1	100	57.6-168	
Benzene	ug/L	20	21.4	107	69.8-120	
Bromodichloromethane	ug/L	20	21.0	105	66.5-120	
Bromoform	ug/L	20	18.6	93	61.1-120	
Bromomethane	ug/L	20	24.0	120	10.6-200	
Carbon disulfide	ug/L	20	25.1	126	60.2-122	L3
Carbon tetrachloride	ug/L	20	22.6	113	60.1-127	
Chlorobenzene	ug/L	20	20.3	102	72-120	
Chloroethane	ug/L	20	24.4	122	36.8-142	
Chloroform	ug/L	20	22.3	112	69-122	
Chloromethane	ug/L	20	21.9	110	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	74.3-120	
Dibromochloromethane	ug/L	20	19.3	96	66.1-120	
Ethylbenzene	ug/L	20	20.7	104	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	24.4	122	68.3-129	
m&p-Xylene	ug/L	40	41.1	103	70.4-130	
Methylene Chloride	ug/L	20	24.2	121	61.5-125	
o-Xylene	ug/L	20	21.0	105	70.6-127	
Styrene	ug/L	20	20.1	101	69.9-120	
Tetrachloroethene	ug/L	20	20.9	105	63.4-121	
Toluene	ug/L	20	21.2	106	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	20.1	101	71-120	
Trichloroethene	ug/L	20	20.5	102	65.9-120	
Trichlorofluoromethane	ug/L	20	23.4	117	44.8-137	
Vinyl chloride	ug/L	20	23.2	116	51-127	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			96	70-130	

QUALIFIERS

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

BATCH QUALIFIERS

Batch: MSV/12793

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Essex-Hope Jamestown 41569181

Pace Project No.: 3069925

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3069925001	PRE-CARB	EPA 8260	MSV/12793		
3069925002	PRIMARY-EFF	EPA 8260	MSV/12793		
3069925003	POST-CARB	EPA 8260	MSV/12793		
3069925004	TB-O1	EPA 8260	MSV/12793		

CHAIN-OF-CUSTODY / Analytical Request Document

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



Pace Analytical®
www.pacelabs.com

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	URS CORP	Report To:	MARK DOWIAK	Attention:	
Address:	POSTER PLAZA 4 501 HOLIDAY DR, STE 300 PITTSBURGH, PA 15220	Copy To:	VALERIE SIBETO	Company Name:	
Email To:		Purchase Order No.:	41569181	Address:	
Phone:	412-503-4700	Project Name:	ESSEX/HOPE JAMESON/AL	Pace Quote Reference:	
Requested Due Date/TAT:	STANDARD	Project Number:	41569181	Pace Project Manager:	
				Pace Profile #:	

Section D Required Client Information		Section E Matrix Codes		Section F Sample ID		Section G Requested Analysis Filtered (Y/N)	
Item #	Sample ID (A-Z, 0-9 / -)	Matrix Code	Matrix / CODE	Sample ID	Sample ID	Sample ID	Sample ID
1	PRE-CARB	Drinking Water	DW	PRE-CARB	PRE-CARB	PRE-CARB	PRE-CARB
2	PRIMARY-EFFC	Water	WT	PRIMARY-EFFC	PRIMARY-EFFC	PRIMARY-EFFC	PRIMARY-EFFC
3	POST-CARB	Waste Water	WW	POST-CARB	POST-CARB	POST-CARB	POST-CARB
4	POST-CARB	Product	P	POST-CARB	POST-CARB	POST-CARB	POST-CARB
5	POST-CARB	Soil/Solid	SL	POST-CARB	POST-CARB	POST-CARB	POST-CARB
6	POST-CARB	Oil	OL	POST-CARB	POST-CARB	POST-CARB	POST-CARB
7	TB-OI	Wipe	WP	TB-OI	TB-OI	TB-OI	TB-OI
8		Air	AR				
9		Tissue	TS				
10		Other	OT				
11							
12							

Section H Additional Comments		Section I Relinquished By / Affiliation		Section J Date		Section K Time		Section L Sample Conditions	
Item #	Additional Comments	Relinquished By / Affiliation	Date	Time	Date	Time	Temp in °C	Received on	Sealed Cooler
1	COMPOSITE FOUR (4)	Valerie Sibeto	5/18/12	1300	5/18/12	1300	3.9	Y	Y
2	POST-CARB SAMPLES IN	Valerie Sibeto	5/18/12	1300	5/18/12	1300	3.9	Y	Y
3	LAB AND REPORT AS	Valerie Sibeto	5/18/12	1300	5/18/12	1300	3.9	Y	Y
4	POST-CARB COMPOSITE	Valerie Sibeto	5/18/12	1300	5/18/12	1300	3.9	Y	Y



Sample Condition Upon Receipt

Client Name: URS

Project # 3069925

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 87264076893

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 5 6 7

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature 3.9

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: ML 5/19

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, Wt-DRO (water)	☒ Yes ☐ No	Initial when completed <u>ML</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 5-21-11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

3069925
URS

Client Name: _____

[illegible]

June 26, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

RE: Project: 41569181.10000 Essex/Hope
Pace Project No.: 3071251

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



David A. Pichette for
Timothy Reed
timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Ms. Valerie Sibeto, URS Corporation



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601

ACCLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification

Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/TNI Certification #: LA080002

Louisiana/TNI Certification #: 4086

Maine Certification #: PA0091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188

Utah/TNI Certification #: ANTE

Virgin Island/PADEP Certification

Virginia Certification #: 00112

Virginia VELAP (Cert # 460198)

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Sample: PRE-CARB		Lab ID: 3071251001	Collected: 06/11/12 14:00	Received: 06/12/12 16:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		06/15/12 23:33	67-64-1	
Benzene	8.2	ug/L	1.0	1		06/15/12 23:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		06/15/12 23:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		06/15/12 23:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		06/15/12 23:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		06/15/12 23:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		06/15/12 23:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		06/15/12 23:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		06/15/12 23:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		06/15/12 23:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		06/15/12 23:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		06/15/12 23:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		06/15/12 23:33	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:33	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		06/15/12 23:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		06/15/12 23:33	107-06-2	
1,1-Dichloroethene	18.5	ug/L	5.0	1		06/15/12 23:33	75-35-4	
cis-1,2-Dichloroethene	5380	ug/L	125	25		06/15/12 23:59	156-59-2	
trans-1,2-Dichloroethene	99.3	ug/L	5.0	1		06/15/12 23:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		06/15/12 23:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 23:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 23:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		06/15/12 23:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		06/15/12 23:33	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		06/15/12 23:33	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		06/15/12 23:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		06/15/12 23:33	108-10-1	
Styrene	ND	ug/L	5.0	1		06/15/12 23:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		06/15/12 23:33	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		06/15/12 23:33	127-18-4	
Toluene	ND	ug/L	5.0	1		06/15/12 23:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		06/15/12 23:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		06/15/12 23:33	79-00-5	
Trichloroethene	817	ug/L	125	25		06/15/12 23:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		06/15/12 23:33	75-69-4	
Vinyl chloride	426	ug/L	25.0	25		06/15/12 23:59	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		06/15/12 23:33	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		06/15/12 23:33	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		06/15/12 23:33	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		06/15/12 23:33	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		06/15/12 23:33	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Sample: PRIMARY-EFF		Lab ID: 3071251002	Collected: 06/11/12 14:05	Received: 06/12/12 16:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		06/15/12 22:15	67-64-1	
Benzene	ND	ug/L	1.0	1		06/15/12 22:15	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		06/15/12 22:15	75-27-4	
Bromoform	ND	ug/L	5.0	1		06/15/12 22:15	75-25-2	
Bromomethane	ND	ug/L	5.0	1		06/15/12 22:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		06/15/12 22:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		06/15/12 22:15	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		06/15/12 22:15	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		06/15/12 22:15	108-90-7	
Chloroethane	ND	ug/L	5.0	1		06/15/12 22:15	75-00-3	
Chloroform	ND	ug/L	5.0	1		06/15/12 22:15	67-66-3	
Chloromethane	ND	ug/L	5.0	1		06/15/12 22:15	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		06/15/12 22:15	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 22:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 22:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 22:15	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		06/15/12 22:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		06/15/12 22:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		06/15/12 22:15	75-35-4	
cis-1,2-Dichloroethene	11.4	ug/L	5.0	1		06/15/12 22:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		06/15/12 22:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		06/15/12 22:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 22:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 22:15	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		06/15/12 22:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		06/15/12 22:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		06/15/12 22:15	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		06/15/12 22:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		06/15/12 22:15	108-10-1	
Styrene	ND	ug/L	5.0	1		06/15/12 22:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		06/15/12 22:15	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		06/15/12 22:15	127-18-4	
Toluene	ND	ug/L	5.0	1		06/15/12 22:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		06/15/12 22:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		06/15/12 22:15	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		06/15/12 22:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		06/15/12 22:15	75-69-4	
Vinyl chloride	6.2	ug/L	1.0	1		06/15/12 22:15	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		06/15/12 22:15	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		06/15/12 22:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	70-130	1		06/15/12 22:15	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		06/15/12 22:15	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		06/15/12 22:15	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Sample: POST-CARB **Lab ID: 3071251003** Collected: 06/11/12 15:40 Received: 06/12/12 16:50 Matrix: Water

Comments: • Post Carbon Samples collected at 14:10, 14:40, 15:10, and 15:40.
• 8260B VOA: The sample was composited from four vials prior to 8260 VOA analysis.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND	ug/L	10.0	1		06/15/12 23:07	67-64-1	
Benzene	ND	ug/L	1.0	1		06/15/12 23:07	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		06/15/12 23:07	75-27-4	
Bromoform	ND	ug/L	5.0	1		06/15/12 23:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		06/15/12 23:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		06/15/12 23:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		06/15/12 23:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		06/15/12 23:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		06/15/12 23:07	108-90-7	
Chloroethane	ND	ug/L	5.0	1		06/15/12 23:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		06/15/12 23:07	67-66-3	
Chloromethane	ND	ug/L	5.0	1		06/15/12 23:07	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		06/15/12 23:07	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		06/15/12 23:07	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		06/15/12 23:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		06/15/12 23:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		06/15/12 23:07	75-35-4	
cis-1,2-Dichloroethene	34.0	ug/L	5.0	1		06/15/12 23:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		06/15/12 23:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		06/15/12 23:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 23:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		06/15/12 23:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		06/15/12 23:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		06/15/12 23:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		06/15/12 23:07	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		06/15/12 23:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		06/15/12 23:07	108-10-1	
Styrene	ND	ug/L	5.0	1		06/15/12 23:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		06/15/12 23:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		06/15/12 23:07	127-18-4	
Toluene	ND	ug/L	5.0	1		06/15/12 23:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		06/15/12 23:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		06/15/12 23:07	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		06/15/12 23:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		06/15/12 23:07	75-69-4	
Vinyl chloride	1.3	ug/L	1.0	1		06/15/12 23:07	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		06/15/12 23:07	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		06/15/12 23:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		06/15/12 23:07	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		06/15/12 23:07	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		06/15/12 23:07	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Sample: TB-01		Lab ID: 3071251004		Collected: 06/11/12 00:01		Received: 06/12/12 16:50		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L	10.0	1			06/15/12 14:50	67-64-1		
Benzene	ND ug/L	1.0	1			06/15/12 14:50	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			06/15/12 14:50	75-27-4		
Bromoform	ND ug/L	5.0	1			06/15/12 14:50	75-25-2		
Bromomethane	ND ug/L	5.0	1			06/15/12 14:50	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			06/15/12 14:50	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			06/15/12 14:50	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			06/15/12 14:50	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			06/15/12 14:50	108-90-7		
Chloroethane	ND ug/L	5.0	1			06/15/12 14:50	75-00-3		
Chloroform	ND ug/L	5.0	1			06/15/12 14:50	67-66-3		
Chloromethane	ND ug/L	5.0	1			06/15/12 14:50	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			06/15/12 14:50	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			06/15/12 14:50	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			06/15/12 14:50	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			06/15/12 14:50	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			06/15/12 14:50	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			06/15/12 14:50	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			06/15/12 14:50	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			06/15/12 14:50	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			06/15/12 14:50	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			06/15/12 14:50	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			06/15/12 14:50	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			06/15/12 14:50	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			06/15/12 14:50	100-41-4		
2-Hexanone	ND ug/L	10.0	1			06/15/12 14:50	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			06/15/12 14:50	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			06/15/12 14:50	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			06/15/12 14:50	108-10-1		
Styrene	ND ug/L	5.0	1			06/15/12 14:50	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			06/15/12 14:50	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			06/15/12 14:50	127-18-4		
Toluene	ND ug/L	5.0	1			06/15/12 14:50	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			06/15/12 14:50	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			06/15/12 14:50	79-00-5		
Trichloroethene	ND ug/L	5.0	1			06/15/12 14:50	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			06/15/12 14:50	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			06/15/12 14:50	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			06/15/12 14:50	179601-23-1		
o-Xylene	ND ug/L	5.0	1			06/15/12 14:50	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	95 %	70-130	1			06/15/12 14:50	460-00-4		
1,2-Dichloroethane-d4 (S)	107 %	70-130	1			06/15/12 14:50	17060-07-0		
Toluene-d8 (S)	102 %	70-130	1			06/15/12 14:50	2037-26-5		

QUALITY CONTROL DATA

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

QC Batch:	MSV/13018	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples: 3071251001, 3071251002, 3071251003, 3071251004			

METHOD BLANK:	452606	Matrix:	Water
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Associated Lab Samples: 3071251001, 3071251002, 3071251003, 3071251004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	06/15/12 14:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	06/15/12 14:24	
1,1,2-Trichloroethane	ug/L	ND	5.0	06/15/12 14:24	
1,1-Dichloroethane	ug/L	ND	5.0	06/15/12 14:24	
1,1-Dichloroethene	ug/L	ND	5.0	06/15/12 14:24	
1,2-Dichlorobenzene	ug/L	ND	5.0	06/15/12 14:24	
1,2-Dichloroethane	ug/L	ND	5.0	06/15/12 14:24	
1,2-Dichloropropane	ug/L	ND	5.0	06/15/12 14:24	
1,3-Dichlorobenzene	ug/L	ND	5.0	06/15/12 14:24	
1,4-Dichlorobenzene	ug/L	ND	5.0	06/15/12 14:24	
2-Butanone (MEK)	ug/L	ND	10.0	06/15/12 14:24	
2-Hexanone	ug/L	ND	10.0	06/15/12 14:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	06/15/12 14:24	
Acetone	ug/L	ND	10.0	06/15/12 14:24	
Benzene	ug/L	ND	1.0	06/15/12 14:24	
Bromodichloromethane	ug/L	ND	5.0	06/15/12 14:24	
Bromoform	ug/L	ND	5.0	06/15/12 14:24	
Bromomethane	ug/L	ND	5.0	06/15/12 14:24	
Carbon disulfide	ug/L	ND	5.0	06/15/12 14:24	
Carbon tetrachloride	ug/L	ND	5.0	06/15/12 14:24	
Chlorobenzene	ug/L	ND	5.0	06/15/12 14:24	
Chloroethane	ug/L	ND	5.0	06/15/12 14:24	
Chloroform	ug/L	ND	5.0	06/15/12 14:24	
Chloromethane	ug/L	ND	5.0	06/15/12 14:24	
cis-1,2-Dichloroethene	ug/L	ND	5.0	06/15/12 14:24	
cis-1,3-Dichloropropene	ug/L	ND	5.0	06/15/12 14:24	
Dibromochloromethane	ug/L	ND	5.0	06/15/12 14:24	
Ethylbenzene	ug/L	ND	5.0	06/15/12 14:24	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	06/15/12 14:24	
m&p-Xylene	ug/L	ND	5.0	06/15/12 14:24	
Methylene Chloride	ug/L	ND	5.0	06/15/12 14:24	B,C9
o-Xylene	ug/L	ND	5.0	06/15/12 14:24	
Styrene	ug/L	ND	5.0	06/15/12 14:24	
Tetrachloroethene	ug/L	ND	5.0	06/15/12 14:24	
Toluene	ug/L	ND	5.0	06/15/12 14:24	
trans-1,2-Dichloroethene	ug/L	ND	5.0	06/15/12 14:24	
trans-1,3-Dichloropropene	ug/L	ND	5.0	06/15/12 14:24	
Trichloroethene	ug/L	ND	5.0	06/15/12 14:24	
Trichlorofluoromethane	ug/L	ND	5.0	06/15/12 14:24	
Vinyl chloride	ug/L	ND	1.0	06/15/12 14:24	
1,2-Dichloroethane-d4 (S)	%	106	70-130	06/15/12 14:24	
4-Bromofluorobenzene (S)	%	95	70-130	06/15/12 14:24	
Toluene-d8 (S)	%	98	70-130	06/15/12 14:24	

Date: 06/26/2012 02:37 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

LABORATORY CONTROL SAMPLE: 452607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.1	96	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	91	64.6-121	
1,1,2-Trichloroethane	ug/L	20	19.3	96	75.6-120	
1,1-Dichloroethane	ug/L	20	19.0	95	68.5-122	
1,1-Dichloroethene	ug/L	20	18.5	93	57.1-120	
1,2-Dichlorobenzene	ug/L	20	18.2	91	69.6-120	
1,2-Dichloroethane	ug/L	20	19.2	96	60.5-133	
1,2-Dichloropropane	ug/L	20	19.3	96	71-120	
1,3-Dichlorobenzene	ug/L	20	18.1	91	68.4-121	
1,4-Dichlorobenzene	ug/L	20	18.1	91	68.5-123	
2-Butanone (MEK)	ug/L	20	21.1	105	55.7-138	
2-Hexanone	ug/L	20	21.0	105	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.7	99	64.5-121	
Acetone	ug/L	20	23.9	120	57.6-168	
Benzene	ug/L	20	19.2	96	69.8-120	
Bromodichloromethane	ug/L	20	19.3	96	66.5-120	
Bromoform	ug/L	20	18.3	92	61.1-120	
Bromomethane	ug/L	20	17.1	86	10.6-200	
Carbon disulfide	ug/L	20	21.7	109	60.2-122	
Carbon tetrachloride	ug/L	20	18.6	93	60.1-127	
Chlorobenzene	ug/L	20	18.4	92	72-120	
Chloroethane	ug/L	20	18.7	93	36.8-142	
Chloroform	ug/L	20	18.1	91	69-122	
Chloromethane	ug/L	20	20.1	101	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	19.2	96	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	19.7	98	74.3-120	
Dibromochloromethane	ug/L	20	18.2	91	66.1-120	
Ethylbenzene	ug/L	20	17.8	89	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	19.7	99	68.3-129	
m&p-Xylene	ug/L	40	36.7	92	70.4-130	
Methylene Chloride	ug/L	20	21.1	105	61.5-125	
o-Xylene	ug/L	20	18.5	92	70.6-127	
Styrene	ug/L	20	19.1	95	69.9-120	
Tetrachloroethene	ug/L	20	17.7	89	63.4-121	
Toluene	ug/L	20	18.7	93	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	18.9	94	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	19.4	97	71-120	
Trichloroethene	ug/L	20	18.2	91	65.9-120	
Trichlorofluoromethane	ug/L	20	20.0	100	44.8-137	
Vinyl chloride	ug/L	20	19.2	96	51-127	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Toluene-d8 (S)	%			100	70-130	

QUALITY CONTROL DATA

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 452608 452609											
Parameter	Units	3071251002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	18.0	19.4	90	97	64.3-127	7	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.7	17.6	83	88	64.6-121	5	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.7	18.6	89	93	75.6-120	5	
1,1-Dichloroethane	ug/L	ND	20	20	18.2	19.3	91	96	68.5-122	6	
1,1-Dichloroethene	ug/L	ND	20	20	19.1	19.6	95	98	57.1-120	3	
1,2-Dichlorobenzene	ug/L	ND	20	20	15.8	16.9	79	84	69.6-120	7	
1,2-Dichloroethane	ug/L	ND	20	20	18.7	19.8	93	99	60.5-133	6	
1,2-Dichloropropane	ug/L	ND	20	20	18.4	18.9	92	94	71-120	2	
1,3-Dichlorobenzene	ug/L	ND	20	20	16.3	16.8	81	84	68.4-121	3	
1,4-Dichlorobenzene	ug/L	ND	20	20	16.5	16.9	82	84	68.5-123	2	
2-Butanone (MEK)	ug/L	ND	20	20	19.8	22.6	99	113	55.7-138	13	
2-Hexanone	ug/L	ND	20	20	17.9	20.8	90	104	67-133	15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	18.3	20.2	91	101	64.5-121	10	
Acetone	ug/L	ND	20	20	18.7	22.9	74	94	57.6-168	20	
Benzene	ug/L	ND	20	20	18.4	19.1	92	96	69.8-120	4	
Bromodichloromethane	ug/L	ND	20	20	17.7	17.9	89	89	66.5-120	1	
Bromoform	ug/L	ND	20	20	15.4	15.7	77	78	61.1-120	2	
Bromomethane	ug/L	ND	20	20	5.4	7.4	27	37	10.6-200	30	
Carbon disulfide	ug/L	ND	20	20	20.3	17.8	102	89	60.2-122	14	
Carbon tetrachloride	ug/L	ND	20	20	17.7	18.1	88	90	60.1-127	2	
Chlorobenzene	ug/L	ND	20	20	16.9	18.0	85	90	72-120	6	
Chloroethane	ug/L	ND	20	20	21.1	23.1	105	116	36.8-142	9	
Chloroform	ug/L	ND	20	20	17.1	17.8	86	89	69-122	4	
Chloromethane	ug/L	ND	20	20	20.1	22.5	100	112	37.2-129	11	
cis-1,2-Dichloroethene	ug/L	11.4	20	20	29.7	31.3	91	99	69.5-123	5	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.5	17.5	83	87	74.3-120	6	
Dibromochloromethane	ug/L	ND	20	20	15.8	15.8	79	79	66.1-120	.1	
Ethylbenzene	ug/L	ND	20	20	17.2	17.6	86	88	70.9-124	2	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	18.4	18.9	92	95	68.3-129	3	
m&p-Xylene	ug/L	ND	40	40	34.7	36.5	84	89	70.4-130	5	
Methylene Chloride	ug/L	ND	20	20	18.7	19.9	94	100	61.5-125	6	
o-Xylene	ug/L	ND	20	20	16.9	17.3	85	87	70.6-127	2	
Styrene	ug/L	ND	20	20	17.0	17.7	85	89	69.9-120	4	
Tetrachloroethene	ug/L	ND	20	20	17.4	17.8	87	89	63.4-121	2	
Toluene	ug/L	ND	20	20	17.4	18.3	87	92	71.5-120	5	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.6	19.3	93	96	64.1-120	3	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.9	17.8	85	89	71-120	5	
Trichloroethene	ug/L	ND	20	20	17.6	17.6	88	88	65.9-120	.02	
Trichlorofluoromethane	ug/L	ND	20	20	24.5	25.7	123	128	44.8-137	5	
Vinyl chloride	ug/L	6.2	20	20	28.3	29.6	111	117	51-127	4	
1,2-Dichloroethane-d4 (S)	%						113	115	70-130		
4-Bromofluorobenzene (S)	%						97	98	70-130		
Toluene-d8 (S)	%						101	101	70-130		

QUALIFIERS

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

C9 Common Laboratory Contaminant.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181.10000 Essex/Hope

Pace Project No.: 3071251

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3071251001	PRE-CARB	EPA 8260	MSV/13018		
3071251002	PRIMARY-EFF	EPA 8260	MSV/13018		
3071251003	POST-CARB	EPA 8260	MSV/13018		
3071251004	TB-01	EPA 8260	MSV/13018		

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	URS CORP	Report To:	MARK DOMALIK	Attention:	
Address:	501 HOLIDAY PL. STE 1300 FOSTER CITY, CA 95420	Copy To:	VALERIE SIBERT	Company Name:	
				Address:	
Email To:	DRISBAUER@URS.COM	Purchase Order No.:	41569181	Pace Quote Reference:	
Phone:	415-503-4700	Project Name:	ESSEX/HOPE JAMES TOWN	Pace Project Manager:	
Requested Due Date (A/T):	STANDARD	Project Number:	41579181.10000	Pace Profile #:	

Page: 1 of 1
 1515758
 REGULATORY AGENCY
 NPDES ☐ GROUND WATER ☐ DRINKING WATER
 UST ☐ RCRA ☐ OTHER ☐
 Site Location: NY
 STATE:

[illegible]



Sample Condition Upon Receipt

Client Name: WRSProject # 3571251Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____Tracking #: 5726410756908Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____Thermometer Used 5 6 7Type of Ice: ☒ Wet ☐ Blue ☐ None☒ Samples on ice, cooling process has begunCooler Temperature 4.1

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: WRS 6/12/12

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WRS</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: VOA, coliform, TOC, O&G, WDRO (water)	☒ Yes ☐ No	Initial when completed <u>WRS</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☒ Yes ☒ No ☐ N/A	16.
Trip Blank Custody Seals Present	☒ Yes ☐ No ☐ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [Signature]Date: 6/13/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Project Number: 3011251

Client Name: WPS

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y	O & G (1L)	TFH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
100	WPS																							
101	WPS																							
102	WPS																							
103	WPS																							
104	WPS																							
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