



July 31, 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
January through June 2013
BPU Permit No. 26
URS Project No. 41569501**

Dear Mr. Saar:

This submittal represents the January through June 2013 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:

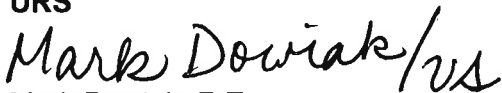
- Concentrations of Total Toxic Organics (TTOs) in discharge to POTW as measured monthly. Note: The Baseline Monitoring conducted for the discharge identified volatile organic compounds (VOCs) as approximately 98% of the influent TTO component. Non-volatile components historically were not a major component 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.

This Semi-Annual Report contains system influent and effluent data for January through June 2013. No noncompliance events occurred during this reporting period. The system was shut down between March 28, 2013 and June 5, 2013 pending carbon changeout. The system carbon was changed out on June 4, 2013. 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 95,958 to 227,448 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

Handwritten signature of Mark Dowiak in black ink, with a stylized 'us' at the end.

Mark Dowiak, P.E.
Project Manager

Attachment

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

Table 1
January - June 2013
Post Carbon (Effluent) Monitoring Data
Essex/Hope Site
Jamestown, NY

Reporting Requirements for Pre-Treated Discharge (System Effluent to POTW)	Industrial Wastewater Discharge Permit #26 Limits	January	February	March	April	May	June
POTW Discharge Analytical Data							
Total TTOs (µg/L)	2,130 µg/L (TTO)	882	1,237	806			7
Detected TTO Compounds	Report	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride	cis-1,2-DCE, Vinyl Chloride			Vinyl Chloride
pH (Standard Units)	5.5 to 10	7.10	7.07	7.31			7.18
		7.04	7.06	7.28			7.17
		7.07	7.06	7.35			7.21
		7.13	7.05	7.31			7.19
Acetone Discharged (lbs)	Not applicable/No limits	14.6	35.9	14.1			16.4
POTW Discharge Flow Data							
Monthly Total Flow (gallons)	Report	95,958	148,706	147,918			227,448
Average Daily Flow (gallons)	Report	3,095	5,311	4,772			7,337
Maximum Daily Flow (gallons)	Report	3,714	6,373	5,726			8,804

Notes:

Jamestown BPU Industrial Wastewater Discharge Permit #26 effective 11/4/12 through 11/3/17.

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

The system was shut down from March 28, 2013 to June 5, 2013 due to elevated effluent levels pending carbon changeout.

System Carbon was changed out on June 4, 2013.

February 15, 2013

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

RE: Project: 41569501 Essex/Hope Jamestown
Pace Project No.: 3086626

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on January 31, 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

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CERTIFICATIONS

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

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: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

Sample: PRE-CARB		Lab ID: 3086626001	Collected: 01/30/13 10:35	Received: 01/31/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	10700	ug/L	500	50		02/01/13 15:02	67-64-1	
Benzene	17.9	ug/L	1.0	1		02/01/13 14:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/01/13 14:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/01/13 14:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/01/13 14:35	74-83-9	
2-Butanone (MEK)	46.1	ug/L	10.0	1		02/01/13 14:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/01/13 14:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/01/13 14:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/01/13 14:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/01/13 14:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/01/13 14:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/01/13 14:35	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/01/13 14:35	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 14:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 14:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 14:35	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/01/13 14:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/01/13 14:35	107-06-2	
1,1-Dichloroethene	18.5	ug/L	5.0	1		02/01/13 14:35	75-35-4	
cis-1,2-Dichloroethene	4210	ug/L	250	50		02/01/13 15:02	156-59-2	
trans-1,2-Dichloroethene	60.4	ug/L	5.0	1		02/01/13 14:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/01/13 14:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 14:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 14:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/01/13 14:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/01/13 14:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/01/13 14:35	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/01/13 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/01/13 14:35	108-10-1	
Styrene	ND	ug/L	5.0	1		02/01/13 14:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/01/13 14:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/01/13 14:35	127-18-4	
Toluene	ND	ug/L	5.0	1		02/01/13 14:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/01/13 14:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/01/13 14:35	79-00-5	
Trichloroethene	3160	ug/L	250	50		02/01/13 15:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/01/13 14:35	75-69-4	
Vinyl chloride	524	ug/L	50.0	50		02/01/13 15:02	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/01/13 14:35	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/01/13 14:35	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	85-115	1		02/01/13 14:35	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	77-119	1		02/01/13 14:35	17060-07-0	
Toluene-d8 (S)	98	%	85-115	1		02/01/13 14:35	2037-26-5	

ANALYTICAL RESULTS

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

Sample: PRIMARY-EFF		Lab ID: 3086626002	Collected: 01/30/13 10:40	Received: 01/31/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	11400	ug/L	500	50		02/01/13 16:21	67-64-1	
Benzene	ND	ug/L	1.0	1		02/01/13 15:55	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/01/13 15:55	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/01/13 15:55	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/01/13 15:55	74-83-9	
2-Butanone (MEK)	81.9	ug/L	10.0	1		02/01/13 15:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/01/13 15:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/01/13 15:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/01/13 15:55	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/01/13 15:55	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/01/13 15:55	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/01/13 15:55	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/01/13 15:55	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 15:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 15:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 15:55	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/01/13 15:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/01/13 15:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/01/13 15:55	75-35-4	
cis-1,2-Dichloroethene	2260	ug/L	250	50		02/01/13 16:21	156-59-2	
trans-1,2-Dichloroethene	8.1	ug/L	5.0	1		02/01/13 15:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/01/13 15:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 15:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 15:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/01/13 15:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/01/13 15:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/01/13 15:55	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/01/13 15:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/01/13 15:55	108-10-1	
Styrene	ND	ug/L	5.0	1		02/01/13 15:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/01/13 15:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/01/13 15:55	127-18-4	
Toluene	ND	ug/L	5.0	1		02/01/13 15:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/01/13 15:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/01/13 15:55	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/01/13 15:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/01/13 15:55	75-69-4	
Vinyl chloride	862	ug/L	50.0	50		02/01/13 16:21	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/01/13 15:55	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/01/13 15:55	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	85-115	1		02/01/13 15:55	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	77-119	1		02/01/13 15:55	17060-07-0	
Toluene-d8 (S)	94	%	85-115	1		02/01/13 15:55	2037-26-5	

ANALYTICAL RESULTS

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

Sample: POST-CARB		Lab ID: 3086626003	Collected: 01/30/13 10:45	Received: 01/31/13 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	4000	400		02/01/13 17:41	67-64-1	
Benzene	ND	ug/L	1.0	1		02/01/13 17:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		02/01/13 17:14	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/01/13 17:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/01/13 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		02/01/13 17:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		02/01/13 17:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/01/13 17:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/01/13 17:14	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/01/13 17:14	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/01/13 17:14	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/01/13 17:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		02/01/13 17:14	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 17:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 17:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/01/13 17:14	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/01/13 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/01/13 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/01/13 17:14	75-35-4	
cis-1,2-Dichloroethene	32.2	ug/L	5.0	1		02/01/13 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/01/13 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/01/13 17:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/01/13 17:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/01/13 17:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		02/01/13 17:14	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		02/01/13 17:14	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		02/01/13 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		02/01/13 17:14	108-10-1	
Styrene	ND	ug/L	5.0	1		02/01/13 17:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/01/13 17:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/01/13 17:14	127-18-4	
Toluene	ND	ug/L	5.0	1		02/01/13 17:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/01/13 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/01/13 17:14	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/01/13 17:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/01/13 17:14	75-69-4	
Vinyl chloride	850	ug/L	400	400		02/01/13 17:41	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		02/01/13 17:14	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		02/01/13 17:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	85-115	1		02/01/13 17:14	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	77-119	1		02/01/13 17:14	17060-07-0	
Toluene-d8 (S)	99	%	85-115	1		02/01/13 17:14	2037-26-5	

ANALYTICAL RESULTS

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

Sample: TB-01		Lab ID: 3086626007		Collected: 01/30/13 00:01		Received: 01/31/13 10:00		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L	10.0	1			02/01/13 12:22	67-64-1		
Benzene	ND ug/L	1.0	1			02/01/13 12:22	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			02/01/13 12:22	75-27-4		
Bromoform	ND ug/L	5.0	1			02/01/13 12:22	75-25-2		
Bromomethane	ND ug/L	5.0	1			02/01/13 12:22	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			02/01/13 12:22	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			02/01/13 12:22	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			02/01/13 12:22	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			02/01/13 12:22	108-90-7		
Chloroethane	ND ug/L	5.0	1			02/01/13 12:22	75-00-3		
Chloroform	ND ug/L	5.0	1			02/01/13 12:22	67-66-3		
Chloromethane	ND ug/L	5.0	1			02/01/13 12:22	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			02/01/13 12:22	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			02/01/13 12:22	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			02/01/13 12:22	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			02/01/13 12:22	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			02/01/13 12:22	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			02/01/13 12:22	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			02/01/13 12:22	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			02/01/13 12:22	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			02/01/13 12:22	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			02/01/13 12:22	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			02/01/13 12:22	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			02/01/13 12:22	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			02/01/13 12:22	100-41-4		
2-Hexanone	ND ug/L	10.0	1			02/01/13 12:22	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			02/01/13 12:22	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			02/01/13 12:22	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			02/01/13 12:22	108-10-1		
Styrene	ND ug/L	5.0	1			02/01/13 12:22	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			02/01/13 12:22	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			02/01/13 12:22	127-18-4		
Toluene	ND ug/L	5.0	1			02/01/13 12:22	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			02/01/13 12:22	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			02/01/13 12:22	79-00-5		
Trichloroethene	ND ug/L	5.0	1			02/01/13 12:22	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			02/01/13 12:22	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			02/01/13 12:22	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			02/01/13 12:22	179601-23-1		
o-Xylene	ND ug/L	5.0	1			02/01/13 12:22	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	102 %	85-115	1			02/01/13 12:22	460-00-4		
1,2-Dichloroethane-d4 (S)	108 %	77-119	1			02/01/13 12:22	17060-07-0		
Toluene-d8 (S)	100 %	85-115	1			02/01/13 12:22	2037-26-5		

QUALITY CONTROL DATA

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

QC Batch: MSV/15252 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3086626001, 3086626002, 3086626003, 3086626007

METHOD BLANK: 539503 Matrix: Water

Associated Lab Samples: 3086626001, 3086626002, 3086626003, 3086626007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	02/01/13 11:29	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	02/01/13 11:29	
1,1,2-Trichloroethane	ug/L	ND	1.0	02/01/13 11:29	
1,1-Dichloroethane	ug/L	ND	1.0	02/01/13 11:29	
1,1-Dichloroethene	ug/L	ND	1.0	02/01/13 11:29	
1,2-Dichlorobenzene	ug/L	ND	1.0	02/01/13 11:29	
1,2-Dichloroethane	ug/L	ND	1.0	02/01/13 11:29	
1,2-Dichloropropane	ug/L	ND	1.0	02/01/13 11:29	
1,3-Dichlorobenzene	ug/L	ND	1.0	02/01/13 11:29	
1,4-Dichlorobenzene	ug/L	ND	1.0	02/01/13 11:29	
2-Butanone (MEK)	ug/L	ND	10.0	02/01/13 11:29	
2-Hexanone	ug/L	ND	10.0	02/01/13 11:29	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	02/01/13 11:29	
Acetone	ug/L	ND	10.0	02/01/13 11:29	
Benzene	ug/L	ND	1.0	02/01/13 11:29	
Bromodichloromethane	ug/L	ND	1.0	02/01/13 11:29	
Bromoform	ug/L	ND	1.0	02/01/13 11:29	
Bromomethane	ug/L	ND	1.0	02/01/13 11:29	
Carbon disulfide	ug/L	ND	1.0	02/01/13 11:29	
Carbon tetrachloride	ug/L	ND	1.0	02/01/13 11:29	
Chlorobenzene	ug/L	ND	1.0	02/01/13 11:29	
Chloroethane	ug/L	ND	1.0	02/01/13 11:29	
Chloroform	ug/L	ND	1.0	02/01/13 11:29	
Chloromethane	ug/L	ND	1.0	02/01/13 11:29	
cis-1,2-Dichloroethene	ug/L	ND	1.0	02/01/13 11:29	
cis-1,3-Dichloropropene	ug/L	ND	1.0	02/01/13 11:29	
Dibromochloromethane	ug/L	ND	1.0	02/01/13 11:29	
Ethylbenzene	ug/L	ND	1.0	02/01/13 11:29	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	02/01/13 11:29	
m&p-Xylene	ug/L	ND	2.0	02/01/13 11:29	
Methylene Chloride	ug/L	ND	1.0	02/01/13 11:29	
o-Xylene	ug/L	ND	1.0	02/01/13 11:29	
Styrene	ug/L	ND	1.0	02/01/13 11:29	
Tetrachloroethene	ug/L	ND	1.0	02/01/13 11:29	
Toluene	ug/L	ND	1.0	02/01/13 11:29	
trans-1,2-Dichloroethene	ug/L	ND	1.0	02/01/13 11:29	
trans-1,3-Dichloropropene	ug/L	ND	1.0	02/01/13 11:29	
Trichloroethene	ug/L	ND	1.0	02/01/13 11:29	
Trichlorofluoromethane	ug/L	ND	1.0	02/01/13 11:29	
Vinyl chloride	ug/L	ND	1.0	02/01/13 11:29	
1,2-Dichloroethane-d4 (S)	%	112	77-119	02/01/13 11:29	
4-Bromofluorobenzene (S)	%	100	85-115	02/01/13 11:29	
Toluene-d8 (S)	%	99	85-115	02/01/13 11:29	

Date: 02/15/2013 08:54 AM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

LABORATORY CONTROL SAMPLE: 539504

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.8	104	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	61-117	
1,1,2-Trichloroethane	ug/L	20	19.4	97	72-119	
1,1-Dichloroethane	ug/L	20	19.1	95	63-123	
1,1-Dichloroethene	ug/L	20	20.4	102	57-127	
1,2-Dichlorobenzene	ug/L	20	19.4	97	70-116	
1,2-Dichloroethane	ug/L	20	20.2	101	62-125	
1,2-Dichloropropane	ug/L	20	18.3	91	69-115	
1,3-Dichlorobenzene	ug/L	20	20.4	102	71-118	
1,4-Dichlorobenzene	ug/L	20	20.5	103	67-119	
2-Butanone (MEK)	ug/L	20	15.1	76	48-136	
2-Hexanone	ug/L	20	16.3	82	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	15.1	76	57-124	
Acetone	ug/L	20	15.5	77	49-138	
Benzene	ug/L	20	20.3	101	66-122	
Bromodichloromethane	ug/L	20	20.0	100	63-118	
Bromoform	ug/L	20	17.9	90	46-130	
Bromomethane	ug/L	20	12.5	62	10-175	
Carbon disulfide	ug/L	20	11.7	59	59-142	
Carbon tetrachloride	ug/L	20	19.3	97	55-126	
Chlorobenzene	ug/L	20	19.3	97	70-121	
Chloroethane	ug/L	20	18.1	91	24-161	
Chloroform	ug/L	20	20.1	101	62-126	
Chloromethane	ug/L	20	18.5	93	37-147	
cis-1,2-Dichloroethene	ug/L	20	18.2	91	64-121	
cis-1,3-Dichloropropene	ug/L	20	20.7	103	64-118	
Dibromochloromethane	ug/L	20	17.8	89	60-120	
Ethylbenzene	ug/L	20	19.0	95	69-119	
Isopropylbenzene (Cumene)	ug/L	20	21.5	108	68-126	
m&p-Xylene	ug/L	40	39.4	98	70-124	
Methylene Chloride	ug/L	20	18.1	91	59-128	
o-Xylene	ug/L	20	19.7	99	67-123	
Styrene	ug/L	20	19.7	99	67-146	
Tetrachloroethene	ug/L	20	20.5	103	62-125	
Toluene	ug/L	20	20.0	100	72-115	
trans-1,2-Dichloroethene	ug/L	20	19.1	96	59-122	
trans-1,3-Dichloropropene	ug/L	20	18.6	93	64-120	
Trichloroethene	ug/L	20	20.3	101	62-125	
Trichlorofluoromethane	ug/L	20	22.4	112	54-158	
Vinyl chloride	ug/L	20	18.4	92	52-145	
1,2-Dichloroethane-d4 (S)	%			109	77-119	
4-Bromofluorobenzene (S)	%			105	85-115	
Toluene-d8 (S)	%			98	85-115	

QUALIFIERS

Project: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

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: 41569501 Essex/Hope Jamestown

Pace Project No.: 3086626

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3086626001	PRE-CARB	EPA 8260	MSV/15252		
3086626002	PRIMARY-EFF	EPA 8260	MSV/15252		
3086626003	POST-CARB	EPA 8260	MSV/15252		
3086626007	TB-01	EPA 8260	MSV/15252		

Section A Required Client Information: Company: URS CORP Address: FOSTER PURZA 6 601 ANDERSON DR. STE. 400 PHILADELPHIA, PA 15120 Email To: _____ Phone: 215-503-4700 Fax: 412-503-4700 Requested Due Date/TAT: STANDARD		Section B Required Project Information: Report To: MARK DOWDIAK Copy To: VALERIE SIBERTO _____ Purchase Order No.: 415769501		Section C Invoice Information: Attention: _____ Company Name: _____ Address: _____ Pace Quote Reference: _____ Pace Project Manager: _____ Pace Profile #: _____	
Page: 1 of 1 1540960		REGULATORY AGENCY ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER _____		Site Location STATE: NY	

[illegible]

RTL

Sample Condition Upon Receipt

Client Name: URS CorpProject # 30800210Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____Tracking #: 8739 81019541

Optional

Proj. Due Date:

Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ noPacking Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Ziploc'sThermometer Used 5 6 7Type of Ice: Wet Blue None ☒ Samples on ice, cooling process has begunCooler Temperature 0.7

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: RTL 1-31-13

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>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: 3/2/13

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)

308100210

IRS Corp

[illegible]

March 14, 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.: 3088422

Dear Mr. Dowiak:

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

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CERTIFICATIONS

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

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: 41569181/Essex-Hope

Pace Project No.: 3088422

Sample: PRE-CARB		Lab ID: 3088422001		Collected: 02/27/13 11:00		Received: 02/28/13 09:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV		Analytical Method: EPA 8260							
Acetone	70700	ug/L	4000	400		03/07/13 09:35	67-64-1		
Benzene	50.9	ug/L	1.0	1		03/07/13 08:46	71-43-2		
Bromodichloromethane	ND	ug/L	5.0	1		03/07/13 08:46	75-27-4		
Bromoform	ND	ug/L	5.0	1		03/07/13 08:46	75-25-2		
Bromomethane	ND	ug/L	5.0	1		03/07/13 08:46	74-83-9		
2-Butanone (MEK)	258	ug/L	10.0	1		03/07/13 08:46	78-93-3		
Carbon disulfide	ND	ug/L	5.0	1		03/07/13 08:46	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		03/07/13 08:46	56-23-5		
Chlorobenzene	ND	ug/L	5.0	1		03/07/13 08:46	108-90-7		
Chloroethane	ND	ug/L	5.0	1		03/07/13 08:46	75-00-3		
Chloroform	ND	ug/L	5.0	1		03/07/13 08:46	67-66-3		
Chloromethane	ND	ug/L	5.0	1		03/07/13 08:46	74-87-3		
Dibromochloromethane	ND	ug/L	5.0	1		03/07/13 08:46	124-48-1		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 08:46	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 08:46	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 08:46	106-46-7		
1,1-Dichloroethane	ND	ug/L	5.0	1		03/07/13 08:46	75-34-3		
1,2-Dichloroethane	ND	ug/L	5.0	1		03/07/13 08:46	107-06-2		
1,1-Dichloroethene	36.0	ug/L	5.0	1		03/07/13 08:46	75-35-4		
cis-1,2-Dichloroethene	16800	ug/L	250	50		03/07/13 09:10	156-59-2		
trans-1,2-Dichloroethene	ND	ug/L	250	50		03/07/13 09:10	156-60-5		
1,2-Dichloropropane	ND	ug/L	5.0	1		03/07/13 08:46	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 08:46	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 08:46	10061-02-6		
Ethylbenzene	ND	ug/L	5.0	1		03/07/13 08:46	100-41-4		
2-Hexanone	ND	ug/L	10.0	1		03/07/13 08:46	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/07/13 08:46	98-82-8		
Methylene Chloride	ND	ug/L	5.0	1		03/07/13 08:46	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/07/13 08:46	108-10-1		
Styrene	ND	ug/L	5.0	1		03/07/13 08:46	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/07/13 08:46	79-34-5		
Tetrachloroethene	ND	ug/L	5.0	1		03/07/13 08:46	127-18-4		
Toluene	ND	ug/L	5.0	1		03/07/13 08:46	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/07/13 08:46	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/07/13 08:46	79-00-5		
Trichloroethene	4060	ug/L	250	50		03/07/13 09:10	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		03/07/13 08:46	75-69-4		
Vinyl chloride	1380	ug/L	50.0	50		03/07/13 09:10	75-01-4		
m&p-Xylene	ND	ug/L	5.0	1		03/07/13 08:46	179601-23-1		
o-Xylene	ND	ug/L	5.0	1		03/07/13 08:46	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	94	%	85-115	1		03/07/13 08:46	460-00-4		
1,2-Dichloroethane-d4 (S)	101	%	77-119	1		03/07/13 08:46	17060-07-0		
Toluene-d8 (S)	90	%	85-115	1		03/07/13 08:46	2037-26-5		

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

Sample: PRIMARY EFF		Lab ID: 3088422002	Collected: 02/27/13 11:05	Received: 02/28/13 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	48400	ug/L	4000	400		03/07/13 08:22	67-64-1	
Benzene	ND	ug/L	1.0	1		03/07/13 07:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		03/07/13 07:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/07/13 07:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/07/13 07:33	74-83-9	
2-Butanone (MEK)	162	ug/L	10.0	1		03/07/13 07:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		03/07/13 07:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/07/13 07:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/07/13 07:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/07/13 07:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/07/13 07:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/07/13 07:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		03/07/13 07:33	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 07:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 07:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 07:33	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/07/13 07:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/07/13 07:33	107-06-2	
1,1-Dichloroethene	11.2	ug/L	5.0	1		03/07/13 07:33	75-35-4	
cis-1,2-Dichloroethene	7970	ug/L	100	20		03/07/13 07:57	156-59-2	
trans-1,2-Dichloroethene	18.6	ug/L	5.0	1		03/07/13 07:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/07/13 07:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 07:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 07:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/07/13 07:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		03/07/13 07:33	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/07/13 07:33	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		03/07/13 07:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/07/13 07:33	108-10-1	
Styrene	ND	ug/L	5.0	1		03/07/13 07:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/07/13 07:33	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/07/13 07:33	127-18-4	
Toluene	ND	ug/L	5.0	1		03/07/13 07:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/07/13 07:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/07/13 07:33	79-00-5	
Trichloroethene	7.6	ug/L	5.0	1		03/07/13 07:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/07/13 07:33	75-69-4	
Vinyl chloride	1010	ug/L	20.0	20		03/07/13 07:57	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		03/07/13 07:33	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		03/07/13 07:33	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	85-115	1		03/07/13 07:33	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	77-119	1		03/07/13 07:33	17060-07-0	
Toluene-d8 (S)	91	%	85-115	1		03/07/13 07:33	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

Sample: POST-CARB		Lab ID: 3088422003	Collected: 02/27/13 11:10	Received: 02/28/13 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	27900	ug/L	2000	200		03/07/13 10:23	67-64-1	
Benzene	ND	ug/L	1.0	1		03/07/13 09:59	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		03/07/13 09:59	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/07/13 09:59	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/07/13 09:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		03/07/13 09:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		03/07/13 09:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/07/13 09:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/07/13 09:59	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/07/13 09:59	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/07/13 09:59	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/07/13 09:59	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		03/07/13 09:59	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 09:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 09:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/07/13 09:59	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/07/13 09:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/07/13 09:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/07/13 09:59	75-35-4	
cis-1,2-Dichloroethene	36.9	ug/L	5.0	1		03/07/13 09:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/07/13 09:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/07/13 09:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 09:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/07/13 09:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/07/13 09:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		03/07/13 09:59	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		03/07/13 09:59	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		03/07/13 09:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		03/07/13 09:59	108-10-1	
Styrene	ND	ug/L	5.0	1		03/07/13 09:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/07/13 09:59	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/07/13 09:59	127-18-4	
Toluene	ND	ug/L	5.0	1		03/07/13 09:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/07/13 09:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/07/13 09:59	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/07/13 09:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/07/13 09:59	75-69-4	
Vinyl chloride	1200	ug/L	200	200		03/07/13 10:23	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		03/07/13 09:59	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		03/07/13 09:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	85-115	1		03/07/13 09:59	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	77-119	1		03/07/13 09:59	17060-07-0	
Toluene-d8 (S)	91	%	85-115	1		03/07/13 09:59	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

Sample: TB-01		Lab ID: 3088422004		Collected: 02/27/13 00:01		Received: 02/28/13 09:40		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L	10.0	1			03/07/13 02:16	67-64-1		
Benzene	ND ug/L	1.0	1			03/07/13 02:16	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			03/07/13 02:16	75-27-4		
Bromoform	ND ug/L	5.0	1			03/07/13 02:16	75-25-2		
Bromomethane	ND ug/L	5.0	1			03/07/13 02:16	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			03/07/13 02:16	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			03/07/13 02:16	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			03/07/13 02:16	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			03/07/13 02:16	108-90-7		
Chloroethane	ND ug/L	5.0	1			03/07/13 02:16	75-00-3		
Chloroform	ND ug/L	5.0	1			03/07/13 02:16	67-66-3		
Chloromethane	ND ug/L	5.0	1			03/07/13 02:16	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			03/07/13 02:16	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			03/07/13 02:16	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			03/07/13 02:16	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			03/07/13 02:16	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			03/07/13 02:16	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			03/07/13 02:16	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			03/07/13 02:16	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			03/07/13 02:16	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			03/07/13 02:16	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			03/07/13 02:16	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			03/07/13 02:16	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			03/07/13 02:16	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			03/07/13 02:16	100-41-4		
2-Hexanone	ND ug/L	10.0	1			03/07/13 02:16	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			03/07/13 02:16	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			03/07/13 02:16	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			03/07/13 02:16	108-10-1		
Styrene	ND ug/L	5.0	1			03/07/13 02:16	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			03/07/13 02:16	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			03/07/13 02:16	127-18-4		
Toluene	ND ug/L	5.0	1			03/07/13 02:16	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			03/07/13 02:16	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			03/07/13 02:16	79-00-5		
Trichloroethene	ND ug/L	5.0	1			03/07/13 02:16	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			03/07/13 02:16	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			03/07/13 02:16	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			03/07/13 02:16	179601-23-1		
o-Xylene	ND ug/L	5.0	1			03/07/13 02:16	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	95 %	85-115	1			03/07/13 02:16	460-00-4		
1,2-Dichloroethane-d4 (S)	107 %	77-119	1			03/07/13 02:16	17060-07-0		
Toluene-d8 (S)	93 %	85-115	1			03/07/13 02:16	2037-26-5		

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

QC Batch: MSV/15481 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3088422001, 3088422002, 3088422003, 3088422004

METHOD BLANK: 551017 Matrix: Water

Associated Lab Samples: 3088422001, 3088422002, 3088422003, 3088422004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	03/07/13 00:15	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/07/13 00:15	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/07/13 00:15	
1,1-Dichloroethane	ug/L	ND	1.0	03/07/13 00:15	
1,1-Dichloroethene	ug/L	ND	1.0	03/07/13 00:15	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/07/13 00:15	
1,2-Dichloroethane	ug/L	ND	1.0	03/07/13 00:15	
1,2-Dichloropropane	ug/L	ND	1.0	03/07/13 00:15	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/07/13 00:15	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/07/13 00:15	
2-Butanone (MEK)	ug/L	ND	10.0	03/07/13 00:15	
2-Hexanone	ug/L	ND	10.0	03/07/13 00:15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/07/13 00:15	
Acetone	ug/L	ND	10.0	03/07/13 00:15	
Benzene	ug/L	ND	1.0	03/07/13 00:15	
Bromodichloromethane	ug/L	ND	1.0	03/07/13 00:15	
Bromoform	ug/L	ND	1.0	03/07/13 00:15	
Bromomethane	ug/L	ND	1.0	03/07/13 00:15	
Carbon disulfide	ug/L	ND	1.0	03/07/13 00:15	
Carbon tetrachloride	ug/L	ND	1.0	03/07/13 00:15	
Chlorobenzene	ug/L	ND	1.0	03/07/13 00:15	
Chloroethane	ug/L	ND	1.0	03/07/13 00:15	
Chloroform	ug/L	ND	1.0	03/07/13 00:15	
Chloromethane	ug/L	ND	1.0	03/07/13 00:15	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/07/13 00:15	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/07/13 00:15	
Dibromochloromethane	ug/L	ND	1.0	03/07/13 00:15	
Ethylbenzene	ug/L	ND	1.0	03/07/13 00:15	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/07/13 00:15	
m&p-Xylene	ug/L	ND	2.0	03/07/13 00:15	
Methylene Chloride	ug/L	ND	1.0	03/07/13 00:15	
o-Xylene	ug/L	ND	1.0	03/07/13 00:15	
Styrene	ug/L	ND	1.0	03/07/13 00:15	
Tetrachloroethene	ug/L	ND	1.0	03/07/13 00:15	
Toluene	ug/L	ND	1.0	03/07/13 00:15	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/07/13 00:15	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/07/13 00:15	
Trichloroethene	ug/L	ND	1.0	03/07/13 00:15	
Trichlorofluoromethane	ug/L	ND	1.0	03/07/13 00:15	
Vinyl chloride	ug/L	ND	1.0	03/07/13 00:15	
1,2-Dichloroethane-d4 (S)	%	102	77-119	03/07/13 00:15	
4-Bromofluorobenzene (S)	%	98	85-115	03/07/13 00:15	
Toluene-d8 (S)	%	93	85-115	03/07/13 00:15	

Date: 03/14/2013 05:09 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

LABORATORY CONTROL SAMPLE: 551018

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	91	61-117	
1,1,2-Trichloroethane	ug/L	20	18.5	92	72-119	
1,1-Dichloroethane	ug/L	20	22.4	112	63-123	
1,1-Dichloroethene	ug/L	20	24.9	125	57-127	
1,2-Dichlorobenzene	ug/L	20	19.0	95	70-116	
1,2-Dichloroethane	ug/L	20	19.9	99	62-125	
1,2-Dichloropropane	ug/L	20	18.8	94	69-115	
1,3-Dichlorobenzene	ug/L	20	20.1	100	71-118	
1,4-Dichlorobenzene	ug/L	20	19.8	99	67-119	
2-Butanone (MEK)	ug/L	20	20.9	104	48-136	
2-Hexanone	ug/L	20	18.1	91	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.0	95	57-124	
Acetone	ug/L	20	22.0	110	49-138	
Benzene	ug/L	20	18.4	92	66-122	
Bromodichloromethane	ug/L	20	18.2	91	63-118	
Bromoform	ug/L	20	15.6	78	46-130	
Bromomethane	ug/L	20	17.8	89	10-175	
Carbon disulfide	ug/L	20	23.5	118	59-142	
Carbon tetrachloride	ug/L	20	18.5	92	55-126	
Chlorobenzene	ug/L	20	19.3	96	70-121	
Chloroethane	ug/L	20	22.6	113	24-161	
Chloroform	ug/L	20	20.0	100	62-126	
Chloromethane	ug/L	20	19.8	99	37-147	
cis-1,2-Dichloroethene	ug/L	20	21.2	106	64-121	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	64-118	
Dibromochloromethane	ug/L	20	17.8	89	60-120	
Ethylbenzene	ug/L	20	19.9	99	69-119	
Isopropylbenzene (Cumene)	ug/L	20	20.9	104	68-126	
m&p-Xylene	ug/L	40	38.7	97	70-124	
Methylene Chloride	ug/L	20	20.6	103	59-128	
o-Xylene	ug/L	20	18.3	92	67-123	
Styrene	ug/L	20	23.0	115	67-146	
Tetrachloroethene	ug/L	20	20.1	100	62-125	
Toluene	ug/L	20	19.0	95	72-115	
trans-1,2-Dichloroethene	ug/L	20	21.1	105	59-122	
trans-1,3-Dichloropropene	ug/L	20	17.4	87	64-120	
Trichloroethene	ug/L	20	19.5	97	62-125	
Trichlorofluoromethane	ug/L	20	22.5	113	54-158	
Vinyl chloride	ug/L	20	20.7	103	52-145	
1,2-Dichloroethane-d4 (S)	%			106	77-119	
4-Bromofluorobenzene (S)	%			95	85-115	
Toluene-d8 (S)	%			93	85-115	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 551019 551020											
Parameter	Units	3088415009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.8	21.5	104	107	62-125	3	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.5	17.5	87	87	61-117	.02	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.5	18.7	92	94	72-119	1	
1,1-Dichloroethane	ug/L	ND	20	20	20.8	21.3	104	107	63-123	2	
1,1-Dichloroethene	ug/L	ND	20	20	23.7	24.3	118	122	57-127	3	
1,2-Dichlorobenzene	ug/L	ND	20	20	18.4	18.9	92	94	70-116	2	
1,2-Dichloroethane	ug/L	ND	20	20	18.4	18.9	92	94	62-125	2	
1,2-Dichloropropane	ug/L	ND	20	20	17.6	18.0	88	90	69-115	2	
1,3-Dichlorobenzene	ug/L	ND	20	20	18.8	19.2	94	96	71-118	2	
1,4-Dichlorobenzene	ug/L	ND	20	20	18.9	19.6	95	98	67-119	3	
2-Butanone (MEK)	ug/L	15.6	20	20	33.3	34.0	88	92	48-136	2	
2-Hexanone	ug/L	ND	20	20	17.5	17.7	88	88	52-130	1	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	18.0	18.2	90	91	57-124	2	
Acetone	ug/L	314	20	20	285	279	-142	-174	49-138	2	M0
Benzene	ug/L	ND	20	20	17.8	18.4	89	92	66-122	3	
Bromodichloromethane	ug/L	ND	20	20	17.3	17.7	86	89	63-118	3	
Bromoform	ug/L	ND	20	20	15.0	15.0	75	75	46-130	.6	
Bromomethane	ug/L	ND	20	20	11.6	12.0	58	60	10-175	3	
Carbon disulfide	ug/L	ND	20	20	25.6	26.9	128	134	59-142	5	
Carbon tetrachloride	ug/L	ND	20	20	18.4	18.9	92	95	55-126	3	
Chlorobenzene	ug/L	ND	20	20	18.3	18.9	92	94	70-121	3	
Chloroethane	ug/L	ND	20	20	23.2	20.8	116	104	24-161	11	
Chloroform	ug/L	2.5	20	20	21.7	22.2	96	98	62-126	2	
Chloromethane	ug/L	ND	20	20	19.8	18.0	99	90	37-147	9	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.1	20.4	100	102	64-121	2	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.0	18.6	90	93	64-118	3	
Dibromochloromethane	ug/L	ND	20	20	17.5	17.8	88	89	60-120	1	
Ethylbenzene	ug/L	ND	20	20	18.9	19.4	94	97	69-119	3	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	20.6	21.0	103	105	68-126	2	
m&p-Xylene	ug/L	ND	40	40	37.8	38.3	95	96	70-124	1	
Methylene Chloride	ug/L	ND	20	20	20.6	20.5	103	103	59-128	.5	
o-Xylene	ug/L	ND	20	20	18.4	19.1	92	95	67-123	4	
Styrene	ug/L	ND	20	20	22.9	23.3	114	116	67-146	2	
Tetrachloroethene	ug/L	ND	20	20	20.1	20.6	100	103	62-125	3	
Toluene	ug/L	ND	20	20	18.3	18.8	92	94	72-115	3	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.5	20.3	102	101	59-122	1	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.7	16.9	83	85	64-120	1	
Trichloroethene	ug/L	ND	20	20	19.4	19.6	96	97	62-125	1	
Trichlorofluoromethane	ug/L	ND	20	20	25.5	22.3	127	111	54-158	13	
Vinyl chloride	ug/L	ND	20	20	22.1	19.3	110	97	52-145	13	
1,2-Dichloroethane-d4 (S)	%						103	101	77-119		
4-Bromofluorobenzene (S)	%						96	98	85-115		
Toluene-d8 (S)	%						92	94	85-115		

QUALIFIERS

Project: 41569181/Essex-Hope

Pace Project No.: 3088422

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: 41569181/Essex-Hope

Pace Project No.: 3088422

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3088422001	PRE-CARB	EPA 8260	MSV/15481		
3088422002	PRIMARY EFF	EPA 8260	MSV/15481		
3088422003	POST-CARB	EPA 8260	MSV/15481		
3088422004	TB-01	EPA 8260	MSV/15481		

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: Company: URS CORP Address: FOSTER PATEL 681 ANDERSON DR. STE 400 PITTSBURGH, PA 15220 Email To: _____ Phone: 412-763-4700 Fax: 412-503-4701 Requested Due Date/TAT: STANDARD		Section B Required Project Information: Report To: MARK DONIAK Copy To: VALEKIE SIBETO Purchase Order No.: 415269570 Project Name: ESSEX/HOVE JAMES TOWN Project Number: 415269570.10000		Section C Invoice Information: Attention: _____ Company Name: _____ Address: _____ Pace Quote Reference: _____ Pace Project Manager: _____ Pace Profile #: _____	
Regulatory Agency: _____ ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER _____		Site Location: NY STATE: _____		Page: 1 of 1 1215955	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE ENDIGRAS			DATE	TIME	DATE	TIME	DATE	TIME	DATE			
1	PRE-CARB	DW WT WW P SL OL WP AR TS OT	WTG	2/27/13	1100	2/27/13	1100									001	
2	PRIMARY-EFF		↓		1105											002	
3	POST-CARB		↓		1116											003	
4	POST-CARB		↓		1140												
5	POST-CARB		↓		1210												
6	POST-CARB		↓		1240												
7	TB-OI		WTG	2/27/13		2/27/13										004	
8																	
9																	
10																	
11																	
12																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
COMPOSITE FOUR (4)	Valerie Sibeto	2/27/13	1315	Valerie Sibeto	2/27/13	1315	
POST-CARB SAMPLES	Bryan Lalor	2/28/13	0940	Bryan Lalor	2/28/13	0940	Y N
IN LAB AND REPORT AS							
POST-CARB COMPOSITE							

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER: VALEKIE SIBETO		DATE Signed (MM/DD/YY): 2.27.13	
SIGNATURE of SAMPLER: <i>[Signature]</i>			

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

*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.



Sample Condition Upon Receipt

Client Name: URS Project # 3088422

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

Tracking #: 8739 8101 9563

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 Ziploc

Thermometer Used 5 6 7

Type of Ice: Wet Blue None

☒ Samples on ice, cooling process has begun

Cooler Temperature 4.8

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: RTL 2-28-13

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>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: [Signature]

Date: 3/1/13

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)

3088122

525

[illegible]

April 12, 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.: 3090685

Dear Mr. Dowiak:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 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

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CERTIFICATIONS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

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 13

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ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

Sample: PRE-CARB		Lab ID: 3090685001	Collected: 03/27/13 11:30	Received: 03/29/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	19800	ug/L	500	50		04/09/13 09:20	67-64-1	
Benzene	21.8	ug/L	1.0	1		04/09/13 08:55	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/13 08:55	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/13 08:55	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/13 08:55	74-83-9	
2-Butanone (MEK)	86.9	ug/L	10.0	1		04/09/13 08:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		04/09/13 08:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/13 08:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/13 08:55	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/13 08:55	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/13 08:55	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/13 08:55	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/13 08:55	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 08:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 08:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 08:55	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/13 08:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/13 08:55	107-06-2	
1,1-Dichloroethene	30.6	ug/L	5.0	1		04/09/13 08:55	75-35-4	
cis-1,2-Dichloroethene	7720	ug/L	250	50		04/09/13 09:20	156-59-2	
trans-1,2-Dichloroethene	92.4	ug/L	5.0	1		04/09/13 08:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/13 08:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 08:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 08:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/13 08:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		04/09/13 08:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/09/13 08:55	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		04/09/13 08:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/09/13 08:55	108-10-1	
Styrene	ND	ug/L	5.0	1		04/09/13 08:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/13 08:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/13 08:55	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/13 08:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/13 08:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/13 08:55	79-00-5	
Trichloroethene	4210	ug/L	250	50		04/09/13 09:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/13 08:55	75-69-4	
Vinyl chloride	1100	ug/L	50.0	50		04/09/13 09:20	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		04/09/13 08:55	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		04/09/13 08:55	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	85-115	1		04/09/13 08:55	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	77-119	1		04/09/13 08:55	17060-07-0	
Toluene-d8 (S)	92	%	85-115	1		04/09/13 08:55	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

Sample: PRIMARY EFF		Lab ID: 3090685002	Collected: 03/27/13 11:35	Received: 03/29/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	8800	ug/L	4000	400		04/10/13 00:42	67-64-1	
Benzene	4.1	ug/L	1.0	1		04/09/13 23:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/13 23:53	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/13 23:53	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/13 23:53	74-83-9	
2-Butanone (MEK)	44.6	ug/L	10.0	1		04/09/13 23:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		04/09/13 23:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/13 23:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/13 23:53	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/13 23:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/13 23:53	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/13 23:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/13 23:53	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:53	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/13 23:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/13 23:53	107-06-2	
1,1-Dichloroethene	13.8	ug/L	5.0	1		04/09/13 23:53	75-35-4	
cis-1,2-Dichloroethene	9760	ug/L	2000	400		04/10/13 00:42	156-59-2	
trans-1,2-Dichloroethene	33.5	ug/L	5.0	1		04/09/13 23:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/13 23:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 23:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 23:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/13 23:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		04/09/13 23:53	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/09/13 23:53	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		04/09/13 23:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/09/13 23:53	108-10-1	
Styrene	ND	ug/L	5.0	1		04/09/13 23:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/13 23:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/13 23:53	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/13 23:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/13 23:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/13 23:53	79-00-5	
Trichloroethene	116	ug/L	5.0	1		04/09/13 23:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/13 23:53	75-69-4	
Vinyl chloride	816	ug/L	20.0	20		04/10/13 00:17	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		04/09/13 23:53	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		04/09/13 23:53	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	106	%	85-115	1		04/09/13 23:53	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	77-119	1		04/09/13 23:53	17060-07-0	
Toluene-d8 (S)	99	%	85-115	1		04/09/13 23:53	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

Sample: POST-CARB		Lab ID: 3090685003	Collected: 03/27/13 11:40	Received: 03/29/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	7610	ug/L	2000	200		04/09/13 23:29	67-64-1	
Benzene	ND	ug/L	1.0	1		04/09/13 23:04	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/13 23:04	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/13 23:04	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/13 23:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		04/09/13 23:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		04/09/13 23:04	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/13 23:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/13 23:04	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/13 23:04	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/13 23:04	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/13 23:04	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/13 23:04	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/13 23:04	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/13 23:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/13 23:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/09/13 23:04	75-35-4	
cis-1,2-Dichloroethene	22.2	ug/L	5.0	1		04/09/13 23:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/13 23:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/13 23:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 23:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/13 23:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/13 23:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		04/09/13 23:04	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		04/09/13 23:04	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		04/09/13 23:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		04/09/13 23:04	108-10-1	
Styrene	ND	ug/L	5.0	1		04/09/13 23:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/13 23:04	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/13 23:04	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/13 23:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/13 23:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/13 23:04	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/09/13 23:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/13 23:04	75-69-4	
Vinyl chloride	784	ug/L	200	200		04/09/13 23:29	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		04/09/13 23:04	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		04/09/13 23:04	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	85-115	1		04/09/13 23:04	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	77-119	1		04/09/13 23:04	17060-07-0	
Toluene-d8 (S)	100	%	85-115	1		04/09/13 23:04	2037-26-5	

ANALYTICAL RESULTS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

Sample: TB-01		Lab ID: 3090685004	Collected: 03/27/13 00:01	Received: 03/29/13 10:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	ND ug/L		10.0	1		04/09/13 00:07	67-64-1	
Benzene	ND ug/L		1.0	1		04/09/13 00:07	71-43-2	
Bromodichloromethane	ND ug/L		5.0	1		04/09/13 00:07	75-27-4	
Bromoform	ND ug/L		5.0	1		04/09/13 00:07	75-25-2	
Bromomethane	ND ug/L		5.0	1		04/09/13 00:07	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		04/09/13 00:07	78-93-3	
Carbon disulfide	ND ug/L		5.0	1		04/09/13 00:07	75-15-0	
Carbon tetrachloride	ND ug/L		5.0	1		04/09/13 00:07	56-23-5	
Chlorobenzene	ND ug/L		5.0	1		04/09/13 00:07	108-90-7	
Chloroethane	ND ug/L		5.0	1		04/09/13 00:07	75-00-3	
Chloroform	ND ug/L		5.0	1		04/09/13 00:07	67-66-3	
Chloromethane	ND ug/L		5.0	1		04/09/13 00:07	74-87-3	
Dibromochloromethane	ND ug/L		5.0	1		04/09/13 00:07	124-48-1	
1,2-Dichlorobenzene	ND ug/L		5.0	1		04/09/13 00:07	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1		04/09/13 00:07	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1		04/09/13 00:07	106-46-7	
1,1-Dichloroethane	ND ug/L		5.0	1		04/09/13 00:07	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		04/09/13 00:07	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		04/09/13 00:07	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		04/09/13 00:07	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		04/09/13 00:07	156-60-5	
1,2-Dichloropropane	ND ug/L		5.0	1		04/09/13 00:07	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		5.0	1		04/09/13 00:07	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		5.0	1		04/09/13 00:07	10061-02-6	
Ethylbenzene	ND ug/L		5.0	1		04/09/13 00:07	100-41-4	
2-Hexanone	ND ug/L		10.0	1		04/09/13 00:07	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		04/09/13 00:07	98-82-8	
Methylene Chloride	ND ug/L		5.0	1		04/09/13 00:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		04/09/13 00:07	108-10-1	
Styrene	ND ug/L		5.0	1		04/09/13 00:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L		5.0	1		04/09/13 00:07	79-34-5	
Tetrachloroethene	ND ug/L		5.0	1		04/09/13 00:07	127-18-4	
Toluene	ND ug/L		5.0	1		04/09/13 00:07	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		04/09/13 00:07	71-55-6	
1,1,2-Trichloroethane	ND ug/L		5.0	1		04/09/13 00:07	79-00-5	
Trichloroethene	ND ug/L		5.0	1		04/09/13 00:07	79-01-6	
Trichlorofluoromethane	ND ug/L		5.0	1		04/09/13 00:07	75-69-4	
Vinyl chloride	ND ug/L		1.0	1		04/09/13 00:07	75-01-4	
m&p-Xylene	ND ug/L		5.0	1		04/09/13 00:07	179601-23-1	
o-Xylene	ND ug/L		5.0	1		04/09/13 00:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101 %		85-115	1		04/09/13 00:07	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		77-119	1		04/09/13 00:07	17060-07-0	
Toluene-d8 (S)	97 %		85-115	1		04/09/13 00:07	2037-26-5	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

QC Batch: MSV/15767

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Associated Lab Samples: 3090685001, 3090685004

METHOD BLANK: 564685

Matrix: Water

Associated Lab Samples: 3090685001, 3090685004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/08/13 23:42	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/08/13 23:42	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/08/13 23:42	
1,1-Dichloroethane	ug/L	ND	1.0	04/08/13 23:42	
1,1-Dichloroethene	ug/L	ND	1.0	04/08/13 23:42	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/08/13 23:42	
1,2-Dichloroethane	ug/L	ND	1.0	04/08/13 23:42	
1,2-Dichloropropane	ug/L	ND	1.0	04/08/13 23:42	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/08/13 23:42	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/08/13 23:42	
2-Butanone (MEK)	ug/L	ND	10.0	04/08/13 23:42	
2-Hexanone	ug/L	ND	10.0	04/08/13 23:42	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/08/13 23:42	
Acetone	ug/L	ND	10.0	04/08/13 23:42	
Benzene	ug/L	ND	1.0	04/08/13 23:42	
Bromodichloromethane	ug/L	ND	1.0	04/08/13 23:42	
Bromoform	ug/L	ND	1.0	04/08/13 23:42	
Bromomethane	ug/L	ND	1.0	04/08/13 23:42	
Carbon disulfide	ug/L	ND	1.0	04/08/13 23:42	
Carbon tetrachloride	ug/L	ND	1.0	04/08/13 23:42	
Chlorobenzene	ug/L	ND	1.0	04/08/13 23:42	
Chloroethane	ug/L	ND	1.0	04/08/13 23:42	
Chloroform	ug/L	ND	1.0	04/08/13 23:42	
Chloromethane	ug/L	ND	1.0	04/08/13 23:42	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/08/13 23:42	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/08/13 23:42	
Dibromochloromethane	ug/L	ND	1.0	04/08/13 23:42	
Ethylbenzene	ug/L	ND	1.0	04/08/13 23:42	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/08/13 23:42	
m&p-Xylene	ug/L	ND	2.0	04/08/13 23:42	
Methylene Chloride	ug/L	1.2	1.0	04/08/13 23:42	B,C9
o-Xylene	ug/L	ND	1.0	04/08/13 23:42	
Styrene	ug/L	ND	1.0	04/08/13 23:42	
Tetrachloroethene	ug/L	ND	1.0	04/08/13 23:42	
Toluene	ug/L	ND	1.0	04/08/13 23:42	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/08/13 23:42	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/08/13 23:42	
Trichloroethene	ug/L	ND	1.0	04/08/13 23:42	
Trichlorofluoromethane	ug/L	ND	1.0	04/08/13 23:42	
Vinyl chloride	ug/L	ND	1.0	04/08/13 23:42	
1,2-Dichloroethane-d4 (S)	%	114	77-119	04/08/13 23:42	
4-Bromofluorobenzene (S)	%	99	85-115	04/08/13 23:42	
Toluene-d8 (S)	%	94	85-115	04/08/13 23:42	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

LABORATORY CONTROL SAMPLE: 564686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	26.5	133	62-125	L1
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	61-117	
1,1,2-Trichloroethane	ug/L	20	19.5	97	72-119	
1,1-Dichloroethane	ug/L	20	23.4	117	63-123	
1,1-Dichloroethene	ug/L	20	25.0	125	57-127	
1,2-Dichlorobenzene	ug/L	20	18.1	90	70-116	
1,2-Dichloroethane	ug/L	20	23.6	118	62-125	
1,2-Dichloropropane	ug/L	20	17.9	90	69-115	
1,3-Dichlorobenzene	ug/L	20	17.4	87	71-118	
1,4-Dichlorobenzene	ug/L	20	18.6	93	67-119	
2-Butanone (MEK)	ug/L	20	27.1	136	48-136	
2-Hexanone	ug/L	20	21.0	105	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.2	96	57-124	
Acetone	ug/L	20	31.6	158	49-138	L1
Benzene	ug/L	20	19.7	99	66-122	
Bromodichloromethane	ug/L	20	21.2	106	63-118	
Bromoform	ug/L	20	23.4	117	46-130	
Bromomethane	ug/L	20	23.4	117	10-175	
Carbon disulfide	ug/L	20	24.7	123	59-142	
Carbon tetrachloride	ug/L	20	26.3	132	55-126	L3
Chlorobenzene	ug/L	20	19.2	96	70-121	
Chloroethane	ug/L	20	24.1	120	24-161	
Chloroform	ug/L	20	23.4	117	62-126	
Chloromethane	ug/L	20	24.9	124	37-147	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	64-121	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	64-118	
Dibromochloromethane	ug/L	20	23.1	115	60-120	
Ethylbenzene	ug/L	20	18.5	92	69-119	
Isopropylbenzene (Cumene)	ug/L	20	19.8	99	68-126	
m&p-Xylene	ug/L	40	39.2	98	70-124	
Methylene Chloride	ug/L	20	24.0	120	59-128	
o-Xylene	ug/L	20	19.9	100	67-123	
Styrene	ug/L	20	24.6	123	67-146	
Tetrachloroethene	ug/L	20	20.5	103	62-125	
Toluene	ug/L	20	19.5	98	72-115	
trans-1,2-Dichloroethene	ug/L	20	23.0	115	59-122	
trans-1,3-Dichloropropene	ug/L	20	18.7	94	64-120	
Trichloroethene	ug/L	20	20.4	102	62-125	
Trichlorofluoromethane	ug/L	20	26.2	131	54-158	
Vinyl chloride	ug/L	20	24.0	120	52-145	
1,2-Dichloroethane-d4 (S)	%			116	77-119	
4-Bromofluorobenzene (S)	%			101	85-115	
Toluene-d8 (S)	%			93	85-115	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

QC Batch: MSV/15783

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Associated Lab Samples: 3090685002, 3090685003

METHOD BLANK: 565288

Matrix: Water

Associated Lab Samples: 3090685002, 3090685003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/09/13 14:56	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/09/13 14:56	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/09/13 14:56	
1,1-Dichloroethane	ug/L	ND	1.0	04/09/13 14:56	
1,1-Dichloroethene	ug/L	ND	1.0	04/09/13 14:56	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/09/13 14:56	
1,2-Dichloroethane	ug/L	ND	1.0	04/09/13 14:56	
1,2-Dichloropropane	ug/L	ND	1.0	04/09/13 14:56	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/09/13 14:56	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/09/13 14:56	
2-Butanone (MEK)	ug/L	ND	10.0	04/09/13 14:56	
2-Hexanone	ug/L	ND	10.0	04/09/13 14:56	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/09/13 14:56	
Acetone	ug/L	ND	10.0	04/09/13 14:56	
Benzene	ug/L	ND	1.0	04/09/13 14:56	
Bromodichloromethane	ug/L	ND	1.0	04/09/13 14:56	
Bromoform	ug/L	ND	1.0	04/09/13 14:56	
Bromomethane	ug/L	ND	1.0	04/09/13 14:56	
Carbon disulfide	ug/L	ND	1.0	04/09/13 14:56	
Carbon tetrachloride	ug/L	ND	1.0	04/09/13 14:56	
Chlorobenzene	ug/L	ND	1.0	04/09/13 14:56	
Chloroethane	ug/L	ND	1.0	04/09/13 14:56	
Chloroform	ug/L	ND	1.0	04/09/13 14:56	
Chloromethane	ug/L	ND	1.0	04/09/13 14:56	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/09/13 14:56	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/09/13 14:56	
Dibromochloromethane	ug/L	ND	1.0	04/09/13 14:56	
Ethylbenzene	ug/L	ND	1.0	04/09/13 14:56	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/09/13 14:56	
m&p-Xylene	ug/L	ND	2.0	04/09/13 14:56	
Methylene Chloride	ug/L	ND	1.0	04/09/13 14:56	
o-Xylene	ug/L	ND	1.0	04/09/13 14:56	
Styrene	ug/L	ND	1.0	04/09/13 14:56	
Tetrachloroethene	ug/L	ND	1.0	04/09/13 14:56	
Toluene	ug/L	ND	1.0	04/09/13 14:56	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/09/13 14:56	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/09/13 14:56	
Trichloroethene	ug/L	1.0	1.0	04/09/13 14:56	P8
Trichlorofluoromethane	ug/L	ND	1.0	04/09/13 14:56	
Vinyl chloride	ug/L	ND	1.0	04/09/13 14:56	
1,2-Dichloroethane-d4 (S)	%	104	77-119	04/09/13 14:56	
4-Bromofluorobenzene (S)	%	104	85-115	04/09/13 14:56	
Toluene-d8 (S)	%	99	85-115	04/09/13 14:56	

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QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

LABORATORY CONTROL SAMPLE: 565289

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	61-117	
1,1,2-Trichloroethane	ug/L	20	19.2	96	72-119	
1,1-Dichloroethane	ug/L	20	20.1	100	63-123	
1,1-Dichloroethene	ug/L	20	18.0	90	57-127	
1,2-Dichlorobenzene	ug/L	20	19.3	97	70-116	
1,2-Dichloroethane	ug/L	20	19.9	99	62-125	
1,2-Dichloropropane	ug/L	20	17.6	88	69-115	
1,3-Dichlorobenzene	ug/L	20	19.1	96	71-118	
1,4-Dichlorobenzene	ug/L	20	19.4	97	67-119	
2-Butanone (MEK)	ug/L	20	24.3	122	48-136	
2-Hexanone	ug/L	20	22.2	111	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	20.1	100	57-124	
Acetone	ug/L	20	26.2	131	49-138	
Benzene	ug/L	20	18.7	93	66-122	
Bromodichloromethane	ug/L	20	18.4	92	63-118	
Bromoform	ug/L	20	20.3	101	46-130	
Bromomethane	ug/L	20	16.1	81	10-175	
Carbon disulfide	ug/L	20	20.8	104	59-142	
Carbon tetrachloride	ug/L	20	18.5	93	55-126	
Chlorobenzene	ug/L	20	18.1	90	70-121	
Chloroethane	ug/L	20	19.7	99	24-161	
Chloroform	ug/L	20	20.6	103	62-126	
Chloromethane	ug/L	20	19.0	95	37-147	
cis-1,2-Dichloroethene	ug/L	20	22.8	114	64-121	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	64-118	
Dibromochloromethane	ug/L	20	19.2	96	60-120	
Ethylbenzene	ug/L	20	18.0	90	69-119	
Isopropylbenzene (Cumene)	ug/L	20	20.4	102	68-126	
m&p-Xylene	ug/L	40	36.6	91	70-124	
Methylene Chloride	ug/L	20	20.5	103	59-128	
o-Xylene	ug/L	20	18.0	90	67-123	
Styrene	ug/L	20	22.3	111	67-146	
Tetrachloroethene	ug/L	20	20.5	103	62-125	
Toluene	ug/L	20	18.5	92	72-115	
trans-1,2-Dichloroethene	ug/L	20	18.5	92	59-122	
trans-1,3-Dichloropropene	ug/L	20	19.0	95	64-120	
Trichloroethene	ug/L	20	17.3	87	62-125	
Trichlorofluoromethane	ug/L	20	16.0	80	54-158	
Vinyl chloride	ug/L	20	19.3	96	52-145	
1,2-Dichloroethane-d4 (S)	%			100	77-119	
4-Bromofluorobenzene (S)	%			101	85-115	
Toluene-d8 (S)	%			98	85-115	

QUALITY CONTROL DATA

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 565290 565291											
Parameter	Units	3090598023 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	12.1	20	20	38.4	37.1	132	125	62-125	3	M0
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.1	17.6	90	88	61-117	3	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.4	19.1	97	95	72-119	2	
1,1-Dichloroethane	ug/L	1.4	20	20	25.0	25.0	118	118	63-123	.1	
1,1-Dichloroethene	ug/L	1.9	20	20	21.1	22.9	96	105	57-127	8	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.1	19.6	100	98	70-116	2	
1,2-Dichloroethane	ug/L	ND	20	20	23.6	23.2	118	116	62-125	2	
1,2-Dichloropropane	ug/L	ND	20	20	19.4	18.9	97	94	69-115	3	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.2	19.2	96	96	71-118	.08	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.0	19.2	100	96	67-119	4	
2-Butanone (MEK)	ug/L	ND	20	20	22.8	23.6	114	118	48-136	4	
2-Hexanone	ug/L	ND	20	20	21.6	21.1	108	105	52-130	3	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	19.3	19.7	97	98	57-124	2	
Acetone	ug/L	ND	20	20	22.0	23.4	110	117	49-138	6	
Benzene	ug/L	ND	20	20	20.0	19.8	100	99	66-122	1	
Bromodichloromethane	ug/L	ND	20	20	21.6	20.3	108	102	63-118	6	
Bromoform	ug/L	ND	20	20	19.9	20.2	100	101	46-130	1	
Bromomethane	ug/L	ND	20	20	10.4	13.2	52	66	10-175	24	
Carbon disulfide	ug/L	ND	20	20	18.9	28.1	95	140	59-142	39	R1
Carbon tetrachloride	ug/L	ND	20	20	22.4	22.2	112	111	55-126	.6	
Chlorobenzene	ug/L	ND	20	20	19.6	18.8	98	94	70-121	4	
Chloroethane	ug/L	ND	20	20	20.1	22.3	101	112	24-161	10	
Chloroform	ug/L	ND	20	20	24.9	24.3	124	121	62-126	3	
Chloromethane	ug/L	ND	20	20	20.6	22.0	103	110	37-147	6	
cis-1,2-Dichloroethene	ug/L	13.6	20	20	43.9	41.8	151	141	64-121	5	M0
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.7	19.2	99	96	64-118	3	
Dibromochloromethane	ug/L	ND	20	20	21.0	19.9	105	100	60-120	5	
Ethylbenzene	ug/L	ND	20	20	19.7	19.3	98	96	69-119	2	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	22.5	21.7	112	109	68-126	4	
m&p-Xylene	ug/L	ND	40	40	40.4	39.4	101	99	70-124	2	
Methylene Chloride	ug/L	ND	20	20	22.8	22.0	114	110	59-128	4	
o-Xylene	ug/L	ND	20	20	19.8	19.4	99	97	67-123	2	
Styrene	ug/L	ND	20	20	24.3	23.1	122	116	67-146	5	
Tetrachloroethene	ug/L	ND	20	20	21.6	21.2	108	106	62-125	2	
Toluene	ug/L	ND	20	20	20.2	19.8	101	99	72-115	2	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.8	21.5	109	108	59-122	1	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.1	19.7	100	98	64-120	2	
Trichloroethene	ug/L	76.7	20	20	89.7	78.8	65	11	62-125	13	M0
Trichlorofluoromethane	ug/L	ND	20	20	23.4	21.2	117	106	54-158	10	
Vinyl chloride	ug/L	ND	20	20	22.7	23.9	114	119	52-145	5	
1,2-Dichloroethane-d4 (S)	%						117	118	77-119		
4-Bromofluorobenzene (S)	%						99	103	85-115		
Toluene-d8 (S)	%						99	100	85-115		

QUALIFIERS

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

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.

BATCH QUALIFIERS

Batch: MSV/15767

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

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

C9 Common Laboratory Contaminant.

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.

P8 Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

R1 RPD value was outside control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 41569181/Essex-Hope

Pace Project No.: 3090685

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3090685001	PRE-CARB	EPA 8260	MSV/15767		
3090685002	PRIMARY EFF	EPA 8260	MSV/15783		
3090685003	POST-CARB	EPA 8260	MSV/15783		
3090685004	TB-01	EPA 8260	MSV/15767		

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 SIBETD					
	SIGNATURE of SAMPLER: <i>Valerie Sibetd</i>		DATE Signed (MM/DD/YY):			
			3.27.13			

RTL

Sample Condition Upon Receipt



Client Name: URS

Project # 3090685

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

Tracking #: 95771864541

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 2.6

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: <u>WMS/29/13</u>
--

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☐ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>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>WMS</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: 3/4/13

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)

3090685

WR5

[illegible]

July 15, 2013

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

RE: Project: Essex/Hope Jamestown
Pace Project No.: 3097625

Dear Mr. Dowiak:

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

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CERTIFICATIONS

Project: Essex/Hope Jamestown

Pace Project No.: 3097625

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

North Dakota Certification #: R-190

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

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

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.: 3097625

Sample: PRE-CARB		Lab ID: 3097625001		Collected: 06/27/13 10:00		Received: 06/28/13 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV		Analytical Method: EPA 8260							
Acetone	6710	ug/L	1000	100		07/08/13 17:13	67-64-1		
Benzene	11.5	ug/L	1.0	1		07/08/13 16:49	71-43-2		
Bromodichloromethane	ND	ug/L	5.0	1		07/08/13 16:49	75-27-4		
Bromoform	ND	ug/L	5.0	1		07/08/13 16:49	75-25-2		
Bromomethane	ND	ug/L	5.0	1		07/08/13 16:49	74-83-9		
2-Butanone (MEK)	31.8	ug/L	10.0	1		07/08/13 16:49	78-93-3		
Carbon disulfide	ND	ug/L	5.0	1		07/08/13 16:49	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		07/08/13 16:49	56-23-5		
Chlorobenzene	ND	ug/L	5.0	1		07/08/13 16:49	108-90-7		
Chloroethane	ND	ug/L	5.0	1		07/08/13 16:49	75-00-3		
Chloroform	ND	ug/L	5.0	1		07/08/13 16:49	67-66-3		
Chloromethane	ND	ug/L	5.0	1		07/08/13 16:49	74-87-3		
Dibromochloromethane	ND	ug/L	5.0	1		07/08/13 16:49	124-48-1		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 16:49	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 16:49	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 16:49	106-46-7		
1,1-Dichloroethane	ND	ug/L	5.0	1		07/08/13 16:49	75-34-3		
1,2-Dichloroethane	ND	ug/L	5.0	1		07/08/13 16:49	107-06-2		
1,1-Dichloroethene	16.7	ug/L	5.0	1		07/08/13 16:49	75-35-4		
cis-1,2-Dichloroethene	4970	ug/L	500	100		07/08/13 17:13	156-59-2		
trans-1,2-Dichloroethene	123	ug/L	5.0	1		07/08/13 16:49	156-60-5		
1,2-Dichloropropane	ND	ug/L	5.0	1		07/08/13 16:49	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 16:49	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 16:49	10061-02-6		
Ethylbenzene	ND	ug/L	5.0	1		07/08/13 16:49	100-41-4		
2-Hexanone	ND	ug/L	10.0	1		07/08/13 16:49	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/08/13 16:49	98-82-8		
Methylene Chloride	ND	ug/L	5.0	1		07/08/13 16:49	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/08/13 16:49	108-10-1		
Styrene	ND	ug/L	5.0	1		07/08/13 16:49	100-42-5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/08/13 16:49	79-34-5		
Tetrachloroethene	ND	ug/L	5.0	1		07/08/13 16:49	127-18-4		
Toluene	ND	ug/L	5.0	1		07/08/13 16:49	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/08/13 16:49	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/08/13 16:49	79-00-5		
Trichloroethene	2300	ug/L	500	100		07/08/13 17:13	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		07/08/13 16:49	75-69-4		
Vinyl chloride	645	ug/L	100	100		07/08/13 17:13	75-01-4		
m&p-Xylene	ND	ug/L	5.0	1		07/08/13 16:49	179601-23-1		
o-Xylene	ND	ug/L	5.0	1		07/08/13 16:49	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	107	%	85-115	1		07/08/13 16:49	460-00-4		
1,2-Dichloroethane-d4 (S)	104	%	77-119	1		07/08/13 16:49	17060-07-0		
Toluene-d8 (S)	99	%	85-115	1		07/08/13 16:49	2037-26-5		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3097625

Sample: PRIMARY-EFF		Lab ID: 3097625002	Collected: 06/27/13 10:05	Received: 06/28/13 09:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	7260	ug/L	1000	100		07/08/13 18:03	67-64-1	
Benzene	ND	ug/L	1.0	1		07/08/13 17:38	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		07/08/13 17:38	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/08/13 17:38	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/08/13 17:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/08/13 17:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		07/08/13 17:38	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/08/13 17:38	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/08/13 17:38	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/08/13 17:38	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/08/13 17:38	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/08/13 17:38	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		07/08/13 17:38	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 17:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 17:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 17:38	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/08/13 17:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/08/13 17:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/08/13 17:38	75-35-4	
cis-1,2-Dichloroethene	24.9	ug/L	5.0	1		07/08/13 17:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/08/13 17:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/08/13 17:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 17:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 17:38	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/08/13 17:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		07/08/13 17:38	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/08/13 17:38	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		07/08/13 17:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/08/13 17:38	108-10-1	
Styrene	ND	ug/L	5.0	1		07/08/13 17:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/08/13 17:38	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/08/13 17:38	127-18-4	
Toluene	ND	ug/L	5.0	1		07/08/13 17:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/08/13 17:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/08/13 17:38	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/08/13 17:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/08/13 17:38	75-69-4	
Vinyl chloride	89.0	ug/L	1.0	1		07/08/13 17:38	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		07/08/13 17:38	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		07/08/13 17:38	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	85-115	1		07/08/13 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	77-119	1		07/08/13 17:38	17060-07-0	
Toluene-d8 (S)	100	%	85-115	1		07/08/13 17:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Essex/Hope Jamestown

Pace Project No.: 3097625

Sample: POST-CARB **Lab ID: 3097625003** Collected: 06/27/13 11:40 Received: 06/28/13 09:30 Matrix: Water

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Acetone	7190	ug/L	500	50		07/08/13 18:52	67-64-1	
Benzene	ND	ug/L	1.0	1		07/08/13 18:27	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		07/08/13 18:27	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/08/13 18:27	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/08/13 18:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/08/13 18:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	1		07/08/13 18:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/08/13 18:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/08/13 18:27	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/08/13 18:27	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/08/13 18:27	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/08/13 18:27	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		07/08/13 18:27	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 18:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 18:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/08/13 18:27	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/08/13 18:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/08/13 18:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/08/13 18:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/08/13 18:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/08/13 18:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/08/13 18:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 18:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/08/13 18:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/08/13 18:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		07/08/13 18:27	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/08/13 18:27	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		07/08/13 18:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/08/13 18:27	108-10-1	
Styrene	ND	ug/L	5.0	1		07/08/13 18:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/08/13 18:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/08/13 18:27	127-18-4	
Toluene	ND	ug/L	5.0	1		07/08/13 18:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/08/13 18:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/08/13 18:27	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/08/13 18:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/08/13 18:27	75-69-4	
Vinyl chloride	6.7	ug/L	1.0	1		07/08/13 18:27	75-01-4	
m&p-Xylene	ND	ug/L	5.0	1		07/08/13 18:27	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		07/08/13 18:27	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	85-115	1		07/08/13 18:27	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	77-119	1		07/08/13 18:27	17060-07-0	
Toluene-d8 (S)	98	%	85-115	1		07/08/13 18:27	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Essex/Hope Jamestown
Pace Project No.: 3097625

Sample: TB-01		Lab ID: 3097625004		Collected: 06/27/13 00:01		Received: 06/28/13 09:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
Acetone	ND ug/L	10.0	1			07/08/13 11:04	67-64-1		
Benzene	ND ug/L	1.0	1			07/08/13 11:04	71-43-2		
Bromodichloromethane	ND ug/L	5.0	1			07/08/13 11:04	75-27-4		
Bromoform	ND ug/L	5.0	1			07/08/13 11:04	75-25-2		
Bromomethane	ND ug/L	5.0	1			07/08/13 11:04	74-83-9		
2-Butanone (MEK)	ND ug/L	10.0	1			07/08/13 11:04	78-93-3		
Carbon disulfide	ND ug/L	5.0	1			07/08/13 11:04	75-15-0		
Carbon tetrachloride	ND ug/L	5.0	1			07/08/13 11:04	56-23-5		
Chlorobenzene	ND ug/L	5.0	1			07/08/13 11:04	108-90-7		
Chloroethane	ND ug/L	5.0	1			07/08/13 11:04	75-00-3		
Chloroform	ND ug/L	5.0	1			07/08/13 11:04	67-66-3		
Chloromethane	ND ug/L	5.0	1			07/08/13 11:04	74-87-3		
Dibromochloromethane	ND ug/L	5.0	1			07/08/13 11:04	124-48-1		
1,2-Dichlorobenzene	ND ug/L	5.0	1			07/08/13 11:04	95-50-1		
1,3-Dichlorobenzene	ND ug/L	5.0	1			07/08/13 11:04	541-73-1		
1,4-Dichlorobenzene	ND ug/L	5.0	1			07/08/13 11:04	106-46-7		
1,1-Dichloroethane	ND ug/L	5.0	1			07/08/13 11:04	75-34-3		
1,2-Dichloroethane	ND ug/L	5.0	1			07/08/13 11:04	107-06-2		
1,1-Dichloroethene	ND ug/L	5.0	1			07/08/13 11:04	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	5.0	1			07/08/13 11:04	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	5.0	1			07/08/13 11:04	156-60-5		
1,2-Dichloropropane	ND ug/L	5.0	1			07/08/13 11:04	78-87-5		
cis-1,3-Dichloropropene	ND ug/L	5.0	1			07/08/13 11:04	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L	5.0	1			07/08/13 11:04	10061-02-6		
Ethylbenzene	ND ug/L	5.0	1			07/08/13 11:04	100-41-4		
2-Hexanone	ND ug/L	10.0	1			07/08/13 11:04	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L	1.0	1			07/08/13 11:04	98-82-8		
Methylene Chloride	ND ug/L	5.0	1			07/08/13 11:04	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1			07/08/13 11:04	108-10-1		
Styrene	ND ug/L	5.0	1			07/08/13 11:04	100-42-5		
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	1			07/08/13 11:04	79-34-5		
Tetrachloroethene	ND ug/L	5.0	1			07/08/13 11:04	127-18-4		
Toluene	ND ug/L	5.0	1			07/08/13 11:04	108-88-3		
1,1,1-Trichloroethane	ND ug/L	5.0	1			07/08/13 11:04	71-55-6		
1,1,2-Trichloroethane	ND ug/L	5.0	1			07/08/13 11:04	79-00-5		
Trichloroethene	ND ug/L	5.0	1			07/08/13 11:04	79-01-6		
Trichlorofluoromethane	ND ug/L	5.0	1			07/08/13 11:04	75-69-4		
Vinyl chloride	ND ug/L	1.0	1			07/08/13 11:04	75-01-4		
m&p-Xylene	ND ug/L	5.0	1			07/08/13 11:04	179601-23-1		
o-Xylene	ND ug/L	5.0	1			07/08/13 11:04	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	103 %	85-115	1			07/08/13 11:04	460-00-4		
1,2-Dichloroethane-d4 (S)	107 %	77-119	1			07/08/13 11:04	17060-07-0		
Toluene-d8 (S)	98 %	85-115	1			07/08/13 11:04	2037-26-5		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex/Hope Jamestown
Pace Project No.: 3097625

QC Batch: MSV/16660 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3097625001, 3097625002, 3097625003, 3097625004

METHOD BLANK: 603447 Matrix: Water
Associated Lab Samples: 3097625001, 3097625002, 3097625003, 3097625004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	07/08/13 10:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/08/13 10:14	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/08/13 10:14	
1,1-Dichloroethane	ug/L	ND	1.0	07/08/13 10:14	
1,1-Dichloroethene	ug/L	ND	1.0	07/08/13 10:14	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/08/13 10:14	
1,2-Dichloroethane	ug/L	ND	1.0	07/08/13 10:14	
1,2-Dichloropropane	ug/L	ND	1.0	07/08/13 10:14	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/08/13 10:14	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/08/13 10:14	
2-Butanone (MEK)	ug/L	ND	10.0	07/08/13 10:14	
2-Hexanone	ug/L	ND	10.0	07/08/13 10:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/08/13 10:14	
Acetone	ug/L	ND	10.0	07/08/13 10:14	
Benzene	ug/L	ND	1.0	07/08/13 10:14	
Bromodichloromethane	ug/L	ND	1.0	07/08/13 10:14	
Bromoform	ug/L	ND	1.0	07/08/13 10:14	
Bromomethane	ug/L	ND	1.0	07/08/13 10:14	
Carbon disulfide	ug/L	ND	1.0	07/08/13 10:14	
Carbon tetrachloride	ug/L	ND	1.0	07/08/13 10:14	
Chlorobenzene	ug/L	ND	1.0	07/08/13 10:14	
Chloroethane	ug/L	ND	1.0	07/08/13 10:14	
Chloroform	ug/L	ND	1.0	07/08/13 10:14	
Chloromethane	ug/L	ND	1.0	07/08/13 10:14	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/08/13 10:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/08/13 10:14	
Dibromochloromethane	ug/L	ND	1.0	07/08/13 10:14	
Ethylbenzene	ug/L	ND	1.0	07/08/13 10:14	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/08/13 10:14	
m&p-Xylene	ug/L	ND	2.0	07/08/13 10:14	
Methylene Chloride	ug/L	ND	1.0	07/08/13 10:14	
o-Xylene	ug/L	ND	1.0	07/08/13 10:14	
Styrene	ug/L	ND	1.0	07/08/13 10:14	
Tetrachloroethene	ug/L	ND	1.0	07/08/13 10:14	
Toluene	ug/L	ND	1.0	07/08/13 10:14	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/08/13 10:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/08/13 10:14	
Trichloroethene	ug/L	ND	1.0	07/08/13 10:14	
Trichlorofluoromethane	ug/L	ND	1.0	07/08/13 10:14	
Vinyl chloride	ug/L	ND	1.0	07/08/13 10:14	
1,2-Dichloroethane-d4 (S)	%	105	77-119	07/08/13 10:14	
4-Bromofluorobenzene (S)	%	105	85-115	07/08/13 10:14	
Toluene-d8 (S)	%	96	85-115	07/08/13 10:14	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Essex/Hope Jamestown

Pace Project No.: 3097625

LABORATORY CONTROL SAMPLE: 603448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.8	114	62-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.9	89	61-117	
1,1,2-Trichloroethane	ug/L	20	20.3	101	72-119	
1,1-Dichloroethane	ug/L	20	20.8	104	63-123	
1,1-Dichloroethene	ug/L	20	20.4	102	57-127	
1,2-Dichlorobenzene	ug/L	20	20.3	102	70-116	
1,2-Dichloroethane	ug/L	20	21.6	108	62-125	
1,2-Dichloropropane	ug/L	20	18.7	94	69-115	
1,3-Dichlorobenzene	ug/L	20	19.4	97	71-118	
1,4-Dichlorobenzene	ug/L	20	18.9	94	67-119	
2-Butanone (MEK)	ug/L	20	14.9	74	48-136	
2-Hexanone	ug/L	20	19.2	96	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	17.8	89	57-124	
Acetone	ug/L	20	15.0	75	49-138	
Benzene	ug/L	20	18.8	94	66-122	
Bromodichloromethane	ug/L	20	21.3	106	63-118	
Bromoform	ug/L	20	26.9	135	46-130	L3
Bromomethane	ug/L	20	18.7	94	10-175	
Carbon disulfide	ug/L	20	23.0	115	59-142	
Carbon tetrachloride	ug/L	20	18.6	93	55-126	
Chlorobenzene	ug/L	20	19.4	97	70-121	
Chloroethane	ug/L	20	23.3	116	24-161	
Chloroform	ug/L	20	20.6	103	62-126	
Chloromethane	ug/L	20	23.8	119	37-147	
cis-1,2-Dichloroethene	ug/L	20	21.3	106	64-121	
cis-1,3-Dichloropropene	ug/L	20	22.1	111	64-118	
Dibromochloromethane	ug/L	20	24.3	121	60-120	L3
Ethylbenzene	ug/L	20	19.9	100	69-119	
Isopropylbenzene (Cumene)	ug/L	20	20.2	101	68-126	
m&p-Xylene	ug/L	40	37.6	94	70-124	
Methylene Chloride	ug/L	20	21.9	110	59-128	
o-Xylene	ug/L	20	19.6	98	67-123	
Styrene	ug/L	20	24.1	120	67-146	
Tetrachloroethene	ug/L	20	19.7	99	62-125	
Toluene	ug/L	20	19.6	98	72-115	
trans-1,2-Dichloroethene	ug/L	20	20.7	104	59-122	
trans-1,3-Dichloropropene	ug/L	20	21.1	105	64-120	
Trichloroethene	ug/L	20	19.7	98	62-125	
Trichlorofluoromethane	ug/L	20	27.5	138	54-158	
Vinyl chloride	ug/L	20	22.6	113	52-145	
1,2-Dichloroethane-d4 (S)	%			112	77-119	
4-Bromofluorobenzene (S)	%			99	85-115	
Toluene-d8 (S)	%			98	85-115	

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Essex/Hope Jamestown
Pace Project No.: 3097625

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.

BATCH QUALIFIERS

Batch: MSV/16660

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

ANALYTE QUALIFIERS

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Essex/Hope Jamestown

Pace Project No.: 3097625

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3097625001	PRE-CARB	EPA 8260	MSV/16660		
3097625002	PRIMARY-EFF	EPA 8260	MSV/16660		
3097625003	POST-CARB	EPA 8260	MSV/16660		
3097625004	TB-01	EPA 8260	MSV/16660		

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

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: URS CORP	Report To: MARK DOWIAK	Attention:
Address: 681 ANDERSON DR STE 400 PISCATAWAY NJ 08854 PITTSBURGH, PA 15220	Copy To: VALEKIE SIBERO	Company Name:
		Address:
Email To:	Purchase Order No.: 41579501	Pace Quote Reference:
Phone: 412-503-4700 FAX: 412-503-4701	Project Name: ESSAY/HOPE JAMESDOWN	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 41579501.10000	Pace Profile #:

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1687890

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location
 STATE: NY

[illegible]



Sample Condition Upon Receipt

Client Name: URS Corp

Project # 3007625

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

Tracking #: 8739 8101 9574

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 3.3

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: MAC 6/28/13

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>MAC</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: 7/4/13

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)

3097625

WDS Corp

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