Derenzo and Associates, Inc.
Environmental Consultants

October 28, 2010

Ms. Trina Vielhauer, Bureau Chief
Bureau of Air Regulation
Department of Environmental Protection
STATE OF FLORIDA
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Subject: Brevard Energy, LLC
DEP File No. 0090069-008-AV
LFG Monitoring Sulfur and Chlorine Contents

Dear Ms. Vielhauer:

Condition B21(a) of Subsection B of Title V Permit No. 0090069-008-AV issued Brevard Energy, LLC (Brevard Energy) on July 9, 2009 specifies that *The permittee shall comply with the following requirements to monitor the sulfur and chlorine content of the landfill gas:*

... the permittee shall sample and analyze the landfill gas for H_2S and chlorine content. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions ... The gas sample collection and analyses for chlorine content shall be done semi-annually. Landfill gas sulfur (as H_2S)sampling and analysis under this condition shall be required for one year period (two semi-annual analyses) once the CMS equipment specified by this permit is installed and operational ... Results shall be reported as SO_2 and HCl emission factors in terms of lb/MMscf (equivalent in ppmv) and lb/MMBtu of landfill gas.

The initial gas sample collection and analyses were completed in February 2007. Therefore, Derenzo and Associates, Inc. (Derenzo and Associates), on behalf of Brevard Energy, is submitting to the Florida Department of Environmental Protection, Division of Air Resource Management (FDEP-DARM) results of chlorine analysis that was performed on a sample of landfill gas (LFG) obtained from the Brevard County Solid Waste Management Central Disposal Facility in October 2010 (semi-annual collection and analyses). The required HCl emission factors (in terms of lb/MMscf, equivalence in ppmv, and lb/MMBtu of landfill gas) and supporting analytical data are provided in the attached documents. The SO_2 emission factors, as described above, are required to be reported semi-annually for a period of one year after installation of the H_2S continuous monitoring system (CMS). The first semi-annual report of 2010 was the final semi-annual report to include an SO_2 emission factor.

The HCl emission factor developed from analyses of the October 18, 2010 sample of LFG obtained from the Brevard County Solid Waste Management Central Disposal Facility is

a) 0.60 lb/MMscf of LFG (<1.49 lb/MMscf of landfill gas with the incorporation of all non-measured chemicals at its reporting limit).

b) 0.001 lb/MMBtu of LFG (<0.003 lb/MMBtu of landfill gas with the incorporation of all non-measured chemicals at its reporting limit). The presented value is based on a fuel heating value of 487.43 Btu/scf HHV (48.26% methane).

Please contact us if you have questions or require clarifications

Sincerely,

DERENZO AND ASSOCIATES, INC.

Charles Scamp
Environmental Consultant

attachments
c: Mike Laframboise, Landfill Energy Systems
Gary Kuberski; FDEP Central District Office

Brevard Energy, LLC (October 18, 2010 Sample)

LFG Combustion Hydrogen Chloride Emission Factor

LFG Influent Chlorine Coumpounds	Analytical Report Concentration[1] (ppm)	Molecular Formula	No. Chlorine Atoms	HCl Emission Factor (lb./MMcf)
Freon 12 (Dichlorodifluoromethane)	0.525	CCl_2F_2	2	0.099 [2]
Freon 114 (Dichlorotetrafluroethane)	<0.101	$C_2Cl_2F_4$	2	<0.019
Chloromethane	<0.400	CH_3Cl	1	<0.038
Vinyl Chloride	0.101	C_2HCl	1	0.010
Chloroethane	<0.101	C_2H_5Cl	1	<0.009
Freon 11 (Fluorotrichloromethane)	<0.101	$CFCl_3$	3	<0.028
Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane)	<0.101	$C_2Cl_2F_3$	2	<0.019
1,1-dichloroethene	<0.101	$C_2H_2Cl_2$	2	<0.019
3-Chloropropene	<0.400	C_3H_5Cl	1	<0.038
Methylene Chloride (Dichloromethane)	<0.101	CH_2Cl_2	2	<0.019
1,2-Dichloroethene (as cis-1,2-Dichloroethene)	0.540	$C_2H_2Cl_2$	2	0.102
1,2-Dichloroethene (as trans-1,2-Dichloroethene)	<0.101	$C_2H_2Cl_2$	2	<0.019
1,1-Dichloroethane	<0.101	$C_2H_4Cl_2$	2	<0.019
1,1-Dichloroethene	<0.180	$C_2H_2Cl_2$	2	<0.034
Chloroform	<0.101	$CHCl_3$	3	<0.028
1,1,1-Trichloroethane	<0.101	$C_2H_3Cl_3$	3	<0.028
Carbon Tetrachloride	<0.101	CCl_4	4	<0.038
1,2-Dichloroethane	0.220	$C_2H_4Cl_2$	2	0.041
Trichloroethene	0.300	C_2HCl_3	3	0.085
1,2-dichloropropane	<0.101	$C_3H_6Cl_2$	2	<0.019
Bromodichloromethane	<0.101	$CBrCl_2$	2	<0.019
1,3-Dichloropropene (as cis-1,3-Dichloropropene)	<0.101	$C_3H_4Cl_2$	2	<0.019
1,3-Dichloropropene (as trans-1,3-Dichloropropene	<0.101	$C_3H_4Cl_2$	2	<0.019
1,1,2-Trichloroethane	<0.101	$C_2H_3Cl_3$	3	<0.028
Tetrachloroethene (Perchloroethene)	0.530	C_2Cl_4	4	0.200
Dibromochloromethane	<0.101	$CHBr_2Cl$	1	<0.009
Chlorobenzene	0.102	C_6H_5Cl	1	0.010
1,1,2,2-Tetrachloroethane	<0.101	$C_2H_2Cl_4$	4	<0.038
1,3-Dichlorobenzene	<0.101	$C_6H_4Cl_2$	2	<0.019
1,4-Dichlorobenzene	0.295	$C_6H_4Cl_2$	2	0.056
alpha-Chlorotoluene	<0.101	C_7H_7Cl	1	<0.009
1,2-Dichlorobenzene	<0.101	$C_6H_4Cl_2$	2	<0.019
1,2,4-Trichlorobenzene	<0.400	$C_6H_3Cl_3$	3	<0.113
Hexachlorobutadiene	<0.400	C_4Cl_6	6	<0.226
Total hydrogen chloride emission factor (lb./MMcf)				**<1.49**
Total hydrogen chloride emission factor (lb./MMBtu)				**<0.003** [3]

Notes

1. October 21, 2010 laboratory analytical results (see Attachment) average of two samples

2. Example calculation for Freon 12 that assumes complete conversion of chloride to HCl
(0.525 ft^3 Freon 12/MMcf LFG) (2 mol HCl/mol Freon 12) (36.46 lb. HCl/mol) / (387 ft^3/mol)
= 0.099 lb. HCl/MMcf LFG

3. (<1.49 lb. HCL/MMcf) (1 cf/487.42 Btu) = <0.003 lb. HCL/MMBtu

Brevard Energy, LLC (October 18, 2010 Sample)

LFG Combustion Hydrogen Chloride Emission Factor

LFG Influent Chlorine Compounds	Measured Concentration[1] (ppm)	Molecular Formula	No. Chlorine Atoms	HCl Emission Factor (lb./MMcf)
Freon 12 (Dichlorodifluoromethane)	0.525	CCl_2F_2	2	0.099 [2]
Vinyl Chloride	0.101	C_2HCl	1	0.010
1,2-Dichloroethene (as cis-1,2-Dichloroethene)	0.540	$C_2H_2Cl_2$	2	0.102
1,2-Dichloroethane	0.220	$C_2H_4Cl_2$	2	0.041
Trichloroethene	0.300	C_2HCl_3	3	0.085
Tetrachloroethene (Perchloroethene)	0.530	C_2Cl_4	4	0.200
Chlorobenzene	0.102	C_6H_5Cl	1	0.010
1,4-Dichlorobenzene	0.295	$C_6H_4Cl_2$	2	0.056
Total hydrogen chloride emission factor (lb./MMcf)				**0.60**
Total hydrogen chloride emission factor (lb./MMBtu)				**0.001** [3]

Notes

1. October 21, 2010 laboratory analytical results (see Attachment) average of two samples

2. Example calculation for Freon 12 that assumes complete conversion of chloride to HCl
(0.525 ft^3 Freon 12/MMcf LFG) (2 mol HCl/mol Freon 12) (36.46 lb. HCl/mol) / (387 ft^3/mol)
= 0.099 lb. HCl/MMcf LFG

3. (0.60 lb. HCL/MMcf) (1 cf/487.42 Btu) = 0.001 lb. HCL/MMBtu

LABORATORY NARRATIVE
EPA Method TO-15
Derenzo & Associates
Workorder# 1010371

Two 1 Liter Tedlar Bag samples were received on October 19, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. A signature and date were not provided by the sample carrier.

Analytical Notes

There were no analytical discrepancies.

Method TO-15 is validated for samples collected in specially treated canisters. As such, the use of Tedlar bags for sample collection is outside the scope of the method and not recommended for ambient or indoor air samples. It is the responsibility of the data user to determine the usability of TO-15 results generated from Tedlar bags.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air TOXICS LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: BE1

Lab ID#: 1010371-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	91	510	450	2500
Vinyl Chloride	91	92	230	230
Ethanol	360	65000	680	120000
Acetone	360	22000	860	52000
2-Propanol	360	20000	890	50000
Hexane	91	410	320	1400
2-Butanone (Methyl Ethyl Ketone)	91	22000	270	66000
cis-1,2-Dichloroethene	91	510	360	2000
Tetrahydrofuran	91	5600	270	16000
Cyclohexane	91	490	310	1700
2,2,4-Trimethylpentane	91	260	420	1200
Benzene	91	1700	290	5300
1,2-Dichloroethane	91	220	370	870
Heptane	91	910	370	3700
Trichloroethene	91	280	490	1500
4-Methyl-2-pentanone	91	1400	370	5600
Toluene	91	16000	340	60000
Tetrachloroethene	91	500	620	3400
Chlorobenzene	91	94	420	440
Ethyl Benzene	91	8200	400	36000
m,p-Xylene	91	12000	400	54000
o-Xylene	91	3600	400	16000
Styrene	91	850	390	3600
Propylbenzene	91	580	450	2800
4-Ethyltoluene	91	2300	450	11000
1,3,5-Trimethylbenzene	91	920	450	4500
1,2,4-Trimethylbenzene	91	2100	450	10000
1,4-Dichlorobenzene	91	290	550	1800

Client Sample ID: BE2

Lab ID#: 1010371-02A

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: BE2

Lab ID#: 1010371-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	110	540	550	2700
Ethanol	440	89000	840	170000
Acetone	440	25000	1000	60000
2-Propanol	440	26000	1100	64000
Hexane	110	460	390	1600
2-Butanone (Methyl Ethyl Ketone)	110	26000	330	76000
cis-1,2-Dichloroethene	110	570	440	2200
Tetrahydrofuran	110	6400	330	19000
Cyclohexane	110	560	380	1900
2,2,4-Trimethylpentane	110	310	520	1500
Benzene	110	1800	350	5900
1,2-Dichloroethane	110	220	450	900
Heptane	110	980	450	4000
Trichloroethene	110	320	600	1700
4-Methyl-2-pentanone	110	1500	450	6100
Toluene	110	18000	420	68000
Tetrachloroethene	110	560	750	3800
Chlorobenzene	110	110	510	510
Ethyl Benzene	110	9500	480	41000
m,p-Xylene	110	14000	480	62000
o-Xylene	110	4200	480	18000
Styrene	110	960	470	4100
Propylbenzene	110	640	540	3100
4-Ethyltoluene	110	2500	540	12000
1,3,5-Trimethylbenzene	110	1000	540	5000
1,2,4-Trimethylbenzene	110	2200	540	11000
1,4-Dichlorobenzene	110	300	670	1800

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BE1

Lab ID#: 1010371-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w102107**	**Date of Collection:**	**10/18/10 3:30:00 PM**
Dil. Factor:	**18.2**	**Date of Analysis:**	**10/21/10 11:06 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	91	510	450	2500
Freon 114	91	Not Detected	640	Not Detected
Chloromethane	360	Not Detected	750	Not Detected
Vinyl Chloride	91	92	230	230
1,3-Butadiene	91	Not Detected	200	Not Detected
Bromomethane	91	Not Detected	350	Not Detected
Chloroethane	91	Not Detected	240	Not Detected
Freon 11	91	Not Detected	510	Not Detected
Ethanol	360	65000	680	120000
Freon 113	91	Not Detected	700	Not Detected
1,1-Dichloroethene	91	Not Detected	360	Not Detected
Acetone	360	22000	860	52000
2-Propanol	360	20000	890	50000
Carbon Disulfide	91	Not Detected	280	Not Detected
3-Chloropropene	360	Not Detected	1100	Not Detected
Methylene Chloride	91	Not Detected	320	Not Detected
Methyl tert-butyl ether	91	Not Detected	330	Not Detected
trans-1,2-Dichloroethene	91	Not Detected	360	Not Detected
Hexane	91	410	320	1400
1,1-Dichloroethane	91	Not Detected	370	Not Detected
2-Butanone (Methyl Ethyl Ketone)	91	22000	270	66000
cis-1,2-Dichloroethene	91	510	360	2000
Tetrahydrofuran	91	5600	270	16000
Chloroform	91	Not Detected	440	Not Detected
1,1,1-Trichloroethane	91	Not Detected	500	Not Detected
Cyclohexane	91	490	310	1700
Carbon Tetrachloride	91	Not Detected	570	Not Detected
2,2,4-Trimethylpentane	91	260	420	1200
Benzene	91	1700	290	5300
1,2-Dichloroethane	91	220	370	870
Heptane	91	910	370	3700
Trichloroethene	91	280	490	1500
1,2-Dichloropropane	91	Not Detected	420	Not Detected
1,4-Dioxane	360	Not Detected	1300	Not Detected
Bromodichloromethane	91	Not Detected	610	Not Detected
cis-1,3-Dichloropropene	91	Not Detected	410	Not Detected
4-Methyl-2-pentanone	91	1400	370	5600
Toluene	91	16000	340	60000
trans-1,3-Dichloropropene	91	Not Detected	410	Not Detected
1,1,2-Trichloroethane	91	Not Detected	500	Not Detected
Tetrachloroethene	91	500	620	3400

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BE1

Lab ID#: 1010371-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w102107**	**Date of Collection:**	**10/18/10 3:30:00 PM**
Dil. Factor:	**18.2**	**Date of Analysis:**	**10/21/10 11:06 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	360	Not Detected	1500	Not Detected
Dibromochloromethane	91	Not Detected	780	Not Detected
1,2-Dibromoethane (EDB)	91	Not Detected	700	Not Detected
Chlorobenzene	91	94	420	440
Ethyl Benzene	91	8200	400	36000
m,p-Xylene	91	12000	400	54000
o-Xylene	91	3600	400	16000
Styrene	91	850	390	3600
Bromoform	91	Not Detected	940	Not Detected
Cumene	91	Not Detected	450	Not Detected
1,1,2,2-Tetrachloroethane	91	Not Detected	620	Not Detected
Propylbenzene	91	580	450	2800
4-Ethyltoluene	91	2300	450	11000
1,3,5-Trimethylbenzene	91	920	450	4500
1,2,4-Trimethylbenzene	91	2100	450	10000
1,3-Dichlorobenzene	91	Not Detected	550	Not Detected
1,4-Dichlorobenzene	91	290	550	1800
alpha-Chlorotoluene	91	Not Detected	470	Not Detected
1,2-Dichlorobenzene	91	Not Detected	550	Not Detected
1,2,4-Trichlorobenzene	360	Not Detected	2700	Not Detected
Hexachlorobutadiene	360	Not Detected	3900	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BE2

Lab ID#: 1010371-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w102108**	**Date of Collection:**	**10/18/10 3:30:00 PM**
Dil. Factor:	**22.2**	**Date of Analysis:**	**10/21/10 11:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	110	540	550	2700
Freon 114	110	Not Detected	780	Not Detected
Chloromethane	440	Not Detected	920	Not Detected
Vinyl Chloride	110	Not Detected	280	Not Detected
1,3-Butadiene	110	Not Detected	240	Not Detected
Bromomethane	110	Not Detected	430	Not Detected
Chloroethane	110	Not Detected	290	Not Detected
Freon 11	110	Not Detected	620	Not Detected
Ethanol	440	89000	840	170000
Freon 113	110	Not Detected	850	Not Detected
1,1-Dichloroethene	110	Not Detected	440	Not Detected
Acetone	440	25000	1000	60000
2-Propanol	440	26000	1100	64000
Carbon Disulfide	110	Not Detected	340	Not Detected
3-Chloropropene	440	Not Detected	1400	Not Detected
Methylene Chloride	110	Not Detected	380	Not Detected
Methyl tert-butyl ether	110	Not Detected	400	Not Detected
trans-1,2-Dichloroethene	110	Not Detected	440	Not Detected
Hexane	110	460	390	1600
1,1-Dichloroethane	110	Not Detected	450	Not Detected
2-Butanone (Methyl Ethyl Ketone)	110	26000	330	76000
cis-1,2-Dichloroethene	110	570	440	2200
Tetrahydrofuran	110	6400	330	19000
Chloroform	110	Not Detected	540	Not Detected
1,1,1-Trichloroethane	110	Not Detected	600	Not Detected
Cyclohexane	110	560	380	1900
Carbon Tetrachloride	110	Not Detected	700	Not Detected
2,2,4-Trimethylpentane	110	310	520	1500
Benzene	110	1800	350	5900
1,2-Dichloroethane	110	220	450	900
Heptane	110	980	450	4000
Trichloroethene	110	320	600	1700
1,2-Dichloropropane	110	Not Detected	510	Not Detected
1,4-Dioxane	440	Not Detected	1600	Not Detected
Bromodichloromethane	110	Not Detected	740	Not Detected
cis-1,3-Dichloropropene	110	Not Detected	500	Not Detected
4-Methyl-2-pentanone	110	1500	450	6100
Toluene	110	18000	420	68000
trans-1,3-Dichloropropene	110	Not Detected	500	Not Detected
1,1,2-Trichloroethane	110	Not Detected	600	Not Detected
Tetrachloroethene	110	560	750	3800

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BE2

Lab ID#: 1010371-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w102108**	**Date of Collection:**	**10/18/10 3:30:00 PM**
Dil. Factor:	**22.2**	**Date of Analysis:**	**10/21/10 11:36 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	440	Not Detected	1800	Not Detected
Dibromochloromethane	110	Not Detected	940	Not Detected
1,2-Dibromoethane (EDB)	110	Not Detected	850	Not Detected
Chlorobenzene	110	110	510	510
Ethyl Benzene	110	9500	480	41000
m,p-Xylene	110	14000	480	62000
o-Xylene	110	4200	480	18000
Styrene	110	960	470	4100
Bromoform	110	Not Detected	1100	Not Detected
Cumene	110	Not Detected	540	Not Detected
1,1,2,2-Tetrachloroethane	110	Not Detected	760	Not Detected
Propylbenzene	110	640	540	3100
4-Ethyltoluene	110	2500	540	12000
1,3,5-Trimethylbenzene	110	1000	540	5000
1,2,4-Trimethylbenzene	110	2200	540	11000
1,3-Dichlorobenzene	110	Not Detected	670	Not Detected
1,4-Dichlorobenzene	110	300	670	1800
alpha-Chlorotoluene	110	Not Detected	570	Not Detected
1,2-Dichlorobenzene	110	Not Detected	670	Not Detected
1,2,4-Trichlorobenzene	440	Not Detected	3300	Not Detected
Hexachlorobutadiene	440	Not Detected	4700	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1010371-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102106**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 10:35 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1010371-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102106**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 10:35 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1010371-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 08:07 AM**	

Compound	%Recovery
Freon 12	109
Freon 114	109
Chloromethane	106
Vinyl Chloride	106
1,3-Butadiene	106
Bromomethane	108
Chloroethane	116
Freon 11	105
Ethanol	105
Freon 113	110
1,1-Dichloroethene	109
Acetone	112
2-Propanol	115
Carbon Disulfide	112
3-Chloropropene	112
Methylene Chloride	96
Methyl tert-butyl ether	122
trans-1,2-Dichloroethene	111
Hexane	108
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	110
cis-1,2-Dichloroethene	106
Tetrahydrofuran	108
Chloroform	105
1,1,1-Trichloroethane	105
Cyclohexane	105
Carbon Tetrachloride	105
2,2,4-Trimethylpentane	109
Benzene	105
1,2-Dichloroethane	110
Heptane	110
Trichloroethene	104
1,2-Dichloropropane	106
1,4-Dioxane	108
Bromodichloromethane	106
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	90
Toluene	104
trans-1,3-Dichloropropene	106
1,1,2-Trichloroethane	106
Tetrachloroethene	104

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1010371-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 08:07 AM**	

Compound	%Recovery
2-Hexanone	114
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	106
Chlorobenzene	104
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	107
Styrene	108
Bromoform	109
Cumene	107
1,1,2,2-Tetrachloroethane	106
Propylbenzene	107
4-Ethyltoluene	109
1,3,5-Trimethylbenzene	108
1,2,4-Trimethylbenzene	109
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	101
alpha-Chlorotoluene	117
1,2-Dichlorobenzene	100
1,2,4-Trichlorobenzene	101
Hexachlorobutadiene	98

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1010371-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 08:57 AM**	

Compound	%Recovery
Freon 12	105
Freon 114	104
Chloromethane	104
Vinyl Chloride	103
1,3-Butadiene	106
Bromomethane	97
Chloroethane	108
Freon 11	102
Ethanol	93
Freon 113	91
1,1-Dichloroethene	92
Acetone	99
2-Propanol	104
Carbon Disulfide	101
3-Chloropropene	100
Methylene Chloride	85
Methyl tert-butyl ether	115
trans-1,2-Dichloroethene	104
Hexane	104
1,1-Dichloroethane	99
2-Butanone (Methyl Ethyl Ketone)	107
cis-1,2-Dichloroethene	101
Tetrahydrofuran	102
Chloroform	98
1,1,1-Trichloroethane	100
Cyclohexane	100
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	104
Benzene	96
1,2-Dichloroethane	101
Heptane	104
Trichloroethene	96
1,2-Dichloropropane	102
1,4-Dioxane	106
Bromodichloromethane	97
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	81
Toluene	93
trans-1,3-Dichloropropene	100
1,1,2-Trichloroethane	99
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1010371-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 08:57 AM**	

Compound	%Recovery
2-Hexanone	110
Dibromochloromethane	100
1,2-Dibromoethane (EDB)	101
Chlorobenzene	96
Ethyl Benzene	97
m,p-Xylene	97
o-Xylene	98
Styrene	101
Bromoform	100
Cumene	96
1,1,2,2-Tetrachloroethane	97
Propylbenzene	94
4-Ethyltoluene	97
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	96
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	88
alpha-Chlorotoluene	96
1,2-Dichlorobenzene	86
1,2,4-Trichlorobenzene	76
Hexachlorobutadiene	79

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1010371-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 09:32 AM**	

Compound	%Recovery
Freon 12	106
Freon 114	106
Chloromethane	104
Vinyl Chloride	104
1,3-Butadiene	107
Bromomethane	96
Chloroethane	106
Freon 11	102
Ethanol	97
Freon 113	92
1,1-Dichloroethene	92
Acetone	97
2-Propanol	99
Carbon Disulfide	102
3-Chloropropene	105
Methylene Chloride	87
Methyl tert-butyl ether	114
trans-1,2-Dichloroethene	104
Hexane	105
1,1-Dichloroethane	99
2-Butanone (Methyl Ethyl Ketone)	106
cis-1,2-Dichloroethene	102
Tetrahydrofuran	103
Chloroform	100
1,1,1-Trichloroethane	101
Cyclohexane	100
Carbon Tetrachloride	101
2,2,4-Trimethylpentane	106
Benzene	94
1,2-Dichloroethane	99
Heptane	101
Trichloroethene	97
1,2-Dichloropropane	100
1,4-Dioxane	101
Bromodichloromethane	99
cis-1,3-Dichloropropene	100
4-Methyl-2-pentanone	79
Toluene	92
trans-1,3-Dichloropropene	101
1,1,2-Trichloroethane	100
Tetrachloroethene	99

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1010371-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**w102104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/10 09:32 AM**	

Compound	%Recovery
2-Hexanone	111
Dibromochloromethane	104
1,2-Dibromoethane (EDB)	105
Chlorobenzene	98
Ethyl Benzene	99
m,p-Xylene	100
o-Xylene	100
Styrene	104
Bromoform	103
Cumene	98
1,1,2,2-Tetrachloroethane	98
Propylbenzene	96
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	99
1,2,4-Trimethylbenzene	100
1,3-Dichlorobenzene	93
1,4-Dichlorobenzene	93
alpha-Chlorotoluene	101
1,2-Dichlorobenzene	90
1,2,4-Trichlorobenzene	83
Hexachlorobutadiene	85

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page ____ of ____

Project Manager DAVID DERENZO
Collected by: (Print and Sign) Chris Dossett
Company DERENZO + ASSOC. Email dderenzo@derenzo.com
Address 39395 SCHOOLCRAFT City LIVONIA State MI Zip 48150
Phone 734-464-3880 Fax 734-464-4505

Project Info:
P.O. # 1310
Project # 180102713
Project Name BREVARD ENERGY

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by: ____
Date: ____
Pressurization Gas: N_2 He

	Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	BE1			10/18/10	15:30	TO-15				
02A	BE2			10/18/10	15:30	TO-15				

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time	Notes:
	716 10/19/10	
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time	
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time	

Lab Use Only

Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
Fedex gnd		NA	good	Yes No None	1010371

Form 1293 rev.11