



February 11, 2013

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
July through December 2012
BPU Permit No. 26
URS Project No. 41569181**

Dear Mr. Saar:

This submittal represents the July through December 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 6, Suite 400
681 Andersen Drive
Pittsburgh, PA 15220
Tel: 412-503-4700
Fax: 412-503-4701
www.urscorp.com

This Semi-Annual Report contains system influent and effluent data for July through December 2012. No noncompliance events occurred during this reporting period. The system carbon was changed out on October 23, 2012. Table 1 summarizes the monthly discharge rates, and the total TTOs and constituents detected in the discharge to the POTW for each month. In addition to the permit requirements, Table 1 includes the total mass of Acetone discharged to the POTW during the reporting period. Discharge flow rates for the reporting period ranged from 33,012 to 170,574 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


Mark Dowiak, P.E.
Project Manager

Attachment

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

Table 1

**July - December 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	July	August	September	October	November	December
POTW Discharge Analytical Data							
Total TTOs (µg/L)	2,130 µg/L (TTO)	27	31	38	65	863	836
Detected TTO Compounds	Report	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, 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	7.30	7.00	7.10	7.00	7.60	7.00
		7.30	7.00	7.20	7.00	7.60	7.00
		7.30	7.00	7.25	6.80	7.60	7.00
		7.30	7.00	7.18	6.80	7.60	7.00
Acetone Discharged (lbs)	Not applicable/No limits	0.0	0.0	0.01	28.6	22.5	23.7
POTW Discharge Flow Data							
Monthly Total Flow (gallons)	Report	125,648	67,894	33,012	170,574	158,632	127,542
Average Daily Flow (gallons)	Report	4,053	2,190	5,502	5,502	7,932	9,110
Maximum Daily Flow (gallons)	Report	4,864	2,628	6,602	6,603	9,518	10,932

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, May 1, 2012, and October 23, 2012.

System was shut down from August 22, 2012 through September 25, 2012 and November 20, 2012 through December 18, 2012 for pump repair.

December samples were collected January 3, 2013

August 13, 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.: 3074334

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 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

Pace Project No.: 3074334

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 Certification #: 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.: 3074334

Sample: PRE CARB		Lab ID: 3074334001	Collected: 07/27/12 10:40	Received: 07/28/12 11:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	4470	ug/L	2000	200		08/03/12 21:55	67-64-1	
Benzene	7.7	ug/L	1.0	1		08/01/12 23:11	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/01/12 23:11	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/01/12 23:11	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/01/12 23:11	74-83-9	
2-Butanone (MEK)	17.7	ug/L	10.0	1		08/01/12 23:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/01/12 23:11	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/01/12 23:11	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/01/12 23:11	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/01/12 23:11	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/01/12 23:11	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/01/12 23:11	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/01/12 23:11	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:11	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:11	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/01/12 23:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/01/12 23:11	107-06-2	
1,1-Dichloroethene	10.3	ug/L	5.0	1		08/01/12 23:11	75-35-4	
cis-1,2-Dichloroethene	3840	ug/L	1000	200		08/03/12 21:55	156-59-2	
trans-1,2-Dichloroethene	58.2	ug/L	5.0	1		08/01/12 23:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/01/12 23:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/01/12 23:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/01/12 23:11	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/01/12 23:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/01/12 23:11	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/01/12 23:11	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/01/12 23:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/01/12 23:11	108-10-1	
Styrene	ND	ug/L	5.0	1		08/01/12 23:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/01/12 23:11	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/01/12 23:11	127-18-4	
Toluene	ND	ug/L	5.0	1		08/01/12 23:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/01/12 23:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/01/12 23:11	79-00-5	
Trichloroethene	ND	ug/L	1000	200		08/03/12 21:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/01/12 23:11	75-69-4	
Vinyl chloride	326	ug/L	1.0	1		08/01/12 23:11	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/01/12 23:11	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/01/12 23:11	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	93	%	70-130	1		08/01/12 23:11	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		08/01/12 23:11	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		08/01/12 23:11	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

Sample: PRIMARY-EFF		Lab ID: 3074334002	Collected: 07/27/12 10:45	Received: 07/28/12 11:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	394	ug/L	10.0	1		08/01/12 23:37	67-64-1	
Benzene	ND	ug/L	1.0	1		08/01/12 23:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/01/12 23:37	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/01/12 23:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/01/12 23:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/01/12 23:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/01/12 23:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/01/12 23:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/01/12 23:37	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/01/12 23:37	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/01/12 23:37	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/01/12 23:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/01/12 23:37	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/01/12 23:37	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/01/12 23:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/01/12 23:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		08/01/12 23:37	75-35-4	
cis-1,2-Dichloroethene	17.1	ug/L	5.0	1		08/01/12 23:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		08/01/12 23:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/01/12 23:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/01/12 23:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/01/12 23:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/01/12 23:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/01/12 23:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/01/12 23:37	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/01/12 23:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/01/12 23:37	108-10-1	
Styrene	ND	ug/L	5.0	1		08/01/12 23:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/01/12 23:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/01/12 23:37	127-18-4	
Toluene	ND	ug/L	5.0	1		08/01/12 23:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/01/12 23:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/01/12 23:37	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		08/01/12 23:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/01/12 23:37	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		08/01/12 23:37	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/01/12 23:37	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/01/12 23:37	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	90	%	70-130	1		08/01/12 23:37	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		08/01/12 23:37	17060-07-0	
Toluene-d8 (S)	79	%	70-130	1		08/01/12 23:37	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

Sample: POST-CARB		Lab ID: 3074334003	Collected: 07/27/12 10:50	Received: 07/28/12 11:00	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		08/02/12 00:03	67-64-1	
Benzene	ND	ug/L	1.0	1		08/02/12 00:03	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/02/12 00:03	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/02/12 00:03	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/02/12 00:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/02/12 00:03	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/02/12 00:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/02/12 00:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/02/12 00:03	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/02/12 00:03	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/02/12 00:03	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/02/12 00:03	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/02/12 00:03	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/02/12 00:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/02/12 00:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/02/12 00:03	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/02/12 00:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/02/12 00:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		08/02/12 00:03	75-35-4	
cis-1,2-Dichloroethene	25.5	ug/L	5.0	1		08/02/12 00:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		08/02/12 00:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/02/12 00:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/02/12 00:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/02/12 00:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/02/12 00:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/02/12 00:03	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/02/12 00:03	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/02/12 00:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/02/12 00:03	108-10-1	
Styrene	ND	ug/L	5.0	1		08/02/12 00:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/02/12 00:03	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/02/12 00:03	127-18-4	
Toluene	ND	ug/L	5.0	1		08/02/12 00:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/02/12 00:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/02/12 00:03	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		08/02/12 00:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/02/12 00:03	75-69-4	
Vinyl chloride	1.6	ug/L	1.0	1		08/02/12 00:03	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/02/12 00:03	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/02/12 00:03	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		08/02/12 00:03	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		08/02/12 00:03	17060-07-0	
Toluene-d8 (S)	88	%	70-130	1		08/02/12 00:03	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

Sample: TB-01		Lab ID: 3074334007		Collected: 07/27/12 00:01		Received: 07/28/12 11:00		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			08/02/12 00:30	67-64-1		
Benzene	ND ug/L	1.0	1			08/02/12 00:30	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			08/02/12 00:30	75-27-4		
Bromoform	ND ug/L	5.0	1			08/02/12 00:30	75-25-2		
Bromomethane	ND ug/L	5.0	1			08/02/12 00:30	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			08/02/12 00:30	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			08/02/12 00:30	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			08/02/12 00:30	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			08/02/12 00:30	108-90-7		
Chloroethane	ND ug/L	5.0	1			08/02/12 00:30	75-00-3		
Chloroform	ND ug/L	5.0	1			08/02/12 00:30	67-66-3		
Chloromethane	ND ug/L	5.0	1			08/02/12 00:30	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			08/02/12 00:30	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			08/02/12 00:30	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			08/02/12 00:30	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			08/02/12 00:30	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			08/02/12 00:30	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			08/02/12 00:30	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			08/02/12 00:30	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			08/02/12 00:30	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			08/02/12 00:30	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			08/02/12 00:30	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			08/02/12 00:30	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			08/02/12 00:30	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			08/02/12 00:30	100-41-4		
2-Hexanone	ND ug/L	10.0	1			08/02/12 00:30	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			08/02/12 00:30	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			08/02/12 00:30	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			08/02/12 00:30	108-10-1		
Styrene	ND ug/L	5.0	1			08/02/12 00:30	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			08/02/12 00:30	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			08/02/12 00:30	127-18-4		
Toluene	ND ug/L	5.0	1			08/02/12 00:30	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			08/02/12 00:30	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			08/02/12 00:30	79-00-5		
Trichloroethene	ND ug/L	5.0	1			08/02/12 00:30	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			08/02/12 00:30	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			08/02/12 00:30	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			08/02/12 00:30	179601-23-1		
o-Xylene	ND ug/L	5.0	1			08/02/12 00:30	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	102 %	70-130	1			08/02/12 00:30	460-00-4		
1,2-Dichloroethane-d4 (S)	114 %	70-130	1			08/02/12 00:30	17060-07-0		
Toluene-d8 (S)	104 %	70-130	1			08/02/12 00:30	2037-26-5		

QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

QC Batch: MSV/13465 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3074334001, 3074334002, 3074334003, 3074334007

METHOD BLANK: 471658 Matrix: Water

Associated Lab Samples: 3074334001, 3074334002, 3074334003, 3074334007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	08/01/12 16:23	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	08/01/12 16:23	
1,1,2-Trichloroethane	ug/L	ND	5.0	08/01/12 16:23	
1,1-Dichloroethane	ug/L	ND	5.0	08/01/12 16:23	
1,1-Dichloroethene	ug/L	ND	5.0	08/01/12 16:23	
1,2-Dichlorobenzene	ug/L	ND	5.0	08/01/12 16:23	
1,2-Dichloroethane	ug/L	ND	5.0	08/01/12 16:23	
1,2-Dichloropropane	ug/L	ND	5.0	08/01/12 16:23	
1,3-Dichlorobenzene	ug/L	ND	5.0	08/01/12 16:23	
1,4-Dichlorobenzene	ug/L	ND	5.0	08/01/12 16:23	
2-Butanone (MEK)	ug/L	ND	10.0	08/01/12 16:23	
2-Hexanone	ug/L	ND	10.0	08/01/12 16:23	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	08/01/12 16:23	
Acetone	ug/L	ND	10.0	08/01/12 16:23	
Benzene	ug/L	ND	1.0	08/01/12 16:23	
Bromodichloromethane	ug/L	ND	5.0	08/01/12 16:23	
Bromoform	ug/L	ND	5.0	08/01/12 16:23	
Bromomethane	ug/L	ND	5.0	08/01/12 16:23	
Carbon disulfide	ug/L	ND	5.0	08/01/12 16:23	
Carbon tetrachloride	ug/L	ND	5.0	08/01/12 16:23	
Chlorobenzene	ug/L	ND	5.0	08/01/12 16:23	
Chloroethane	ug/L	ND	5.0	08/01/12 16:23	
Chloroform	ug/L	ND	5.0	08/01/12 16:23	
Chloromethane	ug/L	ND	5.0	08/01/12 16:23	
cis-1,2-Dichloroethene	ug/L	ND	5.0	08/01/12 16:23	
cis-1,3-Dichloropropene	ug/L	ND	5.0	08/01/12 16:23	
Dibromochloromethane	ug/L	ND	5.0	08/01/12 16:23	
Ethylbenzene	ug/L	ND	5.0	08/01/12 16:23	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/01/12 16:23	
m&p-Xylene	ug/L	ND	5.0	08/01/12 16:23	
Methylene Chloride	ug/L	ND	5.0	08/01/12 16:23	
o-Xylene	ug/L	ND	5.0	08/01/12 16:23	
Styrene	ug/L	ND	5.0	08/01/12 16:23	
Tetrachloroethene	ug/L	ND	5.0	08/01/12 16:23	
Toluene	ug/L	ND	5.0	08/01/12 16:23	
trans-1,2-Dichloroethene	ug/L	ND	5.0	08/01/12 16:23	
trans-1,3-Dichloropropene	ug/L	ND	5.0	08/01/12 16:23	
Trichloroethene	ug/L	ND	5.0	08/01/12 16:23	
Trichlorofluoromethane	ug/L	ND	5.0	08/01/12 16:23	
Vinyl chloride	ug/L	ND	1.0	08/01/12 16:23	
1,2-Dichloroethane-d4 (S)	%	103	70-130	08/01/12 16:23	
4-Bromofluorobenzene (S)	%	98	70-130	08/01/12 16:23	
Toluene-d8 (S)	%	97	70-130	08/01/12 16:23	

Date: 08/13/2012 04:42 PM

REPORT OF LABORATORY ANALYSIS

Page 7 of 11

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QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

LABORATORY CONTROL SAMPLE: 471659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.5	98	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	20.3	102	64.6-121	
1,1,2-Trichloroethane	ug/L	20	20.1	101	75.6-120	
1,1-Dichloroethane	ug/L	20	20.9	105	68.5-122	
1,1-Dichloroethene	ug/L	20	19.3	97	57.1-120	
1,2-Dichlorobenzene	ug/L	20	19.7	99	69.6-120	
1,2-Dichloroethane	ug/L	20	18.4	92	60.5-133	
1,2-Dichloropropane	ug/L	20	18.3	91	71-120	
1,3-Dichlorobenzene	ug/L	20	20.2	101	68.4-121	
1,4-Dichlorobenzene	ug/L	20	19.1	96	68.5-123	
2-Butanone (MEK)	ug/L	20	20.3	101	55.7-138	
2-Hexanone	ug/L	20	18.8	94	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.1	95	64.5-121	
Acetone	ug/L	20	20.5	102	57.6-168	
Benzene	ug/L	20	18.6	93	69.8-120	
Bromodichloromethane	ug/L	20	18.4	92	66.5-120	
Bromoform	ug/L	20	19.3	96	61.1-120	
Bromomethane	ug/L	20	24.1	120	10.6-200	
Carbon disulfide	ug/L	20	20.0	100	60.2-122	
Carbon tetrachloride	ug/L	20	18.4	92	60.1-127	
Chlorobenzene	ug/L	20	19.1	95	72-120	
Chloroethane	ug/L	20	18.7	93	36.8-142	
Chloroform	ug/L	20	19.8	99	69-122	
Chloromethane	ug/L	20	20.5	102	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	21.6	108	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	19.3	97	74.3-120	
Dibromochloromethane	ug/L	20	17.0	85	66.1-120	
Ethylbenzene	ug/L	20	20.8	104	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	23.3	116	68.3-129	
m&p-Xylene	ug/L	40	41.0	103	70.4-130	
Methylene Chloride	ug/L	20	19.9	100	61.5-125	
o-Xylene	ug/L	20	20.2	101	70.6-127	
Styrene	ug/L	20	21.5	108	69.9-120	
Tetrachloroethene	ug/L	20	18.5	93	63.4-121	
Toluene	ug/L	20	19.3	97	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	20.6	103	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	93	71-120	
Trichloroethene	ug/L	20	18.4	92	65.9-120	
Trichlorofluoromethane	ug/L	20	20.1	100	44.8-137	
Vinyl chloride	ug/L	20	21.1	105	51-127	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			96	70-130	

QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 471660 471661											
Parameter	Units	3074245008 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	18.5	22.3	92	112	64.3-127	19	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.2	23.6	101	118	64.6-121	16	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.4	19.8	92	99	75.6-120	7	
1,1-Dichloroethane	ug/L	ND	20	20	17.4	20.8	87	104	68.5-122	18	
1,1-Dichloroethene	ug/L	ND	20	20	16.6	18.2	83	91	57.1-120	9	
1,2-Dichlorobenzene	ug/L	2.2	20	20	21.1	22.5	94	101	69.6-120	7	
1,2-Dichloroethane	ug/L	ND	20	20	17.4	19.4	87	97	60.5-133	11	
1,2-Dichloropropane	ug/L	ND	20	20	18.0	20.5	90	103	71-120	13	
1,3-Dichlorobenzene	ug/L	ND	20	20	18.9	21.8	92	107	68.4-121	15	
1,4-Dichlorobenzene	ug/L	5.8	20	20	22.8	25.6	85	99	68.5-123	12	
2-Butanone (MEK)	ug/L	ND	20	20	23.4	23.7	117	118	55.7-138	1	
2-Hexanone	ug/L	ND	20	20	19.6	20.1	98	101	67-133	3	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	26.4	27.3	132	137	64.5-121	3	M0
Acetone	ug/L	ND	20	20	19.3	16.3	97	81	57.6-168	17	
Benzene	ug/L	173	20	20	179	197	32	119	69.8-120	9	M0
Bromodichloromethane	ug/L	1.1	20	20	17.2	20.3	81	96	66.5-120	16	
Bromoform	ug/L	ND	20	20	18.5	21.0	92	105	61.1-120	13	
Bromomethane	ug/L	ND	20	20	10.9	15.1	55	76	10.6-200	32	R1
Carbon disulfide	ug/L	ND	20	20	15.3	17.6	77	88	60.2-122	14	
Carbon tetrachloride	ug/L	ND	20	20	17.3	20.3	87	102	60.1-127	16	
Chlorobenzene	ug/L	320	20	20	312	323	-41	18	72-120	4	M0
Chloroethane	ug/L	ND	20	20	19.6	17.8	98	89	36.8-142	10	
Chloroform	ug/L	ND	20	20	17.7	21.4	89	107	69-122	19	
Chloromethane	ug/L	ND	20	20	21.4	14.8	107	74	37.2-129	36	R1
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.5	23.8	93	119	69.5-123	25	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.5	20.3	88	101	74.3-120	15	
Dibromochloromethane	ug/L	ND	20	20	15.7	16.5	78	83	66.1-120	5	
Ethylbenzene	ug/L	7.2	20	20	24.6	27.7	87	103	70.9-124	12	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	23.6	27.7	118	139	68.3-129	16	M0
m&p-Xylene	ug/L		40	40	40.7	48.4	93	112	70.4-130	17	
Methylene Chloride	ug/L	ND	20	20	15.4	16.2	77	81	61.5-125	5	
o-Xylene	ug/L		20	20	23.9	26.8	91	106	70.6-127	11	
Styrene	ug/L	ND	20	20	19.9	23.6	100	118	69.9-120	17	
Tetrachloroethene	ug/L	ND	20	20	17.3	18.6	87	93	63.4-121	7	
Toluene	ug/L	2.1	20	20	19.6	21.7	88	98	71.5-120	10	
trans-1,2-Dichloroethene	ug/L	ND	20	20	16.7	18.8	83	94	64.1-120	12	
trans-1,3-Dichloropropene	ug/L	2.6	20	20	18.4	21.0	79	92	71-120	13	
Trichloroethene	ug/L	ND	20	20	17.4	19.5	85	96	65.9-120	11	
Trichlorofluoromethane	ug/L	ND	20	20	21.4	19.2	107	96	44.8-137	10	
Vinyl chloride	ug/L	ND	20	20	21.7	20.6	108	103	51-127	5	
1,2-Dichloroethane-d4 (S)	%						93	90	70-130		
4-Bromofluorobenzene (S)	%						105	106	70-130		
Toluene-d8 (S)	%						95	93	70-130		

QUALIFIERS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

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

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

R1 RPD value was outside control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3074334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3074334001	PRE CARB	EPA 8260	MSV/13465		
3074334002	PRIMARY-EFF	EPA 8260	MSV/13465		
3074334003	POST-CARB	EPA 8260	MSV/13465		
3074334007	TB-01	EPA 8260	MSV/13465		

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:	Attention:	Page: 1 of 1	
Address: FOSTER PLAZA 4 501 HOLLAND ST, STE. 300 PITTSBURGH, PA 15220	Copy To: VALERIE SIBETO	Address:		1231551	
Mail To:	Purchase Order No.: 41569181	Pace Quote References:		REGULATORY AGENCY	
	Project Name: ESSEX HOPE JAMESTOWN	Pace Project Manager:		☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER	
	Project Number: 41569181.10000	Pace Profile #:		☐ UST ☐ RCRA ☐ OTHER	
Requested Due Date/TAT: STANDARD				Site Location: NY	
				STATE:	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX L CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Y/N	Requested Analysis Filtered (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB							
1	PRE-CARB	DW	MIG	DATE	TIME	DATE	TIME	Unpreserved	Analysis Test			3074334
2	PRIMARY-EFF	WT		7/27/12	1040			H ₂ SO ₄	XXXXXX			001
3	POST-CARB	WW			1045			HCl	XXXXXX			002
4	POST-CARB	P			1050			NaOH	XXXXXX			003
5	POST-CARB	SL			1120			HNO ₃	XXXXXX			004
6	POST-CARB	Oil			1150			Na ₂ S ₂ O ₃	XXXXXX			005
7	POST-CARB	Wipe			1220			Methanol	XXXXXX			006
8	TB-01	Air			7/27/12			Other	XXXXXX			007
9		Tissue										
10		Other										
11												
12												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
COMPOSITE FOUR (4)	Valerie Sibeto / URS	7/27/12	~1300	Red	7/29/12	~1300	
POST-CARB SAMPLES IN					7/28/12	1100	Y N Y
LAB AND REPORT AS							
POST-CARB COMPOSITE							

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on	Sealed Cooler	Custody	Samples Intact
PRINT Name of SAMPLER: VALERIE SIBETO						
SIGNATURE of SAMPLER: <i>[Signature]</i>						
DATE Signed (MM/DD/YY): 7/27/12						



Sample Condition Upon Receipt

Client Name: URS

Project # 3074334

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

Tracking #: 872640756930

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

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

Cooler Temperature 0.3

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 7-28-07

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>Wet</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, coliform, TOC, O&G, WH-DRO (water)</u>	☒ Yes ☐ No	Initial when completed: <u>SA</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: 7/30/11

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)

30721334

URS

[illegible]

August 30, 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.: 3075795

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on August 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

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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.: 3075795

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 Certification #: 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.: 3075795

Sample: PRE-CARB		Lab ID: 3075795001	Collected: 08/20/12 12:30	Received: 08/21/12 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	4900	ug/L	1000	100		08/24/12 16:52	67-64-1	
Benzene	6.5	ug/L	1.0	1		08/22/12 18:43	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/22/12 18:43	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/22/12 18:43	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/22/12 18:43	74-83-9	
2-Butanone (MEK)	18.4	ug/L	10.0	1		08/22/12 18:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/22/12 18:43	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/22/12 18:43	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/22/12 18:43	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/22/12 18:43	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/22/12 18:43	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/22/12 18:43	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/22/12 18:43	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 18:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 18:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 18:43	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/22/12 18:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/22/12 18:43	107-06-2	
1,1-Dichloroethene	7.2	ug/L	5.0	1		08/22/12 18:43	75-35-4	
cis-1,2-Dichloroethene	1780	ug/L	500	100		08/24/12 16:52	156-59-2	
trans-1,2-Dichloroethene	15.1	ug/L	5.0	1		08/22/12 18:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/22/12 18:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 18:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 18:43	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/22/12 18:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/22/12 18:43	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/22/12 18:43	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/22/12 18:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/22/12 18:43	108-10-1	
Styrene	ND	ug/L	5.0	1		08/22/12 18:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/22/12 18:43	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/22/12 18:43	127-18-4	
Toluene	ND	ug/L	5.0	1		08/22/12 18:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/22/12 18:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/22/12 18:43	79-00-5	
Trichloroethene	812	ug/L	500	100		08/24/12 16:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/22/12 18:43	75-69-4	
Vinyl chloride	333	ug/L	1.0	1		08/22/12 18:43	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/22/12 18:43	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/22/12 18:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	1		08/22/12 18:43	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130	1		08/22/12 18:43	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		08/22/12 18:43	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

Sample: PRIMARY-EFF		Lab ID: 3075795002	Collected: 08/20/12 12:35	Received: 08/21/12 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	19.0	ug/L	10.0	1		08/22/12 19:09	67-64-1	
Benzene	ND	ug/L	1.0	1		08/22/12 19:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/22/12 19:09	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/22/12 19:09	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/22/12 19:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/22/12 19:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/22/12 19:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/22/12 19:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/22/12 19:09	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/22/12 19:09	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/22/12 19:09	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/22/12 19:09	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/22/12 19:09	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:09	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/22/12 19:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/22/12 19:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		08/22/12 19:09	75-35-4	
cis-1,2-Dichloroethene	27.7	ug/L	5.0	1		08/22/12 19:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		08/22/12 19:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/22/12 19:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 19:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 19:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/22/12 19:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/22/12 19:09	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/22/12 19:09	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/22/12 19:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/22/12 19:09	108-10-1	
Styrene	ND	ug/L	5.0	1		08/22/12 19:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/22/12 19:09	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/22/12 19:09	127-18-4	
Toluene	ND	ug/L	5.0	1		08/22/12 19:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/22/12 19:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/22/12 19:09	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		08/22/12 19:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/22/12 19:09	75-69-4	
Vinyl chloride	896	ug/L	50.0	50		08/24/12 17:19	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/22/12 19:09	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/22/12 19:09	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		08/22/12 19:09	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70-130	1		08/22/12 19:09	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		08/22/12 19:09	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

Sample: POST-CARB		Lab ID: 3075795003	Collected: 08/20/12 12:40	Received: 08/21/12 09:50	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		08/22/12 19:36	67-64-1	
Benzene	ND	ug/L	1.0	1		08/22/12 19:36	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		08/22/12 19:36	75-27-4	
Bromoform	ND	ug/L	5.0	1		08/22/12 19:36	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/22/12 19:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/22/12 19:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		08/22/12 19:36	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		08/22/12 19:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		08/22/12 19:36	108-90-7	
Chloroethane	ND	ug/L	5.0	1		08/22/12 19:36	75-00-3	
Chloroform	ND	ug/L	5.0	1		08/22/12 19:36	67-66-3	
Chloromethane	ND	ug/L	5.0	1		08/22/12 19:36	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		08/22/12 19:36	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		08/22/12 19:36	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		08/22/12 19:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		08/22/12 19:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		08/22/12 19:36	75-35-4	
cis-1,2-Dichloroethene	21.8	ug/L	5.0	1		08/22/12 19:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		08/22/12 19:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		08/22/12 19:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 19:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		08/22/12 19:36	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		08/22/12 19:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		08/22/12 19:36	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/22/12 19:36	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		08/22/12 19:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/22/12 19:36	108-10-1	
Styrene	ND	ug/L	5.0	1		08/22/12 19:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		08/22/12 19:36	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		08/22/12 19:36	127-18-4	
Toluene	ND	ug/L	5.0	1		08/22/12 19:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		08/22/12 19:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		08/22/12 19:36	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		08/22/12 19:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		08/22/12 19:36	75-69-4	
Vinyl chloride	9.5	ug/L	1.0	1		08/22/12 19:36	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		08/22/12 19:36	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		08/22/12 19:36	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		08/22/12 19:36	460-00-4	
1,2-Dichloroethane-d4 (S)	119	%	70-130	1		08/22/12 19:36	17060-07-0	
Toluene-d8 (S)	95	%	70-130	1		08/22/12 19:36	2037-26-5	

ANALYTICAL RESULTS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

Sample: TB-01		Lab ID: 3075795007		Collected: 08/20/12 00:01		Received: 08/21/12 09:50		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			08/22/12 18:17	67-64-1		
Benzene	ND ug/L	1.0	1			08/22/12 18:17	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			08/22/12 18:17	75-27-4		
Bromoform	ND ug/L	5.0	1			08/22/12 18:17	75-25-2		
Bromomethane	ND ug/L	5.0	1			08/22/12 18:17	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			08/22/12 18:17	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			08/22/12 18:17	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			08/22/12 18:17	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			08/22/12 18:17	108-90-7		
Chloroethane	ND ug/L	5.0	1			08/22/12 18:17	75-00-3		
Chloroform	ND ug/L	5.0	1			08/22/12 18:17	67-66-3		
Chloromethane	ND ug/L	5.0	1			08/22/12 18:17	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			08/22/12 18:17	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			08/22/12 18:17	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			08/22/12 18:17	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			08/22/12 18:17	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			08/22/12 18:17	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			08/22/12 18:17	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			08/22/12 18:17	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			08/22/12 18:17	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			08/22/12 18:17	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			08/22/12 18:17	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			08/22/12 18:17	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			08/22/12 18:17	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			08/22/12 18:17	100-41-4		
2-Hexanone	ND ug/L	10.0	1			08/22/12 18:17	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			08/22/12 18:17	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			08/22/12 18:17	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			08/22/12 18:17	108-10-1		
Styrene	ND ug/L	5.0	1			08/22/12 18:17	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			08/22/12 18:17	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			08/22/12 18:17	127-18-4		
Toluene	ND ug/L	5.0	1			08/22/12 18:17	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			08/22/12 18:17	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			08/22/12 18:17	79-00-5		
Trichloroethene	ND ug/L	5.0	1			08/22/12 18:17	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			08/22/12 18:17	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			08/22/12 18:17	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			08/22/12 18:17	179601-23-1		
o-Xylene	ND ug/L	5.0	1			08/22/12 18:17	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	101 %	70-130	1			08/22/12 18:17	460-00-4		
1,2-Dichloroethane-d4 (S)	118 %	70-130	1			08/22/12 18:17	17060-07-0		
Toluene-d8 (S)	95 %	70-130	1			08/22/12 18:17	2037-26-5		

QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

QC Batch: MSV/13702 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3075795001, 3075795002, 3075795003, 3075795007

METHOD BLANK: 479033 Matrix: Water

Associated Lab Samples: 3075795001, 3075795002, 3075795003, 3075795007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	08/22/12 10:49	
Benzene	ug/L	ND	1.0	08/22/12 10:49	
Ethylbenzene	ug/L	ND	5.0	08/22/12 10:49	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/22/12 10:49	
m&p-Xylene	ug/L	ND	5.0	08/22/12 10:49	
o-Xylene	ug/L	ND	5.0	08/22/12 10:49	
Toluene	ug/L	ND	5.0	08/22/12 10:49	
1,2-Dichloroethane-d4 (S)	%	115	70-130	08/22/12 10:49	
4-Bromofluorobenzene (S)	%	95	70-130	08/22/12 10:49	
Toluene-d8 (S)	%	95	70-130	08/22/12 10:49	

LABORATORY CONTROL SAMPLE: 479034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.4	107	60.5-133	
Benzene	ug/L	20	20.7	104	69.8-120	
Ethylbenzene	ug/L	20	20.5	102	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	23.8	119	68.3-129	
m&p-Xylene	ug/L	40	38.5	96	70.4-130	
o-Xylene	ug/L	20	20.2	101	70.6-127	
Toluene	ug/L	20	20.1	101	71.5-120	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 479118 479119

Parameter	Units	3075495001 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	0.19U	20	20	22.7	22.1	113	110	64.3-127	3	
1,1,2,2-Tetrachloroethane	ug/L	0.22U	20	20	19.6	19.9	98	99	64.6-121	1	
1,1,2-Trichloroethane	ug/L	0.23U	20	20	21.7	21.9	108	110	75.6-120	1	
1,1-Dichloroethane	ug/L	0.16U	20	20	22.3	21.9	112	110	68.5-122	2	
1,1-Dichloroethene	ug/L	0.14U	20	20	22.8	22.1	114	111	57.1-120	3	
1,2-Dichlorobenzene	ug/L	0.23U	20	20	20.2	20.9	101	104	69.6-120	3	
1,2-Dichloroethane	ug/L	0.14U	20	20	21.6	20.9	108	105	60.5-133	3	
1,2-Dichloropropane	ug/L	0.23U	20	20	21.3	22.0	107	110	71-120	3	
1,3-Dichlorobenzene	ug/L	0.26U	20	20	21.2	20.8	106	104	68.4-121	2	
1,4-Dichlorobenzene	ug/L	0.17U	20	20	21.5	21.4	107	107	68.5-123	.4	
2-Butanone (MEK)	ug/L	1.1U	20	20	18.2	18.0	91	90	55.7-138	1	

Date: 08/30/2012 03:42 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 479118 479119											
Parameter	Units	3075495001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
2-Hexanone	ug/L	0.34U	20	20	17.5	17.4	88	87	67-133	.6	
4-Methyl-2-pentanone (MIBK)	ug/L	0.29U	20	20	18.8	18.3	94	91	64.5-121	3	
Acetone	ug/L	2.6U	20	20	21.2	19.4	106	97	57.6-168	9	
Benzene	ug/L	0.065U	20	20	22.5	23.0	113	115	69.8-120	2	
Bromodichloromethane	ug/L	0.15U	20	20	21.4	22.0	107	110	66.5-120	3	
Bromoform	ug/L	0.25U	20	20	19.6	20.4	98	102	61.1-120	4	
Bromomethane	ug/L	0.37U	20	20	9.1	9.6	45	48	10.6-200	6	
Carbon disulfide	ug/L	0.18U	20	20	21.5	20.7	107	104	60.2-122	3	
Carbon tetrachloride	ug/L	0.24U	20	20	22.7	21.7	113	109	60.1-127	4	
Chlorobenzene	ug/L	0.12U	20	20	21.4	21.8	107	109	72-120	2	
Chloroethane	ug/L	0.48U	20	20	18.9	17.1	94	85	36.8-142	10	
Chloroform	ug/L	0.16U	20	20	21.1	20.9	105	105	69-122	.8	
Chloromethane	ug/L	0.21U	20	20	17.6	16.6	88	83	37.2-129	6	
cis-1,2-Dichloroethene	ug/L	0.20U	20	20	21.7	21.3	109	107	69.5-123	2	
cis-1,3-Dichloropropene	ug/L	0.19U	20	20	21.0	21.7	105	108	74.3-120	3	
Dibromochloromethane	ug/L	0.22U	20	20	20.1	21.0	100	105	66.1-120	4	
Ethylbenzene	ug/L	0.12U	20	20	22.3	22.2	112	111	70.9-124	.7	
Isopropylbenzene (Cumene)	ug/L	0.12U	20	20	23.4	23.6	117	118	68.3-129	.8	
m&p-Xylene	ug/L		40	40	41.7	41.6	104	104	70.4-130	.3	
Methylene Chloride	ug/L	0.23U	20	20	21.7	20.5	108	102	61.5-125	6	
o-Xylene	ug/L		20	20	20.7	21.0	104	105	70.6-127	1	
Styrene	ug/L	0.18U	20	20	23.4	23.8	117	119	69.9-120	2	
Tetrachloroethene	ug/L	0.12U	20	20	22.7	23.4	114	117	63.4-121	3	
Toluene	ug/L	0.11U	20	20	21.4	22.3	107	111	71.5-120	4	
trans-1,2-Dichloroethene	ug/L	0.18U	20	20	22.1	22.0	111	110	64.1-120	.7	
trans-1,3-Dichloropropene	ug/L	0.23U	20	20	21.5	22.4	107	112	71-120	4	
Trichloroethene	ug/L	0.15U	20	20	21.9	22.7	110	113	65.9-120	3	M0
Trichlorofluoromethane	ug/L	0.19U	20	20	24.4	23.6	122	118	44.8-137	3	
Vinyl chloride	ug/L	0.13U	20	20	21.2	20.2	106	101	51-127	5	
1,2-Dichloroethane-d4 (S)	%						106	106	70-130		
4-Bromofluorobenzene (S)	%						97	100	70-130		
Toluene-d8 (S)	%						94	101	70-130		

QUALIFIERS

Project: ESSEX/HOPE JAMESTOWN

Pace Project No.: 3075795

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

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.: 3075795

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3075795001	PRE-CARB	EPA 8260	MSV/13702		
3075795002	PRIMARY-EFF	EPA 8260	MSV/13702		
3075795003	POST-CARB	EPA 8260	MSV/13702		
3075795007	TB-01	EPA 8260	MSV/13702		

CHAIN-OF-CUSTODY / Analytical Request Document

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



www.paceanalytical.com

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	URS CORP	Report To:	MAX DOWMAN	Attention:	
Address:	FOSTER PLAZA 6, 601 ANDERSON DR STE 400 PITTSBURGH, PA 15220	Copy To:	VALERIE SIBETO	Company Name:	
Phone:	412-503-4700	Purchase Order No.:	41569101	Address:	
Fax:	412-503-4701	Project Name:	ESSEX/HOPE JAMESTOWN	Pace Quote Reference:	
Requested Due Date/TAT:	STANDARD	Project Number:	41569101.1000	Pace Project Manager:	
				Pace Profile #:	

Section D Required Client Information		Section E Requested Analysis Filtered (Y/N)	
Matrix Codes MATRIX / CODE	Matrix Codes DW WT WW P SL OL WP AR TS OT	Preservatives	Y/N
Drinking Water	DW	Unpreserved	
Waste Water	WT	H ₂ SO ₄	
Product	P	HNO ₃	
Soil/Solid	SL	HCl	
Oil	OL	NaOH	
Wipe	WP	Na ₂ S ₂ O ₃	
Air	AR	Methanol	
Tissue	TS	Other	
Other	OT		

Item #	Sample ID (A-Z, 0-9 / -)	Matrix Code (see valid codes to left)	Sample Type (G=GRAB C=COMP)	Collected COMPOSITE START COMPOSITE END/GRAB	Sample Temp at Collection	# of Containers	Analysis Test ↓	Preservatives	Y/N	Requested Analysis Filtered (Y/N)
1	PRE-CARB	WTG	WTG	8/20/12 1230	3	3	VOCs B260			
2	PRIMARY-EFF			1235	3	3				
3	POST-CARB			1240	3	3				
4	POST-CARB			1310	3	3				
5	POST-CARB			1340	3	3				
6	POST-CARB			1410	3	3				
7	TTB-01	WTG	WTG	8/20/12	2	2				
8										
9										
10										
11										
12										

Additional Comments		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time	Sample Conditions
COMPOSITE FOUR (4)		URS	8/20/12	1500	Redacted	8/20/12	1500	
POST-CARB SAMPLES IN					Amanda Shirey	8/21/12	0930	
LAB AND REPORT AS								
POST-CARB COMPOSITE								



Sample Condition Upon Receipt

Client Name: URS

Project # 3075795

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

Tracking #: 8726 4075 10952

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 Ziploc

Thermometer Used 5 6 7

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

Cooler Temperature 0.8

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/21/12

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>ADD</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: 8/22/12

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: 3075795
Client Name: WRS

[illegible]

October 11, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 6
681 Andersen Drive, Suite 400
Pittsburgh, PA 15220

RE: Project: Essex/Hope Jamestown
Pace Project No.: 3078348

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 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

Pace Project No.: 3078348

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 Certification #: 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.: 3078348

Sample: PRE-CARB		Lab ID: 3078348001	Collected: 09/25/12 13:30	Received: 09/27/12 09:20	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	75400	ug/L	2000	200		10/04/12 23:59	67-64-1	
Benzene	18.4	ug/L	1.0	1		10/04/12 23:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		10/04/12 23:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/04/12 23:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/04/12 23:35	74-83-9	
2-Butanone (MEK)	171	ug/L	10.0	1		10/04/12 23:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		10/04/12 23:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/04/12 23:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/04/12 23:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/04/12 23:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/04/12 23:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/04/12 23:35	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		10/04/12 23:35	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 23:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 23:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 23:35	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/04/12 23:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/04/12 23:35	107-06-2	
1,1-Dichloroethene	23.0	ug/L	5.0	1		10/04/12 23:35	75-35-4	
cis-1,2-Dichloroethene	9130	ug/L	1000	200		10/04/12 23:59	156-59-2	
trans-1,2-Dichloroethene	156	ug/L	5.0	1		10/04/12 23:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/04/12 23:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 23:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 23:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		10/04/12 23:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		10/04/12 23:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/04/12 23:35	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		10/04/12 23:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/04/12 23:35	108-10-1	
Styrene	ND	ug/L	5.0	1		10/04/12 23:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/04/12 23:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/04/12 23:35	127-18-4	
Toluene	ND	ug/L	5.0	1		10/04/12 23:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/04/12 23:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/04/12 23:35	79-00-5	
Trichloroethene	1730	ug/L	1000	200		10/04/12 23:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/04/12 23:35	75-69-4	
Vinyl chloride	1660	ug/L	200	200		10/04/12 23:59	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		10/04/12 23:35	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		10/04/12 23:35	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		10/04/12 23:35	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		10/04/12 23:35	17060-07-0	
Toluene-d8 (S)	84	%	70-130	1		10/04/12 23:35	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

Sample: PRIMARY-EFF		Lab ID: 3078348002	Collected: 09/25/12 13:35	Received: 09/27/12 09:20	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	3960	ug/L	100	10		10/04/12 22:22	67-64-1	
Benzene	ND	ug/L	1.0	1		10/04/12 21:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		10/04/12 21:57	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/04/12 21:57	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/04/12 21:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/04/12 21:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		10/04/12 21:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/04/12 21:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/04/12 21:57	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/04/12 21:57	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/04/12 21:57	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/04/12 21:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		10/04/12 21:57	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:57	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/04/12 21:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/04/12 21:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/04/12 21:57	75-35-4	
cis-1,2-Dichloroethene	53.1	ug/L	5.0	1		10/04/12 21:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/04/12 21:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/04/12 21:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 21:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 21:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		10/04/12 21:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		10/04/12 21:57	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/04/12 21:57	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		10/04/12 21:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/04/12 21:57	108-10-1	
Styrene	ND	ug/L	5.0	1		10/04/12 21:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/04/12 21:57	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/04/12 21:57	127-18-4	
Toluene	ND	ug/L	5.0	1		10/04/12 21:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/04/12 21:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/04/12 21:57	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		10/04/12 21:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/04/12 21:57	75-69-4	
Vinyl chloride	1030	ug/L	10.0	10		10/04/12 22:22	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		10/04/12 21:57	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		10/04/12 21:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		10/04/12 21:57	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130	1		10/04/12 21:57	17060-07-0	
Toluene-d8 (S)	88	%	70-130	1		10/04/12 21:57	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

Sample: POST-CARB **Lab ID: 3078348003** Collected: 09/25/12 15:10 Received: 09/27/12 09:20 Matrix: Water

Comments: • VOA 8260: This sample was composited from four vials prior to analysis.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	21.2	ug/L	10.0	1		10/04/12 21:33	67-64-1	
Benzene	ND	ug/L	1.0	1		10/04/12 21:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		10/04/12 21:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/04/12 21:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/04/12 21:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/04/12 21:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		10/04/12 21:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/04/12 21:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/04/12 21:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/04/12 21:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/04/12 21:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/04/12 21:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		10/04/12 21:33	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/04/12 21:33	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/04/12 21:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/04/12 21:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/04/12 21:33	75-35-4	
cis-1,2-Dichloroethene	18.8	ug/L	5.0	1		10/04/12 21:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/04/12 21:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/04/12 21:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 21:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/04/12 21:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		10/04/12 21:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		10/04/12 21:33	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/04/12 21:33	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		10/04/12 21:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/04/12 21:33	108-10-1	
Styrene	ND	ug/L	5.0	1		10/04/12 21:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/04/12 21:33	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/04/12 21:33	127-18-4	
Toluene	ND	ug/L	5.0	1		10/04/12 21:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/04/12 21:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/04/12 21:33	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		10/04/12 21:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/04/12 21:33	75-69-4	
Vinyl chloride	19.6	ug/L	1.0	1		10/04/12 21:33	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		10/04/12 21:33	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		10/04/12 21:33	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		10/04/12 21:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		10/04/12 21:33	17060-07-0	
Toluene-d8 (S)	86	%	70-130	1		10/04/12 21:33	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown
Pace Project No.: 3078348

Sample: TB-01		Lab ID: 3078348004		Collected: 09/25/12 00:01		Received: 09/27/12 09:20		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			10/04/12 21:09	67-64-1		
Benzene	ND ug/L	1.0	1			10/04/12 21:09	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			10/04/12 21:09	75-27-4		
Bromoform	ND ug/L	5.0	1			10/04/12 21:09	75-25-2		
Bromomethane	ND ug/L	5.0	1			10/04/12 21:09	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			10/04/12 21:09	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			10/04/12 21:09	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			10/04/12 21:09	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			10/04/12 21:09	108-90-7		
Chloroethane	ND ug/L	5.0	1			10/04/12 21:09	75-00-3		
Chloroform	ND ug/L	5.0	1			10/04/12 21:09	67-66-3		
Chloromethane	ND ug/L	5.0	1			10/04/12 21:09	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			10/04/12 21:09	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			10/04/12 21:09	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			10/04/12 21:09	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			10/04/12 21:09	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			10/04/12 21:09	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			10/04/12 21:09	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			10/04/12 21:09	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			10/04/12 21:09	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			10/04/12 21:09	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			10/04/12 21:09	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			10/04/12 21:09	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			10/04/12 21:09	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			10/04/12 21:09	100-41-4		
2-Hexanone	ND ug/L	10.0	1			10/04/12 21:09	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			10/04/12 21:09	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			10/04/12 21:09	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			10/04/12 21:09	108-10-1		
Styrene	ND ug/L	5.0	1			10/04/12 21:09	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			10/04/12 21:09	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			10/04/12 21:09	127-18-4		
Toluene	ND ug/L	5.0	1			10/04/12 21:09	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			10/04/12 21:09	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			10/04/12 21:09	79-00-5		
Trichloroethene	ND ug/L	5.0	1			10/04/12 21:09	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			10/04/12 21:09	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			10/04/12 21:09	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			10/04/12 21:09	179601-23-1		
o-Xylene	ND ug/L	5.0	1			10/04/12 21:09	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	104 %	70-130	1			10/04/12 21:09	460-00-4		
1,2-Dichloroethane-d4 (S)	104 %	70-130	1			10/04/12 21:09	17060-07-0		
Toluene-d8 (S)	83 %	70-130	1			10/04/12 21:09	2037-26-5		

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

QC Batch: MSV/14161 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3078348001, 3078348002, 3078348003, 3078348004

METHOD BLANK: 495444 Matrix: Water

Associated Lab Samples: 3078348001, 3078348002, 3078348003, 3078348004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/04/12 14:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	10/04/12 14:38	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/04/12 14:38	
1,1-Dichloroethane	ug/L	ND	5.0	10/04/12 14:38	
1,1-Dichloroethene	ug/L	ND	5.0	10/04/12 14:38	
1,2-Dichlorobenzene	ug/L	ND	5.0	10/04/12 14:38	
1,2-Dichloroethane	ug/L	ND	5.0	10/04/12 14:38	
1,2-Dichloropropane	ug/L	ND	5.0	10/04/12 14:38	
1,3-Dichlorobenzene	ug/L	ND	5.0	10/04/12 14:38	
1,4-Dichlorobenzene	ug/L	ND	5.0	10/04/12 14:38	
2-Butanone (MEK)	ug/L	ND	10.0	10/04/12 14:38	
2-Hexanone	ug/L	ND	10.0	10/04/12 14:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/04/12 14:38	
Acetone	ug/L	ND	10.0	10/04/12 14:38	
Benzene	ug/L	ND	1.0	10/04/12 14:38	
Bromodichloromethane	ug/L	ND	5.0	10/04/12 14:38	
Bromoform	ug/L	ND	5.0	10/04/12 14:38	
Bromomethane	ug/L	ND	5.0	10/04/12 14:38	
Carbon disulfide	ug/L	ND	5.0	10/04/12 14:38	
Carbon tetrachloride	ug/L	ND	5.0	10/04/12 14:38	
Chlorobenzene	ug/L	ND	5.0	10/04/12 14:38	
Chloroethane	ug/L	ND	5.0	10/04/12 14:38	
Chloroform	ug/L	ND	5.0	10/04/12 14:38	
Chloromethane	ug/L	ND	5.0	10/04/12 14:38	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/04/12 14:38	
cis-1,3-Dichloropropene	ug/L	ND	5.0	10/04/12 14:38	
Dibromochloromethane	ug/L	ND	5.0	10/04/12 14:38	
Ethylbenzene	ug/L	ND	5.0	10/04/12 14:38	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	10/04/12 14:38	
m&p-Xylene	ug/L	ND	5.0	10/04/12 14:38	
Methylene Chloride	ug/L	ND	5.0	10/04/12 14:38	
o-Xylene	ug/L	ND	5.0	10/04/12 14:38	
Styrene	ug/L	ND	5.0	10/04/12 14:38	
Tetrachloroethene	ug/L	ND	5.0	10/04/12 14:38	
Toluene	ug/L	ND	5.0	10/04/12 14:38	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/04/12 14:38	
trans-1,3-Dichloropropene	ug/L	ND	5.0	10/04/12 14:38	
Trichloroethene	ug/L	ND	5.0	10/04/12 14:38	
Trichlorofluoromethane	ug/L	ND	5.0	10/04/12 14:38	
Vinyl chloride	ug/L	ND	1.0	10/04/12 14:38	
1,2-Dichloroethane-d4 (S)	%	107	70-130	10/04/12 14:38	
4-Bromofluorobenzene (S)	%	103	70-130	10/04/12 14:38	
Toluene-d8 (S)	%	87	70-130	10/04/12 14:38	

Date: 10/11/2012 03:43 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

LABORATORY CONTROL SAMPLE: 495445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.4	117	64.3-127	
1,1,2,2-Tetrachloroethane	ug/L	20	15.4	77	64.6-121	
1,1,2-Trichloroethane	ug/L	20	17.1	86	75.6-120	
1,1-Dichloroethane	ug/L	20	23.1	116	68.5-122	
1,1-Dichloroethene	ug/L	20	23.2	116	57.1-120	
1,2-Dichlorobenzene	ug/L	20	17.2	86	69.6-120	
1,2-Dichloroethane	ug/L	20	21.8	109	60.5-133	
1,2-Dichloropropane	ug/L	20	16.2	81	71-120	
1,3-Dichlorobenzene	ug/L	20	16.7	84	68.4-121	
1,4-Dichlorobenzene	ug/L	20	17.1	85	68.5-123	
2-Butanone (MEK)	ug/L	20	21.5	108	55.7-138	
2-Hexanone	ug/L	20	16.7	84	67-133	
4-Methyl-2-pentanone (MIBK)	ug/L	20	15.0	75	64.5-121	
Acetone	ug/L	20	22.7	114	57.6-168	
Benzene	ug/L	20	17.2	86	69.8-120	
Bromodichloromethane	ug/L	20	16.9	84	66.5-120	
Bromoform	ug/L	20	15.7	79	61.1-120	
Bromomethane	ug/L	20	17.4	87	10.6-200	
Carbon disulfide	ug/L	20	24.1	121	60.2-122	
Carbon tetrachloride	ug/L	20	17.2	86	60.1-127	
Chlorobenzene	ug/L	20	16.9	84	72-120	
Chloroethane	ug/L	20	20.6	103	36.8-142	
Chloroform	ug/L	20	22.4	112	69-122	
Chloromethane	ug/L	20	18.8	94	37.2-129	
cis-1,2-Dichloroethene	ug/L	20	22.5	112	69.5-123	
cis-1,3-Dichloropropene	ug/L	20	16.8	84	74.3-120	
Dibromochloromethane	ug/L	20	18.0	90	66.1-120	
Ethylbenzene	ug/L	20	16.9	85	70.9-124	
Isopropylbenzene (Cumene)	ug/L	20	17.5	88	68.3-129	
m&p-Xylene	ug/L	40	32.5	81	70.4-130	
Methylene Chloride	ug/L	20	19.0	95	61.5-125	
o-Xylene	ug/L	20	16.9	85	70.6-127	
Styrene	ug/L	20	21.3	107	69.9-120	
Tetrachloroethene	ug/L	20	17.3	86	63.4-121	
Toluene	ug/L	20	16.8	84	71.5-120	
trans-1,2-Dichloroethene	ug/L	20	21.7	109	64.1-120	
trans-1,3-Dichloropropene	ug/L	20	16.7	84	71-120	
Trichloroethene	ug/L	20	17.6	88	65.9-120	
Trichlorofluoromethane	ug/L	20	25.5	128	44.8-137	
Vinyl chloride	ug/L	20	21.6	108	51-127	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			88	70-130	

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 495446 495447											
Parameter	Units	3078325003 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	21.8	25.0	109	125	64.3-127	14	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	12.2	15.5	61	78	64.6-121	24	M0
1,1,2-Trichloroethane	ug/L	ND	20	20	14.4	16.6	72	83	75.6-120	14	M0
1,1-Dichloroethane	ug/L	ND	20	20	20.2	24.0	101	120	68.5-122	17	
1,1-Dichloroethene	ug/L	ND	20	20	22.4	26.0	112	130	57.1-120	15	M0
1,2-Dichlorobenzene	ug/L	ND	20	20	13.6	15.9	68	79	69.6-120	15	M0
1,2-Dichloroethane	ug/L	ND	20	20	19.3	23.9	97	119	60.5-133	21	
1,2-Dichloropropane	ug/L	ND	20	20	13.5	16.5	67	82	71-120	20	M0
1,3-Dichlorobenzene	ug/L	ND	20	20	13.3	15.5	67	78	68.4-121	15	M0
1,4-Dichlorobenzene	ug/L	ND	20	20	13.4	15.9	67	80	68.5-123	17	M0
2-Butanone (MEK)	ug/L	ND	20	20	17.8	24.6	89	123	55.7-138	32	R1
2-Hexanone	ug/L	ND	20	20	13.9	18.4	70	92	67-133	28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	13.4	17.3	67	87	64.5-121	25	
Acetone	ug/L	ND	20	20	28.5	32.7	142	163	57.6-168	14	
Benzene	ug/L	ND	20	20	14.2	17.1	71	86	69.8-120	18	
Bromodichloromethane	ug/L	ND	20	20	14.4	17.3	72	87	66.5-120	19	
Bromoform	ug/L	ND	20	20	12.5	14.8	63	74	61.1-120	17	
Bromomethane	ug/L	ND	20	20	13.7	18.0	69	90	10.6-200	27	
Carbon disulfide	ug/L	ND	20	20	20.1	26.5	100	133	60.2-122	28	M0
Carbon tetrachloride	ug/L	ND	20	20	15.7	17.8	78	89	60.1-127	13	
Chlorobenzene	ug/L	ND	20	20	14.1	16.5	71	83	72-120	16	M0
Chloroethane	ug/L	ND	20	20	23.1	21.7	115	108	36.8-142	6	
Chloroform	ug/L	ND	20	20	20.3	23.8	102	119	69-122	16	
Chloromethane	ug/L	ND	20	20	18.7	20.3	93	101	37.2-129	8	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.6	24.1	103	121	69.5-123	16	
cis-1,3-Dichloropropene	ug/L	ND	20	20	13.5	16.7	68	83	74.3-120	21	M0
Dibromochloromethane	ug/L	ND	20	20	14.7	17.4	73	87	66.1-120	17	
Ethylbenzene	ug/L	ND	20	20	14.3	16.4	72	82	70.9-124	14	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	14.5	17.8	72	89	68.3-129	21	
m&p-Xylene	ug/L	ND	40	40	27.8	32.3	69	81	70.4-130	15	M0
Methylene Chloride	ug/L	ND	20	20	17.4	20.7	87	104	61.5-125	18	
o-Xylene	ug/L	ND	20	20	14.6	16.7	73	83	70.6-127	13	
Styrene	ug/L	ND	20	20	18.5	20.4	93	102	69.9-120	10	
Tetrachloroethene	ug/L	ND	20	20	14.8	17.0	74	85	63.4-121	14	
Toluene	ug/L	ND	20	20	14.3	16.9	72	85	71.5-120	17	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.2	23.9	101	119	64.1-120	17	
trans-1,3-Dichloropropene	ug/L	ND	20	20	13.5	16.9	68	84	71-120	22	M0
Trichloroethene	ug/L	ND	20	20	15.5	17.7	77	89	65.9-120	13	
Trichlorofluoromethane	ug/L	ND	20	20	31.0	28.9	155	145	44.8-137	7	M0
Vinyl chloride	ug/L	ND	20	20	24.9	25.0	125	125	51-127	.08	
1,2-Dichloroethane-d4 (S)	%						109	106	70-130		
4-Bromofluorobenzene (S)	%						98	99	70-130		
Toluene-d8 (S)	%						86	87	70-130		

QUALIFIERS

Project: Essex/Hope Jamestown
Pace Project No.: 3078348

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

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

R1 RPD value was outside control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Essex/Hope Jamestown

Pace Project No.: 3078348

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3078348001	PRE-CARB	EPA 8260	MSV/14161		
3078348002	PRIMARY-EFF	EPA 8260	MSV/14161		
3078348003	POST-CARB	EPA 8260	MSV/14161		
3078348004	TB-01	EPA 8260	MSV/14161		

[illegible][illegible]

ADD

Sample Condition Upon Receipt



Client Name: URS

Project # 358348

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

Tracking #: 705766545700

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 2.2

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 12/9/27/12

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> , conform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>WV</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: 9/27/12

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)

Client Name: VP5

[illegible]

November 09, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 6
681 Andersen Drive, Suite 400
Pittsburgh, PA 15220

RE: Project: 41569181/Essex-Hope
Pace Project No.: 3080965

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on November 01, 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

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

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 Certification #: 460198

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 10

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ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

Sample: PRE-CARB		Lab ID: 3080965001	Collected: 10/31/12 10:45	Received: 11/01/12 10:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	47100	ug/L	4000	400		11/09/12 10:17	67-64-1	
Benzene	56.3	ug/L	1.0	1		11/07/12 21:23	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/07/12 21:23	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/07/12 21:23	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/07/12 21:23	74-83-9	
2-Butanone (MEK)	227	ug/L	10.0	1		11/07/12 21:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/07/12 21:23	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/07/12 21:23	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/07/12 21:23	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/07/12 21:23	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/07/12 21:23	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/07/12 21:23	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/07/12 21:23	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 21:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 21:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 21:23	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/07/12 21:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/07/12 21:23	107-06-2	
1,1-Dichloroethene	30.4	ug/L	5.0	1		11/07/12 21:23	75-35-4	
cis-1,2-Dichloroethene	9970	ug/L	250	50		11/07/12 21:48	156-59-2	
trans-1,2-Dichloroethene	41.9	ug/L	5.0	1		11/07/12 21:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/07/12 21:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 21:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 21:23	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/07/12 21:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/07/12 21:23	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/07/12 21:23	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/07/12 21:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/07/12 21:23	108-10-1	
Styrene	ND	ug/L	5.0	1		11/07/12 21:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/07/12 21:23	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/07/12 21:23	127-18-4	
Toluene	ND	ug/L	5.0	1		11/07/12 21:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/07/12 21:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/07/12 21:23	79-00-5	
Trichloroethene	7360	ug/L	250	50		11/07/12 21:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/07/12 21:23	75-69-4	
Vinyl chloride	1050	ug/L	50.0	50		11/07/12 21:48	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/07/12 21:23	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/07/12 21:23	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	85-115	1		11/07/12 21:23	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	77-119	1		11/07/12 21:23	17060-07-0	
Toluene-d8 (S)	98	%	85-115	1		11/07/12 21:23	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

Sample: PRIMARY EFF		Lab ID: 3080965002	Collected: 10/31/12 10:50	Received: 11/01/12 10:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	24200	ug/L	4000	400		11/09/12 09:53	67-64-1	
Benzene	ND	ug/L	1.0	1		11/07/12 14:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/07/12 14:25	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/07/12 14:25	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/07/12 14:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		11/07/12 14:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/07/12 14:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/07/12 14:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/07/12 14:25	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/07/12 14:25	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/07/12 14:25	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/07/12 14:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/07/12 14:25	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 14:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 14:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 14:25	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/07/12 14:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/07/12 14:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/07/12 14:25	75-35-4	
cis-1,2-Dichloroethene	29.6	ug/L	5.0	1		11/07/12 14:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/07/12 14:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/07/12 14:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 14:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 14:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/07/12 14:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/07/12 14:25	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/07/12 14:25	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/07/12 14:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/07/12 14:25	108-10-1	
Styrene	ND	ug/L	5.0	1		11/07/12 14:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/07/12 14:25	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/07/12 14:25	127-18-4	
Toluene	ND	ug/L	5.0	1		11/07/12 14:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/07/12 14:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/07/12 14:25	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/07/12 14:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/07/12 14:25	75-69-4	
Vinyl chloride	1060	ug/L	200	200		11/07/12 20:58	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/07/12 14:25	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/07/12 14:25	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	85-115	1		11/07/12 14:25	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	77-119	1		11/07/12 14:25	17060-07-0	
Toluene-d8 (S)	97	%	85-115	1		11/07/12 14:25	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

Sample: POST CARB **Lab ID: 3080965003** Collected: 10/31/12 12:25 Received: 11/01/12 10:10 Matrix: Water

Comments: • VOA 8260: This sample was composited from four vials prior to analysis for 8260.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	20100	ug/L	4000	400		11/09/12 09:28	67-64-1	
Benzene	ND	ug/L	1.0	1		11/07/12 20:34	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/07/12 20:34	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/07/12 20:34	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/07/12 20:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		11/07/12 20:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/07/12 20:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/07/12 20:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/07/12 20:34	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/07/12 20:34	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/07/12 20:34	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/07/12 20:34	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/07/12 20:34	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 20:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 20:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/07/12 20:34	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/07/12 20:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/07/12 20:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/07/12 20:34	75-35-4	
cis-1,2-Dichloroethene	54.2	ug/L	5.0	1		11/07/12 20:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/07/12 20:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/07/12 20:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 20:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/07/12 20:34	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/07/12 20:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/07/12 20:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/07/12 20:34	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/07/12 20:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/07/12 20:34	108-10-1	
Styrene	ND	ug/L	5.0	1		11/07/12 20:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/07/12 20:34	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/07/12 20:34	127-18-4	
Toluene	ND	ug/L	5.0	1		11/07/12 20:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/07/12 20:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/07/12 20:34	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/07/12 20:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/07/12 20:34	75-69-4	
Vinyl chloride	11.0	ug/L	1.0	1		11/07/12 20:34	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/07/12 20:34	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/07/12 20:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98 %		85-115	1		11/07/12 20:34	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		77-119	1		11/07/12 20:34	17060-07-0	
Toluene-d8 (S)	97 %		85-115	1		11/07/12 20:34	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

Sample: TB-01		Lab ID: 3080965004	Collected: 10/31/12 00:01	Received: 11/01/12 10:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	18.5 ug/L		10.0	1		11/07/12 20:09	67-64-1	
Benzene	ND ug/L		1.0	1		11/07/12 20:09	71-43-2	
Bromodichloromethane	ND ug/L		5.0	1		11/07/12 20:09	75-27-4	
Bromoform	ND ug/L		5.0	1		11/07/12 20:09	75-25-2	
Bromomethane	ND ug/L		5.0	1		11/07/12 20:09	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		11/07/12 20:09	78-93-3	
Carbon disulfide	ND ug/L		5.0	1		11/07/12 20:09	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		11/07/12 20:09	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		11/07/12 20:09	108-90-7	
Chloroethane	ND ug/L		5.0	1		11/07/12 20:09	75-00-3	
Chloroform	ND ug/L		5.0	1		11/07/12 20:09	67-66-3	
Chloromethane	ND ug/L		5.0	1		11/07/12 20:09	74-87-3	
Dibromochloromethane	ND ug/L		5.0	1		11/07/12 20:09	124-48-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		11/07/12 20:09	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		11/07/12 20:09	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		11/07/12 20:09	106-46-7	
1,1-Dichloroethane	ND ug/L		5.0	1		11/07/12 20:09	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		11/07/12 20:09	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		11/07/12 20:09	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		11/07/12 20:09	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		11/07/12 20:09	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		11/07/12 20:09	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		11/07/12 20:09	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		11/07/12 20:09	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		11/07/12 20:09	100-41-4	
2-Hexanone	ND ug/L		10.0	1		11/07/12 20:09	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		11/07/12 20:09	98-82-8	
Methylene Chloride	ND ug/L		5.0	1		11/07/12 20:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		11/07/12 20:09	108-10-1	
Styrene	ND ug/L		5.0	1		11/07/12 20:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		11/07/12 20:09	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		11/07/12 20:09	127-18-4	
Toluene	ND ug/L		5.0	1		11/07/12 20:09	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		11/07/12 20:09	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		11/07/12 20:09	79-00-5	
Trichloroethene	ND ug/L		5.0	1		11/07/12 20:09	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		11/07/12 20:09	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		11/07/12 20:09	75-01-4	
m&p-Xylene	ND ug/L		5.0	1		11/07/12 20:09	179601-23-1	
o-Xylene	ND ug/L		5.0	1		11/07/12 20:09	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95 %		85-115	1		11/07/12 20:09	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		77-119	1		11/07/12 20:09	17060-07-0	
Toluene-d8 (S)	96 %		85-115	1		11/07/12 20:09	2037-26-5	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

QC Batch: MSV/14493 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3080965001, 3080965002, 3080965003, 3080965004

METHOD BLANK: 509296 Matrix: Water

Associated Lab Samples: 3080965001, 3080965002, 3080965003, 3080965004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	11/07/12 12:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	11/07/12 12:46	
1,1,2-Trichloroethane	ug/L	ND	5.0	11/07/12 12:46	
1,1-Dichloroethane	ug/L	ND	5.0	11/07/12 12:46	
1,1-Dichloroethene	ug/L	ND	5.0	11/07/12 12:46	
1,2-Dichlorobenzene	ug/L	ND	5.0	11/07/12 12:46	
1,2-Dichloroethane	ug/L	ND	5.0	11/07/12 12:46	
1,2-Dichloropropane	ug/L	ND	5.0	11/07/12 12:46	
1,3-Dichlorobenzene	ug/L	ND	5.0	11/07/12 12:46	
1,4-Dichlorobenzene	ug/L	ND	5.0	11/07/12 12:46	
2-Butanone (MEK)	ug/L	ND	10.0	11/07/12 12:46	
2-Hexanone	ug/L	ND	10.0	11/07/12 12:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	11/07/12 12:46	
Acetone	ug/L	ND	10.0	11/07/12 12:46	
Benzene	ug/L	ND	1.0	11/07/12 12:46	
Bromodichloromethane	ug/L	ND	5.0	11/07/12 12:46	
Bromoform	ug/L	ND	5.0	11/07/12 12:46	
Bromomethane	ug/L	ND	5.0	11/07/12 12:46	
Carbon disulfide	ug/L	ND	5.0	11/07/12 12:46	
Carbon tetrachloride	ug/L	ND	5.0	11/07/12 12:46	
Chlorobenzene	ug/L	ND	5.0	11/07/12 12:46	
Chloroethane	ug/L	ND	5.0	11/07/12 12:46	
Chloroform	ug/L	ND	5.0	11/07/12 12:46	
Chloromethane	ug/L	ND	5.0	11/07/12 12:46	
cis-1,2-Dichloroethene	ug/L	ND	5.0	11/07/12 12:46	
cis-1,3-Dichloropropene	ug/L	ND	5.0	11/07/12 12:46	
Dibromochloromethane	ug/L	ND	5.0	11/07/12 12:46	
Ethylbenzene	ug/L	ND	5.0	11/07/12 12:46	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	11/07/12 12:46	
m&p-Xylene	ug/L	ND	5.0	11/07/12 12:46	
Methylene Chloride	ug/L	ND	5.0	11/07/12 12:46	
o-Xylene	ug/L	ND	5.0	11/07/12 12:46	
Styrene	ug/L	ND	5.0	11/07/12 12:46	
Tetrachloroethene	ug/L	ND	5.0	11/07/12 12:46	
Toluene	ug/L	ND	5.0	11/07/12 12:46	
trans-1,2-Dichloroethene	ug/L	ND	5.0	11/07/12 12:46	
trans-1,3-Dichloropropene	ug/L	ND	5.0	11/07/12 12:46	
Trichloroethene	ug/L	ND	5.0	11/07/12 12:46	
Trichlorofluoromethane	ug/L	ND	5.0	11/07/12 12:46	
Vinyl chloride	ug/L	ND	1.0	11/07/12 12:46	
1,2-Dichloroethane-d4 (S)	%	102	77-119	11/07/12 12:46	
4-Bromofluorobenzene (S)	%	95	85-115	11/07/12 12:46	
Toluene-d8 (S)	%	98	85-115	11/07/12 12:46	

Date: 11/09/2012 01:21 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

LABORATORY CONTROL SAMPLE: 509297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.7	98	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.4	87	61-117	
1,1,2-Trichloroethane	ug/L	20	18.9	95	72-119	
1,1-Dichloroethane	ug/L	20	20.7	104	63-123	
1,1-Dichloroethene	ug/L	20	19.5	98	57-127	
1,2-Dichlorobenzene	ug/L	20	20.2	101	70-116	
1,2-Dichloroethane	ug/L	20	19.6	98	62-125	
1,2-Dichloropropane	ug/L	20	18.9	95	69-115	
1,3-Dichlorobenzene	ug/L	20	19.3	97	71-118	
1,4-Dichlorobenzene	ug/L	20	19.6	98	67-119	
2-Butanone (MEK)	ug/L	20	17.0	85	48-136	
2-Hexanone	ug/L	20	16.5	83	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	15.3	77	57-124	
Acetone	ug/L	20	18.3	92	49-138	
Benzene	ug/L	20	19.4	97	66-122	
Bromodichloromethane	ug/L	20	19.0	95	63-118	
Bromoform	ug/L	20	15.2	76	46-130	
Bromomethane	ug/L	20	13.6	68	10-175	
Carbon disulfide	ug/L	20	20.6	103	59-142	
Carbon tetrachloride	ug/L	20	19.9	100	55-126	
Chlorobenzene	ug/L	20	19.3	97	70-121	
Chloroethane	ug/L	20	19.0	95	24-161	
Chloroform	ug/L	20	20.0	100	62-126	
Chloromethane	ug/L	20	17.9	90	37-147	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	64-121	
cis-1,3-Dichloropropene	ug/L	20	19.1	96	64-118	
Dibromochloromethane	ug/L	20	17.7	89	60-120	
Ethylbenzene	ug/L	20	20.2	101	69-119	
Isopropylbenzene (Cumene)	ug/L	20	21.6	108	68-126	
m&p-Xylene	ug/L	40	41.5	104	70-124	
Methylene Chloride	ug/L	20	19.6	98	59-128	
o-Xylene	ug/L	20	20.5	102	67-123	
Styrene	ug/L	20	20.7	103	67-146	
Tetrachloroethene	ug/L	20	18.8	94	62-125	
Toluene	ug/L	20	19.2	96	72-115	
trans-1,2-Dichloroethene	ug/L	20	19.5	97	59-122	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	64-120	
Trichloroethene	ug/L	20	19.5	97	62-125	
Trichlorofluoromethane	ug/L	20	20.3	102	54-158	
Vinyl chloride	ug/L	20	18.2	91	52-145	
1,2-Dichloroethane-d4 (S)	%			99	77-119	
4-Bromofluorobenzene (S)	%			96	85-115	
Toluene-d8 (S)	%			97	85-115	

QUALIFIERS

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

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.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181/Essex-Hope

Pace Project No.: 3080965

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3080965001	PRE-CARB	EPA 8260	MSV/14493		
3080965002	PRIMARY EFF	EPA 8260	MSV/14493		
3080965003	POST CARB	EPA 8260	MSV/14493		
3080965004	TB-01	EPA 8260	MSV/14493		

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 DONIAK	Attention:	
Address:	FOSTER PLAZA 6 681 ANDERSEN DR STE 400 PITTSBURGH, PA 15220	Copy To:	VALERIE SIBETO	Company Name:	
Email To:		Purchase Order No.:	41569181	Address:	
Phone:	412-503-4700	Project Name:	ESSEX/HOPE JAMESTOWN	Pace Quote Reference:	
Requested Due Date/TAT:	STANDARD	Project Number:	41569181.1000	Pace Project Manager:	
				Pace Profile #:	
				Site Location STATE: NY	
				REGULATORY AGENCY ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER	
				Page: 1 of 1 1627822	

[illegible]



Sample Condition Upon Receipt

Client Name: URS

Project # 30809165

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

Tracking #: 872640256985

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 3.6

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: LEL 11/1/12

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>NA</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, coliform, TOC, O&G, WI-DRO (water)</u>	☒ Yes ☐ No	Initial when completed <u>LEL</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: 11/1/12

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: 3080965

Client Name: URS

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)	TPH (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 galL)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
100	4																							
101	4																							
102	4																							
103	4																							
104	4																							
105	4																							
106	4																							
107	4																							
108	4																							
109	4																							
110	4																							
111	4																							
112	4																							
113	4																							
114	4																							
115	4																							
116	4																							
117	4																							
118	4																							
119	4																							
120	4																							

November 30, 2012

Mr. Mark Dowiak
URS Corporation
Foster Plaza 6
681 Andersen Drive, Suite 400
Pittsburgh, PA 15220

RE: Project: Essex/Hope Jamestown
Pace Project No.: 3082412

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on November 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

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

Pace Project No.: 3082412

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 Certification #: 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.: 3082412

Sample: PRE-CARB		Lab ID: 3082412001	Collected: 11/20/12 10:00	Received: 11/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	23200	ug/L	1000	100		11/27/12 17:34	67-64-1	
Benzene	29.7	ug/L	1.0	1		11/26/12 17:22	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/26/12 17:22	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/26/12 17:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/26/12 17:22	74-83-9	
2-Butanone (MEK)	125	ug/L	10.0	1		11/26/12 17:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/26/12 17:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/26/12 17:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/26/12 17:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/26/12 17:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/12 17:22	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/26/12 17:22	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/26/12 17:22	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:22	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/26/12 17:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/26/12 17:22	107-06-2	
1,1-Dichloroethene	31.7	ug/L	5.0	1		11/26/12 17:22	75-35-4	
cis-1,2-Dichloroethene	8270	ug/L	250	50		11/27/12 12:38	156-59-2	
trans-1,2-Dichloroethene	238	ug/L	5.0	1		11/26/12 17:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/26/12 17:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/26/12 17:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/26/12 17:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/26/12 17:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/26/12 17:22	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/26/12 17:22	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/26/12 17:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/26/12 17:22	108-10-1	
Styrene	ND	ug/L	5.0	1		11/26/12 17:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/26/12 17:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/26/12 17:22	127-18-4	
Toluene	ND	ug/L	5.0	1		11/26/12 17:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/26/12 17:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/26/12 17:22	79-00-5	
Trichloroethene	4640	ug/L	250	50		11/27/12 12:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/26/12 17:22	75-69-4	
Vinyl chloride	925	ug/L	50.0	50		11/27/12 12:38	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/26/12 17:22	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/26/12 17:22	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	85-115	1		11/26/12 17:22	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	77-119	1		11/26/12 17:22	17060-07-0	
Toluene-d8 (S)	87	%	85-115	1		11/26/12 17:22	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

Sample: PRIMARY-EFF		Lab ID: 3082412002	Collected: 11/20/12 10:05	Received: 11/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	18200 ug/L		1000	100		11/27/12 18:01	67-64-1	
Benzene	ND ug/L		1.0	1		11/26/12 18:44	71-43-2	
Bromodichloromethane	ND ug/L		5.0	1		11/26/12 18:44	75-27-4	
Bromoform	ND ug/L		5.0	1		11/26/12 18:44	75-25-2	
Bromomethane	ND ug/L		5.0	1		11/26/12 18:44	74-83-9	
2-Butanone (MEK)	16.4 ug/L		10.0	1		11/26/12 18:44	78-93-3	
Carbon disulfide	ND ug/L		5.0	1		11/26/12 18:44	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		11/26/12 18:44	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		11/26/12 18:44	108-90-7	
Chloroethane	ND ug/L		5.0	1		11/26/12 18:44	75-00-3	
Chloroform	ND ug/L		5.0	1		11/26/12 18:44	67-66-3	
Chloromethane	ND ug/L		5.0	1		11/26/12 18:44	74-87-3	
Dibromochloromethane	ND ug/L		5.0	1		11/26/12 18:44	124-48-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		11/26/12 18:44	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		11/26/12 18:44	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		11/26/12 18:44	106-46-7	
1,1-Dichloroethane	ND ug/L		5.0	1		11/26/12 18:44	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		11/26/12 18:44	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		11/26/12 18:44	75-35-4	
cis-1,2-Dichloroethene	36.8 ug/L		5.0	1		11/26/12 18:44	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		11/26/12 18:44	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		11/26/12 18:44	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		11/26/12 18:44	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		11/26/12 18:44	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		11/26/12 18:44	100-41-4	
2-Hexanone	ND ug/L		10.0	1		11/26/12 18:44	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		11/26/12 18:44	98-82-8	
Methylene Chloride	ND ug/L		5.0	1		11/26/12 18:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		11/26/12 18:44	108-10-1	
Styrene	ND ug/L		5.0	1		11/26/12 18:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		11/26/12 18:44	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		11/26/12 18:44	127-18-4	
Toluene	ND ug/L		5.0	1		11/26/12 18:44	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		11/26/12 18:44	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		11/26/12 18:44	79-00-5	
Trichloroethene	ND ug/L		5.0	1		11/26/12 18:44	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		11/26/12 18:44	75-69-4	
Vinyl chloride	850 ug/L		50.0	50		11/27/12 13:06	75-01-4	
m&p-Xylene	ND ug/L		5.0	1		11/26/12 18:44	179601-23-1	
o-Xylene	ND ug/L		5.0	1		11/26/12 18:44	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101 %		85-115	1		11/26/12 18:44	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		77-119	1		11/26/12 18:44	17060-07-0	
Toluene-d8 (S)	86 %		85-115	1		11/26/12 18:44	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

Sample: POST-CARB		Lab ID: 3082412003	Collected: 11/20/12 11:40	Received: 11/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	17000	ug/L	500	50		11/27/12 14:28	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/12 17:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/26/12 17:50	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/26/12 17:50	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/26/12 17:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		11/26/12 17:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/26/12 17:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/26/12 17:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/26/12 17:50	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/26/12 17:50	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/12 17:50	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/26/12 17:50	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/26/12 17:50	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/26/12 17:50	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/26/12 17:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/26/12 17:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/26/12 17:50	75-35-4	
cis-1,2-Dichloroethene	53.3	ug/L	5.0	1		11/26/12 17:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/26/12 17:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/26/12 17:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/26/12 17:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/26/12 17:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/26/12 17:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/26/12 17:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/26/12 17:50	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/26/12 17:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/26/12 17:50	108-10-1	
Styrene	ND	ug/L	5.0	1		11/26/12 17:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/26/12 17:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/26/12 17:50	127-18-4	
Toluene	ND	ug/L	5.0	1		11/26/12 17:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/26/12 17:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/26/12 17:50	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/26/12 17:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/26/12 17:50	75-69-4	
Vinyl chloride	810	ug/L	50.0	50		11/27/12 14:28	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/26/12 17:50	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/26/12 17:50	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	85-115	1		11/26/12 17:50	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	77-119	1		11/26/12 17:50	17060-07-0	
Toluene-d8 (S)	88	%	85-115	1		11/26/12 17:50	2037-26-5	

ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

Sample: TB-01		Lab ID: 3082412004	Collected: 11/20/12 00:01	Received: 11/21/12 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	11.3	ug/L	10.0	1		11/27/12 12:10	67-64-1	
Benzene	ND	ug/L	1.0	1		11/27/12 12:10	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/27/12 12:10	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/27/12 12:10	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/27/12 12:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		11/27/12 12:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		11/27/12 12:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/27/12 12:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/27/12 12:10	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/27/12 12:10	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/27/12 12:10	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/27/12 12:10	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/27/12 12:10	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/27/12 12:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		11/27/12 12:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/27/12 12:10	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/27/12 12:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/27/12 12:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/27/12 12:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/27/12 12:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/27/12 12:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/27/12 12:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		11/27/12 12:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		11/27/12 12:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/27/12 12:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		11/27/12 12:10	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/27/12 12:10	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/27/12 12:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		11/27/12 12:10	108-10-1	
Styrene	ND	ug/L	5.0	1		11/27/12 12:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/27/12 12:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/27/12 12:10	127-18-4	
Toluene	ND	ug/L	5.0	1		11/27/12 12:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/27/12 12:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/27/12 12:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/27/12 12:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/27/12 12:10	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		11/27/12 12:10	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		11/27/12 12:10	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		11/27/12 12:10	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	85-115	1		11/27/12 12:10	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	77-119	1		11/27/12 12:10	17060-07-0	
Toluene-d8 (S)	85	%	85-115	1		11/27/12 12:10	2037-26-5	

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

QC Batch: MSV/14650 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3082412001, 3082412002, 3082412003, 3082412004

METHOD BLANK: 515946 Matrix: Water
Associated Lab Samples: 3082412001, 3082412002, 3082412003, 3082412004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	11/26/12 14:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	11/26/12 14:11	
1,1,2-Trichloroethane	ug/L	ND	5.0	11/26/12 14:11	
1,1-Dichloroethane	ug/L	ND	5.0	11/26/12 14:11	
1,1-Dichloroethene	ug/L	ND	5.0	11/26/12 14:11	
1,2-Dichlorobenzene	ug/L	ND	5.0	11/26/12 14:11	
1,2-Dichloroethane	ug/L	ND	5.0	11/26/12 14:11	
1,2-Dichloropropane	ug/L	ND	5.0	11/26/12 14:11	
1,3-Dichlorobenzene	ug/L	ND	5.0	11/26/12 14:11	
1,4-Dichlorobenzene	ug/L	ND	5.0	11/26/12 14:11	
2-Butanone (MEK)	ug/L	ND	10.0	11/26/12 14:11	
2-Hexanone	ug/L	ND	10.0	11/26/12 14:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	11/26/12 14:11	
Acetone	ug/L	ND	10.0	11/26/12 14:11	
Benzene	ug/L	ND	1.0	11/26/12 14:11	
Bromodichloromethane	ug/L	ND	5.0	11/26/12 14:11	
Bromoform	ug/L	ND	5.0	11/26/12 14:11	
Bromomethane	ug/L	ND	5.0	11/26/12 14:11	
Carbon disulfide	ug/L	ND	5.0	11/26/12 14:11	
Carbon tetrachloride	ug/L	ND	5.0	11/26/12 14:11	
Chlorobenzene	ug/L	ND	5.0	11/26/12 14:11	
Chloroethane	ug/L	ND	5.0	11/26/12 14:11	
Chloroform	ug/L	ND	5.0	11/26/12 14:11	
Chloromethane	ug/L	ND	5.0	11/26/12 14:11	
cis-1,2-Dichloroethene	ug/L	ND	5.0	11/26/12 14:11	
cis-1,3-Dichloropropene	ug/L	ND	5.0	11/26/12 14:11	
Dibromochloromethane	ug/L	ND	5.0	11/26/12 14:11	
Ethylbenzene	ug/L	ND	5.0	11/26/12 14:11	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	11/26/12 14:11	
m&p-Xylene	ug/L	ND	5.0	11/26/12 14:11	
Methylene Chloride	ug/L	ND	5.0	11/26/12 14:11	
o-Xylene	ug/L	ND	5.0	11/26/12 14:11	
Styrene	ug/L	ND	5.0	11/26/12 14:11	
Tetrachloroethene	ug/L	ND	5.0	11/26/12 14:11	
Toluene	ug/L	ND	5.0	11/26/12 14:11	
trans-1,2-Dichloroethene	ug/L	ND	5.0	11/26/12 14:11	
trans-1,3-Dichloropropene	ug/L	ND	5.0	11/26/12 14:11	
Trichloroethene	ug/L	ND	5.0	11/26/12 14:11	
Trichlorofluoromethane	ug/L	ND	5.0	11/26/12 14:11	
Vinyl chloride	ug/L	ND	1.0	11/26/12 14:11	
1,2-Dichloroethane-d4 (S)	%	104	77-119	11/26/12 14:11	
4-Bromofluorobenzene (S)	%	99	85-115	11/26/12 14:11	
Toluene-d8 (S)	%	94	85-115	11/26/12 14:11	

Date: 11/30/2012 03:07 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

LABORATORY CONTROL SAMPLE: 515947

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.7	98	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	16.6	83	61-117	
1,1,2-Trichloroethane	ug/L	20	18.5	92	72-119	
1,1-Dichloroethane	ug/L	20	19.7	98	63-123	
1,1-Dichloroethene	ug/L	20	18.5	92	57-127	
1,2-Dichlorobenzene	ug/L	20	17.7	89	70-116	
1,2-Dichloroethane	ug/L	20	18.6	93	62-125	
1,2-Dichloropropane	ug/L	20	17.6	88	69-115	
1,3-Dichlorobenzene	ug/L	20	17.0	85	71-118	
1,4-Dichlorobenzene	ug/L	20	17.2	86	67-119	
2-Butanone (MEK)	ug/L	20	21.2	106	48-136	
2-Hexanone	ug/L	20	18.9	95	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	16.3	82	57-124	
Acetone	ug/L	20	18.6	93	49-138	
Benzene	ug/L	20	18.0	90	66-122	
Bromodichloromethane	ug/L	20	17.3	86	63-118	
Bromoform	ug/L	20	17.7	89	46-130	
Bromomethane	ug/L	20	14.3	71	10-175	
Carbon disulfide	ug/L	20	23.8	119	59-142	
Carbon tetrachloride	ug/L	20	18.7	94	55-126	
Chlorobenzene	ug/L	20	17.7	89	70-121	
Chloroethane	ug/L	20	17.9	90	24-161	
Chloroform	ug/L	20	19.2	96	62-126	
Chloromethane	ug/L	20	16.7	84	37-147	
cis-1,2-Dichloroethene	ug/L	20	19.7	99	64-121	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	64-118	
Dibromochloromethane	ug/L	20	17.4	87	60-120	
Ethylbenzene	ug/L	20	17.7	88	69-119	
Isopropylbenzene (Cumene)	ug/L	20	19.1	96	68-126	
m&p-Xylene	ug/L	40	36.5	91	70-124	
Methylene Chloride	ug/L	20	18.5	92	59-128	
o-Xylene	ug/L	20	18.5	92	67-123	
Styrene	ug/L	20	19.7	99	67-146	
Tetrachloroethene	ug/L	20	18.1	91	62-125	
Toluene	ug/L	20	18.0	90	72-115	
trans-1,2-Dichloroethene	ug/L	20	18.7	94	59-122	
trans-1,3-Dichloropropene	ug/L	20	17.8	89	64-120	
Trichloroethene	ug/L	20	17.3	86	62-125	
Trichlorofluoromethane	ug/L	20	20.4	102	54-158	
Vinyl chloride	ug/L	20	17.7	89	52-145	
1,2-Dichloroethane-d4 (S)	%			100	77-119	
4-Bromofluorobenzene (S)	%			99	85-115	
Toluene-d8 (S)	%			96	85-115	

QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 515948 515949											
Parameter	Units	3082412002 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	18.8	20.3	94	102	62-125	8	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	15.9	15.5	80	77	61-117	3	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.1	16.5	86	83	72-119	4	
1,1-Dichloroethane	ug/L	ND	20	20	19.3	19.9	97	99	63-123	3	
1,1-Dichloroethene	ug/L	ND	20	20	18.0	19.3	90	97	57-127	7	
1,2-Dichlorobenzene	ug/L	ND	20	20	15.9	15.9	80	80	70-116	.2	
1,2-Dichloroethane	ug/L	ND	20	20	19.6	19.5	98	98	62-125	.5	
1,2-Dichloropropane	ug/L	ND	20	20	15.6	15.8	78	79	69-115	1	
1,3-Dichlorobenzene	ug/L	ND	20	20	15.2	15.8	76	79	71-118	4	
1,4-Dichlorobenzene	ug/L	ND	20	20	14.6	15.5	73	77	67-119	6	
2-Butanone (MEK)	ug/L	16.4	20	20	39.6	39.4	116	115	48-136	.5	
2-Hexanone	ug/L	ND	20	20	19.0	18.3	95	91	52-130	4	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	15.5	14.8	77	74	57-124	4	
Acetone	ug/L	18200	2000	1000	18700	19300	23	105	49-138	3	M0
Benzene	ug/L	ND	20	20	15.9	16.7	80	83	66-122	5	
Bromodichloromethane	ug/L	ND	20	20	15.6	15.5	78	78	63-118	.7	
Bromoform	ug/L	ND	20	20	16.5	15.5	82	78	46-130	6	
Bromomethane	ug/L	ND	20	20	7.3	7.7	37	39	10-175	5	
Carbon disulfide	ug/L	ND	20	20	23.1	20.5	115	102	59-142	12	
Carbon tetrachloride	ug/L	ND	20	20	18.2	19.5	91	97	55-126	7	
Chlorobenzene	ug/L	ND	20	20	15.4	16.2	77	81	70-121	5	
Chloroethane	ug/L	ND	20	20	26.1	24.9	130	125	24-161	5	
Chloroform	ug/L	ND	20	20	19.0	19.5	95	97	62-126	3	
Chloromethane	ug/L	ND	20	20	18.9	18.2	94	91	37-147	3	
cis-1,2-Dichloroethene	ug/L	36.8	20	20	57.7	57.6	104	104	64-121	.1	
cis-1,3-Dichloropropene	ug/L	ND	20	20	15.2	15.1	76	76	64-118	.5	
Dibromochloromethane	ug/L	ND	20	20	15.4	15.6	77	78	60-120	1	
Ethylbenzene	ug/L	ND	20	20	15.7	16.2	79	81	69-119	3	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	16.6	17.7	83	88	68-126	7	
m&p-Xylene	ug/L	ND	40	40	31.3	33.0	78	83	70-124	5	
Methylene Chloride	ug/L	ND	20	20	19.3	19.3	97	97	59-128	.02	
o-Xylene	ug/L	ND	20	20	16.4	17.0	82	85	67-123	3	
Styrene	ug/L	ND	20	20	17.0	17.7	85	89	67-146	4	
Tetrachloroethene	ug/L	ND	20	20	15.5	16.6	77	83	62-125	7	
Toluene	ug/L	ND	20	20	15.6	16.7	78	84	72-115	7	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.4	19.8	92	99	59-122	7	
trans-1,3-Dichloropropene	ug/L	ND	20	20	15.2	15.1	76	76	64-120	.5	
Trichloroethene	ug/L	ND	20	20	15.3	16.6	76	83	62-125	8	
Trichlorofluoromethane	ug/L	ND	20	20	26.7	24.5	134	122	54-158	9	
Vinyl chloride	ug/L	850	1000	1000	1880	1990	103	114	52-145	6	
1,2-Dichloroethane-d4 (S)	%						99	98	77-119		
4-Bromofluorobenzene (S)	%						102	102	85-115		
Toluene-d8 (S)	%						91	90	85-115		

QUALIFIERS

Project: Essex/Hope Jamestown

Pace Project No.: 3082412

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

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.: 3082412

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3082412001	PRE-CARB	EPA 8260	MSV/14650		
3082412002	PRIMARY-EFF	EPA 8260	MSV/14650		
3082412003	POST-CARB	EPA 8260	MSV/14650		
3082412004	TB-01	EPA 8260	MSV/14650		

Section A	Required Client Information:	Company: URS CORP Address: 601 ANDERSEN DR. FOSTER PARKWAY STE 400 DITTSBURGH, PA 15220 Email To: Fax: 412-583-4700 Requested Due Date/TAT: STANDARD	Section B	Report To: MARK DOWIAK Copy To: VALENCIE SIBETO Purchase Order No.: 4152691B1	Section C	Invoice Information:
			Project Name: ESSEX/HOPE TOWNSTOWN Project Number: 419291B1.10000	Pace Project Reference: Pace Quote Reference: Pace Project Manager: Pace Profile #:	REGULATORY AGENCY ☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER _____	Site Location STATE: NY
Page: 1 of 1			1494582			

[illegible]

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



Sample Condition Upon Receipt

Client Name: URS

Project # 3082412

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

Tracking #: 8739 8101 9520

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

1.5

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: RTL 11-21-12

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>RTL</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: 11/21/12

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)

308812

URS

[illegible]

January 16, 2013

Mr. Mark Dowiak
URS Corporation
Foster Plaza 6
681 Andersen Drive, Suite 400
Pittsburgh, PA 15220

RE: Project: 41569181/Essex-Hope
Pace Project No.: 3084918

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on January 04, 2013. 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

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

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 Certification #: 460198

Washington Certification #: C868

West Virginia Certification #: 143

Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 14

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ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

Sample: PRE-CARB		Lab ID: 3084918001	Collected: 01/03/13 10:50	Received: 01/04/13 09:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	18500	ug/L	4000	400		01/10/13 20:19	67-64-1	
Benzene	20.6	ug/L	1.0	1		01/10/13 18:40	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/10/13 18:40	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/10/13 18:40	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/10/13 18:40	74-83-9	
2-Butanone (MEK)	69.5	ug/L	10.0	1		01/10/13 18:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/10/13 18:40	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/10/13 18:40	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/10/13 18:40	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/10/13 18:40	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/10/13 18:40	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/10/13 18:40	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/10/13 18:40	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 18:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 18:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 18:40	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/10/13 18:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/10/13 18:40	107-06-2	
1,1-Dichloroethene	19.1	ug/L	5.0	1		01/10/13 18:40	75-35-4	
cis-1,2-Dichloroethene	6510	ug/L	250	50		01/10/13 19:05	156-59-2	
trans-1,2-Dichloroethene	130	ug/L	5.0	1		01/10/13 18:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/10/13 18:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 18:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 18:40	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/10/13 18:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/10/13 18:40	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/10/13 18:40	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/10/13 18:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/10/13 18:40	108-10-1	
Styrene	ND	ug/L	5.0	1		01/10/13 18:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/10/13 18:40	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/10/13 18:40	127-18-4	
Toluene	ND	ug/L	5.0	1		01/10/13 18:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/10/13 18:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/10/13 18:40	79-00-5	
Trichloroethene	4230	ug/L	250	50		01/10/13 19:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/10/13 18:40	75-69-4	
Vinyl chloride	727	ug/L	50.0	50		01/10/13 19:05	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/10/13 18:40	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/10/13 18:40	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	85-115	1		01/10/13 18:40	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	77-119	1		01/10/13 18:40	17060-07-0	
Toluene-d8 (S)	95	%	85-115	1		01/10/13 18:40	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

Sample: PRIMARY-EFF		Lab ID: 3084918002		Collected: 01/03/13 10:55		Received: 01/04/13 09:50		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	22200	ug/L	4000	400		01/10/13 20:43	67-64-1		
Benzene	ND	ug/L	1.0	1		01/10/13 17:51	71-43-2		
Bromodichloromethane	ND	ug/L	5.0	1		01/10/13 17:51	75-27-4		
Bromoform	ND	ug/L	5.0	1		01/10/13 17:51	75-25-2		
Bromomethane	ND	ug/L	5.0	1		01/10/13 17:51	74-83-9		
2-Butanone (MEK)	65.5	ug/L	10.0	1		01/10/13 17:51	78-93-3		
Carbon disulfide	ND	ug/L	5.0	1		01/10/13 17:51	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		01/10/13 17:51	56-23-5		
Chlorobenzene	ND	ug/L	5.0	1		01/10/13 17:51	108-90-7		
Chloroethane	ND	ug/L	5.0	1		01/10/13 17:51	75-00-3		
Chloroform	ND	ug/L	5.0	1		01/10/13 17:51	67-66-3		
Chloromethane	ND	ug/L	5.0	1		01/10/13 17:51	74-87-3		
Dibromochloromethane	ND	ug/L	5.0	1		01/10/13 17:51	124-48-1		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:51	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:51	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:51	106-46-7		
1,1-Dichloroethane	ND	ug/L	5.0	1		01/10/13 17:51	75-34-3		
1,2-Dichloroethane	ND	ug/L	5.0	1		01/10/13 17:51	107-06-2		
1,1-Dichloroethene	ND	ug/L	5.0	1		01/10/13 17:51	75-35-4		
cis-1,2-Dichloroethene	464	ug/L	250	50		01/10/13 18:16	156-59-2		
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/10/13 17:51	156-60-5		
1,2-Dichloropropane	ND	ug/L	5.0	1		01/10/13 17:51	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 17:51	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 17:51	10061-02-6		
Ethylbenzene	ND	ug/L	5.0	1		01/10/13 17:51	100-41-4		
2-Hexanone	ND	ug/L	10.0	1		01/10/13 17:51	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/10/13 17:51	98-82-8		
Methylene Chloride	ND	ug/L	5.0	1		01/10/13 17:51	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/10/13 17:51	108-10-1		
Styrene	ND	ug/L	5.0	1		01/10/13 17:51	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/10/13 17:51	79-34-5		
Tetrachloroethene	ND	ug/L	5.0	1		01/10/13 17:51	127-18-4		
Toluene	ND	ug/L	5.0	1		01/10/13 17:51	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/10/13 17:51	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/10/13 17:51	79-00-5		
Trichloroethene	ND	ug/L	5.0	1		01/10/13 17:51	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		01/10/13 17:51	75-69-4		
Vinyl chloride	959	ug/L	50.0	50		01/10/13 18:16	75-01-4		
m&p-Xylene	ND	ug/L	5.0	1		01/10/13 17:51	179601-23-1		
o-Xylene	ND	ug/L	5.0	1		01/10/13 17:51	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	99	%	85-115	1		01/10/13 17:51	460-00-4		
1,2-Dichloroethane-d4 (S)	98	%	77-119	1		01/10/13 17:51	17060-07-0		
Toluene-d8 (S)	96	%	85-115	1		01/10/13 17:51	2037-26-5		

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

Sample: POST-CARB **Lab ID: 3084918003** Collected: 01/03/13 11:00 Received: 01/04/13 09:50 Matrix: Water

Comments: • VOA 8260: The sample was composited from four vials prior to VOA analysis.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	22300	ug/L	4000	400		01/10/13 21:08	67-64-1	
Benzene	ND	ug/L	1.0	1		01/10/13 17:27	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		01/10/13 17:27	75-27-4	
Bromoform	ND	ug/L	5.0	1		01/10/13 17:27	75-25-2	
Bromomethane	ND	ug/L	5.0	1		01/10/13 17:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		01/10/13 17:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		01/10/13 17:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		01/10/13 17:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		01/10/13 17:27	108-90-7	
Chloroethane	ND	ug/L	5.0	1		01/10/13 17:27	75-00-3	
Chloroform	ND	ug/L	5.0	1		01/10/13 17:27	67-66-3	
Chloromethane	ND	ug/L	5.0	1		01/10/13 17:27	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		01/10/13 17:27	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/10/13 17:27	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/10/13 17:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/10/13 17:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/10/13 17:27	75-35-4	
cis-1,2-Dichloroethene	31.0	ug/L	5.0	1		01/10/13 17:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/10/13 17:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		01/10/13 17:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 17:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/10/13 17:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		01/10/13 17:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		01/10/13 17:27	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/10/13 17:27	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		01/10/13 17:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/10/13 17:27	108-10-1	
Styrene	ND	ug/L	5.0	1		01/10/13 17:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/10/13 17:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		01/10/13 17:27	127-18-4	
Toluene	ND	ug/L	5.0	1		01/10/13 17:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/10/13 17:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/10/13 17:27	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		01/10/13 17:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		01/10/13 17:27	75-69-4	
Vinyl chloride	805	ug/L	400	400		01/10/13 21:08	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		01/10/13 17:27	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		01/10/13 17:27	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	85-115	1		01/10/13 17:27	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	77-119	1		01/10/13 17:27	17060-07-0	
Toluene-d8 (S)	96	%	85-115	1		01/10/13 17:27	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

Sample: TB-01		Lab ID: 3084918004		Collected: 01/03/13 00:01		Received: 01/04/13 09:50		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		01/07/13 12:07	67-64-1		
Benzene	ND	ug/L	1.0	1		01/07/13 12:07	71-43-2		
Bromodichloromethane	ND	ug/L	5.0	1		01/07/13 12:07	75-27-4		
Bromoform	ND	ug/L	5.0	1		01/07/13 12:07	75-25-2		
Bromomethane	ND	ug/L	5.0	1		01/07/13 12:07	74-83-9		
2-Butanone (MEK)	ND	ug/L	10.0	1		01/07/13 12:07	78-93-3		
Carbon disulfide	ND	ug/L	5.0	1		01/07/13 12:07	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		01/07/13 12:07	56-23-5		
Chlorobenzene	ND	ug/L	5.0	1		01/07/13 12:07	108-90-7		
Chloroethane	ND	ug/L	5.0	1		01/07/13 12:07	75-00-3		
Chloroform	19.7	ug/L	5.0	1		01/07/13 12:07	67-66-3		
Chloromethane	ND	ug/L	5.0	1		01/07/13 12:07	74-87-3		
Dibromochloromethane	ND	ug/L	5.0	1		01/07/13 12:07	124-48-1		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		01/07/13 12:07	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	5.0	1		01/07/13 12:07	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	5.0	1		01/07/13 12:07	106-46-7		
1,1-Dichloroethane	ND	ug/L	5.0	1		01/07/13 12:07	75-34-3		
1,2-Dichloroethane	ND	ug/L	5.0	1		01/07/13 12:07	107-06-2		
1,1-Dichloroethene	ND	ug/L	5.0	1		01/07/13 12:07	75-35-4		
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/07/13 12:07	156-59-2		
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/07/13 12:07	156-60-5		
1,2-Dichloropropane	ND	ug/L	5.0	1		01/07/13 12:07	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		01/07/13 12:07	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		01/07/13 12:07	10061-02-6		
Ethylbenzene	ND	ug/L	5.0	1		01/07/13 12:07	100-41-4		
2-Hexanone	ND	ug/L	10.0	1		01/07/13 12:07	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		01/07/13 12:07	98-82-8		
Methylene Chloride	ND	ug/L	5.0	1		01/07/13 12:07	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		01/07/13 12:07	108-10-1		
Styrene	ND	ug/L	5.0	1		01/07/13 12:07	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		01/07/13 12:07	79-34-5		
Tetrachloroethene	ND	ug/L	5.0	1		01/07/13 12:07	127-18-4		
Toluene	ND	ug/L	5.0	1		01/07/13 12:07	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/07/13 12:07	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		01/07/13 12:07	79-00-5		
Trichloroethene	ND	ug/L	5.0	1		01/07/13 12:07	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		01/07/13 12:07	75-69-4		
Vinyl chloride	ND	ug/L	1.0	1		01/07/13 12:07	75-01-4		
m&p-Xylene	ND	ug/L	5.0	1		01/07/13 12:07	179601-23-1		
o-Xylene	ND	ug/L	5.0	1		01/07/13 12:07	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	98	%	85-115	1		01/07/13 12:07	460-00-4		
1,2-Dichloroethane-d4 (S)	101	%	77-119	1		01/07/13 12:07	17060-07-0		
Toluene-d8 (S)	94	%	85-115	1		01/07/13 12:07	2037-26-5		

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

QC Batch: MSV/15071

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Associated Lab Samples: 3084918004

METHOD BLANK: 530747

Matrix: Water

Associated Lab Samples: 3084918004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/07/13 11:18	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	01/07/13 11:18	
1,1,2-Trichloroethane	ug/L	ND	5.0	01/07/13 11:18	
1,1-Dichloroethane	ug/L	ND	5.0	01/07/13 11:18	
1,1-Dichloroethene	ug/L	ND	5.0	01/07/13 11:18	
1,2-Dichlorobenzene	ug/L	ND	5.0	01/07/13 11:18	
1,2-Dichloroethane	ug/L	ND	5.0	01/07/13 11:18	
1,2-Dichloropropane	ug/L	ND	5.0	01/07/13 11:18	
1,3-Dichlorobenzene	ug/L	ND	5.0	01/07/13 11:18	
1,4-Dichlorobenzene	ug/L	ND	5.0	01/07/13 11:18	
2-Butanone (MEK)	ug/L	ND	10.0	01/07/13 11:18	
2-Hexanone	ug/L	ND	10.0	01/07/13 11:18	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/07/13 11:18	
Acetone	ug/L	ND	10.0	01/07/13 11:18	
Benzene	ug/L	ND	1.0	01/07/13 11:18	
Bromodichloromethane	ug/L	ND	5.0	01/07/13 11:18	
Bromoform	ug/L	ND	5.0	01/07/13 11:18	
Bromomethane	ug/L	ND	5.0	01/07/13 11:18	
Carbon disulfide	ug/L	ND	5.0	01/07/13 11:18	
Carbon tetrachloride	ug/L	ND	5.0	01/07/13 11:18	
Chlorobenzene	ug/L	ND	5.0	01/07/13 11:18	
Chloroethane	ug/L	ND	5.0	01/07/13 11:18	
Chloroform	ug/L	ND	5.0	01/07/13 11:18	
Chloromethane	ug/L	ND	5.0	01/07/13 11:18	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/07/13 11:18	
cis-1,3-Dichloropropene	ug/L	ND	5.0	01/07/13 11:18	
Dibromochloromethane	ug/L	ND	5.0	01/07/13 11:18	
Ethylbenzene	ug/L	ND	5.0	01/07/13 11:18	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	01/07/13 11:18	
m&p-Xylene	ug/L	ND	5.0	01/07/13 11:18	
Methylene Chloride	ug/L	ND	5.0	01/07/13 11:18	
o-Xylene	ug/L	ND	5.0	01/07/13 11:18	
Styrene	ug/L	ND	5.0	01/07/13 11:18	
Tetrachloroethene	ug/L	ND	5.0	01/07/13 11:18	
Toluene	ug/L	ND	5.0	01/07/13 11:18	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/07/13 11:18	
trans-1,3-Dichloropropene	ug/L	ND	5.0	01/07/13 11:18	
Trichloroethene	ug/L	ND	5.0	01/07/13 11:18	
Trichlorofluoromethane	ug/L	ND	5.0	01/07/13 11:18	
Vinyl chloride	ug/L	ND	1.0	01/07/13 11:18	
1,2-Dichloroethane-d4 (S)	%	104	77-119	01/07/13 11:18	
4-Bromofluorobenzene (S)	%	98	85-115	01/07/13 11:18	
Toluene-d8 (S)	%	95	85-115	01/07/13 11:18	

Date: 01/16/2013 03:33 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

LABORATORY CONTROL SAMPLE: 530748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.3	91	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	16.5	82	61-117	
1,1,2-Trichloroethane	ug/L	20	17.8	89	72-119	
1,1-Dichloroethane	ug/L	20	18.5	92	63-123	
1,1-Dichloroethene	ug/L	20	21.3	107	57-127	
1,2-Dichlorobenzene	ug/L	20	17.5	87	70-116	
1,2-Dichloroethane	ug/L	20	17.7	88	62-125	
1,2-Dichloropropane	ug/L	20	16.9	84	69-115	
1,3-Dichlorobenzene	ug/L	20	17.7	89	71-118	
1,4-Dichlorobenzene	ug/L	20	17.9	90	67-119	
2-Butanone (MEK)	ug/L	20	19.4	97	48-136	
2-Hexanone	ug/L	20	20.5	102	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	21.0	105	57-124	
Acetone	ug/L	20	18.1	91	49-138	
Benzene	ug/L	20	18.0	90	66-122	
Bromodichloromethane	ug/L	20	17.0	85	63-118	
Bromoform	ug/L	20	17.2	86	46-130	
Bromomethane	ug/L	20	60.1	300	10-175	CU,L1
Carbon disulfide	ug/L	20	18.0	90	59-142	
Carbon tetrachloride	ug/L	20	17.8	89	55-126	
Chlorobenzene	ug/L	20	17.7	88	70-121	
Chloroethane	ug/L	20	22.0	110	24-161	
Chloroform	ug/L	20	16.9	84	62-126	
Chloromethane	ug/L	20	24.6	123	37-147	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	64-121	
cis-1,3-Dichloropropene	ug/L	20	18.3	92	64-118	
Dibromochloromethane	ug/L	20	17.6	88	60-120	
Ethylbenzene	ug/L	20	18.3	91	69-119	
Isopropylbenzene (Cumene)	ug/L	20	19.5	97	68-126	
m&p-Xylene	ug/L	40	37.4	94	70-124	
Methylene Chloride	ug/L	20	18.8	94	59-128	
o-Xylene	ug/L	20	17.9	90	67-123	
Styrene	ug/L	20	19.4	97	67-146	
Tetrachloroethene	ug/L	20	18.0	90	62-125	
Toluene	ug/L	20	17.7	88	72-115	
trans-1,2-Dichloroethene	ug/L	20	18.7	93	59-122	
trans-1,3-Dichloropropene	ug/L	20	17.0	85	64-120	
Trichloroethene	ug/L	20	17.2	86	62-125	
Trichlorofluoromethane	ug/L	20	22.0	110	54-158	
Vinyl chloride	ug/L	20	23.6	118	52-145	
1,2-Dichloroethane-d4 (S)	%			101	77-119	
4-Bromofluorobenzene (S)	%			95	85-115	
Toluene-d8 (S)	%			98	85-115	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 530749 530750											
Parameter	Units	3084906002 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	19.1	21.5	95	108	62-125	12	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	14.0	16.0	70	80	61-117	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	14.5	16.5	73	82	72-119	13	
1,1-Dichloroethane	ug/L	ND	20	20	18.4	21.4	91	105	63-123	15	
1,1-Dichloroethene	ug/L	ND	20	20	23.2	26.3	116	131	57-127	13	M0
1,2-Dichlorobenzene	ug/L	ND	20	20	13.6	15.4	68	77	70-116	12	M0
1,2-Dichloroethane	ug/L	ND	20	20	17.8	20.0	89	100	62-125	11	
1,2-Dichloropropane	ug/L	ND	20	20	13.4	15.1	67	76	69-115	12	M0
1,3-Dichlorobenzene	ug/L	ND	20	20	13.6	15.6	68	78	71-118	14	M0
1,4-Dichlorobenzene	ug/L	ND	20	20	13.9	15.7	70	79	67-119	12	
2-Butanone (MEK)	ug/L	ND	20	20	25.5	19.3	128	96	48-136	28	
2-Hexanone	ug/L	ND	20	20	27.2	18.1	136	91	52-130	40	M0,R1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	25.9	18.6	130	93	57-124	33	M0,R1
Acetone	ug/L	ND	20	20	22.2	19.6	111	98	49-138	13	
Benzene	ug/L	57.9	20	20	70.8	74.1	65	81	66-122	5	M0
Bromodichloromethane	ug/L	ND	20	20	13.5	15.3	68	76	63-118	12	
Bromoform	ug/L	ND	20	20	12.7	14.5	63	72	46-130	13	
Bromomethane	ug/L	ND	20	20	13.5	16.1	67	81	10-175	18	
Carbon disulfide	ug/L	ND	20	20	24.8	26.0	124	130	59-142	5	
Carbon tetrachloride	ug/L	ND	20	20	15.6	17.2	78	86	55-126	10	
Chlorobenzene	ug/L	2.4	20	20	16.7	18.5	71	81	70-121	10	
Chloroethane	ug/L	ND	20	20	27.8	28.3	139	141	24-161	2	
Chloroform	ug/L	ND	20	20	17.1	19.2	86	96	62-126	11	
Chloromethane	ug/L	ND	20	20	36.2	37.6	181	188	37-147	4	M0
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.8	21.2	90	102	64-121	12	
cis-1,3-Dichloropropene	ug/L	ND	20	20	14.2	16.2	71	81	64-118	13	
Dibromochloromethane	ug/L	ND	20	20	13.7	15.3	69	77	60-120	11	
Ethylbenzene	ug/L	ND	20	20	15.3	17.1	76	86	69-119	11	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	15.6	17.2	78	86	68-126	10	
m&p-Xylene	ug/L	ND	40	40	30.2	33.8	76	84	70-124	11	
Methylene Chloride	ug/L	ND	20	20	18.8	21.2	94	106	59-128	12	
o-Xylene	ug/L	ND	20	20	14.5	16.3	72	81	67-123	12	
Styrene	ug/L	ND	20	20	15.3	16.6	76	83	67-146	9	
Tetrachloroethene	ug/L	ND	20	20	15.1	16.8	75	84	62-125	11	
Toluene	ug/L	ND	20	20	14.7	16.5	69	78	72-115	11	M0
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.8	21.4	93	106	59-122	13	
trans-1,3-Dichloropropene	ug/L	ND	20	20	13.0	14.7	65	74	64-120	12	
Trichloroethene	ug/L	ND	20	20	14.4	16.5	71	82	62-125	14	
Trichlorofluoromethane	ug/L	ND	20	20	26.3	27.4	131	137	54-158	4	
Vinyl chloride	ug/L	ND	20	20	27.4	28.2	134	138	52-145	3	
1,2-Dichloroethane-d4 (S)	%						105	106	77-119		
4-Bromofluorobenzene (S)	%						95	95	85-115		
Toluene-d8 (S)	%						86	87	85-115		

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

QC Batch: MSV/15100 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3084918001, 3084918002, 3084918003

METHOD BLANK: 532116 Matrix: Water

Associated Lab Samples: 3084918001, 3084918002, 3084918003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/10/13 13:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	01/10/13 13:05	
1,1,2-Trichloroethane	ug/L	ND	5.0	01/10/13 13:05	
1,1-Dichloroethane	ug/L	ND	5.0	01/10/13 13:05	
1,1-Dichloroethene	ug/L	ND	5.0	01/10/13 13:05	
1,2-Dichlorobenzene	ug/L	ND	5.0	01/10/13 13:05	
1,2-Dichloroethane	ug/L	ND	5.0	01/10/13 13:05	
1,2-Dichloropropane	ug/L	ND	5.0	01/10/13 13:05	
1,3-Dichlorobenzene	ug/L	ND	5.0	01/10/13 13:05	
1,4-Dichlorobenzene	ug/L	ND	5.0	01/10/13 13:05	
2-Butanone (MEK)	ug/L	ND	10.0	01/10/13 13:05	
2-Hexanone	ug/L	ND	10.0	01/10/13 13:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/10/13 13:05	
Acetone	ug/L	ND	10.0	01/10/13 13:05	
Benzene	ug/L	ND	1.0	01/10/13 13:05	
Bromodichloromethane	ug/L	ND	5.0	01/10/13 13:05	
Bromoform	ug/L	ND	5.0	01/10/13 13:05	
Bromomethane	ug/L	ND	5.0	01/10/13 13:05	
Carbon disulfide	ug/L	ND	5.0	01/10/13 13:05	
Carbon tetrachloride	ug/L	ND	5.0	01/10/13 13:05	
Chlorobenzene	ug/L	ND	5.0	01/10/13 13:05	
Chloroethane	ug/L	ND	5.0	01/10/13 13:05	
Chloroform	ug/L	ND	5.0	01/10/13 13:05	
Chloromethane	ug/L	ND	5.0	01/10/13 13:05	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/10/13 13:05	
cis-1,3-Dichloropropene	ug/L	ND	5.0	01/10/13 13:05	
Dibromochloromethane	ug/L	ND	5.0	01/10/13 13:05	
Ethylbenzene	ug/L	ND	5.0	01/10/13 13:05	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	01/10/13 13:05	
m&p-Xylene	ug/L	ND	5.0	01/10/13 13:05	
Methylene Chloride	ug/L	ND	5.0	01/10/13 13:05	
o-Xylene	ug/L	ND	5.0	01/10/13 13:05	
Styrene	ug/L	ND	5.0	01/10/13 13:05	
Tetrachloroethene	ug/L	ND	5.0	01/10/13 13:05	
Toluene	ug/L	ND	5.0	01/10/13 13:05	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/10/13 13:05	
trans-1,3-Dichloropropene	ug/L	ND	5.0	01/10/13 13:05	
Trichloroethene	ug/L	ND	5.0	01/10/13 13:05	
Trichlorofluoromethane	ug/L	ND	5.0	01/10/13 13:05	
Vinyl chloride	ug/L	ND	1.0	01/10/13 13:05	
1,2-Dichloroethane-d4 (S)	%	96	77-119	01/10/13 13:05	
4-Bromofluorobenzene (S)	%	99	85-115	01/10/13 13:05	
Toluene-d8 (S)	%	95	85-115	01/10/13 13:05	

Date: 01/16/2013 03:33 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

LABORATORY CONTROL SAMPLE: 532117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.7	99	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.7	94	61-117	
1,1,2-Trichloroethane	ug/L	20	19.7	99	72-119	
1,1-Dichloroethane	ug/L	20	20.4	102	63-123	
1,1-Dichloroethene	ug/L	20	24.7	123	57-127	
1,2-Dichlorobenzene	ug/L	20	19.7	98	70-116	
1,2-Dichloroethane	ug/L	20	19.4	97	62-125	
1,2-Dichloropropane	ug/L	20	18.2	91	69-115	
1,3-Dichlorobenzene	ug/L	20	19.8	99	71-118	
1,4-Dichlorobenzene	ug/L	20	20.2	101	67-119	
2-Butanone (MEK)	ug/L	20	15.8	79	48-136	
2-Hexanone	ug/L	20	18.0	90	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	17.9	89	57-124	
Acetone	ug/L	20	16.3	82	49-138	
Benzene	ug/L	20	19.9	100	66-122	
Bromodichloromethane	ug/L	20	17.4	87	63-118	
Bromoform	ug/L	20	15.4	77	46-130	
Bromomethane	ug/L	20	40.0	200	10-175	CU,L3
Carbon disulfide	ug/L	20	14.8	74	59-142	
Carbon tetrachloride	ug/L	20	16.8	84	55-126	
Chlorobenzene	ug/L	20	19.7	99	70-121	
Chloroethane	ug/L	20	20.9	104	24-161	
Chloroform	ug/L	20	18.5	93	62-126	
Chloromethane	ug/L	20	23.6	118	37-147	CU
cis-1,2-Dichloroethene	ug/L	20	19.8	99	64-121	
cis-1,3-Dichloropropene	ug/L	20	19.7	98	64-118	
Dibromochloromethane	ug/L	20	17.3	86	60-120	
Ethylbenzene	ug/L	20	22.2	111	69-119	
Isopropylbenzene (Cumene)	ug/L	20	21.4	107	68-126	
m&p-Xylene	ug/L	40	41.9	105	70-124	
Methylene Chloride	ug/L	20	21.0	105	59-128	
o-Xylene	ug/L	20	20.2	101	67-123	
Styrene	ug/L	20	21.8	109	67-146	
Tetrachloroethene	ug/L	20	20.8	104	62-125	
Toluene	ug/L	20	31.2	156	72-115	L1
trans-1,2-Dichloroethene	ug/L	20	21.0	105	59-122	
trans-1,3-Dichloropropene	ug/L	20	17.6	88	64-120	
Trichloroethene	ug/L	20	19.1	95	62-125	
Trichlorofluoromethane	ug/L	20	20.6	103	54-158	
Vinyl chloride	ug/L	20	18.6	93	52-145	
1,2-Dichloroethane-d4 (S)	%			96	77-119	
4-Bromofluorobenzene (S)	%			94	85-115	
Toluene-d8 (S)	%			95	85-115	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 532118 532119											
Parameter	Units	3085091002 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	0.19U	20	20	20.4	21.3	102	106	62-125	4	
1,1,2,2-Tetrachloroethane	ug/L	0.22U	20	20	17.8	18.8	89	94	61-117	6	
1,1,2-Trichloroethane	ug/L	0.23U	20	20	19.0	20.4	95	102	72-119	7	
1,1-Dichloroethane	ug/L	0.16U	20	20	20.6	21.0	103	105	63-123	2	
1,1-Dichloroethene	ug/L	0.14U	20	20	29.3	25.6	146	128	57-127	14	M0
1,2-Dichlorobenzene	ug/L	0.23U	20	20	19.2	20.2	96	101	70-116	5	
1,2-Dichloroethane	ug/L	0.14U	20	20	19.1	19.7	96	98	62-125	3	
1,2-Dichloropropane	ug/L	0.23U	20	20	18.1	18.6	91	93	69-115	3	
1,3-Dichlorobenzene	ug/L	0.26U	20	20	19.3	20.3	96	101	71-118	5	
1,4-Dichlorobenzene	ug/L	0.17U	20	20	19.9	20.1	99	101	67-119	1	
2-Butanone (MEK)	ug/L	1.1U	20	20	16.2	16.2	81	81	48-136	.2	
2-Hexanone	ug/L	0.34U	20	20	17.3	18.8	87	94	52-130	8	
4-Methyl-2-pentanone (MIBK)	ug/L	0.29U	20	20	18.2	19.5	91	98	57-124	7	
Acetone	ug/L	2.6U	20	20	16.2	16.6	81	83	49-138	3	
Benzene	ug/L	0.065U	20	20	20.3	20.5	101	102	66-122	.9	
Bromodichloromethane	ug/L	0.15U	20	20	16.9	17.4	85	87	63-118	3	
Bromoform	ug/L	0.25U	20	20	13.7	15.5	68	77	46-130	12	
Bromomethane	ug/L	0.37U	20	20	16.3	24.5	82	123	10-175	40	R1
Carbon disulfide	ug/L	0.18U	20	20	20.5	17.4	102	87	59-142	16	
Carbon tetrachloride	ug/L	0.24U	20	20	17.0	17.7	85	89	55-126	4	
Chlorobenzene	ug/L	0.12U	20	20	19.7	20.2	98	101	70-121	3	
Chloroethane	ug/L	0.48U	20	20	20.0	20.2	100	101	24-161	1	
Chloroform	ug/L	0.16U	20	20	18.7	19.3	93	96	62-126	3	
Chloromethane	ug/L	0.21U	20	20	21.4	22.2	107	111	37-147	4	
cis-1,2-Dichloroethene	ug/L	0.20U	20	20	19.9	20.2	100	101	64-121	1	
cis-1,3-Dichloropropene	ug/L	0.19U	20	20	18.2	18.9	91	94	64-118	3	
Dibromochloromethane	ug/L	0.22U	20	20	16.1	17.3	81	86	60-120	7	
Ethylbenzene	ug/L	0.12U	20	20	20.4	21.4	102	107	69-119	5	
Isopropylbenzene (Cumene)	ug/L	0.12U	20	20	21.8	22.4	109	112	68-126	3	
m&p-Xylene	ug/L	0.21U	40	40	40.7	42.8	102	107	70-124	5	
Methylene Chloride	ug/L	0.23U	20	20	20.5	20.7	103	103	59-128	.7	
o-Xylene	ug/L	0.10U	20	20	19.7	20.6	98	103	67-123	5	
Styrene	ug/L	0.18U	20	20	20.0	21.8	100	109	67-146	9	
Tetrachloroethene	ug/L	0.12U	20	20	20.9	21.7	105	108	62-125	3	
Toluene	ug/L	0.24J	20	20	20.0	20.4	99	101	72-115	2	
trans-1,2-Dichloroethene	ug/L	0.18U	20	20	21.5	21.7	107	109	59-122	1	
trans-1,3-Dichloropropene	ug/L	0.23U	20	20	16.4	17.5	82	87	64-120	6	
Trichloroethene	ug/L	0.15U	20	20	19.2	19.9	96	100	62-125	4	
Trichlorofluoromethane	ug/L	0.19U	20	20	21.6	22.7	108	114	54-158	5	
Vinyl chloride	ug/L	0.13U	20	20	19.0	20.3	95	102	52-145	7	
1,2-Dichloroethane-d4 (S)	%						99	102	77-119		
4-Bromofluorobenzene (S)	%						96	96	85-115		
Toluene-d8 (S)	%						96	96	85-115		

QUALIFIERS

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

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

CU	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
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.
R1	RPD value was outside control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181/Essex-Hope

Pace Project No.: 3084918

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3084918001	PRE-CARB	EPA 8260	MSV/15100		
3084918002	PRIMARY-EFF	EPA 8260	MSV/15100		
3084918003	POST-CARB	EPA 8260	MSV/15100		
3084918004	TB-01	EPA 8260	MSV/15071		

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	Attention:	
Address:	FOSTER PLAZA 611 BOYLANDSEN DR STE. 400 PITTSBURGH, PA 15220	Copy To:	VALERIE SIBETO	Company Name:	
Email To:		Purchase Order No.:	41569181	Address:	
Phone:	412-503-4700	Project Name:	ESSEX/HOVE JAMESTOWN	Pace Quote Reference:	
Requested Due Date/TAT:	STANDARD	Project Number:	41569181.10000	Pace Project Manager:	
				Pace Profile #:	
				REGULATORY AGENCY	
				☐ NPDES	☐ GROUND WATER
				☐ UST	☐ RCRA
				☐ DRINKING WATER	☐ OTHER
				REGULATORY AGENCY	
				Site Location	
				STATE:	
				NY	
Page: 1 of 1		1254132			

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
COMPOSITE FOUR (4)	Valencia / URS	1.3.13	~300	Fidra	1.3.13	~1300	
POST-CARB SAMPLES IN LAB AND				1/14/13	09:00	0.8	Y N Y
REPORT AS POST-CARB							
CAMPUSITE							

NOTE: DEC 2012 POTW SAMPLING ORIGINAL	SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	PRINT Name of SAMPLER: VALERIE SIBED					
	SIGNATURE of SAMPLER: <i>Valerie</i>					
	DATE Signed (MM/DD/YY): 1.3.13					

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

THL

Client Name: URS

Project # 3084918

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

Tracking #: 873981019530

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 5 (6) 7

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

Cooler Temperature 0.8

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: WEL 1/4/13

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, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>WEL</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: 1/7/13

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: 3084918
Client Name: URS

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)	TPH (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)	Cubitrainer (500 ml / 4L)	Ziploc	Other	Other
100	1M																							
202	1M																							
303	1M																							
400	1M																							