FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKB3

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EHB002C Lab Sample ID: ABLKB3

Date Analyzed: 07/02/04 Time Analyzed: 1339

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B3LCS	B3LCS	EH010CQ	1128
02	B3LCSD	B3LCSD	EH010CQD	1206
03	SGTERADYNEDP	576335	576335I2	1525
04	SGTERADYNEDL	576334D1	576334D	1610
05				
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH001P BFB Injection Date: 06/29/04

Instrument ID: V BFB Injection Time: 1029

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	54.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	68.9
175	4.0 - 9.0% of mass 174	5.0 (7.3)1
176	93.0 - 101.0% of mass 174	67.0 (97.2)1
177	5.0 - 9.0% of mass 176	4.7 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD0005	ASTD0005	EH0005I2	06/29/04	1147
02	ASTD010	ASTD010	EH010	06/29/04	1313
03	ASTD015	ASTD015	EH015	06/29/04	1353
04	ASTD020	ASTD020	EH020	06/29/04	1438
05	ASTD040	ASTD040	EH040I3	06/29/04	1655
06	ASTD005	ASTD005	EH005I2	06/29/04	1923
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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH003P BFB Injection Date: 07/01/04

Instrument ID: V BFB Injection Time: 0959

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.8
75	30.0 - 66.0% of mass 95	54.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.3
175	4.0 - 9.0% of mass 174	4.6 (6.9)1
176	93.0 - 101.0% of mass 174	63.3 (95.5)1
177	5.0 - 9.0% of mass 176	4.1 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD010	ASTD010	EH010B	07/01/04	1029
02	B1LCS	B1LCS	EH010BQ	07/01/04	1109
03	B1LCSD	B1LCSD	EH010BQD	07/01/04	1146
04	ABLKB1	ABLKB1	EHB002B	07/01/04	1317
05	SGTERADYNE	576334	576334	07/02/04	0446
06	TRIP BLANK	576336	576336	07/02/04	0619
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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH004P BFB Injection Date: 07/02/04

Instrument ID: V BFB Injection Time: 0948

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.8
75	30.0 - 66.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	71.6
175	4.0 - 9.0% of mass 174	5.1 (7.1)1
176	93.0 - 101.0% of mass 174	68.3 (95.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD010	ASTD010	EH010C	07/02/04	1033
02	B3LCS	B3LCS	EH010CQ	07/02/04	1128
03	B3LCSD	B3LCSD	EH010CQD	07/02/04	1206
04	ABLKB3	ABLKB3	EHB002C	07/02/04	1339
05	SGTERADYNEDP	576335	576335I2	07/02/04	1525
06	SGTERADYNEDL	576334D1	576334D	07/02/04	1610
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6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EH0005I2 RRF5 =EH005I2
RRF10 =EH010 RRF20 =EH020 RRF40 =EH040I3

COMPOUND		RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD	
Dichlorodifluoromethane		2.485	2.085	2.055	1.802	1.603			
Chloromethane		0.511	0.466	0.471	0.419	0.348			
Vinyl Chloride		0.656	0.616	0.642	0.590	0.530			
Bromomethane		0.774	0.872	0.923	0.861	0.793			
Chloroethane		0.320	0.340	0.350	0.328	0.296			
Trichlorofluoromethane		2.696	2.754	2.674	2.357	1.989			
Freon TF		1.734	1.912	1.818	1.626	1.461			
1,1-Dichloroethene		0.680	0.704	0.657	0.591	0.494			
Methylene Chloride		1.274	0.861	0.821	0.724	0.626			
1,1-Dichloroethane	*	1.362	1.388	1.346	1.204	1.022			*
cis-1,2-Dichloroethene		0.762	0.889	0.849	0.828	0.811			
Chloroform		2.048	2.084	2.034	1.795	1.556			
1,1,1-Trichloroethane		0.501	0.550	0.531	0.470	0.380			
Carbon Tetrachloride		0.565	0.635	0.599	0.536	0.451			
Benzene		0.463	0.488	0.448	0.399	0.304			
1,2-Dichloroethane		0.290	0.296	0.289	0.240	0.168			
Trichloroethene		0.265	0.291	0.283	0.272	0.246			
1,2-Dichloropropane		0.179	0.189	0.182	0.168	0.133			
cis-1,3-Dichloropropene		0.342	0.383	0.377	0.357	0.331			
Toluene		0.410	0.427	0.396	0.358	0.298			
trans-1,3-Dichloropropene		0.302	0.354	0.345	0.316	0.284			
1,1,2-Trichloroethane		0.240	0.255	0.238	0.219	0.187			
Tetrachloroethene		0.306	0.373	0.353	0.333	0.306			
Chlorobenzene	*	0.509	0.568	0.537	0.478	0.378			*
Ethylbenzene		0.910	0.892	0.839	0.702	0.502			
Xylene (m,p)		0.289	0.323	0.295	0.228	0.134			
Styrene		0.444	0.575	0.542	0.446	0.311			
Xylene (o)		0.288	0.352	0.339	0.290	0.217			
1,1,2,2-Tetrachloroethane		0.486	0.556	0.534	0.446	0.363			
1,3-Dichlorobenzene		0.482	0.618	0.617	0.549	0.481			
1,4-Dichlorobenzene		0.462	0.578	0.565	0.474	0.400			
1,2-Dichlorobenzene		0.422	0.533	0.539	0.458	0.408			
1,2,4-Trichlorobenzene		0.174	0.212	0.216	0.170				
Hexachlorobutadiene		0.188	0.209	0.199	0.138				
1,3,5-Trimethylbenzene		0.845	0.888	0.811	0.615	0.414			
1,2,4-Trimethylbenzene		0.734	0.893	0.873	0.723	0.595			
1,2-Dichlorotetrafluoroethan		2.234	2.325	2.384	2.076	1.698			

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EH0005I2 RRF5 =EH005I2
RRF10 =EH010 RRF20 =EH020 RRF40 =EH040I3

COMPOUND	RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD
1,2-Dibromoethane	0.505	0.558	0.518	0.454	0.382		
1,3-Butadiene	0.360	0.381	0.393	0.355	0.312		
Carbon Disulfide	2.259	2.303	2.209	2.013	1.853		
Acetone		1.063	1.019	0.895	0.773		
Isopropyl Alcohol		1.169	1.142	0.961	0.859		
Methyl tert-Butyl Ether	2.102	2.184	2.140	1.896	1.587		
Cyclohexane	0.214	0.232	0.213	0.194	0.143		
Dibromochloromethane	0.579	0.703	0.665	0.586	0.495		
Methyl Ethyl Ketone	3.378	3.024	2.925	2.570	1.999		
Methyl Isobutyl Ketone	0.370	0.439	0.442	0.401	0.346		
Methyl Butyl Ketone	0.398	0.459	0.428	0.343	0.277		
Bromodichloromethane	0.515	0.588	0.578	0.527	0.442		
trans-1,2-Dichloroethene	1.024	1.070	1.035	0.966	0.862		
4-Ethyltoluene	0.894	1.196	1.177	1.017	0.780		
2-Chlorotoluene	0.784	0.856	0.766	0.561	0.344		
n-Hexane	0.828	1.261	0.900	0.860	0.664		
Tetrahydrofuran		0.198	0.188	0.173	0.114		
n-Heptane	0.220	0.234	0.214	0.173	0.103		

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EH015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
Dichlorodifluoromethane						2.006	16.6
Chloromethane						0.443	14.0
Vinyl Chloride						0.607	8.2
Bromomethane						0.845	7.2
Chloroethane						0.327	6.4
Trichlorofluoromethane						2.494	12.9
Freon TF						1.710	10.2
1,1-Dichloroethene						0.625	13.6
Methylene Chloride						0.861	28.8
1,1-Dichloroethane *						1.264	12.1*
cis-1,2-Dichloroethene						0.828	5.7
Chloroform						1.903	11.8
1,1,1-Trichloroethane						0.486	13.8
Carbon Tetrachloride						0.557	12.6
Benzene						0.420	17.3
1,2-Dichloroethane						0.257	21.1
Trichloroethene						0.271	6.5
1,2-Dichloropropane						0.170	13.0
cis-1,3-Dichloropropene						0.358	6.2
Toluene						0.378	13.6
trans-1,3-Dichloropropene						0.320	9.1
1,1,2-Trichloroethane						0.228	11.4
Tetrachloroethene						0.334	8.8
Chlorobenzene *						0.494	14.8*
Ethylbenzene						0.769	22.1
Xylene (m,p)						0.254	29.7
Styrene						0.464	22.3
Xylene (o)						0.297	17.9
1,1,2,2-Tetrachloroethane						0.477	16.1
1,3-Dichlorobenzene						0.549	12.4
1,4-Dichlorobenzene						0.496	15.1
1,2-Dichlorobenzene						0.472	13.0
1,2,4-Trichlorobenzene	0.182					0.191	11.3
Hexachlorobutadiene	0.158					0.178	16.6
1,3,5-Trimethylbenzene						0.715	27.6
1,2,4-Trimethylbenzene						0.764	16.0
1,2-Dichlorotetrafluoroethan						2.143	12.8

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EH015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
1,2-Dibromoethane						0.483	14.0
1,3-Butadiene						0.360	8.6
Carbon Disulfide						2.127	8.9
Acetone	0.968					0.944	12.1
Isopropyl Alcohol	1.046					1.035	12.4
Methyl tert-Butyl Ether						1.982	12.5
Cyclohexane						0.199	17.2
Dibromochloromethane						0.606	13.4
Methyl Ethyl Ketone						2.779	18.8
Methyl Isobutyl Ketone						0.400	10.5
Methyl Butyl Ketone						0.381	19.0
Bromodichloromethane						0.530	11.0
trans-1,2-Dichloroethene						0.991	8.2
4-Ethyltoluene						1.013	17.7
2-Chlorotoluene						0.662	31.6
n-Hexane						0.903	24.3
Tetrahydrofuran	0.183					0.171	19.3
n-Heptane						0.189	28.1

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/01/04 Time: 1029

Lab File ID: EH010B Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	2.006	2.141	0.01	6.7	30.0	
Chloromethane	0.443	0.440	0.01	0.7	30.0	
Vinyl Chloride	0.607	0.592	0.01	2.5	30.0	
Bromomethane	0.845	0.846	0.01	0.1	30.0	
Chloroethane	0.327	0.338	0.01	3.4	30.0	
Trichlorofluoromethane	2.494	2.945	0.01	18.1	30.0	
Freon TF	1.710	1.938	0.01	13.3	30.0	
1,1-Dichloroethene	0.625	0.680	0.01	8.8	30.0	
Methylene Chloride	0.861	0.888	0.01	3.1	30.0	
1,1-Dichloroethane	1.264	1.420	0.1	12.3	30.0	
cis-1,2-Dichloroethene	0.828	0.900	0.01	8.7	30.0	
Chloroform	1.903	2.276	0.01	19.6	30.0	
1,1,1-Trichloroethane	0.486	0.592	0.01	21.8	30.0	
Carbon Tetrachloride	0.557	0.668	0.01	19.9	30.0	
Benzene	0.420	0.476	0.01	13.3	30.0	
1,2-Dichloroethane	0.257	0.333	0.01	29.6	30.0	
Trichloroethene	0.271	0.303	0.01	11.8	30.0	
1,2-Dichloropropane	0.170	0.198	0.01	16.5	30.0	
cis-1,3-Dichloropropene	0.358	0.406	0.01	13.4	30.0	
Toluene	0.378	0.414	0.01	9.5	30.0	
trans-1,3-Dichloropropene	0.320	0.383	0.01	19.7	30.0	
1,1,2-Trichloroethane	0.228	0.258	0.01	13.2	30.0	
Tetrachloroethene	0.334	0.366	0.01	9.6	30.0	
Chlorobenzene	0.494	0.578	0.3	17.0	30.0	
Ethylbenzene	0.769	0.921	0.01	19.8	30.0	
Xylene (m,p)	0.254	0.318	0.01	25.2	30.0	
Styrene	0.464	0.585	0.01	26.1	30.0	
Xylene (o)	0.297	0.364	0.01	22.6	30.0	
1,1,2,2-Tetrachloroethane	0.477	0.586	0.01	22.8	30.0	
1,3-Dichlorobenzene	0.549	0.651	0.01	18.6	30.0	
1,4-Dichlorobenzene	0.496	0.601	0.01	21.2	30.0	
1,2-Dichlorobenzene	0.472	0.568	0.01	20.3	30.0	
1,2,4-Trichlorobenzene	0.191	0.189	0.01	1.0	30.0	
Hexachlorobutadiene	0.178	0.182	0.01	2.2	30.0	
1,3,5-Trimethylbenzene	0.715	0.974	0.01	36.2	30.0	<-
1,2,4-Trimethylbenzene	0.764	0.967	0.01	26.6	30.0	
1,2-Dichlorotetrafluoroethan	2.143	2.269	0.01	5.9	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/01/04 Time: 1029

Lab File ID: EH010B Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
1,2-Dibromoethane	0.483	0.549	0.01	13.7	30.0	
1,3-Butadiene	0.360	0.359	0.01	0.3	30.0	
Carbon Disulfide	2.127	2.283	0.01	7.3	30.0	
Acetone	0.944	1.111	0.01	17.7	30.0	
Isopropyl Alcohol	1.035	1.233	0.01	19.1	30.0	
Methyl tert-Butyl Ether	1.982	2.341	0.01	18.1	30.0	
Cyclohexane	0.199	0.220	0.01	10.6	30.0	
Dibromochloromethane	0.606	0.720	0.01	18.8	30.0	
Methyl Ethyl Ketone	2.779	3.214	0.01	15.6	30.0	
Methyl Isobutyl Ketone	0.400	0.481	0.01	20.2	30.0	
Methyl Butyl Ketone	0.381	0.459	0.01	20.5	30.0	
Bromodichloromethane	0.530	0.638	0.01	20.4	30.0	
trans-1,2-Dichloroethene	0.991	1.152	0.01	16.2	30.0	
4-Ethyltoluene	1.013	1.190	0.01	17.5	30.0	
2-Chlorotoluene	0.662	0.864	0.01	30.5	30.0	<-
n-Hexane	0.903	1.010	0.01	11.8	30.0	
Tetrahydrofuran	0.171	0.199	0.01	16.4	30.0	
n-Heptane	0.189	0.237	0.01	25.4	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/02/04 Time: 1033

Lab File ID: EH010C Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	2.006	2.085	0.01	3.9	30.0	
Chloromethane	0.443	0.419	0.01	5.4	30.0	
Vinyl Chloride	0.607	0.568	0.01	6.4	30.0	
Bromomethane	0.845	0.833	0.01	1.4	30.0	
Chloroethane	0.327	0.331	0.01	1.2	30.0	
Trichlorofluoromethane	2.494	2.780	0.01	11.5	30.0	
Freon TF	1.710	1.821	0.01	6.5	30.0	
1,1-Dichloroethene	0.625	0.670	0.01	7.2	30.0	
Methylene Chloride	0.861	0.831	0.01	3.5	30.0	
1,1-Dichloroethane	1.264	1.363	0.1	7.8	30.0	
cis-1,2-Dichloroethene	0.828	0.877	0.01	5.9	30.0	
Chloroform	1.903	2.122	0.01	11.5	30.0	
1,1,1-Trichloroethane	0.486	0.552	0.01	13.6	30.0	
Carbon Tetrachloride	0.557	0.628	0.01	12.7	30.0	
Benzene	0.420	0.460	0.01	9.5	30.0	
1,2-Dichloroethane	0.257	0.303	0.01	17.9	30.0	
Trichloroethene	0.271	0.306	0.01	12.9	30.0	
1,2-Dichloropropane	0.170	0.186	0.01	9.4	30.0	
cis-1,3-Dichloropropene	0.358	0.387	0.01	8.1	30.0	
Toluene	0.378	0.397	0.01	5.0	30.0	
trans-1,3-Dichloropropene	0.320	0.355	0.01	10.9	30.0	
1,1,2-Trichloroethane	0.228	0.244	0.01	7.0	30.0	
Tetrachloroethene	0.334	0.352	0.01	5.4	30.0	
Chlorobenzene	0.494	0.554	0.3	12.1	30.0	
Ethylbenzene	0.769	0.871	0.01	13.3	30.0	
Xylene (m,p)	0.254	0.304	0.01	19.7	30.0	
Styrene	0.464	0.543	0.01	17.0	30.0	
Xylene (o)	0.297	0.343	0.01	15.5	30.0	
1,1,2,2-Tetrachloroethane	0.477	0.554	0.01	16.1	30.0	
1,3-Dichlorobenzene	0.549	0.614	0.01	11.8	30.0	
1,4-Dichlorobenzene	0.496	0.569	0.01	14.7	30.0	
1,2-Dichlorobenzene	0.472	0.536	0.01	13.6	30.0	
1,2,4-Trichlorobenzene	0.191	0.216	0.01	13.1	30.0	
Hexachlorobutadiene	0.178	0.197	0.01	10.7	30.0	
1,3,5-Trimethylbenzene	0.715	0.997	0.01	39.4	30.0	<-
1,2,4-Trimethylbenzene	0.764	0.893	0.01	16.9	30.0	
1,2-Dichlorotetrafluoroethan	2.143	2.162	0.01	0.9	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/02/04 Time: 1033

Lab File ID: EH010C Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
1,2-Dibromoethane	0.483	0.517	0.01	7.0	30.0
1,3-Butadiene	0.360	0.349	0.01	3.0	30.0
Carbon Disulfide	2.127	2.234	0.01	5.0	30.0
Acetone	0.944	1.078	0.01	14.2	30.0
Isopropyl Alcohol	1.035	1.153	0.01	11.4	30.0
Methyl tert-Butyl Ether	1.982	2.199	0.01	10.9	30.0
Cyclohexane	0.199	0.220	0.01	10.6	30.0
Dibromochloromethane	0.606	0.684	0.01	12.9	30.0
Methyl Ethyl Ketone	2.779	2.947	0.01	6.0	30.0
Methyl Isobutyl Ketone	0.400	0.446	0.01	11.5	30.0
Methyl Butyl Ketone	0.381	0.424	0.01	11.3	30.0
Bromodichloromethane	0.530	0.604	0.01	14.0	30.0
trans-1,2-Dichloroethene	0.991	1.068	0.01	7.8	30.0
4-Ethyltoluene	1.013	1.062	0.01	4.8	30.0
2-Chlorotoluene	0.662	0.819	0.01	23.7	30.0
n-Hexane	0.903	0.952	0.01	5.4	30.0
Tetrahydrofuran	0.171	0.188	0.01	9.9	30.0
n-Heptane	0.189	0.224	0.01	18.5	30.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID (Standard): EH010B Date Analyzed: 07/01/04

Instrument ID: V Time Analyzed: 1029

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 (BCM) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DFB) AREA #	RT #
	12 HOUR STD	196072	9.63	859176	12.69	863432	10.41
	UPPER LIMIT	274501	9.96	1202846	13.02	1208805	10.74
	LOWER LIMIT	117643	9.30	515506	12.36	518059	10.08
	CLIENT SAMPLE NO.						
01	B1LCS	231538	9.63	884114	12.68	979077	10.42
02	B1LCSD	224263	9.63	826099	12.69	945364	10.41
03	ABLKB1	212816	9.63	811592	12.68	906434	10.42
04	SGTERADYNE	308010*	9.63	1186672	12.69	1282355*	10.42
05	TRIP BLANK	243248	9.63	910176	12.68	1023072	10.42
06							
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22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID (Standard): EH010C Date Analyzed: 07/02/04

Instrument ID: V Time Analyzed: 1033

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 (BCM) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DFB) AREA #	RT #
	12 HOUR STD	213170	9.63	916870	12.69	925818	10.42
	UPPER LIMIT	298438	9.96	1283618	13.02	1296145	10.75
	LOWER LIMIT	127902	9.30	550122	12.36	555491	10.09
	CLIENT SAMPLE NO.						
01	B3LCS	261320	9.63	1047738	12.68	1105504	10.42
02	B3LCSD	246543	9.63	893892	12.69	1026603	10.42
03	ABLKB3	221884	9.63	839440	12.69	944306	10.42
04	SGTERADYNEDP	284314	9.63	1106641	12.68	1186731	10.42
05	SGTERADYNEDL	299404*	9.64	1131082	12.69	1247332	10.43
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22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
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AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

ATTACHMENT 5

Trillium's Data Validation Reports

ATTACHMENT 5

Trillium's Data Validation Reports

TRILLIUM INC.

DATA VALIDATION

FOR

INDUSTRIPLEX PROJECT
WOBURN, MASSACHUSETTS

ORGANIC ANALYSIS DATA
Volatile Organics in Soil Gas

Sample Delivery Group #100226
May 2004 Sample Collections

Chemical Analyses Performed by:

Severn Trent Laboratories
Colchester, Vermont

FOR

Roux Associates, Inc.
Burlington, Massachusetts

BY

Trillium, Inc.
356 Farragut Crossing Drive
Knoxville, Tennessee 37922
(865) 966-8880

June 25, 2004

04864\CAE\EKD
Industriplex/Soil Gas/100226 voc

EXECUTIVE SUMMARY

Validation of the volatile organics analysis data prepared by Severn Trent Laboratories (STL Burlington) for seven soil gas samples collected in association with the IndustriPlex project in Woburn, Massachusetts, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under Sample Delivery Group (SDG) #100226, which was received for review on June 22, 2004. The following samples were reported:

SG-ABC ROOFING	SG-GANGLIANI
SG-GRAPHIQUE	SG-PACER
SG-SACCO/A	SG-SACCO/B
SG-VINING	

Throughout this report, the suffix "DL" is used to distinguish the diluted re-analysis of a sample (e.g., SG-PACERDL) from the original, undiluted analysis of the sample.

Based on the validation effort, reported sample results were qualified as follows:

- Results for acetone in SG-PACER, SG-PACERDL, SG-ABC ROOFING, and SG-ABC ROOFINGDL were qualified as estimated (J).
- Results for methyl tert-butyl ether and methyl ethyl ketone in SG-ABC ROOFING and SG-SACCO/B were corrected to less than the reporting limit (RL) (0.50 U).
- Results for methyl ethyl ketone in SG-GANGLIANI, SG-GRAPHIQUE, and SG-SACCO/A were corrected to less than the RL (0.50 U).

All "D" and "E" qualifiers applied by the laboratory were removed by the validator. "J" qualifiers applied by the laboratory to denote target analyte results below the applicable RL were not removed except where superceded by validation qualifiers.

For SG-ABC ROOFING and SG-PACER, only the results recommended for use by the validator have been reported on the data summary form; these represent a combination of results from the original and diluted analyses of these samples. In Attachment B, the Form Is for the original analyses of SG-ABC ROOFING and SG-PACER have been "hybridized" to reflect the results recommended for use from the two reported analyses of each sample. The Form Is for the analyses that should not be used have been marked "Do Not Use" for clarity.

CLICK TO CONTINUE

Brief explanations of the reasons for the actions taken above may be found in the Overall Assessment (Section XIV) of this report. Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XIII.

This validation report should be considered part of the data package for all future distributions of these volatiles data.