GaiaTech
OF N.C., PLLC

RECEIVED
DEC 27 2012
SUPERFUND SECTION

December 21, 2012

Ms. Sue Murphy, Engineer
Inactive Hazardous Sites Branch
Superfund Section
North Carolina Department of Environment and Natural Resources
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: Soil Vapor Investigation Activities: Engineered Controls International, LLC Facility Located at 100 Rego Drive, Elon, Alamance County, North Carolina

Dear Ms. Murphy:

This letter has been prepared by GaiaTech of NC, PLLC (GaiaTech) on behalf of Engineered Controls International, LLC (ECIL) to provide an update of findings regarding recently completed assessment of potential vapor intrusion issues at the ECIL facility located at 100 Rego Drive in Elon, Alamance County, North Carolina. In the May 15, 2012 letter, a request was made for a soil vapor investigation at the Site in accordance with the latest version of *Supplemental Guidelines for the Evaluation of Structural Vapor Intrusion for Site Assessments and Remedial Actions Under the Inactive Hazardous Sites Branch* (http://poprtal.ncdenr.org/web/wm/sf/sfavailabledocs) (Guidance). A request for an extension for submittal of the requested information was provided by Moore & VanAllen, as legal counsel for ECIL, on August 14, 2012. The following presents a summary of the investigation.

SOIL VAPOR ASSESSMENT ACTIVITIES

The ECIL Site in Elon is awaiting finalization of the Administrative Agreement under the Registered Environmental Consultant (REC) Program. GaiaTech, as the proposed REC consultant, completed soil vapor investigation / assessment activities at locations within the existing building at the Site as part of supplemental Site assessment activities.

Specifically, as required in the Guidance, an evaluation of vapor intrusion potential is required anytime an existing building, or a lot where a building could be placed in the future, is located within 100 feet of groundwater or soil contamination. An evaluation of distances greater than 100 feet may be needed if there are significant preferential pathways that may be conduits for vapors toward a structure. The Guidance requires an awareness of the geology of the area and the location of utility corridors. Vapor intrusion evaluation is required by the Guidance for both residential and non-residential structures.

The Guidance specifies that where a contaminant of concern (present in groundwater, soil or waste) is a chemical currently in use in a commercial/industrial structure, OSHA regulates the concentration allowed in indoor air. When chemicals are no longer used at the site, the applicable regulatory standard is the Inactive Hazardous Sites Branch (IHSB) indoor air concentrations.

More often than not, at the time that mitigation decisions are being made to address IHSB levels, it is not possible to determine how much of the chemical causing indoor air concentrations exceeding IHSB levels is the result of the past use of the chemical versus off-gassing of contaminated media in the subsurface. Therefore, to protect future occupants of the building from exposure to contaminants in indoor air (when the

OSHA standards cease to apply at a currently OSHA-regulated structure) the remediating party is required to use the Screening Steps outlined in the IHSB guidance up to, but not including, the testing of indoor air. If the structure fails all the screening steps leading up to the testing of indoor air, but meets OSHA limits, contaminated media at the site must nevertheless be remediated so that sub-slab vapors meet IHSB screening criteria or land use restrictions must be placed on the property. Screening and/or initial evaluation steps generally include the following:

- An initial evaluation of identified groundwater concentration against IHSB ***Acceptable Groundwater Concentrations (AGWC)*** screening concentrations. If groundwater concentrations exceed screening values, then sub-slab soil gas testing is typically required.
- Properties with structures within 100 feet of identified soil contamination are generally required to collect sub-slab soil gas samples.

As groundwater concentrations at the site exceed the IHSB screening values and soil impacts beneath the property have been identified, a series of five (5) sub-slab soil vapor sampling points were completed at locations inside the building near potential source areas such as the wastewater treatment area and former degreaser (see attached figure for location of sub-slab soil vapor testing locations). Soil vapor borings (designated as SV-1 through SV-5) were installed using direct-push methods without the generation of any cuttings to set the vapor screen for sample collection. Specifically, vapor borings were extended to depths of approximately 2.5 to 3 feet at which point a 6-inch stainless steel screen implant with Teflon™ tubing run to the surface was inserted in the bore hole. Sand was placed surrounding the screened interval and extending approximately 1.5 above the screened interval at which point bentonite was placed to seal the remaining annulus above the sand. As part of the sampling process, each probe was properly purged and samples were collected using a 6 liter Summa canister with a flow regulator to limit the flow to 150 ml/minute for approximately 30 minutes. A duplicate sample was also collected from sub-slab soil vapor point SV-2 for QA/QC purposes.

Samples were analyzed for EPA Method TO-15 volatile organics as a measure of sub-slab volatile organic concentrations. Per the Structural Vapor Intrusion Guidance, the results for sub-slab or soil gas tests should be compared to the ***Acceptable Soil Gas Concentrations (ASGC)*** on the IHSB Vapor Intrusion Tables. If the contaminant concentrations do not exceed these levels and the sample was collected during worst case conditions, no further vapor study is required. If the contaminant concentrations correspond to a collective cancer risk of between 1.0E-06 to 1.0E-04 and are within a Hazard Index of 1, then at least one additional test is required. A second test should be scheduled during worst case conditions. If any sample exceeds the 1.0E-04 cancer risk limit or a Hazard Index of 1, indoor air testing is required. Results indicated:

- Exceedances of the IHSB ASGC for Chloroform in SV-2 through SV-5;
- Exceedance of the IHSB ASGC for Naphthalene in SV-4;
- Exceedance of the IHSB ASGC for Tetrachloroethene (PCE) in SV-5;
- Exceedances of the IHSB ASGC for Trichloroethene (TCE) in SV-1 through SV-5; and
- Exceedance of the IHSB ASGC for 1,2,4-Trimethylbenzene in SV-4.

Note: Exceedances are based on a risk factor of 1.0E-06

See attached analytical data summary table for a complete summary of the sub-slab soil vapor testing results, together with the accompanying analytical data report.

GaiaTech
OF N.C., PLLC

As many of the samples exceed the 1.0E-04 cancer risk limit or a Hazard Index of 1, indoor air testing will be needed. It is anticipated that three to five (3 to 5) indoor air samples will be collected as part of the next phase of activities (2 to 3 in the open warehouse / manufacturing portion of the building and 1 to 2 in the office space portion of the building). Such indoor air sampling activities are currently in the planning phase, but are anticipated to be conducted in January 2013.

As part of the indoor air sampling, an exterior upwind background sample must also be collected. Upwind background samples should be initiated one hour prior to the collection of indoor air samples unless estimates of building exchange rates indicate a shorter or longer delay is appropriate. The time lag between the collection of the background and the test sample should allow for one exchange volume to have occurred.

After subtracting for background concentrations, if the contaminant concentrations do not exceed the ***Acceptable Indoor Air Concentrations*** on the IHSB Vapor Intrusion Tables (1.0E-06 and HI of 1) and the sample was collected during worst case conditions, no further vapor study is required unless the groundwater contaminant plume is advancing in the direction of the structure or other site conditions warrant conducting further evaluation. If the contaminant concentrations correspond to a collective cancer risk of between 1.0E-06 to 1.0E-04 and are within a Hazard Index of 1, then at least one additional test is required. A second test should be scheduled during worst case conditions. Thus, a minimum of one sample event during worst case conditions and two if concentrations fall within the risk range, are required. If the samples do not exceed the screening numbers but a contaminant plume is migrating toward the structure, periodic soil gas testing will be required. The guidance requires abatement if any sample exceeds the 1.0E-04 cancer risk limit or a Hazard Index of 1.

In closing, GaiaTech believes the responses provided herein addresses NCDENR's comments regarding the initial evaluation of potential vapor intrusion and we will provide additional updates as further information is obtained. Please feel free to contact the undersigned if you have any questions or concerns, or require additional information. As required, all documents submitted to the Division in relation to this work must be submitted in both paper and in an electronic format designated by the Division. As such, this document is being provided in both paper and electronic format.

Sincerely,
GAIATECH OF NC, PLLC

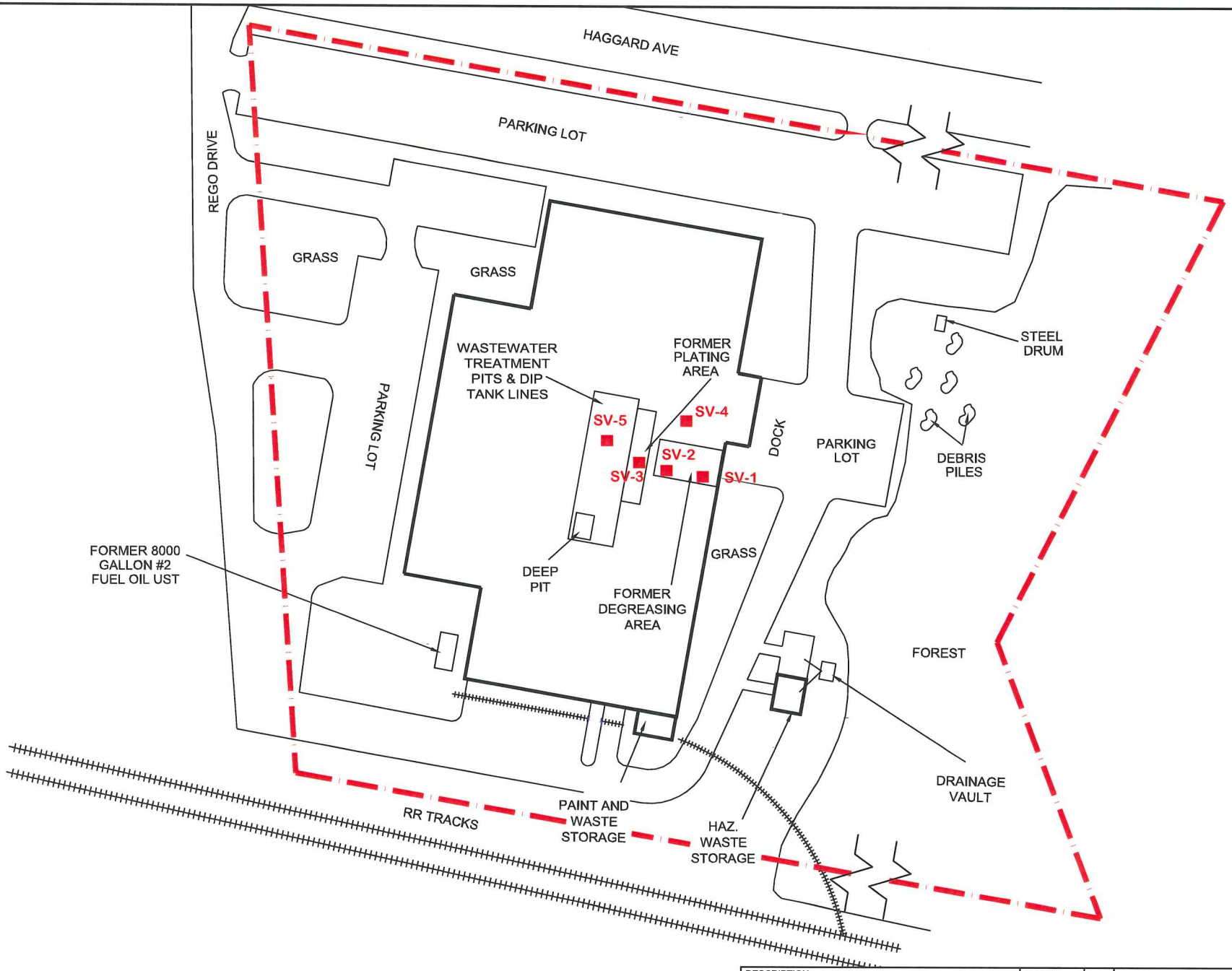
William H. Lucas, III, L.G.
Director, Site Investigation & Remediation
(404) 809-3875 – Direct Dial

Technical Review and Concurrence by:

David S. Buchalter, P.E.
REC Program Registered Site Manager
Manager, Environmental Engineering
(404) 809-3863 – Direct Dial

cc: P. McGrath, Moore & VanAllen (electronic version only)
P. Capponi, GaiaTech
Project File B1116-421-2

attachments: Figures Depicting Sub-Slab Soil Vapor Sampling Locations
Soil Vapor Data Summary Table
Soil Vapor Analytical Data Report
CD Electronic Deliverable (All Inclusive)



LEGEND

SITE BOUNDARY

SV-1 SUB-SLAB SOIL GAS SAMPLING LOCATION

DESCRIPTION:	DRAWN:	FIGURE: SITE PLAN DEPICTING SUB-SLAB SOIL GAS SAMPLING LOCATIONS
ENGINEERED CONTROL INTERNATIONAL 100 REGO DRIVE ELON, NC	SCALE: 1"=92.40' DATE: FILE:	GaiaTech

Project No. B1116-421-2

Table - 3
Soil Vapor Analytical Results

Engineered Controls International
100 Rego Drive
Elon, NC

Sample ID	North Carolina IHSB - Vapor Intrusion Screening Levels	SV-1	SV-2	SV-3	SV-4	SV-5	SV-2 (DUP)
Date Sampled	**Industial/ Commercial**	11/15/12	11/15/12	11/15/12	11/15/12	11/15/12	11/15/12
VOCs - Method TO-15	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**
Acetone	280,000	30.4	59.6	35.0	60.4	301	63.9
Benzene	160	22.9	15.1	16.1	39.3	32.2	6.8
Bromodichloromethane	33	ND	6.9	ND	ND	ND	10.6
2-Butanone (MEK)	44,000	4.7	12.2	ND	59.8	122	8.1
Carbon disulfide	6,200	43.1	9.1	34.2	17.6	6.2	3.1
Carbon tetrachloride	200	1.5	0.96	ND	ND	1.6	ND
Chloroform	53	30.7	**229**	**620**	**8,580**	**11,200**	**144**
Cyclohexane	NE	7.0	4.4	8.7	58.6	ND	ND
Dichlorodifluoromethane (Freon 12)	880	3.0	3.1	ND	2.6	ND	3.2
1,1-Dichloroethene	1,760	ND	ND	ND	5.4	ND	ND
cis-1,2-Dichloroethene	NE	ND	1.2	8.8	144	3.8	ND
trans-1,2-Dichloroethene	520	ND	ND	ND	8.6	8.2	ND
Ethylbenzene	490	50.9	79.6	53.0	128	10.0	61.8
4-Ethyltoluene	NE	12.9	27.7	22.5	104	ND	26.8
n-Heptane	NE	15.0	10.3	36.6	44.9	9.8	5.3
n-Hexane	6,200	14.5	4.5	83.6	66.9	ND	1.7
2-Hexanone	NE	ND	ND	ND	ND	4.1	4.5
Methylene chloride	5,300	2.8	4.3	ND	8.8	1,840	3.7
4-Methyl-2-pentanone (MIBK)	26,000	ND	ND	ND	ND	35.0	ND
Naphthalene	26	3.3	3.5	4.0	**98.6**	5.2	3.0
2-Propanol	NE	ND	ND	ND	ND	138	ND
Propylene	NE	5.1	3.0	ND	3.6	27.0	ND
Styrene	8,800	ND	1.7	3.0	2.4	281	ND
Tetrachloroethene (PCE)	350	27.9	55.0	43.9	54.1	**16,600**	72.1
THC as Gas	NE	1,920	4,620	5,160	9,510	8,100	4,750
Toluene	44,000	231	245	235	259	55.5	191
1,1,1-Trichloroethane (TCA)	44,000	ND	ND	ND	ND	2.5	ND
Trichloroethene (TCE)	17.6	**81.4**	**1,470**	**4,740**	**110,000**	**150,000**	**1,760**
Trichlorofluoromethane	6,200	3.5	5.3	7.5	4.2	4.1	5.8
1,1,2-Trichlorotrifluoroethane	260,000	2.5	41.1	53.5	5.7	921	47.3
1,2,4-Trimethylbenzene	62	27.1	53.9	42.5	**279**	10.6	53.5
1,3,5-Trimethylbenzene	NE	5.8	12.7	10.3	97.8	3.0	11.2
m&p-Xylene	880	189	290	210	397	14.0	260
o-Xylene	880	88.9	151	72.9	209	6.5	112

NOTES:

Only detected compounds are listed.

VOCs: Volatile organic compounds

Value indicates levels that were reported in excess of the laboratory detection limit, but less than applicable IHSB industrial soil gas screening level

Bold and shaded value indicates levels that exceeded IHSB industrial soil gas screening level

ND - Not Detected in excess of laboratory detection limit

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 03, 2012

Michael Wilson
Gaia Tech
3525 Piedmont Rd NE
Bldg 6, Suite 520
Atlanta, GA 30326

RE: Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Dear Michael Wilson:
Enclosed are the analytical results for sample(s) received by the laboratory on November 15, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92138899001	**ECIE-1112-SV1**	Air	11/15/12 10:35	11/15/12 15:55
92138899002	**ECIE-1112-SV2**	Air	11/15/12 10:45	11/15/12 15:55
92138899003	**ECIE-1112-SV3**	Air	11/15/12 10:50	11/15/12 15:55
92138899004	**ECIE-1112-SV4**	Air	11/15/12 10:55	11/15/12 15:55
92138899005	**ECIE-1112-SV5**	Air	11/15/12 11:05	11/15/12 15:55
92138899006	**ECIE-1112-SV (DUP)**	Air	11/15/12 11:20	11/15/12 15:55

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92138899001	**ECIE-1112-SV1**	TO-15	CJR, DR1	60	PASI-M
92138899002	**ECIE-1112-SV2**	TO-15	CJR, DR1	60	PASI-M
92138899003	**ECIE-1112-SV3**	TO-15	CJR, DR1	60	PASI-M
92138899004	**ECIE-1112-SV4**	TO-15	CJR, DR1	60	PASI-M
92138899005	**ECIE-1112-SV5**	TO-15	CJR, DR1	60	PASI-M
92138899006	**ECIE-1112-SV (DUP)**	TO-15	CJR, DR1	60	PASI-M

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

HITS ONLY

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92138899001	**ECIE-1112-SV1**					
TO-15	Acetone	30.4	ug/m3	0.72	11/27/12 23:49	
TO-15	Benzene	22.9	ug/m3	0.48	11/27/12 23:49	
TO-15	2-Butanone (MEK)	4.7	ug/m3	0.89	11/27/12 23:49	
TO-15	Carbon disulfide	43.1	ug/m3	0.94	11/27/12 23:49	SS
TO-15	Carbon tetrachloride	1.5	ug/m3	0.95	11/27/12 23:49	
TO-15	Chloroform	30.7	ug/m3	1.5	11/27/12 23:49	
TO-15	Cyclohexane	7.0	ug/m3	1.0	11/27/12 23:49	
TO-15	Dichlorodifluoromethane	3.0	ug/m3	1.5	11/27/12 23:49	
TO-15	Ethylbenzene	50.9	ug/m3	1.3	11/27/12 23:49	
TO-15	4-Ethyltoluene	12.9	ug/m3	1.5	11/27/12 23:49	
TO-15	n-Heptane	15.0	ug/m3	1.2	11/27/12 23:49	
TO-15	n-Hexane	14.5	ug/m3	1.1	11/27/12 23:49	
TO-15	Methylene Chloride	2.8	ug/m3	1.1	11/27/12 23:49	
TO-15	Naphthalene	3.3	ug/m3	1.6	11/27/12 23:49	
TO-15	Propylene	5.1	ug/m3	0.52	11/27/12 23:49	
TO-15	Tetrachloroethene	27.9	ug/m3	1.0	11/27/12 23:49	
TO-15	THC as Gas	1920	ug/m3	90.6	11/27/12 23:49	
TO-15	Toluene	231	ug/m3	11.5	11/30/12 11:14	
TO-15	Trichloroethene	81.4	ug/m3	0.82	11/27/12 23:49	
TO-15	Trichlorofluoromethane	3.5	ug/m3	1.7	11/27/12 23:49	
TO-15	1,1,2-Trichlorotrifluoroethane	2.5	ug/m3	2.4	11/27/12 23:49	
TO-15	1,2,4-Trimethylbenzene	27.1	ug/m3	1.5	11/27/12 23:49	
TO-15	1,3,5-Trimethylbenzene	5.8	ug/m3	1.5	11/27/12 23:49	
TO-15	m&p-Xylene	189	ug/m3	2.6	11/27/12 23:49	
TO-15	o-Xylene	88.9	ug/m3	1.3	11/27/12 23:49	
92138899002	**ECIE-1112-SV2**					
TO-15	Acetone	59.6	ug/m3	0.69	11/28/12 01:45	
TO-15	Benzene	15.1	ug/m3	0.47	11/28/12 01:45	
TO-15	Bromodichloromethane	6.9	ug/m3	2.0	11/28/12 01:45	
TO-15	2-Butanone (MEK)	12.2	ug/m3	0.86	11/28/12 01:45	
TO-15	Carbon disulfide	9.1	ug/m3	0.91	11/28/12 01:45	SS
TO-15	Carbon tetrachloride	0.96	ug/m3	0.92	11/28/12 01:45	
TO-15	Chloroform	229	ug/m3	1.4	11/28/12 01:45	
TO-15	Cyclohexane	4.4	ug/m3	1.0	11/28/12 01:45	
TO-15	Dichlorodifluoromethane	3.1	ug/m3	1.5	11/28/12 01:45	
TO-15	cis-1,2-Dichloroethene	1.2	ug/m3	1.2	11/28/12 01:45	
TO-15	Ethylbenzene	79.6	ug/m3	1.3	11/28/12 01:45	
TO-15	4-Ethyltoluene	27.7	ug/m3	1.4	11/28/12 01:45	
TO-15	n-Heptane	10.3	ug/m3	1.2	11/28/12 01:45	
TO-15	n-Hexane	4.5	ug/m3	1.0	11/28/12 01:45	
TO-15	Methylene Chloride	4.3	ug/m3	1.0	11/28/12 01:45	
TO-15	Naphthalene	3.5	ug/m3	1.5	11/28/12 01:45	
TO-15	Propylene	3.0	ug/m3	0.50	11/28/12 01:45	
TO-15	Styrene	1.7	ug/m3	1.3	11/28/12 01:45	
TO-15	Tetrachloroethene	55.0	ug/m3	0.99	11/28/12 01:45	
TO-15	THC as Gas	4620	ug/m3	87.6	11/28/12 01:45	
TO-15	Toluene	245	ug/m3	22.2	11/30/12 09:19	

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

HITS ONLY

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92138899002	**ECIE-1112-SV2**					
TO-15	Trichloroethene	1470	ug/m3	15.8	11/30/12 09:19	
TO-15	Trichlorofluoromethane	5.3	ug/m3	1.6	11/28/12 01:45	
TO-15	1,1,2-Trichlorotrifluoroethane	41.1	ug/m3	2.3	11/28/12 01:45	
TO-15	1,2,4-Trimethylbenzene	53.9	ug/m3	1.4	11/28/12 01:45	
TO-15	1,3,5-Trimethylbenzene	12.7	ug/m3	1.4	11/28/12 01:45	
TO-15	m&p-Xylene	290	ug/m3	2.5	11/28/12 01:45	
TO-15	o-Xylene	151	ug/m3	1.3	11/28/12 01:45	
92138899003	**ECIE-1112-SV3**					
TO-15	Acetone	35.0	ug/m3	0.67	11/28/12 01:16	
TO-15	Benzene	16.1	ug/m3	0.45	11/28/12 01:16	
TO-15	Carbon disulfide	34.2	ug/m3	0.88	11/28/12 01:16	SS
TO-15	Chloroform	620	ug/m3	27.5	11/30/12 09:48	
TO-15	Cyclohexane	8.7	ug/m3	0.97	11/28/12 01:16	
TO-15	cis-1,2-Dichloroethene	8.8	ug/m3	1.1	11/28/12 01:16	
TO-15	Ethylbenzene	53.0	ug/m3	1.2	11/28/12 01:16	
TO-15	4-Ethyltoluene	22.5	ug/m3	1.4	11/28/12 01:16	
TO-15	n-Heptane	36.6	ug/m3	1.2	11/28/12 01:16	
TO-15	n-Hexane	83.6	ug/m3	1.0	11/28/12 01:16	
TO-15	Naphthalene	4.0	ug/m3	1.5	11/28/12 01:16	
TO-15	Styrene	3.0	ug/m3	1.2	11/28/12 01:16	
TO-15	Tetrachloroethene	43.9	ug/m3	0.96	11/28/12 01:16	
TO-15	THC as Gas	5160	ug/m3	84.5	11/28/12 01:16	
TO-15	Toluene	235	ug/m3	21.4	11/30/12 09:48	
TO-15	Trichloroethene	4740	ug/m3	15.3	11/30/12 09:48	
TO-15	Trichlorofluoromethane	7.5	ug/m3	1.6	11/28/12 01:16	
TO-15	1,1,2-Trichlorotrifluoroethane	53.5	ug/m3	2.2	11/28/12 01:16	
TO-15	1,2,4-Trimethylbenzene	42.5	ug/m3	1.4	11/28/12 01:16	
TO-15	1,3,5-Trimethylbenzene	10.3	ug/m3	1.4	11/28/12 01:16	
TO-15	m&p-Xylene	210	ug/m3	2.4	11/28/12 01:16	
TO-15	o-Xylene	72.9	ug/m3	1.2	11/28/12 01:16	
92138899004	**ECIE-1112-SV4**					
TO-15	Acetone	60.4	ug/m3	0.67	11/28/12 00:47	
TO-15	Benzene	39.3	ug/m3	0.45	11/28/12 00:47	
TO-15	2-Butanone (MEK)	59.8	ug/m3	0.83	11/28/12 00:47	
TO-15	Carbon disulfide	17.6	ug/m3	0.88	11/28/12 00:47	SS
TO-15	Chloroform	8580	ug/m3	2360	11/30/12 10:17	A3
TO-15	Cyclohexane	58.6	ug/m3	0.97	11/28/12 00:47	
TO-15	Dichlorodifluoromethane	2.6	ug/m3	1.4	11/28/12 00:47	
TO-15	1,1-Dichloroethene	5.4	ug/m3	1.1	11/28/12 00:47	
TO-15	cis-1,2-Dichloroethene	144	ug/m3	1.1	11/28/12 00:47	
TO-15	trans-1,2-Dichloroethene	8.6	ug/m3	1.1	11/28/12 00:47	
TO-15	Ethylbenzene	128	ug/m3	1.2	11/28/12 00:47	
TO-15	4-Ethyltoluene	104	ug/m3	1.4	11/28/12 00:47	
TO-15	n-Heptane	44.9	ug/m3	1.2	11/28/12 00:47	
TO-15	n-Hexane	66.9	ug/m3	1.0	11/28/12 00:47	
TO-15	Methylene Chloride	8.8	ug/m3	0.99	11/28/12 00:47	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

HITS ONLY

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92138899004	**ECIE-1112-SV4**					
TO-15	Naphthalene	98.6	ug/m3	1.5	11/28/12 00:47	
TO-15	Propylene	3.6	ug/m3	0.49	11/28/12 00:47	
TO-15	Styrene	2.4	ug/m3	1.2	11/28/12 00:47	
TO-15	Tetrachloroethene	54.1	ug/m3	0.96	11/28/12 00:47	
TO-15	THC as Gas	9510	ug/m3	84.5	11/28/12 00:47	
TO-15	Toluene	259	ug/m3	1.1	11/28/12 00:47	E
TO-15	Trichloroethene	110000	ug/m3	1310	11/30/12 10:17	A3
TO-15	Trichlorofluoromethane	4.2	ug/m3	1.6	11/28/12 00:47	
TO-15	1,1,2-Trichlorotrifluoroethane	5.7	ug/m3	2.2	11/28/12 00:47	
TO-15	1,2,4-Trimethylbenzene	279	ug/m3	1.4	11/28/12 00:47	E
TO-15	1,3,5-Trimethylbenzene	97.8	ug/m3	1.4	11/28/12 00:47	
TO-15	m&p-Xylene	397	ug/m3	2.4	11/28/12 00:47	E
TO-15	o-Xylene	209	ug/m3	1.2	11/28/12 00:47	E
92138899005	**ECIE-1112-SV5**					
TO-15	Acetone	301	ug/m3	0.69	11/28/12 00:18	E
TO-15	Benzene	32.2	ug/m3	0.47	11/28/12 00:18	
TO-15	2-Butanone (MEK)	122	ug/m3	0.86	11/28/12 00:18	
TO-15	Carbon disulfide	6.2	ug/m3	0.91	11/28/12 00:18	SS
TO-15	Carbon tetrachloride	1.6	ug/m3	0.92	11/28/12 00:18	
TO-15	Chloroform	11200	ug/m3	2450	11/30/12 10:45	A3
TO-15	cis-1,2-Dichloroethene	3.8	ug/m3	1.2	11/28/12 00:18	
TO-15	trans-1,2-Dichloroethene	8.2	ug/m3	1.2	11/28/12 00:18	
TO-15	Ethylbenzene	10	ug/m3	1.3	11/28/12 00:18	
TO-15	n-Heptane	9.8	ug/m3	1.2	11/28/12 00:18	
TO-15	2-Hexanone	4.1	ug/m3	1.2	11/28/12 00:18	
TO-15	Methylene Chloride	1840	ug/m3	1750	11/30/12 10:45	A3
TO-15	4-Methyl-2-pentanone (MIBK)	35.0	ug/m3	1.2	11/28/12 00:18	
TO-15	Naphthalene	5.2	ug/m3	1.5	11/28/12 00:18	
TO-15	2-Propanol	138	ug/m3	0.72	11/28/12 00:18	E
TO-15	Propylene	27.0	ug/m3	0.50	11/28/12 00:18	
TO-15	Styrene	281	ug/m3	1.3	11/28/12 00:18	E
TO-15	Tetrachloroethene	16600	ug/m3	1700	11/30/12 10:45	A3
TO-15	THC as Gas	8100	ug/m3	87.6	11/28/12 00:18	
TO-15	Toluene	55.5	ug/m3	1.1	11/28/12 00:18	
TO-15	1,1,1-Trichloroethane	2.5	ug/m3	1.6	11/28/12 00:18	
TO-15	Trichloroethene	150000	ug/m3	1360	11/30/12 10:45	A3
TO-15	Trichlorofluoromethane	4.1	ug/m3	1.6	11/28/12 00:18	
TO-15	1,1,2-Trichlorotrifluoroethane	921	ug/m3	2.3	11/28/12 00:18	E
TO-15	1,2,4-Trimethylbenzene	10.6	ug/m3	1.4	11/28/12 00:18	
TO-15	1,3,5-Trimethylbenzene	3.0	ug/m3	1.4	11/28/12 00:18	
TO-15	m&p-Xylene	14.0	ug/m3	2.5	11/28/12 00:18	
TO-15	o-Xylene	6.5	ug/m3	1.3	11/28/12 00:18	
92138899006	**ECIE-1112-SV (DUP)**					
TO-15	Acetone	63.9	ug/m3	0.77	11/27/12 23:20	
TO-15	Benzene	6.8	ug/m3	0.52	11/27/12 23:20	
TO-15	Bromodichloromethane	10.6	ug/m3	2.2	11/27/12 23:20	

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

HITS ONLY

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92138899006	**ECIE-1112-SV (DUP)**					
TO-15	2-Butanone (MEK)	8.1	ug/m3	0.97	11/27/12 23:20	
TO-15	Carbon disulfide	3.1	ug/m3	1.0	11/27/12 23:20	SS
TO-15	Chloroform	144	ug/m3	1.6	11/27/12 23:20	
TO-15	Dichlorodifluoromethane	3.2	ug/m3	1.6	11/27/12 23:20	
TO-15	Ethylbenzene	61.8	ug/m3	1.4	11/27/12 23:20	
TO-15	4-Ethyltoluene	26.8	ug/m3	1.6	11/27/12 23:20	
TO-15	n-Heptane	5.3	ug/m3	1.3	11/27/12 23:20	
TO-15	n-Hexane	1.7	ug/m3	1.2	11/27/12 23:20	
TO-15	Methylene Chloride	3.7	ug/m3	1.1	11/27/12 23:20	
TO-15	Naphthalene	3.0	ug/m3	1.7	11/27/12 23:20	
TO-15	Tetrachloroethene	72.1	ug/m3	1.1	11/27/12 23:20	
TO-15	THC as Gas	4750	ug/m3	97.9	11/27/12 23:20	
TO-15	Toluene	191	ug/m3	1.2	11/27/12 23:20	
TO-15	Trichloroethene	1760	ug/m3	17.7	11/30/12 08:50	
TO-15	Trichlorofluoromethane	5.8	ug/m3	1.8	11/27/12 23:20	
TO-15	1,1,2-Trichlorotrifluoroethane	47.3	ug/m3	2.6	11/27/12 23:20	
TO-15	1,2,4-Trimethylbenzene	53.5	ug/m3	1.6	11/27/12 23:20	
TO-15	1,3,5-Trimethylbenzene	11.2	ug/m3	1.6	11/27/12 23:20	
TO-15	m&p-Xylene	260	ug/m3	2.8	11/27/12 23:20	
TO-15	o-Xylene	112	ug/m3	1.4	11/27/12 23:20	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Method: **TO-15**
Description: TO15 MSV AIR
Client: Gaia Tech
Date: December 03, 2012

General Information:
6 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/16258

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- ECIE-1112-SV (DUP) (Lab ID: 92138899006)
  - Carbon disulfide
- ECIE-1112-SV1 (Lab ID: 92138899001)
  - Carbon disulfide
- ECIE-1112-SV2 (Lab ID: 92138899002)
  - Carbon disulfide
- ECIE-1112-SV3 (Lab ID: 92138899003)
  - Carbon disulfide
- ECIE-1112-SV4 (Lab ID: 92138899004)
  - Carbon disulfide
- ECIE-1112-SV5 (Lab ID: 92138899005)
  - Carbon disulfide
- LCS (Lab ID: 1339927)
  - Carbon disulfide

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Method: **TO-15**
Description: TO15 MSV AIR
Client: Gaia Tech
Date: December 03, 2012

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: AIR/16258

A3: The sample was analyzed by serial dilution.

- ECIE-1112-SV4 (Lab ID: 92138899004)
  - Chloroform
  - Trichloroethene
- ECIE-1112-SV5 (Lab ID: 92138899005)
  - Chloroform
  - Methylene Chloride
  - Tetrachloroethene
  - Trichloroethene

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- ECIE-1112-SV4 (Lab ID: 92138899004)
  - 1,2,4-Trimethylbenzene
  - m&p-Xylene
  - o-Xylene
  - Toluene
- ECIE-1112-SV5 (Lab ID: 92138899005)
  - 2-Propanol
  - Acetone
  - Styrene
  - 1,1,2-Trichlorotrifluoroethane

This data package has been reviewed for quality and completeness and is approved for release.

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV1 **Lab ID: 92138899001** Collected: 11/15/12 10:35 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**30.4**	ug/m3	0.72	0.36	1.49		11/27/12 23:49	67-64-1	
Benzene	**22.9**	ug/m3	0.48	0.24	1.49		11/27/12 23:49	71-43-2	
Bromodichloromethane	ND	ug/m3	2.0	0.26	1.49		11/27/12 23:49	75-27-4	
Bromoform	ND	ug/m3	3.1	1.6	1.49		11/27/12 23:49	75-25-2	
Bromomethane	ND	ug/m3	1.2	0.27	1.49		11/27/12 23:49	74-83-9	
1,3-Butadiene	ND	ug/m3	0.67	0.34	1.49		11/27/12 23:49	106-99-0	
2-Butanone (MEK)	**4.7**	ug/m3	0.89	0.23	1.49		11/27/12 23:49	78-93-3	
Carbon disulfide	**43.1**	ug/m3	0.94	0.47	1.49		11/27/12 23:49	75-15-0	SS
Carbon tetrachloride	**1.5**	ug/m3	0.95	0.48	1.49		11/27/12 23:49	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.70	1.49		11/27/12 23:49	108-90-7	
Chloroethane	ND	ug/m3	0.80	0.40	1.49		11/27/12 23:49	75-00-3	
Chloroform	**30.7**	ug/m3	1.5	0.74	1.49		11/27/12 23:49	67-66-3	
Chloromethane	ND	ug/m3	0.63	0.31	1.49		11/27/12 23:49	74-87-3	
Cyclohexane	**7.0**	ug/m3	1.0	0.52	1.49		11/27/12 23:49	110-82-7	
Dibromochloromethane	ND	ug/m3	2.6	1.3	1.49		11/27/12 23:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.3	1.2	1.49		11/27/12 23:49	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.91	1.49		11/27/12 23:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	0.91	1.49		11/27/12 23:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.8	0.91	1.49		11/27/12 23:49	106-46-7	
Dichlorodifluoromethane	**3.0**	ug/m3	1.5	0.75	1.49		11/27/12 23:49	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.61	1.49		11/27/12 23:49	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.61	0.31	1.49		11/27/12 23:49	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.60	1.49		11/27/12 23:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	0.23	1.49		11/27/12 23:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.60	1.49		11/27/12 23:49	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.70	1.49		11/27/12 23:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	0.17	1.49		11/27/12 23:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	0.69	1.49		11/27/12 23:49	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.1	0.32	1.49		11/27/12 23:49	76-14-2	
Ethyl acetate	ND	ug/m3	1.1	0.53	1.49		11/27/12 23:49	141-78-6	
Ethylbenzene	**50.9**	ug/m3	1.3	0.18	1.49		11/27/12 23:49	100-41-4	
4-Ethyltoluene	**12.9**	ug/m3	1.5	0.74	1.49		11/27/12 23:49	622-96-8	
n-Heptane	**15.0**	ug/m3	1.2	0.62	1.49		11/27/12 23:49	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.3	1.6	1.49		11/27/12 23:49	87-68-3	
n-Hexane	**14.5**	ug/m3	1.1	0.54	1.49		11/27/12 23:49	110-54-3	
2-Hexanone	ND	ug/m3	1.2	0.62	1.49		11/27/12 23:49	591-78-6	
Methylene Chloride	**2.8**	ug/m3	1.1	0.53	1.49		11/27/12 23:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.62	1.49		11/27/12 23:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.13	1.49		11/27/12 23:49	1634-04-4	
Naphthalene	**3.3**	ug/m3	1.6	0.79	1.49		11/27/12 23:49	91-20-3	
2-Propanol	ND	ug/m3	0.74	0.14	1.49		11/27/12 23:49	67-63-0	
Propylene	**5.1**	ug/m3	0.52	0.26	1.49		11/27/12 23:49	115-07-1	
Styrene	ND	ug/m3	1.3	0.65	1.49		11/27/12 23:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.28	1.49		11/27/12 23:49	79-34-5	
Tetrachloroethene	**27.9**	ug/m3	1.0	0.51	1.49		11/27/12 23:49	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.89	0.45	1.49		11/27/12 23:49	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV1 **Lab ID: 92138899001** Collected: 11/15/12 10:35 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**1920**	ug/m3	90.6	45.3	1.49		11/27/12 23:49		
Toluene	**231**	ug/m3	11.5	5.7	14.9		11/30/12 11:14	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.2	1.1	1.49		11/27/12 23:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.7	0.83	1.49		11/27/12 23:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.82	0.41	1.49		11/27/12 23:49	79-00-5	
Trichloroethene	**81.4**	ug/m3	0.82	0.41	1.49		11/27/12 23:49	79-01-6	
Trichlorofluoromethane	**3.5**	ug/m3	1.7	0.33	1.49		11/27/12 23:49	75-69-4	
1,1,2-Trichlorotrifluoroethane	**2.5**	ug/m3	2.4	1.2	1.49		11/27/12 23:49	76-13-1	
1,2,4-Trimethylbenzene	**27.1**	ug/m3	1.5	0.74	1.49		11/27/12 23:49	95-63-6	
1,3,5-Trimethylbenzene	**5.8**	ug/m3	1.5	0.19	1.49		11/27/12 23:49	108-67-8	
Vinyl acetate	ND	ug/m3	1.1	0.53	1.49		11/27/12 23:49	108-05-4	
Vinyl chloride	ND	ug/m3	0.39	0.19	1.49		11/27/12 23:49	75-01-4	
m&p-Xylene	**189**	ug/m3	2.6	1.3	1.49		11/27/12 23:49	179601-23-1	
o-Xylene	**88.9**	ug/m3	1.3	0.19	1.49		11/27/12 23:49	95-47-6	

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

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV2 **Lab ID: 92138899002** Collected: 11/15/12 10:45 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**59.6**	ug/m3	0.69	0.35	1.44		11/28/12 01:45	67-64-1	
Benzene	**15.1**	ug/m3	0.47	0.23	1.44		11/28/12 01:45	71-43-2	
Bromodichloromethane	**6.9**	ug/m3	2.0	0.25	1.44		11/28/12 01:45	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.44		11/28/12 01:45	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.26	1.44		11/28/12 01:45	74-83-9	
1,3-Butadiene	ND	ug/m3	0.65	0.32	1.44		11/28/12 01:45	106-99-0	
2-Butanone (MEK)	**12.2**	ug/m3	0.86	0.22	1.44		11/28/12 01:45	78-93-3	
Carbon disulfide	**9.1**	ug/m3	0.91	0.46	1.44		11/28/12 01:45	75-15-0	SS
Carbon tetrachloride	**0.96**	ug/m3	0.92	0.46	1.44		11/28/12 01:45	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.67	1.44		11/28/12 01:45	108-90-7	
Chloroethane	ND	ug/m3	0.78	0.39	1.44		11/28/12 01:45	75-00-3	
Chloroform	**229**	ug/m3	1.4	0.72	1.44		11/28/12 01:45	67-66-3	
Chloromethane	ND	ug/m3	0.60	0.30	1.44		11/28/12 01:45	74-87-3	
Cyclohexane	**4.4**	ug/m3	1.0	0.50	1.44		11/28/12 01:45	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.2	1.44		11/28/12 01:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.1	1.44		11/28/12 01:45	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 01:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 01:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 01:45	106-46-7	
Dichlorodifluoromethane	**3.1**	ug/m3	1.5	0.72	1.44		11/28/12 01:45	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.44		11/28/12 01:45	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.44		11/28/12 01:45	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.44		11/28/12 01:45	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/m3	1.2	0.22	1.44		11/28/12 01:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	0.58	1.44		11/28/12 01:45	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.68	1.44		11/28/12 01:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.16	1.44		11/28/12 01:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.44		11/28/12 01:45	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	0.31	1.44		11/28/12 01:45	76-14-2	
Ethyl acetate	ND	ug/m3	1.1	0.52	1.44		11/28/12 01:45	141-78-6	
Ethylbenzene	**79.6**	ug/m3	1.3	0.17	1.44		11/28/12 01:45	100-41-4	
4-Ethyltoluene	**27.7**	ug/m3	1.4	0.72	1.44		11/28/12 01:45	622-96-8	
n-Heptane	**10.3**	ug/m3	1.2	0.60	1.44		11/28/12 01:45	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.2	1.6	1.44		11/28/12 01:45	87-68-3	
n-Hexane	**4.5**	ug/m3	1.0	0.52	1.44		11/28/12 01:45	110-54-3	
2-Hexanone	ND	ug/m3	1.2	0.60	1.44		11/28/12 01:45	591-78-6	
Methylene Chloride	**4.3**	ug/m3	1.0	0.51	1.44		11/28/12 01:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.60	1.44		11/28/12 01:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.13	1.44		11/28/12 01:45	1634-04-4	
Naphthalene	**3.5**	ug/m3	1.5	0.77	1.44		11/28/12 01:45	91-20-3	
2-Propanol	ND	ug/m3	0.72	0.13	1.44		11/28/12 01:45	67-63-0	
Propylene	**3.0**	ug/m3	0.50	0.25	1.44		11/28/12 01:45	115-07-1	
Styrene	**1.7**	ug/m3	1.3	0.62	1.44		11/28/12 01:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.27	1.44		11/28/12 01:45	79-34-5	
Tetrachloroethene	**55.0**	ug/m3	0.99	0.50	1.44		11/28/12 01:45	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.86	0.43	1.44		11/28/12 01:45	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV2 **Lab ID: 92138899002** Collected: 11/15/12 10:45 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**4620**	ug/m3	87.6	43.8	1.44		11/28/12 01:45		
Toluene	**245**	ug/m3	22.2	11.0	28.8		11/30/12 09:19	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.2	1.1	1.44		11/28/12 01:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.6	0.80	1.44		11/28/12 01:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.79	0.40	1.44		11/28/12 01:45	79-00-5	
Trichloroethene	**1470**	ug/m3	15.8	7.9	28.8		11/30/12 09:19	79-01-6	
Trichlorofluoromethane	**5.3**	ug/m3	1.6	0.32	1.44		11/28/12 01:45	75-69-4	
1,1,2-Trichlorotrifluoroethane	**41.1**	ug/m3	2.3	1.2	1.44		11/28/12 01:45	76-13-1	
1,2,4-Trimethylbenzene	**53.9**	ug/m3	1.4	0.72	1.44		11/28/12 01:45	95-63-6	
1,3,5-Trimethylbenzene	**12.7**	ug/m3	1.4	0.19	1.44		11/28/12 01:45	108-67-8	
Vinyl acetate	ND	ug/m3	1.0	0.52	1.44		11/28/12 01:45	108-05-4	
Vinyl chloride	ND	ug/m3	0.37	0.19	1.44		11/28/12 01:45	75-01-4	
m&p-Xylene	**290**	ug/m3	2.5	1.3	1.44		11/28/12 01:45	179601-23-1	
o-Xylene	**151**	ug/m3	1.3	0.18	1.44		11/28/12 01:45	95-47-6	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV3 **Lab ID: 92138899003** Collected: 11/15/12 10:50 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**35.0**	ug/m3	0.67	0.33	1.39		11/28/12 01:16	67-64-1	
Benzene	**16.1**	ug/m3	0.45	0.23	1.39		11/28/12 01:16	71-43-2	
Bromodichloromethane	ND	ug/m3	1.9	0.25	1.39		11/28/12 01:16	75-27-4	
Bromoform	ND	ug/m3	2.9	1.5	1.39		11/28/12 01:16	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.25	1.39		11/28/12 01:16	74-83-9	
1,3-Butadiene	ND	ug/m3	0.63	0.31	1.39		11/28/12 01:16	106-99-0	
2-Butanone (MEK)	ND	ug/m3	0.83	0.22	1.39		11/28/12 01:16	78-93-3	
Carbon disulfide	**34.2**	ug/m3	0.88	0.44	1.39		11/28/12 01:16	75-15-0	SS
Carbon tetrachloride	ND	ug/m3	0.89	0.44	1.39		11/28/12 01:16	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.65	1.39		11/28/12 01:16	108-90-7	
Chloroethane	ND	ug/m3	0.75	0.38	1.39		11/28/12 01:16	75-00-3	
Chloroform	**620**	ug/m3	27.5	13.8	27.8		11/30/12 09:48	67-66-3	
Chloromethane	ND	ug/m3	0.58	0.29	1.39		11/28/12 01:16	74-87-3	
Cyclohexane	**8.7**	ug/m3	0.97	0.49	1.39		11/28/12 01:16	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.39		11/28/12 01:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.1	1.39		11/28/12 01:16	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 01:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 01:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 01:16	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.4	0.70	1.39		11/28/12 01:16	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	0.57	1.39		11/28/12 01:16	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.57	0.29	1.39		11/28/12 01:16	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	0.56	1.39		11/28/12 01:16	75-35-4	
cis-1,2-Dichloroethene	**8.8**	ug/m3	1.1	0.21	1.39		11/28/12 01:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	0.56	1.39		11/28/12 01:16	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.65	1.39		11/28/12 01:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.15	1.39		11/28/12 01:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.64	1.39		11/28/12 01:16	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	0.30	1.39		11/28/12 01:16	76-14-2	
Ethyl acetate	ND	ug/m3	1.0	0.50	1.39		11/28/12 01:16	141-78-6	
Ethylbenzene	**53.0**	ug/m3	1.2	0.17	1.39		11/28/12 01:16	100-41-4	
4-Ethyltoluene	**22.5**	ug/m3	1.4	0.70	1.39		11/28/12 01:16	622-96-8	
n-Heptane	**36.6**	ug/m3	1.2	0.58	1.39		11/28/12 01:16	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.5	1.39		11/28/12 01:16	87-68-3	
n-Hexane	**83.6**	ug/m3	1.0	0.50	1.39		11/28/12 01:16	110-54-3	
2-Hexanone	ND	ug/m3	1.2	0.58	1.39		11/28/12 01:16	591-78-6	
Methylene Chloride	ND	ug/m3	0.99	0.49	1.39		11/28/12 01:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.58	1.39		11/28/12 01:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.12	1.39		11/28/12 01:16	1634-04-4	
Naphthalene	**4.0**	ug/m3	1.5	0.74	1.39		11/28/12 01:16	91-20-3	
2-Propanol	ND	ug/m3	0.70	0.13	1.39		11/28/12 01:16	67-63-0	
Propylene	ND	ug/m3	0.49	0.24	1.39		11/28/12 01:16	115-07-1	
Styrene	**3.0**	ug/m3	1.2	0.60	1.39		11/28/12 01:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.97	0.26	1.39		11/28/12 01:16	79-34-5	
Tetrachloroethene	**43.9**	ug/m3	0.96	0.48	1.39		11/28/12 01:16	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.83	0.42	1.39		11/28/12 01:16	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV3 **Lab ID: 92138899003** Collected: 11/15/12 10:50 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**5160**	ug/m3	84.5	42.3	1.39		11/28/12 01:16		
Toluene	**235**	ug/m3	21.4	10.6	27.8		11/30/12 09:48	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.1	1.0	1.39		11/28/12 01:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	0.77	1.39		11/28/12 01:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.76	0.39	1.39		11/28/12 01:16	79-00-5	
Trichloroethene	**4740**	ug/m3	15.3	7.6	27.8		11/30/12 09:48	79-01-6	
Trichlorofluoromethane	**7.5**	ug/m3	1.6	0.31	1.39		11/28/12 01:16	75-69-4	
1,1,2-Trichlorotrifluoroethane	**53.5**	ug/m3	2.2	1.1	1.39		11/28/12 01:16	76-13-1	
1,2,4-Trimethylbenzene	**42.5**	ug/m3	1.4	0.70	1.39		11/28/12 01:16	95-63-6	
1,3,5-Trimethylbenzene	**10.3**	ug/m3	1.4	0.18	1.39		11/28/12 01:16	108-67-8	
Vinyl acetate	ND	ug/m3	1.0	0.50	1.39		11/28/12 01:16	108-05-4	
Vinyl chloride	ND	ug/m3	0.36	0.18	1.39		11/28/12 01:16	75-01-4	
m&p-Xylene	**210**	ug/m3	2.4	1.2	1.39		11/28/12 01:16	179601-23-1	
o-Xylene	**72.9**	ug/m3	1.2	0.18	1.39		11/28/12 01:16	95-47-6	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV4 **Lab ID: 92138899004** Collected: 11/15/12 10:55 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**60.4**	ug/m3	0.67	0.33	1.39		11/28/12 00:47	67-64-1	
Benzene	**39.3**	ug/m3	0.45	0.23	1.39		11/28/12 00:47	71-43-2	
Bromodichloromethane	ND	ug/m3	1.9	0.25	1.39		11/28/12 00:47	75-27-4	
Bromoform	ND	ug/m3	2.9	1.5	1.39		11/28/12 00:47	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.25	1.39		11/28/12 00:47	74-83-9	
1,3-Butadiene	ND	ug/m3	0.63	0.31	1.39		11/28/12 00:47	106-99-0	
2-Butanone (MEK)	**59.8**	ug/m3	0.83	0.22	1.39		11/28/12 00:47	78-93-3	
Carbon disulfide	**17.6**	ug/m3	0.88	0.44	1.39		11/28/12 00:47	75-15-0	SS
Carbon tetrachloride	ND	ug/m3	0.89	0.44	1.39		11/28/12 00:47	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	0.65	1.39		11/28/12 00:47	108-90-7	
Chloroethane	ND	ug/m3	0.75	0.38	1.39		11/28/12 00:47	75-00-3	
Chloroform	**8580**	ug/m3	2360	1180	2384.1		11/30/12 10:17	67-66-3	A3
Chloromethane	ND	ug/m3	0.58	0.29	1.39		11/28/12 00:47	74-87-3	
Cyclohexane	**58.6**	ug/m3	0.97	0.49	1.39		11/28/12 00:47	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.2	1.39		11/28/12 00:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.1	1.39		11/28/12 00:47	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 00:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 00:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.7	0.85	1.39		11/28/12 00:47	106-46-7	
Dichlorodifluoromethane	**2.6**	ug/m3	1.4	0.70	1.39		11/28/12 00:47	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	0.57	1.39		11/28/12 00:47	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.57	0.29	1.39		11/28/12 00:47	107-06-2	
1,1-Dichloroethene	**5.4**	ug/m3	1.1	0.56	1.39		11/28/12 00:47	75-35-4	
cis-1,2-Dichloroethene	**144**	ug/m3	1.1	0.21	1.39		11/28/12 00:47	156-59-2	
trans-1,2-Dichloroethene	**8.6**	ug/m3	1.1	0.56	1.39		11/28/12 00:47	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	0.65	1.39		11/28/12 00:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.15	1.39		11/28/12 00:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.64	1.39		11/28/12 00:47	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	0.30	1.39		11/28/12 00:47	76-14-2	
Ethyl acetate	ND	ug/m3	1.0	0.50	1.39		11/28/12 00:47	141-78-6	
Ethylbenzene	**128**	ug/m3	1.2	0.17	1.39		11/28/12 00:47	100-41-4	
4-Ethyltoluene	**104**	ug/m3	1.4	0.70	1.39		11/28/12 00:47	622-96-8	
n-Heptane	**44.9**	ug/m3	1.2	0.58	1.39		11/28/12 00:47	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.5	1.39		11/28/12 00:47	87-68-3	
n-Hexane	**66.9**	ug/m3	1.0	0.50	1.39		11/28/12 00:47	110-54-3	
2-Hexanone	ND	ug/m3	1.2	0.58	1.39		11/28/12 00:47	591-78-6	
Methylene Chloride	**8.8**	ug/m3	0.99	0.49	1.39		11/28/12 00:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	0.58	1.39		11/28/12 00:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.0	0.12	1.39		11/28/12 00:47	1634-04-4	
Naphthalene	**98.6**	ug/m3	1.5	0.74	1.39		11/28/12 00:47	91-20-3	
2-Propanol	ND	ug/m3	0.70	0.13	1.39		11/28/12 00:47	67-63-0	
Propylene	**3.6**	ug/m3	0.49	0.24	1.39		11/28/12 00:47	115-07-1	
Styrene	**2.4**	ug/m3	1.2	0.60	1.39		11/28/12 00:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.97	0.26	1.39		11/28/12 00:47	79-34-5	
Tetrachloroethene	**54.1**	ug/m3	0.96	0.48	1.39		11/28/12 00:47	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.83	0.42	1.39		11/28/12 00:47	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV4 **Lab ID: 92138899004** Collected: 11/15/12 10:55 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**9510**	ug/m3	84.5	42.3	1.39		11/28/12 00:47		
Toluene	**259**	ug/m3	1.1	0.53	1.39		11/28/12 00:47	108-88-3	E
1,2,4-Trichlorobenzene	ND	ug/m3	2.1	1.0	1.39		11/28/12 00:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	0.77	1.39		11/28/12 00:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.76	0.39	1.39		11/28/12 00:47	79-00-5	
Trichloroethene	**110000**	ug/m3	1310	651	2384.1		11/30/12 10:17	79-01-6	A3
Trichlorofluoromethane	**4.2**	ug/m3	1.6	0.31	1.39		11/28/12 00:47	75-69-4	
1,1,2-Trichlorotrifluoroethane	**5.7**	ug/m3	2.2	1.1	1.39		11/28/12 00:47	76-13-1	
1,2,4-Trimethylbenzene	**279**	ug/m3	1.4	0.70	1.39		11/28/12 00:47	95-63-6	E
1,3,5-Trimethylbenzene	**97.8**	ug/m3	1.4	0.18	1.39		11/28/12 00:47	108-67-8	
Vinyl acetate	ND	ug/m3	1.0	0.50	1.39		11/28/12 00:47	108-05-4	
Vinyl chloride	ND	ug/m3	0.36	0.18	1.39		11/28/12 00:47	75-01-4	
m&p-Xylene	**397**	ug/m3	2.4	1.2	1.39		11/28/12 00:47	179601-23-1	E
o-Xylene	**209**	ug/m3	1.2	0.18	1.39		11/28/12 00:47	95-47-6	E

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV5 **Lab ID: 92138899005** Collected: 11/15/12 11:05 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**301**	ug/m3	0.69	0.35	1.44		11/28/12 00:18	67-64-1	E
Benzene	**32.2**	ug/m3	0.47	0.23	1.44		11/28/12 00:18	71-43-2	
Bromodichloromethane	ND	ug/m3	2.0	0.25	1.44		11/28/12 00:18	75-27-4	
Bromoform	ND	ug/m3	3.0	1.5	1.44		11/28/12 00:18	75-25-2	
Bromomethane	ND	ug/m3	1.1	0.26	1.44		11/28/12 00:18	74-83-9	
1,3-Butadiene	ND	ug/m3	0.65	0.32	1.44		11/28/12 00:18	106-99-0	
2-Butanone (MEK)	**122**	ug/m3	0.86	0.22	1.44		11/28/12 00:18	78-93-3	
Carbon disulfide	**6.2**	ug/m3	0.91	0.46	1.44		11/28/12 00:18	75-15-0	SS
Carbon tetrachloride	**1.6**	ug/m3	0.92	0.46	1.44		11/28/12 00:18	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	0.67	1.44		11/28/12 00:18	108-90-7	
Chloroethane	ND	ug/m3	0.78	0.39	1.44		11/28/12 00:18	75-00-3	
Chloroform	**11200**	ug/m3	2450	1230	2469.8		11/30/12 10:45	67-66-3	A3
Chloromethane	ND	ug/m3	0.60	0.30	1.44		11/28/12 00:18	74-87-3	
Cyclohexane	ND	ug/m3	1.0	0.50	1.44		11/28/12 00:18	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.2	1.44		11/28/12 00:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.1	1.44		11/28/12 00:18	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 00:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 00:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.8	0.88	1.44		11/28/12 00:18	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.5	0.72	1.44		11/28/12 00:18	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	0.59	1.44		11/28/12 00:18	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	0.30	1.44		11/28/12 00:18	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	0.58	1.44		11/28/12 00:18	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/m3	1.2	0.22	1.44		11/28/12 00:18	156-59-2	
trans-1,2-Dichloroethene	**8.2**	ug/m3	1.2	0.58	1.44		11/28/12 00:18	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	0.68	1.44		11/28/12 00:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	0.16	1.44		11/28/12 00:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	0.66	1.44		11/28/12 00:18	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	0.31	1.44		11/28/12 00:18	76-14-2	
Ethyl acetate	ND	ug/m3	1.1	0.52	1.44		11/28/12 00:18	141-78-6	
Ethylbenzene	**10**	ug/m3	1.3	0.17	1.44		11/28/12 00:18	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.4	0.72	1.44		11/28/12 00:18	622-96-8	
n-Heptane	**9.8**	ug/m3	1.2	0.60	1.44		11/28/12 00:18	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.2	1.6	1.44		11/28/12 00:18	87-68-3	
n-Hexane	ND	ug/m3	1.0	0.52	1.44		11/28/12 00:18	110-54-3	
2-Hexanone	**4.1**	ug/m3	1.2	0.60	1.44		11/28/12 00:18	591-78-6	
Methylene Chloride	**1840**	ug/m3	1750	872	2469.8		11/30/12 10:45	75-09-2	A3
4-Methyl-2-pentanone (MIBK)	**35.0**	ug/m3	1.2	0.60	1.44		11/28/12 00:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	0.13	1.44		11/28/12 00:18	1634-04-4	
Naphthalene	**5.2**	ug/m3	1.5	0.77	1.44		11/28/12 00:18	91-20-3	
2-Propanol	**138**	ug/m3	0.72	0.13	1.44		11/28/12 00:18	67-63-0	E
Propylene	**27.0**	ug/m3	0.50	0.25	1.44		11/28/12 00:18	115-07-1	
Styrene	**281**	ug/m3	1.3	0.62	1.44		11/28/12 00:18	100-42-5	E
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	0.27	1.44		11/28/12 00:18	79-34-5	
Tetrachloroethene	**16600**	ug/m3	1700	852	2469.8		11/30/12 10:45	127-18-4	A3
Tetrahydrofuran	ND	ug/m3	0.86	0.43	1.44		11/28/12 00:18	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV5 **Lab ID: 92138899005** Collected: 11/15/12 11:05 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**8100**	ug/m3	87.6	43.8	1.44		11/28/12 00:18		
Toluene	**55.5**	ug/m3	1.1	0.55	1.44		11/28/12 00:18	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.2	1.1	1.44		11/28/12 00:18	120-82-1	
1,1,1-Trichloroethane	**2.5**	ug/m3	1.6	0.80	1.44		11/28/12 00:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.79	0.40	1.44		11/28/12 00:18	79-00-5	
Trichloroethene	**150000**	ug/m3	1360	674	2469.8		11/30/12 10:45	79-01-6	A3
Trichlorofluoromethane	**4.1**	ug/m3	1.6	0.32	1.44		11/28/12 00:18	75-69-4	
1,1,2-Trichlorotrifluoroethane	**921**	ug/m3	2.3	1.2	1.44		11/28/12 00:18	76-13-1	E
1,2,4-Trimethylbenzene	**10.6**	ug/m3	1.4	0.72	1.44		11/28/12 00:18	95-63-6	
1,3,5-Trimethylbenzene	**3.0**	ug/m3	1.4	0.19	1.44		11/28/12 00:18	108-67-8	
Vinyl acetate	ND	ug/m3	1.0	0.52	1.44		11/28/12 00:18	108-05-4	
Vinyl chloride	ND	ug/m3	0.37	0.19	1.44		11/28/12 00:18	75-01-4	
m&p-Xylene	**14.0**	ug/m3	2.5	1.3	1.44		11/28/12 00:18	179601-23-1	
o-Xylene	**6.5**	ug/m3	1.3	0.18	1.44		11/28/12 00:18	95-47-6	

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

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV (DUP) **Lab ID: 92138899006** Collected: 11/15/12 11:20 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**63.9**	ug/m3	0.77	0.39	1.61		11/27/12 23:20	67-64-1	
Benzene	**6.8**	ug/m3	0.52	0.26	1.61		11/27/12 23:20	71-43-2	
Bromodichloromethane	**10.6**	ug/m3	2.2	0.28	1.61		11/27/12 23:20	75-27-4	
Bromoform	ND	ug/m3	3.4	1.7	1.61		11/27/12 23:20	75-25-2	
Bromomethane	ND	ug/m3	1.3	0.29	1.61		11/27/12 23:20	74-83-9	
1,3-Butadiene	ND	ug/m3	0.72	0.36	1.61		11/27/12 23:20	106-99-0	
2-Butanone (MEK)	**8.1**	ug/m3	0.97	0.25	1.61		11/27/12 23:20	78-93-3	
Carbon disulfide	**3.1**	ug/m3	1.0	0.51	1.61		11/27/12 23:20	75-15-0	SS
Carbon tetrachloride	ND	ug/m3	1.0	0.52	1.61		11/27/12 23:20	56-23-5	
Chlorobenzene	ND	ug/m3	1.5	0.75	1.61		11/27/12 23:20	108-90-7	
Chloroethane	ND	ug/m3	0.87	0.43	1.61		11/27/12 23:20	75-00-3	
Chloroform	**144**	ug/m3	1.6	0.80	1.61		11/27/12 23:20	67-66-3	
Chloromethane	ND	ug/m3	0.68	0.34	1.61		11/27/12 23:20	74-87-3	
Cyclohexane	ND	ug/m3	1.1	0.56	1.61		11/27/12 23:20	110-82-7	
Dibromochloromethane	ND	ug/m3	2.8	1.4	1.61		11/27/12 23:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.5	1.3	1.61		11/27/12 23:20	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	0.98	1.61		11/27/12 23:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	0.98	1.61		11/27/12 23:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.0	0.98	1.61		11/27/12 23:20	106-46-7	
Dichlorodifluoromethane	**3.2**	ug/m3	1.6	0.81	1.61		11/27/12 23:20	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	0.66	1.61		11/27/12 23:20	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.66	0.33	1.61		11/27/12 23:20	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.3	0.65	1.61		11/27/12 23:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.3	0.25	1.61		11/27/12 23:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.3	0.65	1.61		11/27/12 23:20	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.5	0.76	1.61		11/27/12 23:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	0.18	1.61		11/27/12 23:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	0.74	1.61		11/27/12 23:20	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.3	0.34	1.61		11/27/12 23:20	76-14-2	
Ethyl acetate	ND	ug/m3	1.2	0.58	1.61		11/27/12 23:20	141-78-6	
Ethylbenzene	**61.8**	ug/m3	1.4	0.19	1.61		11/27/12 23:20	100-41-4	
4-Ethyltoluene	**26.8**	ug/m3	1.6	0.80	1.61		11/27/12 23:20	622-96-8	
n-Heptane	**5.3**	ug/m3	1.3	0.67	1.61		11/27/12 23:20	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.5	1.8	1.61		11/27/12 23:20	87-68-3	
n-Hexane	**1.7**	ug/m3	1.2	0.58	1.61		11/27/12 23:20	110-54-3	
2-Hexanone	ND	ug/m3	1.3	0.67	1.61		11/27/12 23:20	591-78-6	
Methylene Chloride	**3.7**	ug/m3	1.1	0.57	1.61		11/27/12 23:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.3	0.67	1.61		11/27/12 23:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.2	0.14	1.61		11/27/12 23:20	1634-04-4	
Naphthalene	**3.0**	ug/m3	1.7	0.86	1.61		11/27/12 23:20	91-20-3	
2-Propanol	ND	ug/m3	0.80	0.15	1.61		11/27/12 23:20	67-63-0	
Propylene	ND	ug/m3	0.56	0.28	1.61		11/27/12 23:20	115-07-1	
Styrene	ND	ug/m3	1.4	0.70	1.61		11/27/12 23:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	0.30	1.61		11/27/12 23:20	79-34-5	
Tetrachloroethene	**72.1**	ug/m3	1.1	0.56	1.61		11/27/12 23:20	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.97	0.48	1.61		11/27/12 23:20	109-99-9	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Sample: ECIE-1112-SV (DUP) **Lab ID: 92138899006** Collected: 11/15/12 11:20 Received: 11/15/12 15:55 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
THC as Gas	**4750**	ug/m3	97.9	48.9	1.61		11/27/12 23:20		
Toluene	**191**	ug/m3	1.2	0.62	1.61		11/27/12 23:20	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.4	1.2	1.61		11/27/12 23:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.8	0.89	1.61		11/27/12 23:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.89	0.45	1.61		11/27/12 23:20	79-00-5	
Trichloroethene	**1760**	ug/m3	17.7	8.8	32.2		11/30/12 08:50	79-01-6	
Trichlorofluoromethane	**5.8**	ug/m3	1.8	0.36	1.61		11/27/12 23:20	75-69-4	
1,1,2-Trichlorotrifluoroethane	**47.3**	ug/m3	2.6	1.3	1.61		11/27/12 23:20	76-13-1	
1,2,4-Trimethylbenzene	**53.5**	ug/m3	1.6	0.80	1.61		11/27/12 23:20	95-63-6	
1,3,5-Trimethylbenzene	**11.2**	ug/m3	1.6	0.21	1.61		11/27/12 23:20	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	0.58	1.61		11/27/12 23:20	108-05-4	
Vinyl chloride	ND	ug/m3	0.42	0.21	1.61		11/27/12 23:20	75-01-4	
m&p-Xylene	**260**	ug/m3	2.8	1.4	1.61		11/27/12 23:20	179601-23-1	
o-Xylene	**112**	ug/m3	1.4	0.21	1.61		11/27/12 23:20	95-47-6	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

QC Batch: AIR/16258 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 92138899001, 92138899002, 92138899003, 92138899004, 92138899005, 92138899006

METHOD BLANK: 1339926 Matrix: Air
Associated Lab Samples: 92138899001, 92138899002, 92138899003, 92138899004, 92138899005, 92138899006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	11/27/12 17:05	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	11/27/12 17:05	
1,1,2-Trichloroethane	ug/m3	ND	0.55	11/27/12 17:05	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	11/27/12 17:05	
1,1-Dichloroethane	ug/m3	ND	0.82	11/27/12 17:05	
1,1-Dichloroethene	ug/m3	ND	0.81	11/27/12 17:05	
1,2,4-Trichlorobenzene	ug/m3	ND	1.5	11/27/12 17:05	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	11/27/12 17:05	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	11/27/12 17:05	
1,2-Dichlorobenzene	ug/m3	ND	1.2	11/27/12 17:05	
1,2-Dichloroethane	ug/m3	ND	0.41	11/27/12 17:05	
1,2-Dichloropropane	ug/m3	ND	0.94	11/27/12 17:05	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	11/27/12 17:05	
1,3-Butadiene	ug/m3	ND	0.45	11/27/12 17:05	
1,3-Dichlorobenzene	ug/m3	ND	1.2	11/27/12 17:05	
1,4-Dichlorobenzene	ug/m3	ND	1.2	11/27/12 17:05	
2-Butanone (MEK)	ug/m3	ND	0.60	11/27/12 17:05	
2-Hexanone	ug/m3	ND	0.83	11/27/12 17:05	
2-Propanol	ug/m3	ND	0.50	11/27/12 17:05	
4-Ethyltoluene	ug/m3	ND	1.0	11/27/12 17:05	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	11/27/12 17:05	
Acetone	ug/m3	ND	0.48	11/27/12 17:05	
Benzene	ug/m3	ND	0.32	11/27/12 17:05	
Bromodichloromethane	ug/m3	ND	1.4	11/27/12 17:05	
Bromoform	ug/m3	ND	2.1	11/27/12 17:05	
Bromomethane	ug/m3	ND	0.79	11/27/12 17:05	
Carbon disulfide	ug/m3	ND	0.63	11/27/12 17:05	
Carbon tetrachloride	ug/m3	ND	0.64	11/27/12 17:05	
Chlorobenzene	ug/m3	ND	0.94	11/27/12 17:05	
Chloroethane	ug/m3	ND	0.54	11/27/12 17:05	
Chloroform	ug/m3	ND	0.99	11/27/12 17:05	
Chloromethane	ug/m3	ND	0.42	11/27/12 17:05	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	11/27/12 17:05	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	11/27/12 17:05	
Cyclohexane	ug/m3	ND	0.70	11/27/12 17:05	
Dibromochloromethane	ug/m3	ND	1.7	11/27/12 17:05	
Dichlorodifluoromethane	ug/m3	ND	1.0	11/27/12 17:05	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	11/27/12 17:05	
Ethyl acetate	ug/m3	ND	0.73	11/27/12 17:05	
Ethylbenzene	ug/m3	ND	0.88	11/27/12 17:05	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	11/27/12 17:05	
m&p-Xylene	ug/m3	ND	1.8	11/27/12 17:05	
Methyl-tert-butyl ether	ug/m3	ND	0.73	11/27/12 17:05	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

METHOD BLANK: 1339926 Matrix: Air

Associated Lab Samples: 92138899001, 92138899002, 92138899003, 92138899004, 92138899005, 92138899006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methylene Chloride	ug/m3	ND	0.71	11/27/12 17:05	
n-Heptane	ug/m3	ND	0.83	11/27/12 17:05	
n-Hexane	ug/m3	ND	0.72	11/27/12 17:05	
Naphthalene	ug/m3	ND	1.1	11/27/12 17:05	
o-Xylene	ug/m3	ND	0.88	11/27/12 17:05	
Propylene	ug/m3	ND	0.35	11/27/12 17:05	
Styrene	ug/m3	ND	0.87	11/27/12 17:05	
Tetrachloroethene	ug/m3	ND	0.69	11/27/12 17:05	
Tetrahydrofuran	ug/m3	ND	0.60	11/27/12 17:05	
THC as Gas	ug/m3	ND	60.8	11/27/12 17:05	
Toluene	ug/m3	ND	0.77	11/27/12 17:05	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	11/27/12 17:05	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	11/27/12 17:05	
Trichloroethene	ug/m3	ND	0.55	11/27/12 17:05	
Trichlorofluoromethane	ug/m3	ND	1.1	11/27/12 17:05	
Vinyl acetate	ug/m3	ND	0.72	11/27/12 17:05	
Vinyl chloride	ug/m3	ND	0.26	11/27/12 17:05	

LABORATORY CONTROL SAMPLE: 1339927

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	58.3	105	72-129	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	77.9	112	73-131	
1,1,2-Trichloroethane	ug/m3	55.5	57.9	104	71-128	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	90.7	116	65-132	
1,1-Dichloroethane	ug/m3	41.2	43.0	104	67-132	
1,1-Dichloroethene	ug/m3	40.3	44.8	111	68-134	
1,2,4-Trichlorobenzene	ug/m3	75.5	86.2	114	48-150	
1,2,4-Trimethylbenzene	ug/m3	50	57.6	115	72-127	
1,2-Dibromoethane (EDB)	ug/m3	78.1	86.8	111	75-130	
1,2-Dichlorobenzene	ug/m3	61.2	76.9	126	71-132	
1,2-Dichloroethane	ug/m3	41.2	42.1	102	70-131	
1,2-Dichloropropane	ug/m3	47	48.2	103	73-130	
1,3,5-Trimethylbenzene	ug/m3	50	60.8	122	70-133	
1,3-Butadiene	ug/m3	22.5	25.6	114	69-132	
1,3-Dichlorobenzene	ug/m3	61.2	76.6	125	71-128	
1,4-Dichlorobenzene	ug/m3	61.2	73.6	120	72-131	
2-Butanone (MEK)	ug/m3	30	28.8	96	69-131	
2-Hexanone	ug/m3	41.7	46.0	110	71-134	
2-Propanol	ug/m3	25	27.7	111	72-132	
4-Ethyltoluene	ug/m3	50	56.9	114	71-129	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.7	44.8	108	69-135	
Acetone	ug/m3	24.2	28.2	117	61-139	
Benzene	ug/m3	32.5	31.2	96	69-134	
Bromodichloromethane	ug/m3	68.2	73.8	108	71-130	

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

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

LABORATORY CONTROL SAMPLE: 1339927

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/m3	105	137	130	70-130	
Bromomethane	ug/m3	39.5	44.9	114	69-125	
Carbon disulfide	ug/m3	31.7	38.3	121	66-131	SS
Carbon tetrachloride	ug/m3	64	64.1	100	68-128	
Chlorobenzene	ug/m3	46.8	49.8	106	75-128	
Chloroethane	ug/m3	26.8	30.5	114	66-131	
Chloroform	ug/m3	49.7	49.7	100	68-132	
Chloromethane	ug/m3	21	21.1	100	60-139	
cis-1,2-Dichloroethene	ug/m3	40.3	40.2	100	73-130	
cis-1,3-Dichloropropene	ug/m3	46.2	52.4	114	74-134	
Cyclohexane	ug/m3	35	34.6	99	67-136	
Dibromochloromethane	ug/m3	86.6	100	116	69-131	
Dichlorodifluoromethane	ug/m3	50.3	51.8	103	67-131	
Dichlorotetrafluoroethane	ug/m3	71.1	75.6	106	66-130	
Ethyl acetate	ug/m3	36.6	36.0	98	71-131	
Ethylbenzene	ug/m3	44.2	49.5	112	69-139	
Hexachloro-1,3-butadiene	ug/m3	108	129	119	41-150	
m&p-Xylene	ug/m3	88.3	100	113	66-137	
Methyl-tert-butyl ether	ug/m3	36.7	40.7	111	70-132	
Methylene Chloride	ug/m3	35.3	37.8	107	73-134	
n-Heptane	ug/m3	41.7	36.1	87	70-134	
n-Hexane	ug/m3	35.8	31.4	88	65-133	
Naphthalene	ug/m3	53.3	57.4	108	57-150	
o-Xylene	ug/m3	44.2	50.9	115	69-138	
Propylene	ug/m3	17.5	16.5	94	70-134	
Styrene	ug/m3	43.3	55.3	128	72-132	
Tetrachloroethene	ug/m3	69	74.9	109	70-130	
Tetrahydrofuran	ug/m3	30	29.2	97	74-128	
THC as Gas	ug/m3	3030	2630	87	66-131	
Toluene	ug/m3	38.3	35.9	94	71-132	
trans-1,2-Dichloroethene	ug/m3	40.3	45.1	112	72-128	
trans-1,3-Dichloropropene	ug/m3	46.2	54.3	118	73-130	
Trichloroethene	ug/m3	54.6	59.1	108	72-131	
Trichlorofluoromethane	ug/m3	57.1	64.0	112	66-129	
Vinyl acetate	ug/m3	35.8	34.2	95	71-131	
Vinyl chloride	ug/m3	26	29.1	112	70-131	

SAMPLE DUPLICATE: 1340490

Parameter	Units	10212711005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

SAMPLE DUPLICATE: 1340490

Parameter	Units	10212711005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	1.4		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	ND	.49J		25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	9.3	9.4	.7	25	
4-Ethyltoluene	ug/m3	ND	ND		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	10.2	10.2	.1	25	
Benzene	ug/m3	0.70	0.75	7	25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	ND	.67J		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	ND	0.94		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	3.0	3.2	5	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethyl acetate	ug/m3	1.5	ND		25	
Ethylbenzene	ug/m3	ND	ND		25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	ND	1.7J		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	7.6	8.5	11	25	
n-Heptane	ug/m3	ND	ND		25	
n-Hexane	ug/m3	5.6	5.9	5	25	
Naphthalene	ug/m3	2.7	2.6	2	25	
o-Xylene	ug/m3	ND	ND		25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	ND	ND		25	
Tetrahydrofuran	ug/m3	ND	ND		25	
THC as Gas	ug/m3	ND	ND		25	
Toluene	ug/m3	3.7	3.9	3	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	

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

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

SAMPLE DUPLICATE: 1340490

Parameter	Units	10212711005 Result	Dup Result	RPD	Max RPD	Qualifiers
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	ND	ND		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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

QUALIFIERS

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

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.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

A3	The sample was analyzed by serial dilution.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: ECI ELON FACILITY B1116-410-0
Pace Project No.: 92138899

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92138899001	**ECIE-1112-SV1**	TO-15	AIR/16258		
92138899002	**ECIE-1112-SV2**	TO-15	AIR/16258		
92138899003	**ECIE-1112-SV3**	TO-15	AIR/16258		
92138899004	**ECIE-1112-SV4**	TO-15	AIR/16258		
92138899005	**ECIE-1112-SV5**	TO-15	AIR/16258		
92138899006	**ECIE-1112-SV (DUP)**	TO-15	AIR/16258		

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

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

Company:	GaiaTech
Address:	3525 Piedmont Rd NE
	Bldg 6, Suite 520
Email To:	Mike Wilson and Will Lucas
Phone: (404) 812-0001	Fax:
Requested Due Date/TAT:	10 day TAT

Section B Required Project Information:

Report To:	Michael Wilson mwilson@gaiatech.com
Copy To:	Will Lucas wlucas@gaiatech.com
Purchase Order No.:	B1116-410-0
Project Name:	ECI Elon Facility
Project Number:	B1116-410-0

Section C Invoice Information:

Attention:	X
Company Name:	GaiaTech
Address:	Same as report address
Pace Quote Reference:	
Pace Project Manager:	Allison Cantrell
Pace Profile #:	

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

Site Location STATE: NC

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Y/N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TO-15	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ECIE-1112-SV1	AR	C	11/15/12	1000	11/15/12	1035		1										x		001
2	ECIE-1112-SV2	AR	C		1005		1045		1										x		002
3	ECIE-1112-SV3	AR	C		1010		1050		1										x		003
4	ECIE-1112-SV4	AR	C		1012		1055		1										x		004
5	ECIE-1112-SV5	AR	C		1025		1105		1										x		005
6	ECIE-1112-SV2 (DUP)	AR	C		1045		1120		1										x		006
7	~~ECIE-1112-SV7~~	~~AR~~	~~C~~						1										x		
8																					
9																					
10																					
11																					
12																					

92138899

NOTE: ISOPROPYL ALCOHOL USED AS LEAK DETECTION COMPOUND

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	GAIATECH	11/15/12	1150		11-15-12	1150				
		11/15/12	1555	Simone Pace	11-15	1555	NA	N	N	4

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:					
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):				

*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.