QUARTERLY PROGRESS REPORT
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

TO: Darryl Luce, USEPA
Andrew Hoffman, NHDES
Warren Diesl, AECOM Environment

FROM: Work Settling Defendants (WSD)
prepared by Mike Webster and Christene Binger, GeoInsight, Inc.

DATE: July 10, 2011

RE: Quarterly Progress Report

Christene Binger
Digitally signed by Christene Binger
DN: cn=Christene Binger, o=GeoInsight, Inc., ou, email=cabinger@geoinc.com, c=US
Reason: I am approving this document
Date: 2011.07.12 15:17:21 -04'00'

REPORTING PERIOD:

_____January to March – Due April 10th
__X__April to June – Due July 10th
_____July to September – Due October 10th
_____October to December – Due January 10th

I. PROGRESS REPORT OVERVIEW

For these Quarterly Progress Reports, representatives of the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) will be collectively referred to as the "Agency(ies)." Remedial Action (RA) activities are being completed at the Dover Municipal Landfill Superfund Site by GeoInsight, Inc. (GeoInsight) and XDD, Inc. (XDD) at the request of the Executive Committee of the Work Settling Defendants (the "Group"). Dean Peschel, Environmental Projects Manager for the City of Dover, is the project coordinator on behalf of the Group.

As requested by Darryl Luce, USEPA Remedial Project Manager, the Quarterly Progress Report was developed to provide an overall summary of completed and ongoing activities. The First Quarterly Report that was submitted on January 10, 2009 included an overview of objectives and an overall summary of activities at the Dover Municipal Landfill. Going forward, Quarterly Progress Reports only include updates for ongoing RA activities. As requested by USEPA, the progress report will be distributed via electronic PDF copies only.

II. OVERVIEW OF LANDFILL ACTIVITIES

This progress report focuses upon activities completed from April to June 2011. During this reporting period, activities were conducted associated with:

- Southern Plume Management of Migration (MOM) (summary attached);

SDMS DocID 490941

- Northwest Landfill Hot Spot Remedial Design and Remedial Action (summary attached); and

- Source Control Remedial Action (SCRA; summary attached).

A master schedule of anticipated activities for 2011 was developed to provide the Agencies and the Group with a consolidated, site-wide summary of activities and likely implementation schedule. The master schedule will be updated each quarter and is included as an attachment.

III. COMMUNITY RELATIONS PLAN

The City of Dover provided a public notice on June 8, 2011 to neighborhood residents. The notice included the schedule of SCRA activities and a brief description of the work areas at the Landfill and along roadways where the conveyance line will be installed. A copy is attached.

IV. SUMMARY OF REMEDIAL ACTIVITIES

This section of the Quarterly Progress Report provides a summary of the estimated mass of volatile organic compounds (VOC) removed (to date) associated with ongoing remedial activities.

Activity	**Pounds of VOCs Removed**				
	2008	**2009**	**2010**	**2011**	**Total**
Southern Plume MOM	4.5	4.0	4.3	1.1	13.9
Northwest Landfill Hotspot	0	17,603	22,525	683	40,811

V. ATTACHMENTS

- Master Schedule of Anticipated Activities - Year 2011;
- Copy of City of Dover June 8, 2011 notice to residents; and
- Summary and Status of Activities (three attachments).

MASTER SCHEDULE OF ANTICIPATED ACTIVITIES - YEAR 2011
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
TOLEND ROAD
DOVER, NEW HAMPSHIRE

	2011											
	Q1			Q2			Q3			Q4		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SOURCE CONTROL												
Source Control Remedial Action												
SCRA Work Plan (approved January 24, 2011)												
Phase I - Finish Closure of Perimeter Ditch												
Construction of Ground Water Extraction (GWE) System												
Enhancement of Permeable Cover												
GWE System Start-up												
Northwest Landfill Hotspot Remedial Action												
Site Preparation Activities and Equipment Testing												
Baseline Sampling												
System Start Up												
Seasonal Operation												
Performance Monitoring												
System Shutdown												
Data submittals (with Quarterly Progress Reports)												
MANAGEMENT OF MIGRATION												
Southern Plume - Ground Water Extraction												
Pre-start up system equipment procurement and configuration modifications												
Baseline Gauging and Sampling												
System Start Up												
Seasonal Operation												
Performance Monitoring												
System Shutdown												
Data submittals (with Quarterly Progress Reports)												
OTHER RESPONSE ACTIONS												
Soil Vapor Intrusion												
Focused Monitoring during EMP Events												
Environmental Monitoring Plan												
EMP Program Proposed Modifications Summary												
Summary Report: Second Monitoring Event (Winter) Year 2010 - Submitted April 12, 2011												
First Monitoring Event (Spring) 2011												
Second Monitoring Event (Winter) 2011												
Summary Report: First Monitoring Event (Summer) Year 2011												

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City of Dover, New Hampshire

COMMUNITY SERVICES DEPARTMENT

June 8, 2011

Dear Resident:

The Dover Landfill Closure Project is getting underway this month and will continue through November of this year. The project consists of two major components.

The first part is the ground water extraction system which is a system of wells which will extract and collect contaminated groundwater. This construction will be confined to the area of the landfill. The second part is the construction of a sewer line that will transport the extracted groundwater from the landfill to an existing sewer line located on Cornerstone Drive. The sewer line begins at the landfill and will cross Tolend Road, then follow Glen Hill Road to Covered Bridge Lane. It will travel down Covered Bridge Lane over the Cocheco River via a new bridge to and across the County Property. The line will follow County Farm Cross Road for a short distance to Cornerstone Drive. Minor traffic delays may occur during construction, but the roads remain open throughout the construction project.

The sewer line will be a high pressure force main. It has been determined that if any residences wish to connect to the force main, that they will be allowed to do so, with conditions. If you are interested in connecting to the sewer force main, please contact Dean Peschel at 603-781-5931.

Sincerely,

Douglas W. Steele II
Director

SUMMARY AND STATUS OF ACTIVITIES – Q2 - JULY 10, 2011
SOUTHERN PLUME MANAGEMENT OF MIGRATION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

- conducting system modifications including, replacing the ground water extraction (GWE) system water line tubing between the manifold and extraction wells SB-4D and MW-206(I);
- performing the annual baseline gauging event on March 30, 2011;
- performing the annual baseline monitoring event and pressure transducer data download between April 5 and 6, 2011;
- performing system startup on April 12, 2011;
- coordinating operation of the Southern Plume GWE system;
- conducting weekly system operation, monitoring, and maintenance activities; and
- collecting monthly samples from extraction wells and the frac tank.

2. Deliverables and Correspondence

The 2010 Annual Remedy Performance Report was submitted on April 10, 2011 during this reporting period.

3. Schedule for Next Quarter

During the next quarter the following activities are anticipated to be performed:

- weekly system operation, monitoring, and maintenance activities;
- monthly sampling activities from extraction wells and the frac tank;
- performance monitoring event and transducer download during the month of July; and
- on-going evaluation of system performance field data.

4. Status of Activities

Reporting Schedule - Information regarding the Southern Plume MOM will be included in two of the four annual Quarterly Progress Reports as specified in September 26, 2008 100 Percent Design Report, consistent with the following reporting schedule:

-April to July activities will be included in the October Report
-August to November activities will be included in the subsequent April Report

Remedy Design:	Completed.
Remedy Construction:	100 Percent Complete.
Remedy Implementation:	First, second and third operating season completed. Fourth system operating season initiated on April 12, 2011.
Mass Removal 2008 to 2010:	12.8 pounds
Mass Removal 2011 (to date):	1.1 pounds
Total Mass Removal	**13.9 pounds**

5. Modifications

The weekly extraction well sampling schedule was modified to a monthly schedule.

SUMMARY AND STATUS OF ACTIVITIES – Q2 – JULY 10, 2011
SOURCE CONTROL REMEDIAL ACTION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

- a Phase II SCRA kick-off meeting with the Phase II contractor, the Agencies, and representatives of the Dover Group was held on May 10, 2011;
- Phase II activities and contractor mobilization were initiated on June 13, 2011; and
- extraction well drilling activities were initiated on June 13, 2011 and continued through June 30, 2011.

2. Deliverables and Correspondence

During this reporting period, USEPA prepared a letter on May 12, 2011 related to the frequency of Site Meetings. In the letter USEPA approved the following modification to the progress meeting schedule; weekly meeting notes will be provided to USEPA, and USEPA will participate in periodic meetings at critical phases of the work.

3. Schedule for Next Quarter

During the next quarter the following activities are anticipated to be performed:

- additional focused site clearing for electrical utility line installation;
- continued extraction well drilling activities
- extraction well development activities; and
- initiation of infrastructure installations.

4. Status of Activities

Reporting Schedule - Information regarding the SCRA will be included in the four Quarterly Progress Reports as specified in March 24, 2011 Final SCRA Work Plan.

5. Modifications

The progress meeting schedule was modified. Other modifications were not implemented during this quarter.

SUMMARY AND STATUS OF ACTIVITIES – Q2 – JULY 10, 2011
NORTHWEST LANDFILL HOTSPOT REMEDIAL DESIGN AND REMEDIAL ACTION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

Baseline Data Reports - 2011

- This is the third operating season of the air sparge (AS) and soil vapor extraction (SVE) system. A summary of data from the 2010 operating season was presented in the Northwest Landfill Response Action Air Sparging and Soil Vapor Extraction 2010 Annual Report (the 2010 Annual Report), dated April 12, 2011.
- Baseline soil vapor, ground water, and air sampling were completed from February through April 2011. See Tables 1, 2, and 3 for a summary of the soil vapor, ground water, and ambient air baseline sampling results (Attachment A presents the laboratory results).

2011 Field Work – Q2

- Repair of a crack in the SVE discharge stack delayed system start up. The stack was repaired in early May 2011.
- On April 14, 2011, the granular activated carbon inside of the SVE water separator treatment unit was replaced. Environmental Projects, Inc. (EPI) properly disposed of the spent carbon offsite.
- Official system startup occurred on May 9, 2011.
- System operation and well adjustments: In May and June 2011, AS and SVE systems were optimized in accordance with the 2010 Annual Report. Figures 1 and 2 present the AS and SVE system layout with respect to the volatile organic compound (VOC) treatment area and the perimeter treatment curtain. Tables 4 and 5 present a summary of AS and SVE well air flow data, respectively.
- Tolend Road ambient air sample: One baseline sample was collected prior to startup. An operations sample will be collected at the beginning of Q3. Table 3 presents a summary of ambient air sample results for this location. The corresponding laboratory report has been provided in Attachment A.
- Periodic system checks: Table 6 presents a summary of system status check data. Table 7 is a summary of laboratory results collected from the SVE discharge. Table 8 presents a summary of vapor probe data. Table 9 presents a summary of aqueous sample analytical results collected prior to and after activated carbon treatment.
- AS Well Replacement: On June 30, 2011, an attempt was made to replace 8 poorly performing AS wells via Geoprobe. Multiple refusals forced the replacement to be postponed until an auger rig becomes available. AS well replacement is scheduled for July 2011.
- Monthly O&M Field Event –May 23, 2011: Per the 2010 Annual Report, SVE flow rates were modified and optimized for maximum VOC removal during the May 2010 O&M event. The corresponding laboratory reports have been provided in Attachment A. Table 7 is a summary of laboratory results collected from the SVE discharge. Table 8 presents a summary of vapor probe data. The corresponding laboratory reports have been provided in Attachment A.
- Monthly O&M Field Event – June 10, 2011: Per the 2010 Annual Report, AS flow rates were modified and optimized for maximum VOC removal during the June 2010 O&M event. The corresponding laboratory reports have been provided in Attachment A.

<u>Mass Removal Calculation</u>

- Table 10 presents the mass removed at the site during operation of the AS and SVE system.

- Approximately 683 pounds of VOCs (primarily cis-1,2-dichloroethene, tetrachloroethene, and toluene) have been removed between May 9, 2011 and June 10, 2011. A total of 40,811 pounds of VOCs have been removed since June 2009.

2. Deliverables and Correspondence

The 2010 Annual Report was submitted on April 10, 2011.

3. Schedule for Next Quarter

During the next quarter the following activities are anticipated to be performed:

- Monthly O&M Field Events – July, August, and September 2011;
- Additional AS well installation - July 2011;
- AS/SVE Emission Contribution Evaluation - August 2011; and
- Two-month post system startup ambient air sample collection along Tolend Road (estimated to occur in July 2011).

4. Status of Activities

Performance and regulatory monitoring data will be submitted with the Quarterly Progress Reports as these data become available.

Remedy Design:	Complete.
Remedy Construction:	Complete.
Remedy Implementation:	Active.

5. Modifications

None

TABLES

Table 1
SVE Soil Gas Static VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Sample ID	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are reported in ppbv)															
SVE-05																	
	9/3/2008	65	32 U	140	280	32 U	810	32 U	2,000	32 U	32 U	32 U	32 U	32 U	32 U	32 U	32 U
	4/1/2009	30 U	37	53	360	62	240	30 U	10,000	30 U	30 U	30 U	30 U	52	30 U	30 U	30 U
	4/1/2010	800	140	400	2,300	94	5,600	190	32,000	47 U	47 U	53	47 U	510	51	47 U	92
	2/7/2011	850	270	1,000	4,300	280	14,000	150	37,000	48 U	48 U	51	50	470 J	150 J	95	89
SVE-05 (Duplicate)																	
	2/7/2011	710	240	960	3,900	260	13,000	130	34,000	44 U	44 U	44 U	44 U	150 J	62 J	59	110
SVE-07																	
	9/3/2008	530	1,100	7,300	7,800	88 U	5,700	88 U	6,000	100	92	400	1,300	17,000	2,100	650	230
	4/1/2009	46	35	430	1,300	15 U	760	16	2,000	120	120 J	90	610	5,400	1,400	480	40
	4/1/2010	370	130	460	1,500	51	3,400	69	13,000	60	170	28	73	1,100	180	230	640
	2/7/2011	1,100	510	450	5,000	250	10,000	120	19,000	300	220	80	1,200	4,100	690	460	390
SVE-09																	
	9/3/2008	500	200 U	220	2,000	200 U	3,700	200 U	9,000	200 U	200 U	200 U	1,400	7,000	7,900	1,800	510
	4/1/2009	1,100	3,300	22,000	34,000	4,900	290,000	1,100	560,000	560 U	560 U	590	25,000	460,000	30,000	4,000	14,000
	4/1/2010	4,700	1,200	12,000	18,000	910	120,000	930	190,000	380 U	380 U	380 U	1,200	100,000	7,900	2,200	5,400
	2/7/2011	16,000	8,200	4,600	14,000	1,500	150,000	720	22,000	2,200	1,600	1,500	23,000	330,000	45,000	10,000	1,000
SVE-12																	
	9/3/2008	1,600	850	3,000	13,000	380	42,000	320	120,000	210 U	210 U	340	210 U	3,600	350	210 U	210 U
	4/1/2009	300 U	300 U	1,100	6,700	300 U	16,000	300 U	150,000	300 U	300 U	300 U	300 U	16,000	570	300 U	300 U
	4/1/2010	19,000	5,200	2,300	3,200	240	46,000	420	41,000	280	320	85	350	5,700	1,500	1,000	1,300
	2/7/2011	2,900	630	640	1,300	270	33,000	140	90,000	130 U	130 U	130 U	130 U	2,600	270	130 U	130 U
SVE-12 (Duplicate)																	
	9/3/2008	1,500	880	3,400	14,000	460	47,000	340	140,000	200 U	200 U	280	200 U	5,400	660	210	200 U
SVE-16																	
	9/3/2008	1,000,000	520,000	84,000	120,000	18,000	2,600,000	20,000	920,000	4,000 U	4,000 U	4,000 U	20,000	540,000	45,000	10,000	1,300,000
	4/1/2009	120,000	54,000	5,400	46,000	11,000	2,300,000	9,000	550,000	2,700 U	2,700 U	2,700 U	7,900	290,000	15,000	2,900	350,000
	4/1/2010	95,000	27,000	3,400	4,500	680	220,000	1,400	130,000	430 U	500	430 U	1,900	33,000	6,900	4,500	13,000
	2/7/2011	19,000	12,000	670 U	6,700	2,700	440,000	2,300	240,000	2,400	2,200	670 U	10,000	78,000	31,000	14,000	670 U
SVE-16 (Duplicate)																	
	4/1/2009	160,000	68,000	6,400	47,000	11,000	2,300,000	9,000	580,000	3,000 U	3,000 U	3,000 U	11,000	340,000	21,000	4,200	340,000
SVE-18																	
	9/3/2008	750	1,100	140 U	910	170	52,000	140 U	34,000	140 U	140 U	1,400	16,000	140,000	35,000	9,600	890
	4/1/2009	310	340	110 U	490	110 U	20,000	110 U	21,000	170	160	710	9,200	58,000	21,000	6,000	380
	4/1/2010	2,800	1,700	160 U	650	190	23,000	290	100,000	160 U	160 U	160 U	1,100	6,900	2,800	1,100	290
	2/7/2011	620	360	61 U	320	93	13,000	140	36,000	1,200	830	150	2,800	10,000	7,800	3,000	2,000

Table 1
SVE Soil Gas Static VOC Concentrations

Dover Municipal Landfill Superfund Site, Dover, NH

Sample ID	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are reported in ppbv)															
SVE-22																	
	4/1/2010	5,300	980	480	1,500	85	16,000	210	15,000	98	81	30 U	48	470	180	120	560
	2/7/2011	1,900	520	69	380	170	32,000	130	41,000	48 U	48 U	48 U	64	500	180	450	48 U
SVE-22 (Duplicate)																	
	4/1/2010	4,900	920	440	1,400	81	15,000	200	14,000	92	77	20 U	46	430	170	110	520
SVE-26																	
	9/3/2008	1,700	4,400	300 U	300 U	300 U	22,000	300 U	6,200	300 U	300 U	370	300 U	1,800	300 U	300 U	300 U
	4/1/2009	3	1 U	1 U	3	1 U	230	1 U	80	1 U	1 U	18	6	79	11	2	1

Notes:

SVE = soil vapor extraction
VOC = volatile organic compound
ppbv = parts per billion by volume
U = compound was not detected at the indicated concentration
J = estimated value
PCE = tetrachloroethene
TCE = trichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene

Table 2
Groundwater VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Monitoring Well	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are presented in ppb)															
AS-01A																	
	9/03/08 G	75	13	150	290	5 U	1,900	13	1,000	150	57	10 U	110	1,900	360	110	25 U
AS-02E																	
	9/03/08 G	100 U	100 U	100 U	100 U	50 U	390	100 U	210	100 U	100 U	100 U	100 U	100 U	100 U	100 U	250 U
	4/01/09 S	100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	250 U
	1/04/10 S	4	3	2 U	2 U	1 U	18	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
	3/31/10 G	22	26	2 U	2 U	1 U	64	2 U	2 U	5	2	2 U	2 U	6	4	3	5 U
	12/21/10 G	2 U	2 U	2 U	2	1 U	24	2 U	2	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
	3/30/11 G	6	9	2 U	19	1 U	240	2	8	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
AS-03C																	
	3/31/10 S	270	92	2	55	1 U	170	2 U	57	2 U	2 U	2 U	2 U	3	2 U	5	5 U
	12/20/10 S	8	2 U	2 U	83	1 U	24	2 U	24	2 U	2 U	2 U	2 U	2 U	2 U	3	6
AS-04C																	
	9/02/08 S	140,000	16,000	50,000	5,000	720	35,000	400 U	2,900	400 U	400 U	400 U	1,700	16,000	4,300	1,200	38,000
	4/01/09 S	120,000	15,000	32,000	2,000	500 U	83,000	1,000 U	2,600	1,000 U	1,000 U	1,000 U	1,800	14,000	5,200	1,300	14,000
	1/04/10 S	300	2,600	1,400	290	50 U	14,000	100 U	100 U	100 U	100 U	100 U	100 U	2,000	100 U	100 U	650
	3/31/10 S	150	860	3,100	810	100	55,000	110	480	100 U	100 U	100 U	290	3,500	1,100	390	250 U
	12/20/10 S	6,300	3,300	1,600	360	100 U	23,000	200 U	200 U	200 U	200 U	200 U	200 U	900	200 U	200 U	500 U
	3/30/11 S	200 U	200 U	3,400	1,100	130	66,000	200 U	4,100	200 U	200 U	200 U	200 U	6,100	820	420	500 U
AS-05D																	
	12/20/10 S	40 U	42	270	1,700	300	31,000	85	1,100	40 U	40 U	40 U	270	7,700	890	450	100 U
AS-06C																	
	3/31/09 S	40 U	40 U	88	470	20 U	8,200	66	5,600	550	210	40 U	400	9,700	1,300	400	100 U
	1/04/10 S	17 J	7 J	2 U	12	1 U	79	2 U	43	4	2 U	2 U	2 U	10	2	2	5 U
AS-06C (Duplicate)																	
	1/04/10 S	10 J	5 J	2 U	11	1 U	79	2 U	38	2 U	2 U	2 U	2 U	12	2 U	2 U	5 U
AS-07E																	
	9/03/08 G	20 U	20 U	41	580	10 U	15,000	23	7,100	180	53	25	400	4,000	1,100	370	50 U
	3/31/09 S	21	10 U	10 U	290	5 U	36	10 U	930	200	60	35	440	3,000	1,300	430	25 U
	12/31/09 S	20 U	20 U	20 U	100	10 U	110	20 U	1,800	150	43	20 U	290	2,800	940	360	50 U
	3/31/10 S	20 U	20 U	20 U	95	10 U	20 U	20 U	20 U	100	34	20 U	160	1,200	510	190	50 U
	12/21/10 G	10 U	10 U	10 U	110	5 U	1,600	20	4,200	10 U	10 U	10 U	29	160	20	30	25 U
	3/30/11 G	10 U	10 U	10 U	480	36	26,000	160	7,200	25	10 U	10 U	240	2,600	440	290	25 U
AS-08B																	
	3/30/11 S	2,600	4,000	2,700	1,100	200	75,000	350	3,800	54	23	20 U	280	4,200	830	340	70
AS-08B (Duplicate)																	
	3/30/11 S	2,200	3,700	2,600	1,100	210	72,000	460	3,800	55	25	20 U	290	4,300	870	350	62
AS-13B																	
	9/03/08 G	200 U	200 U	220	1,600	100 U	4,200	200 U	890	250	200 U	200 U	300	9,100	810	280	500 U
	4/01/09 G	40 U	40 U	40 U	97	20 U	40 U	40 U	40 U	220	61	40 U	300	7,800	770	280	100 U
	1/04/10 S	2 U	2 U	2 U	46	1 U	19	2 U	64	4	2 U	3	5	11	3	5	5 U
	3/31/10 S	2 U	2 U	2 U	42	1 U	14	5	75	28	9	3	50	1,200	97	54	9
	12/20/10 S	10	6	2 U	52	1	300	2	120	2 U	2 U	2 U	3	32	4	13	5 U
	3/31/11 S	2 U	2 U	2 U	16	1 U	2	3	7	6	3	2 U	12	300	20	14	5 U
AS-14A																	
	9/03/08 S	2,300	400 U	2,000	6,500	200 U	25,000	400 U	850	460	400 U	400 U	1,400	81,000	4,000	1,100	25,000

Table 2
Groundwater VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Monitoring Well	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are presented in ppb)															
AS-14A																	
	3/31/09 S	400 U	400 U	3,100	9,200	200 U	39,000	400 U	850	430	400 U	400 U	1,600	100,000	4,600	1,300	51,000
	1/04/10 S	2 U	2 U	3	45	1 U	320	2 U	27	5	2 U	2 U	3	110	8	4	5 U
	3/31/10 S	20 U	20 U	20	250	10 U	2,600	20 U	710	55	24	20 U	33	2,300	110	74	50 U
	12/21/10 S	2 U	2 U	2 U	30	1 U	180	2 U	59	8	15	2 U	5	320	32	29	5 U
	3/30/11 S	40 U	40 U	40 U	91	20 U	52	40 U	190	40 U	40 U	40 U	40 U	470	40 U	40 U	100 U
AS-14A (Duplicate)																	
	3/31/09 S	400 U	400 U	3,000	9,200	200 U	39,000	400 U	820	420	400 U	400 U	1,500	100,000	4,500	1,200	51,000
AS-15A																	
	9/03/08 G	1,700	660	1,900	4,200	100 U	35,000	200 U	1,200	200 U	200 U	200 U	300	17,000	880	290	38,000
	4/01/09 G	200 U	200 U	2,600 B	7,200	100 U	40,000	200 U	1,300	200 U	200 U	200 U	310	28,000	910	300	61,000 B
	12/31/09 S	40 U	40 U	40 U	170	20 U	6,500	40 U	3,800	40 U	40 U	40 U	40 U	850	150	69	100 U
	3/31/10 S	40 U	40 U	40 U	630	20 U	91	40 U	24,000	120	48	40 U	270	4,700	1,200	420	100 U
	12/21/10 S	13	3	2 U	2 U	1 U	240	2 U	8	2 U	2 U	2 U	2 U	2	2 U	2 U	5 U
	3/30/11 S	20 U	20 U	20 U	20 U	10 U	3,000	20 U	53	20 U	20 U	20 U	20 U	20 U	20 U	20 U	50 U
AS-15B																	
	3/31/10 S	66	220	310	1,500	72	52,000	84	4,200	77	40 U	40 U	200	9,600	810	250	490
	12/21/10 S	100 U	100 U	100 U	110	50 U	13,000	100 U	120	100 U	100 U	100 U	100 U	100 U	100 U	100 U	250 U
AS-15D																	
	9/03/08 G	23,000	2,300	2,100	4,200	110	180,000	200 U	2,000	200 U	200 U	200 U	800	2,000	2,300	720	27,000
	4/01/09 G	130,000	6,900	9,600	7,000	500 U	220,000	1,000 U	3,200	1,000 U	1,000 U	1,000 U	2,700	47,000	8,100	2,300	41,000
	12/31/09 S	1,000 U	1,400	1,000 U	1,900	500 U	120,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	11,000	1,000 U	1,000 U	3,800
	3/31/10 S	1,300	1,000 U	1,000 U	1,600	500 U	180,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	28,000	1,400	1,000 U	2,500 U
	12/21/10 G	400 U	400 U	400 U	1,300	200 U	5,000	400 U	54,000	400 U	400 U	400 U	400 U	4,100	400 U	400 U	1,000 U
	3/30/11 G	400 U	400 U	400 U	510	200 U	4,600	400 U	8,100	400 U	400 U	400 U	400 U	5,500	400 U	400 U	9,300
AS-16A																	
	3/31/09 S	54,000	5,500	2,000 U	7,600	1,000 U	230,000	2,000 U	3,100	2,000 U	2,000 U	2,000 U	2,800	64,000	9,200	2,700	34,000
	12/31/09 S	1,000 U	1,000 U	1,000 U	2,700	500 U	110,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	9,500	1,000 U	1,000 U	4,300
AS-16C																	
	9/03/08 G	28,000	3,500	4,600	3,900	120	160,000	200 U	2,500	200 U	200 U	200 U	880	21,000	2,600	810	14,000
	4/01/09 G	110,000	6,400	8,900	6,300	500 U	210,000	1,000 U	3,500	1,000 U	1,000 U	1,000 U	2,800	48,000	9,000	2,500	29,000
	12/31/09 S	560	3,500	650	380	50 U	18,000	100 U	340	100 U	100 U	100 U	100 U	1,400	350	200	250 U
	3/31/10 S	600	1,200	1,000	1,500	83	92,000	100 U	2,100	290	110	100 U	580	13,000	2,600	860	280
	12/20/10 S	25,000	1,800	870	200 U	100 U	15,000	200 U	430	200 U	200 U	200 U	230	11,000	1,400	710	500 U
	3/31/11 S	180	2,800	1,100	1,200	130	77,000	110	4,300	260	120	100 U	360	9,600	1,800	720	250 U
AS-17C																	
	3/31/11 S	10 U	10 U	10 U	47	5 U	1,100	10 U	1,500	10 U	10 U	10 U	10 U	110	13	15	25 U
AS-20C																	
	3/31/11 S	470	240	64	180	14	9,900	15	2,000	10	10 U	10 U	51	1,600	200	110	31
AS-20D																	
	3/31/11 G	400 U	400 U	400 U	1,100	200 U	53,000	400 U	16,000	400 U	400 U	400 U	880	19,000	2,800	1,100	1,000 U
AS-22D																	
	12/21/10 S	100 U	100 U	100 U	630	50 U	8,800	100 U	5,000	100 U	100 U	100 U	390	11,000	520	310	250 U
AS-23C																	
	3/31/10 G	59,000	12,000	1,400	540	200 U	130,000	400 U	3,300	950	400 U	400 U	1,800	12,000	6,400	1,800	1,000 U
	12/21/10 G	210	300	200 U	280	100 U	21,000	200 U	470	200 U	200 U	200 U	200 U	450	200 U	200 U	500 U
AS-24A																	

Table 2
Groundwater VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Monitoring Well	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are presented in ppb)															
AS-24A																	
	9/03/08 S	570	370	7,400	6,500	160	55,000	200 U	980	390	200 U	200 U	860	44,000	2,200	760	52,000
AS-24C																	
	9/02/08 G	2,500	250	450	2,300	150	160,000	240	7,400	890	260	100 U	2,700	20,000	7,800	2,500	1,800
AS-25A																	
	4/01/09 G	200 U	200 U	200 U	350	100 U	8,700	200 U	830	200 U	200 U	200 U	200 U	2,100	210	200 U	500 U
	12/31/09 S	100 U	100 U	100 U	920	50 U	15,000	100 U	280	100 U	100 U	100 U	100 U	600	100 U	100 U	1,900
AS-25B																	
	1/04/10 S	110	100 U	100 U	100 U	50 U	1,500	100 U	100 U	100 U	100 U	100 U	100 U	140	100 U	100 U	250 U
	4/01/10 S	83	270	22	440	10 U	6,800	20 U	450	23	20 U	20 U	120	1,400	280	140	50 U
	12/21/10 S	36	17	10 U	31	5 U	600	10 U	10 U	29	10 U	10 U	58	69	18	20	25 U
	3/31/11 S	690	91	22	100	7	1,400	10 U	490	10 U	10 U	10 U	53	140	37	22	35
AS-27B																	
	9/03/08 S	820	120	100 U	1,300	55	88,000	100 U	6,900	370	120	100 U	950	11,000	2,700	860	250 U
	3/31/09 S	400 U	400 U	400 U	1,500	200 U	83,000	400 U	4,500	400 U	400 U	400 U	870	14,000	2,600	850	1,000 U
	12/31/09 S	390	290	40 U	320	20 U	5,000	40 U	2,800	73	40 U	40 U	450	3,600	1,700	1,200	100 U
	4/01/10 S	1,100	460	40 U	160	20 U	3,400	40 U	700	520	160	40 U	1,500	5,700	5,600	3,000	100 U
	12/21/10 S	40 U	47	40 U	180	20 U	6,000	40 U	4,200	40 U	40 U	40 U	42	490	140	150	100 U
	3/31/11 S	10 U	10 U	10 U	87	5 U	1,800	10 U	1,300	40	17	10 U	150	940	530	500	25 U
AS-27B (Duplicate)																	
	4/01/10 S	1,200	360	20 U	150	10 U	3,100	20 U	660	530	160	20 U	1,400	5,400	5,200	2,800	50 U
AS-27D																	
	12/21/10 S	190	150	10 U	170	7	5,700	15	3,700	10 U	10 U	10 U	10 U	110	12	22	25 U
AS-28B																	
	9/03/08 S	12,000	470	1,700	5,400	120	71,000	200 U	2,000	770	220	200 U	1,700	35,000	4,600	1,400	12,000
AS-28B (Duplicate)																	
	9/03/08 S	9,700	390	1,500	4,200	100 U	59,000	200 U	1,500	570	200 U	200 U	1,400	28,000	3,800	1,100	11,000
GW-01																	
	9/02/08 S	390	94	140	500	5 U	1,000	12	240	280	100	10 U	280	3,100	1,000	380	45
	4/01/09 S	36	20 U	75 B	600	10 U	2,600	21	1,400	270	96	20 U	410	5,500	1,500	540	180 B
	1/04/10 S	40 U	100	810	1,800	22	14,000	40	5,000	66	40 U	40 U	140	2,300	560	230	100 U
	3/31/10 S	350	5,000	550	560	50 U	12,000	100 U	2,100	100 U	100 U	100 U	140	2,400	580	230	250 U
	12/20/10 S	530	370	370	2,200	50 U	6,300	100 U	41,000	100 U	100 U	100 U	140	2,700	500	220	330
	3/30/11 S	100 U	100 U	460	1,200	50 U	2,700	100 U	12,000	100 U	100 U	100 U	290	5,900	1,100	430	420
GW-01 (Duplicate)																	
	12/20/10	540	360	390	2,300	14	4,900	44	37,000	31	20 U	20 U	160	2,700	540	260	320
GW-02																	
	9/02/08 S	300	200 U	2,200	5,500	100 U	35,000	200 U	2,200	820	220	200 U	1,300	36,000	3,000	940	5,600
	3/31/09 S	100 U	100 U	200	3,600	50 U	19,000	100 U	2,200	550	130	100 U	950	23,000	2,500	740	2,100
	1/04/10 S	100 U	100 U	100 U	130	50 U	100 U	100 U	150	100 U	100 U	100 U	100 U	1,600	180	100	250 U
	3/31/10 S	10 U	10 U	10 U	42	5 U	110	10 U	120	100	32	14	120	2,900	270	140	51
GW-03																	
	9/02/08 S	22,000	3,400	14,000	3,400	170	120,000	200 U	2,300	510	200 U	200 U	1,700	29,000	5,000	1,600	14,000
	3/31/09 S	33,000	8,000	20,000	6,900	500 U	150,000	1,000 U	2,900	1,000 U	1,000 U	1,000 U	2,300	44,000	7,700	2,300	9,600
	1/04/10 S	17,000	15,000	1,600	220	100 U	34,000	200 U	420	240	200 U	200 U	240	2,100	950	420	500 U
	3/31/10 S	5,800	7,100	2,400	920	100	70,000	200 U	200 U	220	200 U	200 U	200 U	3,400	820	390	500 U
	12/20/10 S	2,600	7,100	400 U	400 U	200 U	42,000	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	1,000 U

Table 2
Groundwater VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Monitoring Well	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are presented in ppb)															
GW-03																	
	3/30/11 S	3,200	10,000	1,100	740	200 U	66,000	400 U	2,100	400 U	400 U	400 U	400 U	570	400 U	400 U	1,000 U
GW-04																	
	9/02/08 S	3,400	1,500	20 U	460	11	21,000	34	3,700	180	51	38	1,100	6,200	2,900	910	50 U
	3/31/09 S	20 U	20 U	20 U	1,100	20	72,000	190	7,300	140	43	52	1,300	8,200	3,500	1,000	50 U
	1/04/10 S	120	100 U	100 U	320	50 U	10,000	100 U	1,600	100 U	100 U	100 U	450	3,400	1,500	520	250 U
	4/01/10 S	20 U	20 U	20 U	180	10 U	660	20 U	3,000	140	49	34	800	6,600	2,500	820	50 U
	12/21/10 S	98	270	40 U	84	29	23,000	40 U	1,800	60	40 U	40 U	120	1,000	450	210	100 U
	3/31/11 S	100	180	40 U	89	20 U	9,800	40 U	13,000	53	40 U	40 U	240	1,900	710	330	100 U

Notes:

VOC = volatile organic compound
ppb = parts per billion
U = compound was not detected at the indicated concentration.
J = estimated concentration
B = analyte was detected in the method blank
PCE = tetrachloroethene
TCE = trichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
G = grab sample was collected after attempting EPA low flow sampling procedures; the well was purged until dry and allowed to recharge before the sample was collected.
S = sample collected via EPA low flow methodology.

Table 3
Ambient Air Exposure Monitoring VOC Concentrations

Dover Municipal Landfill Superfund Site, Dover, NH

Sample ID	Sample Date	Date Notes	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride	THF
			(Concentrations are presented in ppbv)																
Annual AAL Criteria			60	119	833	335	50	1984	1984	2.4	84	84	1.2	230	106	23	23	119	168
TR-Base																			
	9/3/2008	A	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
	4/1/2009	A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	7/13/2009	B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/22/2009	C	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1
	11/12/2009	D	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/2/2010	A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/30/2010	B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U
	7/22/2010	C	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	24
	4/1/2011	A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	9

Notes:

VOC = volatile organic compounds
ppbv = parts per billion by volume
AAL = New Hampshire Ambient Air Limit
U = compound was not detected at the indicated concentration
PCE = Tetrachloroethene
TCE = Trichloroethene
THF = Tetrahydrofuran
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
Sample collected along Tolend Road, north of the soil vapor extraction discharge stack.
[A] = Sample was collected prior to AS and SVE system start up.
[B] = Sample was collected one week after SVE system start up.
[C] = Sample was collected 3 months after AS and SVE system start up.
[D] = Sample was collected to verify concentration data detected in the October 2009 sample, which was was collected during heavy traffic conditions.
[E] = Sample was collected one week after AS and SVE system start up.

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-01A				
	7/14/2009	6.0	8.0	11.1
	8/24/2009	9.0	3.0	4.7
	9/2/2009	12.0	4.5	8.0
	10/23/2009	9.0	0.0	0.0
	4/19/2010	6.0	7.7	10.6
	6/15/2010	15.0	0.0	0.0
	10/7/2010	14.0	0.0	0.0
	5/16/2011	19.0	0.0	0.0
	6/9/2011	24.0	0.0	0.0
AS-01B				
	7/15/2009	2.0	9.0	10.0
	8/24/2009	10.0	0.0	0.0
	9/2/2009	14.0	3.0	5.7
	10/23/2009	8.5	0.0	0.0
	4/19/2010	11.0	0.0	0.0
	6/16/2010	20.0	0.0	0.0
	10/7/2010	14.0	0.0	0.0
	5/16/2011	17.0	0.0	0.0
	6/9/2011	21.0	0.0	0.0
AS-01C				
	7/14/2009	7.5	0.0	0.0
	8/24/2009	13.0	0.0	0.0
	9/2/2009	15.0	3.0	5.9
	10/23/2009	11.0	0.0	0.0
	4/19/2010	5.0	11.6	15.2
	6/15/2010	16.0	0.0	0.0
	10/7/2010	10.0	0.0	0.0
	5/17/2011	13.0	0.0	0.0
	6/9/2011	20.0	0.0	0.0
AS-01D				
	7/15/2009	NR	NR	NR
	8/24/2009	9.0	7.0	11.1
	9/2/2009	9.0	6.5	10.3
	9/11/2009	10.0	5.5	9.1
	10/23/2009	9.0	0.0	0.0
	4/19/2010	10.0	7.4	12.2
	6/15/2010	17.0	0.0	0.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	14.0	0.0	0.0
	6/8/2011	24.0	0.0	0.0
AS-01E				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-01E				
	7/27/2009	3.0	9.8	11.5
	8/24/2009	5.0	10.0	13.1
	9/2/2009	5.0	8.0	10.5
	10/23/2009	6.5	7.4	10.5
	4/19/2010	3.0	8.1	9.6
	6/16/2010	12.0	6.1	10.8
	10/7/2010	10.0	4.5	7.4
	5/16/2011	13.0	0.0	0.0
	6/9/2011	NR	NR	NR
AS-02A				
	7/14/2009	6.0	7.5	10.4
	8/24/2009	11.0	2.5	4.3
	9/2/2009	10.0	6.5	10.7
	10/23/2009	8.0	4.6	7.0
	4/19/2010	10.0	3.7	6.1
	6/15/2010	7.0	4.8	6.9
	10/7/2010	9.0	2.0	3.2
	6/8/2011	9.0	6.0	9.5
AS-02B				
	7/15/2009	8.0	0.0	0.0
	8/24/2009	11.0	0.0	0.0
	9/2/2009	11.5	7.0	12.2
	10/23/2009	3.5	7.0	8.5
	4/19/2010	10.0	2.5	4.1
	6/16/2010	7.0	3.6	5.3
	10/7/2010	0.0	4.0	3.9
	5/16/2011	1.0	3.0	3.1
	5/17/2011	1.0	3.0	3.1
	6/9/2011	4.0	10.0	12.5
AS-02C				
	7/14/2009	8.0	0.0	0.0
	8/24/2009	13.0	0.0	0.0
	9/2/2009	16.0	3.0	6.1
	10/23/2009	7.0	0.0	0.0
	4/19/2010	6.0	8.1	11.2
	6/15/2010	7.0	3.4	4.9
	10/7/2010	6.0	0.0	0.0
	5/16/2011	10.0	3.0	4.9
	6/9/2011	12.0	3.0	5.3
AS-02D				
	7/15/2009	3.5	7.5	9.1

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-02D				
	8/24/2009	10.5	0.0	0.0
	9/2/2009	16.0	0.0	0.0
	9/11/2009	15.0	0.0	0.0
	10/23/2009	9.0	0.0	0.0
	4/19/2010	NR	0.0	0.0
	6/15/2010	17.0	0.0	0.0
	10/7/2010	20.0	0.0	0.0
	5/18/2011	15.0	0.0	0.0
	6/8/2011	23.0	0.0	0.0
AS-02E				
	7/27/2009	7.0	5.5	8.0
	8/24/2009	10.0	0.0	0.0
	9/2/2009	11.0	4.0	6.9
	10/23/2009	11.0	0.0	0.0
	4/19/2010	10.0	0.0	0.0
	6/16/2010	13.0	0.0	0.0
	10/7/2010	11.0	0.0	0.0
	5/16/2011	14.0	0.0	0.0
	6/9/2011	NR	NR	NR
AS-03A				
	7/14/2009	7.0	4.0	5.8
	8/24/2009	10.0	3.0	4.9
	9/2/2009	11.0	6.5	11.1
	10/23/2009	6.0	8.0	11.1
	4/19/2010	10.0	6.1	10.0
	6/15/2010	4.0	3.8	4.8
	10/7/2010	4.0	2.0	2.5
	5/16/2011	10.0	3.0	4.9
	6/9/2011	9.0	2.0	3.2
AS-03B				
	7/15/2009	8.0	4.0	6.1
	8/24/2009	10.0	2.5	4.1
	9/2/2009	13.0	4.5	8.3
	10/23/2009	8.0	4.0	6.1
	4/19/2010	7.0	8.1	11.8
	6/16/2010	6.0	2.9	4.1
	7/30/2010	14.0	4.5	8.6
	10/7/2010	14.0	4.0	7.7
	5/16/2011	14.0	3.4	6.5
	6/9/2011	8.5	2.0	3.1
AS-03C				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-03C				
	7/14/2009	5.5	9.0	12.1
	8/24/2009	11.0	7.0	12.0
	9/2/2009	8.0	10.0	15.2
	10/23/2009	10.0	0.0	0.0
	4/19/2010	8.0	6.4	9.6
	6/15/2010	5.0	3.9	5.1
	10/7/2010	4.0	0.0	0.0
	5/17/2011	8.0	3.0	4.5
	6/9/2011	10.0	3.0	4.9
AS-03D				
	7/15/2009	7.0	3.0	4.3
	8/24/2009	7.0	8.0	11.6
	9/2/2009	13.0	8.0	14.8
	9/11/2009	9.0	5.0	7.9
	10/23/2009	9.0	0.0	0.0
	4/19/2010	11.0	4.1	7.0
	6/15/2010	17.0	0.0	0.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	15.0	0.0	0.0
	6/8/2011	23.0	0.0	0.0
AS-03E				
	7/27/2009	2.0	10.0	11.1
	8/24/2009	4.0	8.0	10.0
	9/2/2009	6.0	7.0	9.7
	10/23/2009	6.5	7.0	9.9
	4/19/2010	6.0	9.1	12.6
	6/16/2010	13.0	0.0	0.0
	10/7/2010	15.0	0.0	0.0
	5/16/2011	13.0	0.0	0.0
	6/9/2011	NR	NR	NR
AS-04A				
	7/14/2009	7.0	4.5	6.5
	8/24/2009	9.0	7.5	11.9
	9/2/2009	6.5	9.0	12.7
	10/23/2009	6.5	5.7	8.0
	4/19/2010	9.0	9.6	15.2
	6/15/2010	17.0	0.0	0.0
	10/7/2010	15.0	0.0	0.0
	5/16/2011	18.0	0.0	0.0
	6/8/2011	20.0	0.0	0.0
AS-04B				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-04B				
	7/15/2009	8.0	4.0	6.1
	8/24/2009	4.0	10.0	12.5
	9/2/2009	11.0	6.5	11.1
	10/23/2009	8.5	0.0	0.0
	4/19/2010	12.0	0.0	0.0
	6/16/2010	20.0	0.0	0.0
	10/7/2010	13.0	0.0	0.0
	5/16/2011	15.0	0.0	0.0
	6/9/2011	24.0	0.0	0.0
AS-04C				
	7/14/2009	5.0	7.5	9.9
	8/24/2009	12.0	6.0	10.7
	9/2/2009	15.0	5.0	9.9
	10/23/2009	10.0	5.8	9.5
	4/19/2010	12.0	5.1	9.1
	6/15/2010	13.0	5.5	10.1
	10/7/2010	15.0	9.5	18.8
	5/16/2011	11.0	3.0	5.1
	6/9/2011	16.0	8.0	16.4
AS-04D				
	7/15/2009	7.0	5.0	7.2
	8/24/2009	11.0	0.0	0.0
	9/2/2009	14.0	8.0	15.3
	9/11/2009	13.0	5.0	9.2
	10/23/2009	9.0	1.9	3.0
	4/19/2010	11.0	3.5	6.1
	6/15/2010	17.0	0.0	0.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	15.0	0.0	0.0
	6/8/2011	24.0	0.0	0.0
AS-04E				
	7/27/2009	8.0	5.0	7.6
	8/24/2009	10.0	4.5	7.4
	9/2/2009	10.0	6.0	9.9
	10/23/2009	10.0	3.6	6.0
	4/19/2010	10.0	5.0	8.3
	6/16/2010	10.0	7.1	11.7
	10/7/2010	8.0	6.0	9.1
	5/16/2011	11.0	7.0	12.0
	6/9/2011	NR	NR	NR
AS-05A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-05A				
	7/14/2009	5.0	8.0	10.5
	8/24/2009	11.0	0.0	0.0
	9/2/2009	13.0	0.0	0.0
	10/23/2009	9.0	0.0	0.0
	4/19/2010	11.0	3.5	6.1
	6/15/2010	16.0	0.0	0.0
	10/7/2010	11.0	11.0	18.9
	5/16/2011	15.0	10.5	20.8
	6/8/2011	11.0	11.0	18.9
AS-05B				
	7/15/2009	2.0	9.5	10.6
	8/24/2009	5.0	10.0	13.1
	9/2/2009	3.0	10.0	11.8
	10/23/2009	3.0	8.0	9.5
	4/19/2010	3.0	8.6	10.1
	6/16/2010	2.0	3.6	4.1
	7/30/2010	6.5	14.5	20.5
	10/7/2010	4.0	15.0	18.7
	5/17/2011	1.0	3.0	3.1
	6/9/2011	5.0	4.0	5.3
AS-05C				
	7/14/2009	5.0	10.0	13.1
	8/24/2009	4.5	10.0	12.8
	9/2/2009	5.0	10.0	13.1
	10/23/2009	5.0	7.0	9.2
	4/19/2010	6.0	10.6	14.7
	6/15/2010	7.0	2.1	3.0
	10/7/2010	2.0	1.0	1.1
	5/17/2011	5.0	3.0	3.9
	6/9/2011	6.0	4.0	5.5
AS-05D				
	7/15/2009	3.0	8.0	9.5
	8/24/2009	6.0	9.0	12.4
	9/2/2009	4.0	10.0	12.5
	9/11/2009	6.0	9.5	13.1
	10/23/2009	3.5	7.0	8.5
	4/19/2010	5.0	12.5	16.4
	6/15/2010	2.0	3.6	4.1
	10/7/2010	2.0	3.0	3.3
	5/18/2011	5.0	3.0	3.9
	6/8/2011	4.5	3.8	4.8

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-05E				
	7/27/2009	10.0	3.0	4.9
	8/24/2009	10.0	4.5	7.4
	9/2/2009	9.0	6.0	9.5
	10/23/2009	10.5	4.0	6.7
	4/19/2010	9.0	7.1	11.2
	6/16/2010	10.0	8.1	13.4
	10/7/2010	9.0	7.5	11.9
	5/16/2011	12.0	6.0	10.7
	6/9/2011	NR	NR	NR
AS-06A				
	7/14/2009	5.0	10.0	13.1
	8/24/2009	9.0	8.0	12.7
	9/2/2009	8.0	8.0	12.1
	10/23/2009	5.0	7.0	9.2
	4/19/2010	7.0	7.8	11.2
	6/15/2010	2.0	3.2	3.5
	10/7/2010	2.0	3.0	3.3
	5/16/2011	4.0	2.5	3.1
	6/9/2011	5.0	4.0	5.3
AS-06B				
	7/15/2009	5.0	9.5	12.5
	8/24/2009	8.0	9.0	13.6
	9/2/2009	8.0	8.0	12.1
	10/23/2009	5.0	5.5	7.2
	4/19/2010	6.0	7.3	10.1
	6/16/2010	2.0	2.3	2.5
	7/30/2010	7.0	14.7	21.3
	10/7/2010	3.0	15.0	17.7
	5/16/2011	5.0	3.0	3.9
	6/9/2011	4.0	4.0	5.0
AS-06C				
	7/14/2009	4.0	8.0	10.0
	8/24/2009	5.0	5.0	6.6
	9/2/2009	8.0	8.0	12.1
	10/23/2009	8.0	6.3	9.5
	4/19/2010	7.0	7.1	10.2
	6/15/2010	2.0	3.9	4.4
	10/7/2010	13.0	0.0	0.0
	5/16/2011	15.0	0.0	0.0
	6/9/2011	21.0	0.0	0.0
AS-06D				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-06D				
	7/15/2009	5.5	7.0	9.4
	8/24/2009	8.0	8.5	12.9
	9/2/2009	6.5	9.0	12.7
	9/11/2009	6.0	8.5	11.7
	10/23/2009	6.5	5.7	8.0
	4/19/2010	7.0	7.1	10.2
	6/15/2010	17.0	0.0	0.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	15.0	0.0	0.0
	6/8/2011	23.0	0.0	0.0
AS-06E				
	7/27/2009	8.0	9.0	13.6
	8/24/2009	8.0	6.5	9.8
	9/2/2009	10.0	7.0	11.5
	10/23/2009	10.0	7.0	11.5
	4/19/2010	10.0	6.5	10.6
	6/16/2010	9.0	10.1	16.0
	10/7/2010	8.0	7.0	10.6
	5/16/2011	11.0	9.0	15.4
	6/9/2011	NR	NR	NR
AS-07A				
	7/14/2009	5.5	8.0	10.8
	8/24/2009	9.0	7.0	11.1
	9/2/2009	10.0	7.5	12.4
	10/23/2009	8.5	0.0	0.0
	4/19/2010	11.0	3.5	6.1
	6/15/2010	17.0	1.4	3.0
	10/7/2010	15.0	0.0	0.0
	5/16/2011	20.0	0.0	0.0
	6/9/2011	24.0	0.0	0.0
AS-07B				
	7/15/2009	2.0	8.0	8.9
	8/24/2009	9.5	5.5	8.9
	9/2/2009	13.0	3.0	5.5
	10/23/2009	8.5	0.0	0.0
	4/19/2010	11.0	0.0	0.0
	6/16/2010	20.0	0.0	0.0
	10/7/2010	14.0	0.0	0.0
	5/17/2011	20.0	0.0	0.0
	6/9/2011	24.0	0.0	0.0
AS-07C				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-07C				
	7/14/2009	7.0	0.0	0.0
	8/24/2009	6.0	0.0	0.0
	9/2/2009	16.0	0.0	0.0
	10/23/2009	9.0	0.0	0.0
	4/19/2010	NR	0.0	0.0
	6/15/2010	16.0	0.0	0.0
	10/7/2010	14.0	18.0	34.5
	5/16/2011	15.0	0.0	0.0
	6/9/2011	20.0	0.0	0.0
AS-07D				
	7/15/2009	7.0	5.5	8.0
	8/24/2009	10.0	3.0	4.9
	9/2/2009	10.0	6.0	9.9
	9/11/2009	10.0	5.0	8.2
	10/23/2009	9.0	0.0	0.0
	4/19/2010	11.0	3.5	6.1
	6/15/2010	5.0	3.5	4.6
	10/7/2010	7.0	3.0	4.3
	5/18/2011	14.0	3.0	5.7
	6/8/2011	11.0	15.0	25.7
AS-07E				
	7/27/2009	7.5	8.5	12.6
	8/24/2009	5.0	10.0	13.1
	9/2/2009	8.0	8.0	12.1
	10/23/2009	10.0	8.5	14.0
	4/19/2010	4.5	5.9	7.6
	6/16/2010	13.0	0.0	0.0
	10/7/2010	11.0	0.0	0.0
	5/16/2011	14.0	0.0	0.0
	6/9/2011	NR	NR	NR
AS-08A				
	7/14/2009	7.0	5.5	8.0
	8/24/2009	11.0	0.0	0.0
	9/2/2009	14.0	0.0	0.0
	10/23/2009	8.0	2.0	3.0
	4/19/2010	11.0	3.5	6.1
	6/15/2010	17.0	0.0	0.0
	10/7/2010	0.0	0.0	0.0
	5/16/2011	20.0	0.0	0.0
	6/8/2011	20.0	0.0	0.0
AS-08B				

Table 4
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Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-08B				
	7/15/2009	8.0	3.0	4.5
	8/24/2009	10.5	3.0	5.0
	9/2/2009	12.0	5.0	8.9
	10/23/2009	9.0	6.0	9.5
	4/19/2010	10.0	3.7	6.1
	6/16/2010	14.0	10.0	19.3
	7/30/2010	14.0	10.0	19.2
	10/7/2010	6.0	0.0	0.0
	5/16/2011	13.0	3.0	5.5
	6/9/2011	14.0	9.0	17.2
AS-08C				
	7/14/2009	4.0	7.5	9.4
	8/24/2009	6.0	0.0	0.0
	9/2/2009	12.0	7.0	12.5
	10/23/2009	6.0	4.0	5.5
	4/19/2010	13.0	2.7	5.1
	6/15/2010	10.0	2.8	4.7
	10/7/2010	6.0	0.0	0.0
	5/17/2011	10.0	3.0	4.9
	6/9/2011	11.0	9.0	15.4
AS-08D				
	7/15/2009	4.0	8.5	10.6
	8/24/2009	9.5	5.5	8.9
	9/2/2009	8.0	6.5	9.8
	9/11/2009	11.5	7.0	12.2
	10/23/2009	7.0	6.0	8.7
	4/19/2010	11.0	3.5	6.1
	6/15/2010	17.0	0.0	0.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	15.0	0.0	0.0
	6/8/2011	25.0	0.0	0.0
AS-08E				
	7/27/2009	6.0	8.5	11.7
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	10.0	12.5
	10/23/2009	4.0	11.0	13.7
	4/19/2010	3.5	8.3	10.1
	6/16/2010	3.0	8.6	10.1
	10/7/2010	8.0	9.5	14.4
	5/16/2011	6.0	7.0	9.7
	6/9/2011	NR	NR	NR

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-09A				
	7/14/2009	7.0	6.0	8.7
	8/24/2009	10.0	6.0	9.9
	9/2/2009	11.0	6.0	10.3
	10/23/2009	7.5	3.9	5.8
	4/19/2010	10.0	6.1	10.0
	6/16/2010	6.0	4.0	5.6
	10/7/2010	10.0	0.0	0.0
	5/16/2011	18.0	2.5	5.5
	6/9/2011	19.0	2.5	5.6
AS-09B				
	7/15/2009	6.0	3.0	4.1
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	10.0	12.5
	10/23/2009	5.0	7.0	9.2
	4/19/2010	4.0	7.7	9.6
	6/16/2010	2.5	4.0	4.6
	10/7/2010	3.0	0.0	0.0
	5/16/2011	3.0	3.0	3.5
	6/9/2011	5.0	4.0	5.3
AS-09C				
	7/14/2009	7.0	7.5	10.9
	8/24/2009	10.0	6.5	10.7
	9/2/2009	10.0	7.0	11.5
	10/23/2009	7.0	4.0	5.8
	4/19/2010	12.0	4.0	7.2
	6/15/2010	7.0	3.5	5.1
	10/7/2010	8.0	0.0	0.0
	5/17/2011	15.0	3.0	5.9
	6/9/2011	10.0	3.5	5.8
AS-09D				
	7/15/2009	3.5	10.0	12.1
	8/24/2009	4.0	11.8	14.7
	9/2/2009	NR	NR	NR
	9/11/2009	3.0	9.5	11.2
	10/23/2009	2.0	0.0	0.0
	4/19/2010	4.0	8.1	10.1
	6/15/2010	2.0	3.1	3.4
	10/7/2010	2.0	2.5	2.8
	5/18/2011	4.0	3.0	3.7
	6/8/2011	4.0	4.0	5.0
AS-10A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-10A				
	7/14/2009	5.0	8.5	11.2
	8/24/2009	7.0	10.0	14.5
	9/2/2009	5.0	9.0	11.8
	10/23/2009	5.0	6.2	8.2
	4/19/2010	6.0	7.1	9.8
	6/16/2010	7.0	14.7	21.3
	10/7/2010	10.0	11.0	18.1
	5/16/2011	15.0	10.0	19.8
	6/9/2011	6.0	3.0	4.1
AS-10B				
	7/15/2009	4.5	10.0	12.8
	8/24/2009	5.0	10.0	13.1
	9/2/2009	4.5	9.0	11.5
	10/23/2009	3.0	7.0	8.3
	4/19/2010	5.0	9.6	12.7
	6/16/2010	6.0	17.3	23.9
	7/30/2010	6.0	17.3	23.9
	10/7/2010	6.0	14.5	20.0
	5/17/2011	7.0	16.0	23.2
	6/9/2011	5.0	4.0	5.3
AS-10C				
	7/14/2009	4.0	9.5	11.9
	8/24/2009	10.0	4.0	6.6
	9/2/2009	13.5	6.5	12.2
	10/23/2009	7.5	3.6	5.4
	4/19/2010	10.0	3.1	5.1
	6/15/2010	15.0	5.6	11.1
	10/7/2010	16.0	5.0	10.2
	5/16/2011	16.0	0.0	0.0
	6/9/2011	19.0	0.0	0.0
AS-10D				
	7/15/2009	4.0	10.0	12.5
	8/24/2009	8.0	8.0	12.1
	9/2/2009	5.0	8.0	10.5
	9/11/2009	7.0	7.0	10.1
	10/23/2009	4.5	6.0	7.7
	4/19/2010	8.0	10.2	15.4
	6/15/2010	2.0	4.1	4.6
	10/7/2010	3.5	2.5	3.0
	5/18/2011	6.0	3.0	4.1
	6/8/2011	6.0	4.0	5.5

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-11A				
	7/14/2009	7.0	4.5	6.5
	8/24/2009	11.0	0.0	0.0
	9/2/2009	11.0	7.0	12.0
	10/23/2009	8.8	0.0	0.0
	4/19/2010	10.5	0.0	0.0
	6/16/2010	17.0	3.4	7.2
	10/7/2010	15.0	0.0	0.0
	5/16/2011	18.5	0.0	0.0
	6/8/2011	20.0	0.0	0.0
AS-11B				
	7/15/2009	8.0	4.5	6.8
	8/24/2009	9.5	7.0	11.3
	9/2/2009	11.0	7.0	12.0
	10/23/2009	7.5	5.2	7.7
	4/19/2010	4.0	8.1	10.1
	6/16/2010	16.5	9.0	18.6
	10/7/2010	14.0	0.0	0.0
	5/16/2011	22.0	0.0	0.0
	6/9/2011	20.0	0.0	0.0
AS-11C				
	7/14/2009	5.0	7.5	9.9
	8/24/2009	10.0	5.5	9.1
	9/2/2009	8.0	8.0	12.1
	10/23/2009	8.0	0.0	0.0
	4/19/2010	5.5	7.9	10.6
	6/15/2010	14.0	10.6	20.3
	10/7/2010	11.0	5.5	9.4
	5/17/2011	14.0	3.0	5.7
	6/9/2011	19.0	5.0	11.2
AS-11D				
	7/15/2009	8.0	0.0	0.0
	8/24/2009	11.0	0.0	0.0
	9/2/2009	15.5	0.0	0.0
	9/11/2009	15.0	0.0	0.0
	10/23/2009	8.5	0.0	0.0
	4/19/2010	11.0	4.1	7.0
	6/15/2010	16.0	8.5	17.4
	10/7/2010	19.0	6.0	13.5
	5/18/2011	15.0	0.0	0.0
	6/8/2011	23.0	5.0	12.6
AS-12A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-12A				
	7/14/2009	8.0	4.5	6.8
	8/24/2009	11.0	2.5	4.3
	9/2/2009	11.0	5.5	9.4
	10/23/2009	8.0	4.0	6.1
	4/19/2010	NR	0.0	0.0
	6/15/2010	10.0	3.4	5.6
	10/7/2010	9.0	0.0	0.0
	5/16/2011	14.0	3.0	5.7
	6/9/2011	19.0	0.0	0.0
AS-12B				
	7/15/2009	8.0	3.0	4.5
	8/24/2009	10.0	4.0	6.6
	9/2/2009	10.0	6.0	9.9
	10/23/2009	10.0	0.0	0.0
	4/19/2010	10.0	2.5	4.1
	6/16/2010	14.0	11.1	21.3
	10/7/2010	10.0	10.0	16.5
	5/17/2011	11.0	3.0	5.1
	6/9/2011	13.0	11.0	20.3
AS-12C				
	7/14/2009	5.5	5.5	7.4
	8/24/2009	8.0	9.0	13.6
	9/2/2009	7.0	9.0	13.0
	10/23/2009	5.5	5.0	6.8
	4/19/2010	5.5	7.9	10.6
	6/15/2010	10.0	12.2	20.1
	10/7/2010	8.0	12.0	18.2
	5/16/2011	8.0	5.0	7.6
	6/9/2011	11.0	11.0	18.9
AS-12D				
	7/15/2009	5.5	9.0	12.1
	8/24/2009	9.0	7.0	11.1
	9/2/2009	5.0	7.5	9.9
	9/11/2009	15.0	0.0	0.0
	10/23/2009	6.5	5.7	8.0
	4/19/2010	10.0	3.7	6.1
	6/15/2010	15.0	9.1	18.0
	10/7/2010	19.0	0.0	0.0
	5/18/2011	16.0	0.0	0.0
	6/8/2011	24.0	0.0	0.0
AS-13A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-13A				
	7/14/2009	4.5	9.5	12.2
	8/24/2009	3.0	10.0	11.8
	9/2/2009	NR	NR	NR
	10/23/2009	2.0	6.0	6.7
	4/19/2010	5.0	12.2	16.0
	6/15/2010	1.5	2.3	2.5
	10/7/2010	3.0	0.0	0.0
	5/16/2011	18.0	8.0	17.5
	6/9/2011	10.0	3.0	4.9
AS-13B				
	7/15/2009	2.0	10.0	11.1
	8/24/2009	7.0	5.0	7.2
	9/2/2009	8.5	7.5	11.6
	10/23/2009	5.0	6.5	8.5
	4/19/2010	4.0	8.1	10.1
	6/16/2010	1.5	3.9	4.2
	7/30/2010	9.0	15.0	23.7
	10/7/2010	12.0	13.0	23.2
	5/17/2011	7.0	5.0	7.2
	6/9/2011	5.0	3.0	3.9
AS-13C				
	7/14/2009	8.0	7.5	11.4
	8/24/2009	5.0	4.0	5.3
	9/2/2009	13.0	6.5	12.0
	10/23/2009	10.0	0.0	0.0
	4/19/2010	13.0	3.8	7.1
	6/15/2010	19.0	2.2	4.9
	10/7/2010	18.0	0.0	0.0
	5/16/2011	15.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-13D				
	7/15/2009	4.5	10.0	12.8
	8/24/2009	2.0	10.0	11.1
	9/2/2009	4.0	8.0	10.0
	9/11/2009	5.0	9.0	11.8
	10/23/2009	3.0	7.0	8.3
	4/19/2010	5.0	8.1	10.6
	6/15/2010	2.0	4.1	4.6
	10/7/2010	2.0	0.0	0.0
	5/18/2011	4.0	3.0	3.7
	6/8/2011	4.0	4.0	5.0

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-14A				
	7/14/2009	2.0	10.0	11.1
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	9.0	11.2
	10/23/2009	3.0	7.6	9.0
	4/19/2010	6.0	12.1	16.7
	6/16/2010	2.5	4.0	4.6
	10/7/2010	2.0	2.5	2.8
	5/16/2011	2.0	2.5	2.8
	6/9/2011	6.5	4.0	5.7
AS-14B				
	7/15/2009	3.5	8.0	9.7
	8/24/2009	6.0	10.3	14.2
	9/2/2009	8.0	8.0	12.1
	10/23/2009	4.5	6.9	8.9
	4/19/2010	6.5	11.1	15.7
	6/16/2010	3.0	4.0	4.7
	7/30/2010	13.0	9.5	17.6
	10/7/2010	10.0	8.5	14.0
	5/16/2011	23.0	0.0	0.0
	5/17/2011	5.0	3.0	3.9
	6/9/2011	6.0	3.0	4.1
AS-14C				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	3.0	5.5	6.5
	9/2/2009	3.0	6.0	7.1
	10/23/2009	6.0	10.0	13.8
	4/19/2010	5.0	11.2	14.7
	6/15/2010	8.0	14.4	21.8
	10/7/2010	14.0	11.0	21.1
	5/16/2011	14.0	7.0	13.4
	6/9/2011	9.0	3.5	5.5
AS-14D				
	7/15/2009	4.0	10.0	12.5
	8/24/2009	3.0	10.0	11.8
	9/2/2009	3.5	8.0	9.7
	9/11/2009	5.0	8.0	10.5
	10/23/2009	5.0	5.0	6.6
	4/19/2010	5.0	8.1	10.6
	6/15/2010	15.0	7.7	15.2
	10/7/2010	20.0	0.0	0.0
	5/18/2011	16.0	0.0	0.0
	6/8/2011	22.0	0.0	0.0

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-15A				
	7/14/2009	4.0	9.0	11.2
	8/24/2009	4.0	10.0	12.5
	9/2/2009	3.0	9.5	11.2
	10/23/2009	3.0	8.0	9.5
	4/19/2010	4.0	8.1	10.1
	6/16/2010	6.0	18.3	25.3
	10/7/2010	10.0	12.0	19.8
	5/16/2011	11.0	12.5	21.4
	6/9/2011	8.0	11.0	16.7
AS-15B				
	7/15/2009	3.5	9.5	11.5
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	10.0	12.5
	10/23/2009	5.0	8.0	10.5
	4/19/2010	5.0	11.2	14.7
	6/16/2010	4.5	16.6	21.3
	10/7/2010	3.0	15.0	17.7
	5/16/2011	5.0	15.0	19.7
	6/9/2011	5.0	14.0	18.4
AS-15C				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	4.0	9.5	11.9
	9/2/2009	4.0	9.0	11.2
	10/23/2009	3.0	6.0	7.1
	4/19/2010	4.0	8.1	10.1
	6/15/2010	4.0	15.4	19.3
	10/7/2010	4.0	16.0	20.0
	5/17/2011	5.0	15.0	19.7
	6/9/2011	5.0	12.0	15.8
AS-15D				
	7/15/2009	4.0	10.0	12.5
	8/24/2009	9.0	7.0	11.1
	9/2/2009	5.0	8.0	10.5
	9/11/2009	5.0	8.0	10.5
	10/23/2009	4.0	5.6	7.0
	4/19/2010	7.0	11.1	16.1
	6/15/2010	16.0	4.9	10.1
	10/7/2010	21.0	0.0	0.0
	5/18/2011	16.0	0.0	0.0
	6/8/2011	25.0	0.0	0.0
AS-16A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-16A				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	3.0	10.0	11.8
	9/2/2009	5.0	9.0	11.8
	10/23/2009	4.0	7.0	8.7
	4/19/2010	3.5	10.0	12.2
	6/16/2010	16.0	5.0	10.2
	10/7/2010	16.0	0.0	0.0
	5/16/2011	20.0	2.5	5.8
	6/8/2011	19.0	0.0	0.0
AS-16B				
	7/15/2009	2.5	9.0	10.3
	8/24/2009	10.5	3.5	5.9
	9/2/2009	13.0	4.5	8.3
	10/23/2009	10.0	0.0	0.0
	4/19/2010	11.5	6.1	10.6
	6/16/2010	20.0	4.3	10.0
	10/7/2010	11.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	24.0	0.0	0.0
AS-16C				
	7/14/2009	4.0	9.0	11.2
	8/24/2009	5.5	9.5	12.8
	9/2/2009	10.0	7.0	11.5
	10/23/2009	6.5	4.0	5.7
	4/19/2010	9.0	6.1	9.6
	6/15/2010	12.0	10.1	18.0
	10/7/2010	10.0	18.0	29.7
	5/17/2011	13.5	6.0	11.3
	6/9/2011	17.0	6.0	12.7
AS-16D				
	7/15/2009	6.0	7.0	9.7
	8/24/2009	10.0	3.0	4.9
	9/2/2009	10.0	6.0	9.9
	9/11/2009	11.0	8.0	13.7
	10/23/2009	7.0	3.5	5.0
	4/19/2010	8.0	7.1	10.7
	6/15/2010	11.0	12.2	20.9
	10/7/2010	14.0	13.0	24.9
	5/18/2011	9.0	5.0	7.9
	6/8/2011	12.0	8.5	15.1
AS-17A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-17A				
	7/14/2009	6.0	7.5	10.4
	8/24/2009	10.0	5.0	8.2
	9/2/2009	12.0	4.0	7.1
	10/23/2009	8.8	0.0	0.0
	4/19/2010	14.0	4.5	8.6
	6/16/2010	6.0	4.0	5.6
	10/7/2010	5.0	0.0	0.0
	5/16/2011	3.0	2.5	3.0
	6/9/2011	4.5	2.5	3.2
AS-17B				
	7/15/2009	4.0	7.5	9.4
	8/24/2009	10.5	0.0	0.0
	9/2/2009	13.0	3.0	5.5
	10/23/2009	8.5	0.0	0.0
	4/19/2010	14.0	0.0	0.0
	6/16/2010	20.0	4.3	10.0
	10/7/2010	14.0	0.0	0.0
	5/16/2011	16.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-17C				
	7/14/2009	8.0	5.0	7.6
	8/24/2009	9.5	8.0	12.9
	9/2/2009	8.0	8.0	12.1
	10/23/2009	6.0	5.0	6.9
	4/19/2010	11.0	6.1	10.4
	6/15/2010	11.0	12.2	20.9
	10/7/2010	9.0	12.5	19.8
	5/16/2011	12.0	9.0	16.0
	6/9/2011	10.0	3.5	5.8
AS-17D				
	7/15/2009	4.0	8.5	10.6
	8/24/2009	7.0	8.0	11.6
	9/2/2009	13.0	4.5	8.3
	9/11/2009	15.0	4.0	7.9
	10/23/2009	3.0	0.0	0.0
	4/19/2010	10.0	7.4	12.2
	6/15/2010	4.0	2.4	3.0
	10/7/2010	5.0	3.0	3.9
	5/18/2011	15.0	6.0	11.9
	6/8/2011	8.0	3.5	5.3
AS-18A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-18A				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	3.0	10.0	11.8
	9/2/2009	4.0	9.5	11.9
	10/23/2009	3.5	7.2	8.7
	4/19/2010	4.0	8.1	10.1
	6/16/2010	6.0	16.5	22.8
	10/7/2010	6.0	17.0	23.5
	5/16/2011	18.0	9.0	19.6
	6/9/2011	5.0	4.0	5.3
AS-18B				
	7/15/2009	4.0	10.0	12.5
	8/24/2009	3.0	10.0	11.8
	9/2/2009	6.0	9.0	12.4
	10/23/2009	8.0	0.0	0.0
	4/19/2010	12.0	6.3	11.1
	6/16/2010	19.5	4.4	10.1
	10/7/2010	12.0	0.0	0.0
	5/17/2011	17.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-18C				
	7/14/2009	3.5	9.0	10.9
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.5	9.0	11.5
	10/23/2009	6.0	4.0	5.5
	4/19/2010	13.0	6.0	11.1
	6/15/2010	16.0	2.4	4.9
	10/7/2010	18.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	21.0	0.0	0.0
AS-18D				
	7/15/2009	3.0	10.0	11.8
	8/24/2009	5.0	10.0	13.1
	9/2/2009	4.0	8.0	10.0
	9/11/2009	5.0	10.0	13.1
	10/23/2009	4.0	6.4	8.0
	4/19/2010	3.0	9.1	10.7
	6/15/2010	6.0	15.4	21.3
	10/7/2010	9.0	15.5	24.5
	5/18/2011	9.0	13.0	20.6
	6/8/2011	4.0	4.0	5.0
AS-19A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-19A				
	7/14/2009	5.0	9.0	11.8
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	10.0	12.5
	10/23/2009	3.0	8.0	9.5
	4/19/2010	6.0	11.1	15.4
	6/16/2010	9.5	16.3	26.3
	10/7/2010	10.0	16.0	26.4
	5/16/2011	9.0	13.0	20.6
	6/9/2011	9.0	11.0	17.4
AS-19B				
	7/15/2009	2.0	9.5	10.6
	8/24/2009	2.0	10.0	11.1
	9/2/2009	4.5	10.0	12.8
	10/23/2009	6.5	5.7	8.0
	4/19/2010	4.0	7.7	9.6
	6/16/2010	20.0	4.3	10.0
	10/7/2010	14.0	0.0	0.0
	5/17/2011	17.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-19C				
	7/14/2009	5.5	6.5	8.8
	8/24/2009	7.5	10.0	14.8
	9/2/2009	7.0	8.0	11.6
	10/23/2009	8.0	4.0	6.0
	4/19/2010	12.0	5.7	10.1
	6/15/2010	15.0	4.1	8.1
	10/7/2010	18.0	0.0	0.0
	5/16/2011	14.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-19D				
	7/15/2009	5.0	10.0	13.1
	8/24/2009	3.0	10.0	11.8
	9/2/2009	3.0	8.5	10.0
	9/11/2009	3.0	9.0	10.6
	10/23/2009	5.0	5.0	6.6
	4/19/2010	11.0	6.5	11.1
	6/15/2010	15.0	6.4	12.7
	10/7/2010	19.0	7.5	16.9
	5/18/2011	15.0	4.0	7.9
	6/8/2011	22.0	5.0	12.2
AS-20A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-20A				
	7/14/2009	5.5	9.0	12.1
	8/24/2009	8.0	9.0	13.6
	9/2/2009	12.0	3.5	6.2
	10/23/2009	8.0	0.0	0.0
	4/19/2010	13.0	4.4	8.1
	6/16/2010	16.0	4.0	8.1
	10/7/2010	3.0	16.5	19.5
	5/16/2011	2.0	18.5	20.6
	6/8/2011	2.0	15.0	16.7
AS-20B				
	7/15/2009	3.0	9.0	10.6
	8/24/2009	5.0	10.0	13.1
	9/2/2009	8.0	8.0	12.1
	10/23/2009	7.0	6.5	9.4
	4/19/2010	13.0	6.0	11.1
	6/16/2010	19.5	9.3	21.3
	10/7/2010	12.0	5.0	8.9
	5/16/2011	14.0	4.5	8.6
	6/9/2011	22.0	0.0	0.0
AS-20C				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	11.0	5.5	9.4
	9/2/2009	15.0	4.0	7.9
	10/23/2009	7.0	5.0	7.2
	4/19/2010	12.0	6.1	10.8
	6/15/2010	7.0	4.1	5.9
	10/7/2010	7.0	0.0	0.0
	5/17/2011	11.0	3.0	5.1
	6/9/2011	15.0	8.0	15.9
AS-20D				
	7/15/2009	4.5	10.0	12.8
	8/24/2009	7.0	10.0	14.5
	9/2/2009	6.5	7.0	9.9
	9/11/2009	12.0	7.5	13.4
	10/23/2009	8.0	0.0	0.0
	4/19/2010	6.0	8.1	11.2
	6/15/2010	16.0	4.9	10.1
	10/7/2010	18.0	3.5	7.6
	5/18/2011	16.0	0.0	0.0
	6/8/2011	22.0	4.0	9.8
AS-21A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-21A				
	7/14/2009	3.0	10.0	11.8
	8/24/2009	7.0	10.0	14.5
	9/2/2009	10.0	7.0	11.5
	10/23/2009	8.0	0.0	0.0
	4/19/2010	12.0	5.1	9.0
	6/16/2010	15.0	7.7	15.2
	10/7/2010	12.0	9.0	16.0
	5/16/2011	18.0	10.0	21.8
	6/9/2011	5.0	4.0	5.3
AS-21B				
	7/15/2009	4.0	8.0	10.0
	8/24/2009	9.0	5.5	8.7
	9/2/2009	12.5	3.0	5.4
	10/23/2009	8.0	0.0	0.0
	4/19/2010	14.0	4.2	8.1
	6/16/2010	19.5	4.4	10.0
	10/7/2010	11.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-21C				
	7/14/2009	9.0	5.0	7.9
	8/24/2009	10.0	6.5	10.7
	9/2/2009	15.0	4.0	7.9
	10/23/2009	8.5	1.9	3.0
	4/19/2010	14.0	0.0	0.0
	6/15/2010	16.0	2.4	4.9
	10/7/2010	15.0	0.0	0.0
	5/16/2011	16.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-21D				
	7/15/2009	6.0	6.5	9.0
	8/24/2009	10.5	0.0	0.0
	9/2/2009	12.0	5.5	9.8
	9/11/2009	12.0	7.0	12.5
	10/23/2009	7.0	6.0	8.7
	4/19/2010	11.0	6.1	10.4
	6/15/2010	16.0	5.4	11.1
	10/7/2010	20.0	4.5	10.4
	5/18/2011	16.0	3.0	6.1
	6/8/2011	24.0	0.0	0.0
AS-22A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-22A				
	7/14/2009	2.5	10.0	11.5
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	9.0	11.2
	10/23/2009	3.0	7.0	8.3
	4/19/2010	4.0	12.3	15.4
	6/16/2010	5.0	15.4	20.3
	10/7/2010	6.0	15.0	20.7
	5/16/2011	6.0	16.5	22.8
	6/9/2011	6.0	11.0	15.2
AS-22B				
	7/15/2009	4.5	10.0	12.8
	8/24/2009	10.0	4.0	6.6
	9/2/2009	12.5	3.5	6.4
	10/23/2009	10.0	0.0	0.0
	4/19/2010	14.0	0.0	0.0
	6/16/2010	19.5	4.4	10.0
	10/7/2010	14.0	0.0	0.0
	5/16/2011	17.0	0.0	0.0
AS-22C				
	7/14/2009	4.5	10.0	12.8
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.0	9.0	11.2
	10/23/2009	3.0	6.0	7.1
	4/19/2010	6.0	10.1	14.0
	6/15/2010	9.0	13.5	21.3
	10/7/2010	12.0	10.0	17.8
	5/17/2011	13.0	8.0	14.8
	6/9/2011	4.0	4.0	5.0
AS-22D				
	7/15/2009	3.0	10.0	11.8
	8/24/2009	3.0	10.0	11.8
	9/2/2009	3.0	9.0	10.6
	9/11/2009	2.5	10.0	11.5
	10/23/2009	3.0	6.8	8.0
	4/19/2010	3.0	13.2	15.6
	6/15/2010	4.0	15.4	19.3
	10/7/2010	6.0	17.5	24.2
	5/18/2011	15.0	7.0	13.9
	6/8/2011	6.0	14.0	19.3
AS-23A				
	7/14/2009	4.0	8.0	10.0

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-23A				
	8/24/2009	7.0	10.0	14.5
	9/2/2009	6.0	9.0	12.4
	10/23/2009	3.0	5.1	6.0
	4/19/2010	6.5	8.1	11.4
	6/15/2010	12.0	12.2	21.7
	10/7/2010	2.0	16.5	18.4
	5/16/2011	3.0	19.0	22.4
	6/9/2011	3.0	13.0	15.4
AS-23B				
	7/15/2009	5.0	10.0	13.1
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.5	9.0	11.5
	10/23/2009	5.0	6.5	8.5
	4/19/2010	5.0	13.2	17.3
	6/16/2010	7.0	17.3	25.1
	10/7/2010	7.0	11.5	16.7
	5/17/2011	10.0	12.0	19.8
	6/9/2011	11.0	12.0	20.6
AS-23C				
	7/14/2009	3.5	10.0	12.1
	8/24/2009	4.0	10.0	12.5
	9/2/2009	4.5	9.0	11.5
	10/23/2009	6.0	6.0	8.3
	4/19/2010	4.0	7.7	9.6
	6/15/2010	16.0	2.4	4.9
	10/7/2010	18.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-23D				
	7/15/2009	4.5	9.0	11.5
	8/24/2009	8.0	10.0	15.2
	9/2/2009	7.0	5.5	8.0
	9/11/2009	14.0	3.0	5.7
	10/23/2009	8.5	0.0	0.0
	4/19/2010	12.0	3.7	6.6
	6/15/2010	16.0	4.9	10.0
	10/7/2010	21.0	0.0	0.0
	5/18/2011	16.0	0.0	0.0
	6/8/2011	22.0	0.0	0.0
AS-24A				
	7/14/2009	6.0	4.5	6.2

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-24A				
	8/24/2009	11.0	0.0	0.0
	9/2/2009	11.5	4.5	7.9
	10/23/2009	5.0	0.0	0.0
	4/19/2010	15.0	4.6	9.1
	6/15/2010	17.0	3.4	7.2
	10/7/2010	10.0	0.0	0.0
	5/16/2011	21.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-24B				
	7/15/2009	3.0	9.0	10.6
	8/24/2009	8.0	10.0	15.2
	9/2/2009	8.0	8.0	12.1
	10/23/2009	6.0	5.4	7.5
	4/19/2010	9.0	6.1	9.6
	6/16/2010	15.0	12.8	25.3
	10/7/2010	7.0	11.5	16.7
	5/16/2011	12.0	12.0	21.4
	6/9/2011	15.0	11.0	21.8
AS-24C				
	7/14/2009	4.5	10.0	12.8
	8/24/2009	6.0	10.0	13.8
	9/2/2009	8.0	8.0	12.1
	10/23/2009	9.0	6.0	9.5
	4/19/2010	11.0	9.5	16.2
	6/15/2010	12.0	11.1	19.9
	10/7/2010	12.0	11.5	20.5
	5/16/2011	15.0	8.0	15.9
	6/9/2011	16.0	8.0	16.4
AS-24D				
	7/15/2009	6.5	6.0	8.5
	8/24/2009	9.5	6.0	9.7
	9/2/2009	8.0	7.0	10.6
	9/11/2009	11.5	7.5	13.1
	10/23/2009	5.0	6.5	8.5
	4/19/2010	10.0	6.1	10.1
	6/15/2010	11.0	12.2	20.9
	10/7/2010	21.0	0.0	0.0
	5/18/2011	14.0	0.0	0.0
	6/8/2011	21.0	0.0	0.0
AS-25A				
	7/14/2009	5.0	10.0	13.1

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-25A				
	8/24/2009	6.5	10.0	14.1
	9/2/2009	10.0	7.0	11.5
	10/23/2009	8.5	0.0	0.0
	4/19/2010	15.0	4.6	9.1
	6/15/2010	17.0	3.4	7.2
	10/7/2010	3.0	16.5	19.5
	10/7/2010	14.0	0.0	0.0
	5/16/2011	21.0	0.0	0.0
	6/9/2011	22.5	0.0	0.0
AS-25B				
	7/15/2009	4.5	10.0	12.8
	8/24/2009	10.0	5.0	8.2
	9/2/2009	13.0	4.0	7.4
	10/23/2009	7.0	6.0	8.7
	4/19/2010	15.0	4.9	9.6
	6/16/2010	16.0	10.0	20.5
	10/7/2010	14.0	0.0	0.0
	5/16/2011	17.0	3.0	6.3
	6/9/2011	21.0	3.0	7.1
AS-25C				
	7/14/2009	9.0	3.0	4.7
	8/24/2009	13.0	0.0	0.0
	9/2/2009	15.0	3.0	5.9
	10/23/2009	8.0	2.0	3.0
	4/19/2010	14.5	0.0	0.0
	6/15/2010	15.0	0.0	0.0
	10/7/2010	17.0	0.0	0.0
	5/16/2011	17.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-25D				
	7/15/2009	4.0	8.5	10.6
	8/24/2009	5.0	10.0	13.1
	9/2/2009	6.0	10.0	13.8
	9/11/2009	3.0	10.0	11.8
	10/23/2009	5.0	0.0	0.0
	4/19/2010	12.0	3.4	6.1
	6/15/2010	16.0	4.9	10.0
	10/7/2010	19.0	0.0	0.0
	5/18/2011	16.0	0.0	0.0
	6/8/2011	22.0	0.0	0.0
AS-26A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-26A				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	6.0	10.0	13.8
	9/2/2009	6.0	9.0	12.4
	10/23/2009	3.5	7.4	9.0
	4/19/2010	6.0	11.1	15.4
	6/15/2010	11.5	13.2	23.1
	10/7/2010	15.0	0.0	0.0
	5/16/2011	21.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-26B				
	7/15/2009	5.0	8.5	11.2
	8/24/2009	11.0	4.0	6.9
	9/2/2009	11.0	7.5	12.9
	10/23/2009	10.0	0.0	0.0
	4/19/2010	14.5	4.9	9.6
	6/16/2010	19.0	4.5	10.1
	10/7/2010	15.0	0.0	0.0
	5/17/2011	19.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-26C				
	7/14/2009	3.5	10.0	12.1
	8/24/2009	6.0	10.0	13.8
	9/2/2009	14.0	6.0	11.5
	10/23/2009	9.0	0.0	0.0
	4/19/2010	10.0	10.1	16.7
	6/15/2010	12.0	11.1	19.9
	10/7/2010	8.0	15.0	22.7
	5/16/2011	13.0	9.0	16.6
	6/9/2011	10.0	10.0	16.5
AS-26D				
	7/15/2009	5.0	9.0	11.8
	8/24/2009	7.0	9.5	13.8
	9/2/2009	5.5	7.5	10.1
	9/11/2009	5.0	10.0	13.1
	10/23/2009	4.0	7.0	8.7
	4/19/2010	7.0	10.1	14.7
	6/15/2010	9.0	8.7	13.8
	10/7/2010	19.0	8.0	18.0
	5/18/2011	15.0	6.0	11.9
	6/8/2011	22.0	9.0	22.0
AS-27A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-27A				
	7/14/2009	6.0	8.5	11.7
	8/24/2009	10.0	5.0	8.2
	9/2/2009	8.0	8.0	12.1
	10/23/2009	7.0	5.0	7.2
	4/19/2010	6.0	11.1	15.4
	6/15/2010	1.0	4.0	4.2
	10/7/2010	0.0	0.0	0.0
	5/16/2011	11.0	2.5	4.3
	6/9/2011	14.0	3.0	5.7
AS-27B				
	7/15/2009	4.0	10.0	12.5
	8/24/2009	2.5	10.0	11.5
	9/2/2009	4.0	10.0	12.5
	10/23/2009	3.5	6.0	7.3
	4/19/2010	3.0	8.1	9.6
	6/16/2010	19.5	4.4	10.0
	10/7/2010	12.0	5.5	9.8
	5/17/2011	5.0	3.0	3.9
	6/9/2011	21.0	3.5	8.3
AS-27C				
	7/14/2009	4.5	10.0	12.8
	8/24/2009	6.5	7.0	9.9
	9/2/2009	15.0	3.5	6.9
	10/23/2009	8.0	0.0	0.0
	4/19/2010	13.0	5.8	10.6
	6/15/2010	16.0	2.4	4.9
	10/7/2010	18.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	19.0	0.0	0.0
AS-27D				
	7/15/2009	5.5	8.0	10.8
	8/24/2009	8.5	3.0	4.6
	9/2/2009	10.5	6.0	10.1
	9/11/2009	12.0	7.0	12.5
	10/23/2009	6.0	5.8	8.0
	4/19/2010	11.0	5.1	8.7
	6/15/2010	12.0	11.1	19.9
	10/7/2010	15.0	12.0	23.8
	5/18/2011	14.0	7.0	13.4
	6/8/2011	17.0	12.0	25.4
AS-28A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-28A				
	7/14/2009	3.0	10.0	11.8
	8/24/2009	6.0	9.0	12.4
	9/2/2009	10.0	6.0	9.9
	10/23/2009	8.0	0.0	0.0
	4/19/2010	15.0	0.0	0.0
	6/15/2010	16.0	3.5	7.2
	10/7/2010	15.0	0.0	0.0
	5/16/2011	20.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-28B				
	7/15/2009	1.0	10.0	10.5
	8/24/2009	2.0	10.0	11.1
	9/2/2009	3.0	10.0	11.8
	10/23/2009	2.0	10.0	11.1
	4/19/2010	3.0	14.6	17.2
	6/16/2010	1.0	4.0	4.2
	7/30/2010	4.0	16.5	20.6
	10/7/2010	1.0	6.5	6.8
	5/16/2011	1.0	3.0	3.1
	6/9/2011	3.0	5.0	5.9
AS-28C				
	7/14/2009	7.5	6.0	8.9
	8/24/2009	10.0	7.0	11.5
	9/2/2009	15.0	3.0	5.9
	10/23/2009	10.0	0.0	0.0
	4/19/2010	15.0	0.0	0.0
	6/15/2010	15.0	0.0	0.0
	10/7/2010	16.0	0.0	0.0
	5/16/2011	15.0	0.0	0.0
	6/9/2011	18.0	0.0	0.0
AS-28D				
	7/15/2009	4.0	8.0	10.0
	8/24/2009	9.0	7.0	11.1
	9/2/2009	8.0	7.0	10.6
	9/11/2009	10.0	7.0	11.5
	10/23/2009	3.0	6.0	7.1
	4/19/2010	7.0	7.1	10.2
	6/15/2010	4.5	2.3	2.9
	10/7/2010	4.0	0.0	0.0
	5/18/2011	0.0	3.0	2.9
	6/8/2011	6.0	18.0	24.9

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-29A				
	7/14/2009	7.0	4.0	5.8
	8/24/2009	10.0	5.0	8.2
	9/2/2009	8.5	6.0	9.3
	10/23/2009	7.0	5.5	8.0
	4/19/2010	11.0	6.1	10.4
	6/15/2010	6.0	3.7	5.1
	10/7/2010	8.0	0.0	0.0
	5/16/2011	15.0	3.0	5.9
	6/9/2011	3.0	14.0	16.5
AS-29B				
	7/15/2009	2.5	8.0	9.2
	8/24/2009	6.0	10.0	13.8
	9/2/2009	8.5	7.0	10.8
	10/23/2009	8.0	0.0	0.0
	4/19/2010	7.0	7.1	10.2
	6/16/2010	18.0	6.1	13.3
	10/7/2010	14.0	0.0	0.0
	5/17/2011	17.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-29C				
	7/14/2009	7.0	6.0	8.7
	8/24/2009	8.5	8.5	13.2
	9/2/2009	10.0	7.0	11.5
	10/23/2009	8.0	0.0	0.0
	4/19/2010	13.0	6.3	11.7
	6/15/2010	16.0	2.4	4.9
	10/7/2010	18.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	19.0	0.0	0.0
AS-29D				
	7/15/2009	5.0	8.0	10.5
	8/24/2009	7.0	9.8	14.1
	9/2/2009	7.0	7.0	10.1
	9/11/2009	12.5	5.5	10.0
	10/23/2009	9.0	0.0	0.0
	4/19/2010	8.0	7.1	10.7
	6/15/2010	12.0	4.0	7.2
	10/7/2010	21.0	0.0	0.0
	5/18/2011	18.0	0.0	0.0
	6/8/2011	24.0	0.0	0.0
AS-30A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-30A				
	7/14/2009	4.5	10.0	12.8
	8/24/2009	9.0	7.0	11.1
	9/2/2009	6.0	9.0	12.4
	10/23/2009	6.0	6.0	8.3
	4/19/2010	10.0	6.1	10.0
	6/15/2010	17.0	3.4	7.2
	10/7/2010	18.0	0.0	0.0
	5/16/2011	21.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-30B				
	7/15/2009	7.5	6.0	8.9
	8/24/2009	NR	NR	NR
	9/2/2009	13.0	3.0	5.5
	10/23/2009	8.0	0.0	0.0
	4/19/2010	14.0	4.2	8.1
	6/16/2010	20.0	1.3	3.0
	10/7/2010	13.0	0.0	0.0
	5/16/2011	17.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-30C				
	7/14/2009	4.0	10.0	12.5
	8/24/2009	8.0	8.0	12.1
	9/2/2009	8.0	8.0	12.1
	10/23/2009	6.0	6.0	8.3
	4/19/2010	9.0	9.1	14.4
	6/15/2010	3.0	3.4	4.1
	10/7/2010	2.0	0.0	0.0
	5/17/2011	1.0	3.0	3.1
	6/9/2011	3.0	14.0	16.5
AS-30D				
	7/15/2009	5.0	8.0	10.5
	8/24/2009	6.0	10.0	13.8
	9/2/2009	8.0	7.0	10.6
	9/11/2009	14.0	3.3	6.2
	10/23/2009	6.0	0.0	0.0
	4/19/2010	9.5	7.4	12.0
	6/15/2010	15.0	6.1	12.2
	10/7/2010	20.0	3.0	6.9
	5/18/2011	17.0	0.0	0.0
	6/8/2011	22.0	0.0	0.0
AS-31A				

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID		Pressure (psi)	Flow (acfm)	Flow (scfm)
AS-31A				
	7/14/2009	2.0	10.0	11.1
	8/24/2009	5.0	10.0	13.1
	9/2/2009	8.0	7.0	10.6
	10/23/2009	8.0	0.0	0.0
	4/19/2010	11.0	9.1	15.6
	6/15/2010	17.0	3.4	7.2
	10/7/2010	15.0	0.0	0.0
	5/16/2011	20.0	0.0	0.0
	6/8/2011	23.0	0.0	0.0
AS-31B				
	7/15/2009	3.0	10.0	11.8
	8/24/2009	6.0	10.0	13.8
	9/2/2009	5.0	8.0	10.5
	10/23/2009	7.0	4.0	5.8
	4/19/2010	10.0	6.1	10.0
	6/16/2010	20.0	4.3	10.0
	10/7/2010	10.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	22.0	0.0	0.0
AS-31C				
	7/14/2009	5.5	9.5	12.8
	8/24/2009	6.0	8.0	11.1
	9/2/2009	14.0	4.0	7.7
	10/23/2009	10.0	0.0	0.0
	4/19/2010	14.0	0.0	0.0
	6/15/2010	16.0	2.4	4.9
	10/7/2010	18.0	0.0	0.0
	5/17/2011	16.0	0.0	0.0
	6/9/2011	19.0	0.0	0.0
AS-31D				
	7/15/2009	3.5	9.5	11.5
	8/24/2009	5.0	10.0	13.1
	9/2/2009	5.0	8.0	10.5
	9/11/2009	13.0	6.0	11.1
	10/23/2009	8.0	0.0	0.0
	4/19/2010	7.0	11.1	16.1
	6/15/2010	5.0	3.3	4.4
	10/7/2010	11.0	3.5	6.0
	5/18/2011	14.0	3.0	5.7
	6/8/2011	21.0	3.3	7.7

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)

Notes:

psi = pounds per square inch
acfm = actual cubic feet per minute
scfm = standard cubic feet per minute
Equation for converstion of acfm to scfm = (flow [in acfm])*[(14.7+pressure [in psi]/14.7]*[520/(460+70 deg. F)
NR = data not recorded
The initial system start date was August 10, 2009 and all data collected prior to then was a component of either startup/shake down or compliance sampling.
Initial Design Flow Rate = 10 scfm
Suffix A, B, C, D = legs of system in the volatile organic compound treatment area
Suffix E = E leg of system in the perimeter treatment curtain

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
6/23/2009					
	SVE-01	3.4	0.940	53.02	7.0
	SVE-02	2.8	0.880	51.34	10.5
	SVE-03	2.2	0.650	44.15	19.8
	SVE-04	2.2	0.220	25.69	19.3
	SVE-05	2.2	0.040	10.95	9.4
	SVE-06	1.4	0.140	20.51	5.5
	SVE-07	4.6	2.000	77.22	12.2
	SVE-08	3.8	0.200	24.44	54.8
	SVE-09	3	0.100	17.30	909.0
	SVE-10	2.2	0.120	18.97	2,875.0
	SVE-11	1.6	0.260	27.95	178.0
	SVE-12	1.2	0.180	23.26	76.2
	SVE-13	7.8	0.200	24.32	507.0
	SVE-14	5.8	0.700	45.62	631.0
	SVE-15	5.8	0.220	25.57	525.0
	SVE-16	5.4	0.260	27.81	4,221.0
	SVE-16	5.4	0.160	21.82	4,221.0
	SVE-17	4.8	0.300	29.90	3,306.0
	SVE-18	5	0.380	33.64	35.0
	SVE-19	5.8	0.080	15.42	118.0
	SVE-20	4.8	0.240	26.74	100.0
	SVE-21	1.2	0.140	20.52	7.3
	SVE-22	1.6	0.040	10.96	10.3
	SVE-23	1.4	0.080	15.51	36.2
7/6/2009					
	SVE-01	1.4	0.300	30.03	nm
	SVE-02	1.2	0.280	29.01	nm
	SVE-03	1.3	0.300	30.03	nm
	SVE-04	1.4	0.260	27.95	nm
	SVE-05	6.8	0.020	7.70	nm
	SVE-06	2	0.300	30.00	nm
	SVE-07	1	0.260	27.97	nm
	SVE-08	5	0.320	30.87	nm
	SVE-09	8.2	0.340	31.70	nm
	SVE-10	2.5	0.200	24.48	nm

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
7/6/2009					
	SVE-11	1.4	0.300	30.03	nm
	SVE-12	1.6	0.240	26.85	nm
	SVE-13	0.1	0.300	30.07	nm
	SVE-14	3.2	0.270	28.42	nm
	SVE-15	6	0.240	26.70	nm
	SVE-16	6	0.240	26.70	nm
	SVE-17	3.4	0.220	25.65	nm
	SVE-18	3.8	0.260	27.87	nm
	SVE-19	9	0.200	24.29	nm
	SVE-20	5.8	0.360	32.71	nm
	SVE-21	1	0.200	24.53	nm
	SVE-22	5	0.160	21.83	nm
	SVE-23	4.4	0.240	26.76	nm
	SVE-24	5	0.020	7.72	nm
	SVE-25	4.8	0.060	13.37	nm
	SVE-26	4.8	0.020	7.72	nm
	SVE-27	4.7	0.060	13.37	nm
	SVE-28	5	0.040	10.91	nm
	SVE-29	5	0.060	13.37	nm
	SVE-30	4.8	0.060	13.37	nm
	SVE-31	4.6	0.080	15.44	nm
8/21/2009					
	SVE-01	1.65	0.250	27.40	42.6
	SVE-02	1.05	0.250	27.42	203.0
	SVE-03	1.15	0.250	27.42	499.0
	SVE-04	1.25	0.250	27.41	54.6
	SVE-05	4.75	0.150	21.14	231.0
	SVE-06	1.6	0.250	27.40	26.0
	SVE-07	1	0.300	30.04	268.0
	SVE-08	6	0.250	27.25	1,020.0
	SVE-09	5.8	0.300	29.86	1,650.0
	SVE-10	3	0.300	29.97	3,450.0
	SVE-11	1.05	0.250	27.42	1,030.0
	SVE-12	0.9	0.200	24.53	611.0
	SVE-13	10	0.250	27.12	1,040.0

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
8/21/2009					
	SVE-14	2	0.250	27.39	1,370.0
	SVE-15	6.5	0.300	29.84	4,000.0
	SVE-16	4	0.250	27.32	4,000.0
	SVE-17	3	0.170	22.56	2,480.0
	SVE-18	5	0.300	29.89	547.0
	SVE-19	8.5	0.280	28.75	320.0
	SVE-20	7	0.260	27.76	204.0
	SVE-21	1.1	0.300	30.04	29.0
	SVE-22	4.5	0.220	25.61	59.2
	SVE-23	2	0.300	30.00	69.4
	SVE-24	4.5	0.050	12.21	15.5
	SVE-25	4.5	0.050	12.21	10.3
	SVE-26	4.5	0.050	12.21	163.0
	SVE-27	4.5	0.050	12.21	6.5
	SVE-28	4.5	0.050	12.21	13.3
	SVE-29	2	0.050	12.25	55.4
	SVE-30	4.5	0.050	12.21	8.2
	SVE-31	4.5	0.050	12.21	6.1
10/23/2009					
	SVE-01	2.2	0.300	30.00	20.0
	SVE-02	1.35	0.250	27.41	4.2
	SVE-03	1.75	0.300	30.01	439.0
	SVE-04	1.9	0.375	33.55	70.4
	SVE-05	8	0.200	24.32	61.0
	SVE-06	2.05	0.400	34.64	27.2
	SVE-07	0.85	0.325	31.27	254.0
	SVE-08	7.6	0.325	31.01	351.0
	SVE-09	8.2	0.250	27.18	1,093.0
	SVE-10	3.8	0.400	34.57	3,334.0
	SVE-11	1.65	0.450	36.76	593.0
	SVE-12	1.3	0.400	34.67	636.0
	SVE-13	10	0.300	29.71	966.0
	SVE-14	3	0.250	27.36	1,822.0
	SVE-15	10	0.300	29.71	4,709.0
	SVE-16	8	0.250	27.19	3,031.0

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
10/23/2009					
	SVE-17	3.6	0.250	27.33	1,917.0
	SVE-18	6	0.375	33.38	373.0
	SVE-19	10	0.250	27.12	951.0
	SVE-20	8	0.200	24.32	72.7
	SVE-21	1.35	0.450	36.78	10.0
	SVE-22	7	0.250	27.22	84.6
	SVE-23	0.2	0.050	12.28	897.0
	SVE-24	6.6	0.050	12.18	7.4
	SVE-25	nm	nm	nm	nm
	SVE-26	nm	nm	nm	nm
	SVE-27	5.8	0.050	12.19	17.3
	SVE-28	6.4	0.050	12.18	0.4
	SVE-29	6.6	0.050	12.18	12.7
	SVE-30	6.4	0.050	12.18	3.0
	SVE-31	6.4	0.050	12.18	29.7
6/15/2010					
	SVE-01	0.3	0.020	7.76	33.8
	SVE-02	0.35	0.050	12.27	48.0
	SVE-03	0.4	0.050	12.27	196.0
	SVE-04	0.35	0.020	7.76	30.2
	SVE-05	5.5	0.045	11.57	33.5
	SVE-06	0.6	0.035	10.27	14.1
	SVE-07	0.35	0.050	12.27	67.9
	SVE-08	3	0.035	10.24	262.0
	SVE-09	13	0.650	43.56	455.0
	SVE-10	9	1.300	61.91	2,149.0
	SVE-11	1.75	0.400	34.66	487.0
	SVE-12	2	0.350	32.41	323.0
	SVE-13	25	0.100	16.82	255.0
	SVE-14	18	2.750	89.03	692.0
	SVE-15	22	0.200	23.89	3,129.0
	SVE-16	18	0.750	46.49	1,806.0
	SVE-17	14	1.250	60.33	990.0
	SVE-18	2	0.050	12.25	176.0
	SVE-19	18	0.050	12.00	1,296.0

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
6/15/2010					
	SVE-20	6	0.050	12.19	106.0
	SVE-21	1	0.010	5.48	127.0
	SVE-22	7	0.025	8.61	19.6
	SVE-23	7	0.450	36.52	105.0
	SVE-24	9	0.010	5.43	39.8
	SVE-25	9	0.010	5.43	124.0
	SVE-26	9	0.010	5.43	14.8
	SVE-27	7	0.050	12.17	13.6
	SVE-28	9	0.010	5.43	34.8
	SVE-29	9	0.010	5.43	24.2
	SVE-30	9	0.030	9.41	11.1
	SVE-31	18	0.045	11.39	47.7
10/8/2010					
	SVE-01	0.065	0.005	3.88	33.4
	SVE-02	0.075	0.005	3.88	76.9
	SVE-03	0.25	0.040	10.98	163.0
	SVE-04	0.25	0.005	3.88	46.8
	SVE-05	0.075	0.010	5.49	18.2
	SVE-06	0.85	0.050	12.27	49.5
	SVE-07	0.15	0.005	3.88	164.0
	SVE-08	0.65	0.040	10.97	150.0
	SVE-09	15	0.550	39.97	347.0
	SVE-10	10	1.000	54.23	520.0
	SVE-11	1.1	0.300	30.04	115.0
	SVE-12	0.4	0.200	24.55	126.0
	SVE-13	22.5	0.010	5.34	42.3
	SVE-14	14	3.000	93.46	158.0
	SVE-15	19	0.005	3.79	1,032.0
	SVE-16	16	0.350	31.84	16.2
	SVE-17	13	2.000	76.41	42.5
	SVE-18	0.5	0.300	30.06	207.0
	SVE-19	19	0.030	9.29	650.0
	SVE-20	6	0.050	12.19	27.6
	SVE-21	0.25	0.045	11.65	22.0
	SVE-22	3	0.055	12.83	134.0

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
10/8/2010					
	SVE-23	9	0.700	45.43	63.2
	SVE-24	0.04	0.000	0.00	22.4
	SVE-25	0.11	0.005	3.88	41.3
	SVE-26	0.02	0.040	10.98	50.0
	SVE-27	0.04	0.000	0.00	9.4
	SVE-28	0.12	0.010	5.49	6.6
	SVE-29	0.01	0.010	5.49	53.3
	SVE-30	0.01	0.000	0.00	32.5
	SVE-31	0	0.000	0.00	26.6
4/1/2011					
	SVE-01	nm	nm	nm	44.4
	SVE-02	nm	nm	nm	27.2
	SVE-03	nm	nm	nm	38.5
	SVE-04	nm	nm	nm	63.8
	SVE-05	nm	nm	nm	8.7
	SVE-06	nm	nm	nm	3.5
	SVE-07	nm	nm	nm	56.8
	SVE-08	nm	nm	nm	126.0
	SVE-09	nm	nm	nm	33.5
	SVE-10	nm	nm	nm	49.1
	SVE-11	nm	nm	nm	99.6
	SVE-12	nm	nm	nm	79.2
	SVE-13	nm	nm	nm	140.0
	SVE-14	nm	nm	nm	304.0
	SVE-15	nm	nm	nm	118.0
	SVE-16	nm	nm	nm	264.0
	SVE-17	nm	nm	nm	134.0
	SVE-18	nm	nm	nm	40.0
	SVE-19	nm	nm	nm	69.7
	SVE-20	nm	nm	nm	33.0
	SVE-21	nm	nm	nm	1.8
	SVE-22	nm	nm	nm	31.3
	SVE-23	nm	nm	nm	9.4
	SVE-24	nm	nm	nm	8.5
	SVE-25	nm	nm	nm	9.2

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
4/1/2011					
	SVE-26	nm	nm	nm	29.2
	SVE-27	nm	nm	nm	5.5
	SVE-28	nm	nm	nm	8.1
	SVE-29	nm	nm	nm	4.8
	SVE-30	nm	nm	nm	8.2
	SVE-31	nm	nm	nm	7.8
5/9/2011 *					
	SVE-01	0.4	0.030	9.51	nm
	SVE-02	0.4	0.035	10.27	nm
	SVE-03	0.3	0.030	9.51	nm
	SVE-04	1.75	0.005	3.87	nm
	SVE-05	1.45	0.010	5.48	nm
	SVE-06	0.5	0.030	9.51	nm
	SVE-07	0.45	0.035	10.27	nm
	SVE-08	0.6	0.030	9.50	nm
	SVE-09	2.8	0.025	8.65	nm
	SVE-10	1.2	0.060	13.43	nm
	SVE-11	1.2	0.300	30.03	nm
	SVE-12	1.1	0.200	24.52	nm
	SVE-13	4.7	0.010	5.46	nm
	SVE-14	4.2	0.090	16.39	nm
	SVE-15	4.3	0.000	0.00	nm
	SVE-16	4	0.070	14.46	nm
	SVE-17	3.5	0.120	18.94	nm
	SVE-18	2.5	0.035	10.24	nm
	SVE-19	4	0.000	0.00	nm
	SVE-20	3.8	0.050	12.22	nm
	SVE-21	0.4	0.040	10.98	nm
	SVE-22	0.9	0.020	7.76	nm
	SVE-23	1.4	0.040	10.96	nm
	SVE-24	1.5	0.000	0.00	nm
	SVE-25	1.5	0.000	0.00	nm
	SVE-26	1.5	0.000	0.00	nm
	SVE-27	1.5	0.000	0.00	nm
	SVE-28	1.5	0.000	0.00	nm

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
5/9/2011 *					
	SVE-29	1.5	0.005	3.88	nm
	SVE-30	1.5	0.000	0.00	nm
	SVE-31	1	0.000	0.00	nm
5/22/2011					
	SVE-01	2	0.055	12.85	nm
	SVE-02	1	0.060	13.43	nm
	SVE-03	0.4	0.030	9.51	nm
	SVE-04	2	0.070	14.49	nm
	SVE-05	19	0.020	7.58	nm
	SVE-06	1.1	0.075	15.02	nm
	SVE-07	1	0.030	9.50	nm
	SVE-08	1.95	0.030	9.49	nm
	SVE-09	14	0.250	26.98	nm
	SVE-10	9	0.400	34.34	nm
	SVE-11	2	0.350	32.41	nm
	SVE-12	2	0.250	27.39	nm
	SVE-13	22	0.005	3.78	nm
	SVE-14	19	0.650	43.23	nm
	SVE-15	20	0.005	3.79	nm
	SVE-16	18	0.750	46.49	nm
	SVE-17	13	0.250	27.01	nm
	SVE-18	7	0.025	8.61	nm
	SVE-19	19	0.010	5.36	nm
	SVE-20	7	0.050	12.17	nm
	SVE-21	0.4	0.050	12.27	nm
	SVE-22	3	0.055	12.83	nm
	SVE-23	1.6	0.040	10.96	nm
	SVE-24	24	0.025	8.42	nm
	SVE-25	22	0.005	3.78	nm
	SVE-26	21	0.600	41.42	nm
	SVE-27	22	0.005	3.78	nm
	SVE-28	23	0.030	9.24	nm
	SVE-29	22	0.020	7.55	nm
	SVE-30	23	0.010	5.33	nm
	SVE-31	22	0.080	15.11	nm

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

	SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)
6/10/2011					
	SVE-01	0.75	0.350	32.46	nm
	SVE-02	0.01	0.550	40.72	nm
	SVE-03	0.4	0.060	13.44	nm
	SVE-04	2.4	0.150	21.21	nm
	SVE-05	24	0.020	7.53	nm
	SVE-06	5	0.500	38.59	nm
	SVE-07	1	0.150	21.24	nm
	SVE-08	6	0.250	27.25	nm
	SVE-09	4	0.055	12.81	nm
	SVE-10	5	0.600	42.27	nm
	SVE-11	1.2	0.250	27.42	nm
	SVE-12	2.1	0.500	38.73	nm
	SVE-13	44	0.020	7.33	nm
	SVE-14	5	0.060	13.37	nm
	SVE-15	36	0.000	0.00	nm
	SVE-16	12.5	0.140	20.23	nm
	SVE-17	10	0.750	46.97	nm
	SVE-18	11.5	0.300	29.65	nm
	SVE-19	42	0.000	0.00	nm
	SVE-20	11	0.125	19.15	nm
	SVE-21	0.3	0.030	9.51	nm
	SVE-22	17	0.550	39.87	nm
	SVE-23	0	0.000	0.00	nm
	SVE-24	nm	nm	nm	nm
	SVE-25	nm	nm	nm	nm
	SVE-26	nm	nm	nm	nm
	SVE-27	nm	nm	nm	nm
	SVE-28	nm	nm	nm	nm
	SVE-29	nm	nm	nm	nm
	SVE-30	nm	nm	nm	nm
	SVE-31	nm	nm	nm	nm

Table 5
Soil Vapor Extraction Well Air Flow Data
Dover Municipal Landfill Superfund Site, Dover, NH

SVE Well ID	Vacuum (in. H2O)	Differential Pressure (in. H2O)	Flow (scfm)	Total VOCs (ppmv)

Notes:

SVE = soil vapor extraction
VOCs = volatile organic compounds
in. H2O = inches of water
scfm = standard cubic feet per minute
ppmv = parts per million by volume
nm = not measured
* = Dilution valve on SVE system was open.

1. Vacuum and differential pressure measured in the field using a Dwyer DS-300 for a 2-inch-diameter pipe . Flow was calculated from the field measurements.
2. Total VOCs were measured in the field using a photoionization detector.
3. During the June 2009 field event, total VOCs were measured on June 26, 2009 due to weather conditions/equipment malfunction.
4. During the October 2009 field event, SVE-25 and SVE-26 contained water so no air flow or VOC measurements were recorded.

SVE operations were initiated on July 6, 2009; AS and SVE operations were initiated on August 10, 2009.

Table 6
Process Monitoring

Dover Municipal Landfill Superfund Site, Dover, NH

Date	Event Type	SVE Total Air Flow (scfm)	SVE Vacuum (in. Hg)	SVE Disc. Temp. (deg. F)	SVE Total Runtime (hrs)	Air Sparge PTC- Total Air Flow (scfm)	Air Sparge PTC- Pressure (psi)	Air Sparge PTC- Disc. Temp. (deg. F)	Air Sparge PTC- Total Runtime (hrs)	Air Sparge VOCTA- Total Air Flow (scfm)	Air Sparge VOCTA- Pressure (psi)	Air Sparge VOCTA- Disc. Temp. (deg. F)	Air Sparge VOCTA- Total Runtime* (hrs)	Transfer Pump - Total Runtime^
7/7/2009	A	753	5	113	238	NR	NR	NR	NR	NR	NR	NR	NR	NR
7/10/2009	A	743	6	84	315	NR	NR	NR	NR	NR	NR	NR	NR	4
7/13/2009	A	740	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7/14/2009	A	750	NR	130	NR	NR	NR	NR	NR	440	7	92	NR	NR
7/17/2009	A	738	6	139	428	NR	NR	NR	21	NR	NR	NR	40	9
7/21/2009	A	767	6	107	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7/22/2009	A	759	6	144	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7/23/2009	A	761	5	82	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7/31/2009	A	745	6	125	584	NR	NR	NR	NR	454	9	92	53	9
8/4/2009	A	742	5	128	NR	NR	NR	NR	NR	430	11	93	NR	NR
8/10/2009	B	730	4	140	762	100	10	140	125	380	10	110	288	6
8/21/2009	B	725	3	150	993	100	11	145	194	420	9	114	675	6
8/31/2009	A	725	3	134	1,162	100	12	120	236	421	12	101	998	9
9/4/2009	A	733	3	132	1,242	100	13	115	262	404	13	99	1,155	9
9/11/2009	B	730	4	125	1,405	105	13	130	308	380	18	94	1,488	6
9/18/2009	A	722	3	130	1,562	100	12	120	400	397	15	95	1,789	10
9/25/2009	B	730	4	135	1,675	100	13	120	427	380	18	83	2,025	7
10/2/2009	B	746	3	122	1,699	100	13	116	1,035	406	18	90	2,071	7

Table 6
Process Monitoring

Dover Municipal Landfill Superfund Site, Dover, NH

Date	Event Type	SVE Total Air Flow (scfm)	SVE Vacuum (in. Hg)	SVE Disc. Temp. (deg. F)	SVE Total Runtime (hrs)	Air Sparge PTC- Total Air Flow (scfm)	Air Sparge PTC- Pressure (psi)	Air Sparge PTC- Disc. Temp. (deg. F)	Air Sparge PTC- Total Runtime (hrs)	Air Sparge VOCTA- Total Air Flow (scfm)	Air Sparge VOCTA- Pressure (psi)	Air Sparge VOCTA- Disc. Temp. (deg. F)	Air Sparge VOCTA- Total Runtime* (hrs)	Transfer Pump - Total Runtime^
10/9/2009	B	725	3	130	1,814	100	13	116	477	339	19	93	2,286	10
10/16/2009	B	745	3	115	1,914	100	5	107	537	457	10	77	2,479	11
10/22/2009	A	740	4	120	2,059	100	14	115	560	450	11	70	2,782	8
10/30/2009	B	735	3	127	2,241	97	9	110	613	473	9	82	3,133	13
11/9/2009	B	738	3	130	2,481	99	10	117	676	481	8	86	3,613	14
11/13/2009	B	736	3	126	2,577	96	6	108	699	378	18	82	3,803	15
11/20/2009	B	754	3	122	2,745	96	12	124	742	448	11	91	4,140	16
11/23/2009	A	750	4	120	2,825	NR	NR	NR	NR	370	20	73	4,314	10
4/21/2010	A	750	3	125	2,862	NR	NR	NR	768	400	9	94	2,195	10
4/30/2010	B	749	3	127	3,004	NR	NR	NR	NR	353	18	102	2,327	86
5/7/2010	B	760	3	120	3,168	NR	NR	NR	NR	467	9	84	2,490	86
5/14/2010	B	747	3	118	3,336	NR	NR	NR	NR	471	9	85	2,659	86
5/27/2010	A	740	3	130	3,524	NR	NR	NR	920	320	5	93	2,855	27
6/4/2010	B	732	3	140	3,718	NR	NR	NR	NR	465	8	110	3,040	87
6/11/2010	B	751	3	134	3,854	93	13	131	992	397	15	105	3,175	87
6/15/2010	A	750	3	170	3,926	NR	9	120	1,002	450	6	100	3,258	28
6/17/2010	A	700	3	150	3,953	NR	12	120	1,011	280	17	90	3,288	29
6/18/2010	B	701	3	140	3,978	NR	NR	NR	1,031	376	10	112	3,296	87
6/25/2010	B	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Table 6
Process Monitoring

Dover Municipal Landfill Superfund Site, Dover, NH

Date	Event Type	SVE Total Air Flow (scfm)	SVE Vacuum (in. Hg)	SVE Disc. Temp. (deg. F)	SVE Total Runtime (hrs)	Air Sparge PTC- Total Air Flow (scfm)	Air Sparge PTC- Pressure (psi)	Air Sparge PTC- Disc. Temp. (deg. F)	Air Sparge PTC- Total Runtime (hrs)	Air Sparge VOCTA- Total Air Flow (scfm)	Air Sparge VOCTA- Pressure (psi)	Air Sparge VOCTA- Disc. Temp. (deg. F)	Air Sparge VOCTA- Total Runtime* (hrs)	Transfer Pump - Total Runtime^
6/29/2010	B	710	3	137	NR	NR	NR	NR	NR	278	9	117	NR	87
7/12/2010	B	721	3	144	4,282	97	12	143	1,066	364	10	117	3,600	87
7/16/2010	B	710	3	141	4,368	NR	NR	NR	NR	274	17	108	3,685	88
7/22/2010	A	700	3	145	4,509	86	NR	100	1,072	290	13	106	3,837	29
7/23/2010	B	706	3	143	4,529	NR	NR	NR	1,093	262	17	110	3,846	88
7/30/2010	B	713	3	143	4,681	85	11	137	1,135	280	16	113	3,995	89
8/6/2010	B	718	3	136	4,824	79	10	129	1,173	245	19	103	4,140	89
8/20/2010	B	711	3	147	4,947	NR	NR	NR	1,098	308	14	111	4,272	30
8/26/2010	A	700	1	145	5,091	NR	NR	NR	1,092	290	15	109	4,416	31
9/3/2010	B	703	3	145	5,187	NR	NR	NR	1,159	NR	NR	NR	4,429	48
9/10/2010	B	733	3	137	5,354	NR	NR	NR	1,200	NR	NR	NR	4,429	49
9/17/2010	B	760	3	119	5,488	82	10	108	1,234	NR	NR	NR	4,429	50
9/24/2010	B	743	3	137	5,656	NR	NR	NR	1,276	NR	NR	NR	4,429	50
10/7/2010	A	740	9	145	5,821	1	11	75	1,125	290	15	88	4,498	28
10/15/2010	B	694	3	132	6,012	87	8	115	1,372	251	16	91	4,689	52
10/29/2010	A	725	9	135	6,317	8	8	120	1,255	260	12	86	4,993	54
11/5/2010	B	700	3	137	6,480	14	0	78	1,492	204	13	85	5,156	57
11/12/2010	B	723	3	137	6,649	14	13	75	1,534	213	14	87	5,325	60

Table 6
Process Monitoring

Dover Municipal Landfill Superfund Site, Dover, NH

Date	Event Type	SVE Total Air Flow (scfm)	SVE Vacuum (in. Hg)	SVE Disc. Temp. (deg. F)	SVE Total Runtime (hrs)	Air Sparge PTC- Total Air Flow (scfm)	Air Sparge PTC- Pressure (psi)	Air Sparge PTC- Disc. Temp. (deg. F)	Air Sparge PTC- Total Runtime (hrs)	Air Sparge VOCTA- Total Air Flow (scfm)	Air Sparge VOCTA- Pressure (psi)	Air Sparge VOCTA- Disc. Temp. (deg. F)	Air Sparge VOCTA- Total Runtime* (hrs)	Transfer Pump - Total Runtime^
11/18/2010	A	700	8	125	6,794	80	8	105	1,375	260	13	78	5,470	54
5/9/2011	A**	900	11	110	6,807	0	0	71	1,380	0	0	72	5,476	54
5/16/2011	A**	900	7	100	6,971	0	0	50	1,380	0	0	54	5,477	54
5/18/2011	A**	900	8	100	7,018	0	0	54	1,380	200	15	74	5,484	72
5/22/2011	A	725	13	120	7,137	95	7	125	1,414	200	13	84	5,603	72
6/3/2011	A	725	16	130	7,238	90	7	125	1,429	150	12	85	57,036	108
6/27/2011	B	650	3	146	7,665	84	63	137	1,796	93	17	104	5,881	164

Notes:

SVE = soil vapor extraction
in. Hg = inches of mercury
deg. F = degress Fahrenheit
hrs = hours
scfm = standard cubic feet per minute
psi = pounds per square inch
ppmv = parts per million by volume
PTC = Perimeter Treatment Curtain
VOCTA = Volatile Organic Carbon Treatment Area
NR = not recorded
Disc. Temp. = discharge temperature

A = Recorded during site visit
B = Recorded during telemetry status check

The flow rate readings for the VOCTA recorded via telemetry in August and September 2009 [Event Type B] are biased high due to the unit's calibration. More accurate flow rates were were recored during site visits [Event Type A].
Start date for system was August 10th 2009.

* = Two air compressors provide sparge air to the VOCTA. The air sparge runtime for the VOCTA is an average value of the two air compressors.
^ = Total runtime hours for the transfer pump differ between the site visit readings and telemetry readings; site visit readings are assumed to be more accurate.
** = Dilution valve on SVE system was open.

Table 7
SVE Discharge VOC Concentrations

Dover Municipal Landfill Superfund Site, Dover, NH

Sample Event	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are reported in ppmv)															
Maximum Allowable Stack Concentration		7,829	15,644	109,359	44,031	4,413	364,517	364,554	318	11,017	11,017	156	20,726	15,579	31,232	31,232	234
SVE	6/19/2009	43	9.2	5.9	14.0	1.4	410	0.8	71.0	1.5	0.7	0.62 U	9.4	140.0	25.0	6.2	84.0
SVE	7/6/2009	58	8.5	4.0	7.4	0.5	210	0.5	13.0	3.7	1.4	0.25 U	11.0	120.0	31.0	8.4	40.0
AS/SVE (Line A)	7/14/2009	76	10.0	10.0	9.3	0.6	200	0.5	21.0	4.1	1.7	0.25	14.0	140.0	38.0	10.0	46.0
AS/SVE (Line C)	7/14/2009	84	11.0	16.0	10.0	0.8	230	0.6	21.0	4.2	1.8	0.50 U	15.0	160.0	42.0	11.0	52.0
AS/SVE (Line B)	7/15/2009	72	9.4	14.0	8.4	0.6	180	0.5	18.0	3.7	1.5	0.25 U	13.0	130.0	35.0	9.8	39.0
AS/SVE (Line D)	7/15/2009	76	9.9	12.0	9.2	0.6	190	0.5	21.0	3.9	1.6	0.25 U	13.0	140.0	36.0	10.0	43.0
AS/SVE (Line E)	7/27/2009	40 J	8.1	4.0	5.4	0.3	130	0.4	6.2	3.8	1.4	0.21 U	11.0	110.0	32.0	9.0	28.0
SVE	8/14/2009	68	8.9	13.0	7.6	0.4 U	130	0.4	6.0	2.2	1.1	0.40 U	8.6	100.0	25.0	7.2	36.0
AS/SVE (Line D)	8/21/2009	140	12.0	26.0	13.0	1.1 U	200	1.1 U	6.6	6.3	3.0	1.10 U	17.0	190.0	53.0	16.0	65.0
AS/SVE (Line B)	9/25/2009	140	11.0	14.0	6.5	1.0 U	110	1.0 U	3.9	4.9	2.6	1.00 U	11.0	140.0	40.0	12.0	30.0
AS/SVE (Lines A&D)	10/22/2009	120	8.4	8.2	4.4	1.0 U	70	1.0 U	2.4	4.6	2.5	1.00 U	9.0	100.0	35.0	12.0	19.0
AS/SVE (Lines B&C)	11/24/2009	140	9.9	9.0	3.9	0.2	60	0.2	2.2	7.2	3.9	0.17 U	10.0	78.0	41.0	16.0	18.0
AS/SVE (Line B)	4/21/2010	59	9.5	7.2	6.4	0.4	87	0.6	77.0	1.0	0.7	0.12 U	3.7	56.0	13.0	4.1	24.0
AS/SVE (Lines B&D)	5/27/2010	100	6.9	6.3	2.8	0.1 U	42	0.2	4.2	2.4	1.7	0.12 U	3.8	42.0	16.0	6.7	9.7
AS/SVE (Line B)	6/15/2010	90	5.9	4.9	2.4	0.1 U	36	0.2	6.0	1.9	1.3	0.12 U	3.2	30.0	13.0	5.5	8.1

Table 7
SVE Discharge VOC Concentrations

Dover Municipal Landfill Superfund Site, Dover, NH

Sample Event	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are reported in ppmv)															
Maximum Allowable Stack Concentration		7,829	15,644	109,359	44,031	4,413	364,517	364,554	318	11,017	11,017	156	20,726	15,579	31,232	31,232	234
AS/SVE (Line B)	6/17/2010	150	9.6	6.6	3.4	0.3 U	59	0.3	5.2	3.4	2.2	0.25 U	5.8	58.0	26.0	10.0	16.0
AS/SVE (Line A)	7/22/2010	160	12.0	6.1	3.2	0.3 U	54	0.3 U	5.1	6.3	3.8	0.28 U	8.3	68.0	34.0	13.0	14.0
AS/SVE (Line B)	8/26/2010	210	15.0	8.4	4.0	0.3 U	51	0.3	4.8	7.8	4.7	0.25 U	12.0	91.0	42.0	17.0	18.0
AS/SVE (Line B)	10/7/2010	160	14.0	8.5	4.9	0.2 U	61	0.4	6.2	7.0	4.1	0.21 U	9.6	82.0	32.0	13.0	24.0
AS/SVE (Line B)	10/29/2010	200	15.0	9.6	4.7	0.3 U	52	0.4	4.5	9.6	5.1	0.25 U	13.0	83.0	45.0	18.0	28.0
AS/SVE (Lines A&B)	11/18/2010	110	6.4	4.3	1.9	0.1 U	18	0.1 U	1.4	4.0	2.3	0.12 U	5.0	31.0	16.0	6.7	9.0
SVE	5/9/2011 *	10	1.9	1.0	1.4	0.1	16	0.1	18.0	0.4	0.2	0.32	0.7	8.4	2.1	0.8	4.7
SVE	5/16/2011 *	7	0.8	0.4	0.5	0.0	6	0.0	2.6	0.2	0.1	0.01 U	0.4	4.2	1.4	0.5	2.0
AS/SVE (Line B)	5/18/2011 *	4	0.5	0.4	0.4	0.0	5	0.0	7.3	0.1	0.1	0.02 U	0.2	2.6	0.8	0.3	1.1
AS/SVE (Line B)	5/23/2011	49	5.5	3.6	2.8	0.2	48	0.3	14.0	1.6	0.9	0.06 U	2.6	26.0	8.6	3.5	13.0
SVE	6/3/2011	42	4.7	2.5	2.0	0.1	31	0.2	12.0	1.3	0.8	0.06 U	2.1	19.0	7.0	3.2	8.3
AS/SVE (Line C)	6/10/2011	20	2.7	1.5	1.0	0.1	16	0.1	10.0	0.7	0.5	0.03 U	0.9	8.6	3.2	1.7	3.2

Table 7
SVE Discharge VOC Concentrations

Dover Municipal Landfill Superfund Site, Dover, NH

Sample Event	Sample Date	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride
		(Concentrations are reported in ppmv)															
Maximum Allowable Stack Concentration		7,829	15,644	109,359	44,031	4,413	364,517	364,554	318	11,017	11,017	156	20,726	15,579	31,232	31,232	234

Notes:

Sample Event Designation SVE = Sample collected during operation of soil vapor extraction system only
Sample Event Designation AS/SVE (Line X) = Sample collected during operation of both the soil vapor extraction and air sparging systems (applicable air sparging system leg indicated in parantheses)
SVE = soil vapor extraction
VOC = volatile organic compound
ppmv = parts per million by volume
U = compound was not detected at the indicated concentration
PCE = tetrachloroethene
TCE = trichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
J = estimated value
* = Sample collected with dilution valve open

Table 8
Vapor Probe Data

Dover Municipal Landfill Superfund Site, Dover, NH

	Vapor Probe ID	Vacuum (in. H2O)	Total VOCs (ppmv)	Methane (%)
6/18/2009				
	VP-01	0	2.7	-
	VP-02	0	2.4	-
	VP-03	0	8.6	-
	VP-04	0	7.7	-
	VP-05	0	18.6	1.4
	VP-06	0	3.1	60.5
8/21/2009				
	VP-01	0.04	-	-
	VP-02	0	-	-
	VP-03	0.18	-	-
	VP-04	0.4	-	-
	VP-05	0.1	14.2	0.4
	VP-06	0.02	0.7	0.4
9/25/2009				
	VP-01	0.04	-	-
	VP-02	0	-	-
	VP-03	0.18	-	-
	VP-04	0.38	-	-
10/8/2009				
	VP-05	0.08	2	0
	VP-06	0.1	18.6	0.1
10/23/2009				
	VP-01	0.05	-	-
	VP-02	0	-	-
	VP-03	0.1	-	-
	VP-04	0.35	-	-
	VP-05	0	13.9	0
	VP-06	0.065	7.2	0
11/24/2009				
	VP-01	0	-	-
	VP-02	0.005	-	-
	VP-03	0.005	-	-
	VP-04	0.01	-	-
	VP-05	0	0.2	0
	VP-06	0.05	0.2	0
4/2/2010				
	VP-01	0	1.5	-

Table 8
Vapor Probe Data

Dover Municipal Landfill Superfund Site, Dover, NH

	Vapor Probe ID	Vacuum (in. H2O)	Total VOCs (ppmv)	Methane (%)
	VP-02	0	2.5	-
	VP-03	0	2.7	-
	VP-04	0	2.5	-
	VP-05	0	0.7	0.5
	VP-06	0	2.4	57.2
6/15/2010				
	VP-01	0.155	0.3	-
	VP-02	0.205	0	-
	VP-03	0.185	42.7	-
	VP-04	0.35	0.2	-
	VP-05	0.01	0.2	0.1
	VP-06	0.125	0.2	0
7/22/2010				
	VP-01	0.01	-	-
	VP-02	0	-	-
	VP-03	0.015	-	-
	VP-04	0.45	-	-
	VP-05	0	-	0
	VP-06	0.13	-	0
8/26/2010				
	VP-01	0.09	0.6	0.1
	VP-02	0.02	2.5	0.1
	VP-03	0	96	0
	VP-04	1	0.2	0.2
	VP-05	0.005	0	0
	VP-06	0.06	0	0
10/8/2010				
	VP-01	0.09	0.7	0
	VP-02	0.09	0.6	0
	VP-03	0.08	164	0
	VP-04	0.075	1	0
	VP-05	0.035	0.6	0
	VP-06	0.105	2.4	0
10/29/2010				
	VP-01	0.1	3.5	0
	VP-02	0	1.6	0
	VP-03	0	230	0
	VP-04	0.4	0.7	0

Table 8
Vapor Probe Data

Dover Municipal Landfill Superfund Site, Dover, NH

	Vapor Probe ID	Vacuum (in. H2O)	Total VOCs (ppmv)	Methane (%)
	VP-05	0	2	0
	VP-06	0	5.3	0.2
3/31/2011				
	VP-01	0	6.3	0.1
	VP-02	0	0.1	0.1
	VP-03	0.05	0.5	0
	VP-04	0	33.8	0.2
	VP-05	0	0.4	0.1
	VP-06	0	29	0.1
5/18/2011				
	VP-01	0	0	0
	VP-01	0.25	0	0
	VP-02	0.1	0.3	0
	VP-02	0.025	0.3	0
	VP-03	0.25	33.4	0.5
	VP-03	0.25	33.4	0.5
	VP-04	0.025	0	0
	VP-04	0.025	0	0
	VP-05	0.03	4.2	0
	VP-05	0.03	4.2	0
	VP-06	0	0	0
	VP-06	0.005	19.3	1.2
5/23/2011				
	VP-01	0.25	0	0
	VP-01	0.25	0	0
	VP-02	0.05	1.7	0
	VP-02	0.05	0	0
	VP-03	0.01	0	0
	VP-03	0.01	0	0
	VP-04	0.85	1.7	0
	VP-04	0.85	0	0
	VP-05	0	0	0
	VP-05	0	0	0
	VP-06	0.25	0	0
	VP-06	0.25	0	0
6/11/2011				
	VP-01	0.14	-	-
	VP-02	0.175	-	-

Table 8
Vapor Probe Data

Dover Municipal Landfill Superfund Site, Dover, NH

Vapor Probe ID	Vacuum (in. H2O)	Total VOCs (ppmv)	Methane (%)
VP-03	0	-	-
VP-04	0.5	-	-
VP-05	0	-	-
VP-06	0	-	-

Notes:

VOCs = volatile organic compounds
in. H2O = inches of water
ppmv = parts per million by volume
% = percentage

Total VOCs were measured in the field using a photoionization detector.
- = per the work plan, parameter was not recorded.

During the September 25, 2009 Operations and Monitoring event, data could not be recorded at VP-05 and VP-06 due to equipment issues; these data were recorded during the next site visit, which occurred on October 8, 2009.

Table 9
Aqueous Carbon Treatment VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Sample Date	Sample	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis1,2-DCE	trans-1,2-DCE	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride	1,4-Dioxane	Vinyl Chloride	Benzene	THF
		(Concentrations are presented in ppb)																	
9/25/2009																			
	Carbon Inf.	1,600	190	120	150	10 U	3,500	20 U	140	78	61	2,400	700	480	1,300	700	20 U	20 U	240
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	10 U
10/22/2009																			
	Carbon Inf.	1,600	180	110	120	5 U	2,800	12	150	74	160	2,400	680	450	1,100	540	10 U	10 U	210
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	10 U
11/23/2009																			
	Carbon Inf.	1,700	140	98	86	5 U	1,600	10 U	150	92	84	1,100	480	350	730	490	10 U	10 U	140
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	10 U
6/21/2010																			
	Carbon Inf.	1,900	190	53	68	5 U	1,700	13	29 J	91	10 U	510	240	430	710	400	13	10 U	140
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	54
7/22/2010																			
	Carbon Inf.	1,200	210	55	62	5 U	1,500	12	10 U	79	10 U	940	88 J	350	630	330	15	10 U	81
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	10 U
10/7/2010																			
	Carbon Inf.	1,300	180	47	61	5 U	1,200	10 U	130	58	94	1,400	450	300	520	250 U	18	10 U	50 U
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	50 U	2 U	2 U	10 U
10/29/2010																			
	Carbon Inf.	1,100	120	41	38	5 U	730	10 U	95	55	58	760	330	260	410	250 U	10 U	10 U	57
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	65	2 U	2 U	12
11/18/2010																			
	Carbon Inf.	1,000	90	39	46	5 U	590	10 U	23	60	26	350	83	210	510 J	260	10 U	10 U	55
	Carbon Eff	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	75	2 U	2 U	12

Table 9
Aqueous Carbon Treatment VOC Concentrations
Dover Municipal Landfill Superfund Site, Dover, NH

Sample Date	Sample	PCE	TCE	1,1,1-TCA	1,1-DCA	1,1-DCE	cis1,2-DCE	trans-1,2-DCE	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Ethyl-benzene	Toluene	m&p-Xylenes	o-Xylene	Methylene chloride	1,4-Dioxane	Vinyl Chloride	Benzene	THF
(Concentrations are presented in ppb)																			

Notes:

VOC = volatile organic compound
Inf. = influent
Eff = effluent
ppb = parts per billion
U = compound was not detected at the indicated concentration
J = estimated concentration
PCE = tetrachloroethene
TCE = trichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
MEK = methyl ethyl ketone
MIBK = methyl isobutyl ketone
THF = tetrahydrofuran
No sample was collected in August 2010 due to a lack of available water.

Table 10
AS and SVE System Mass Removal Total
Dover Muncipal Landfill Superfund Site, Dover, NH

Sample ID	Operational System Component	Sample Date	Cumulative Run Time	Flow Rate	Tetrachloroethene			Trichloroethene			1,1,1-Trichloroethane			1,1-Dichloroethane			1,1-Dichloroethene			cis-1,2-Dichloroethene		
			hours	scfm	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	Total lbs	ppmv	lb/hr	total lbs
STACK 050911	SVE - Startup	5/9/2011	6,807	900	10	0.229	NC	1.9	0.034	NC	1.0	0.018	NC	1.4	0.019	NC	0.12	0.002	NC	16	0.214	NC
STACK 051611	SVE	5/16/2011	6,971	900	7	0.160	32	0.8	0.014	4	0.4	0.007	2	0.5	0.007	2	0.02	0.000	0.2	6	0.080	24
SVE Sample 051811	AS+SVE	5/18/2011	7,018	900	4	0.091	6	0.5	0.009	1	0.4	0.007	0	0.4	0.005	0	0.05	0.001	0.0	5	0.067	3
SVE stack 052311	AS+SVE	5/23/2011	7,137	725	49	0.902	59	5.5	0.080	5	3.6	0.053	4	2.8	0.031	2	0.19	0.002	0.2	48	0.516	35
Stack SVE 060311	SVE	6/3/2011	7,238	725	42	0.773	84	5	0.069	7	2.5	0.037	5	2.0	0.022	3	0.12	0.001	0.2	31	0.333	43
SVE stack 061011	AS+SVE	6/10/2011	7,342	725	20	0.368	59	3	0.039	6	1.5	0.022	3	1.0	0.011	2	0.08	0.001	0.1	16	0.172	26
Total Mass Removed:							**241**			**23**			**14**			**9**			**1**			**132**

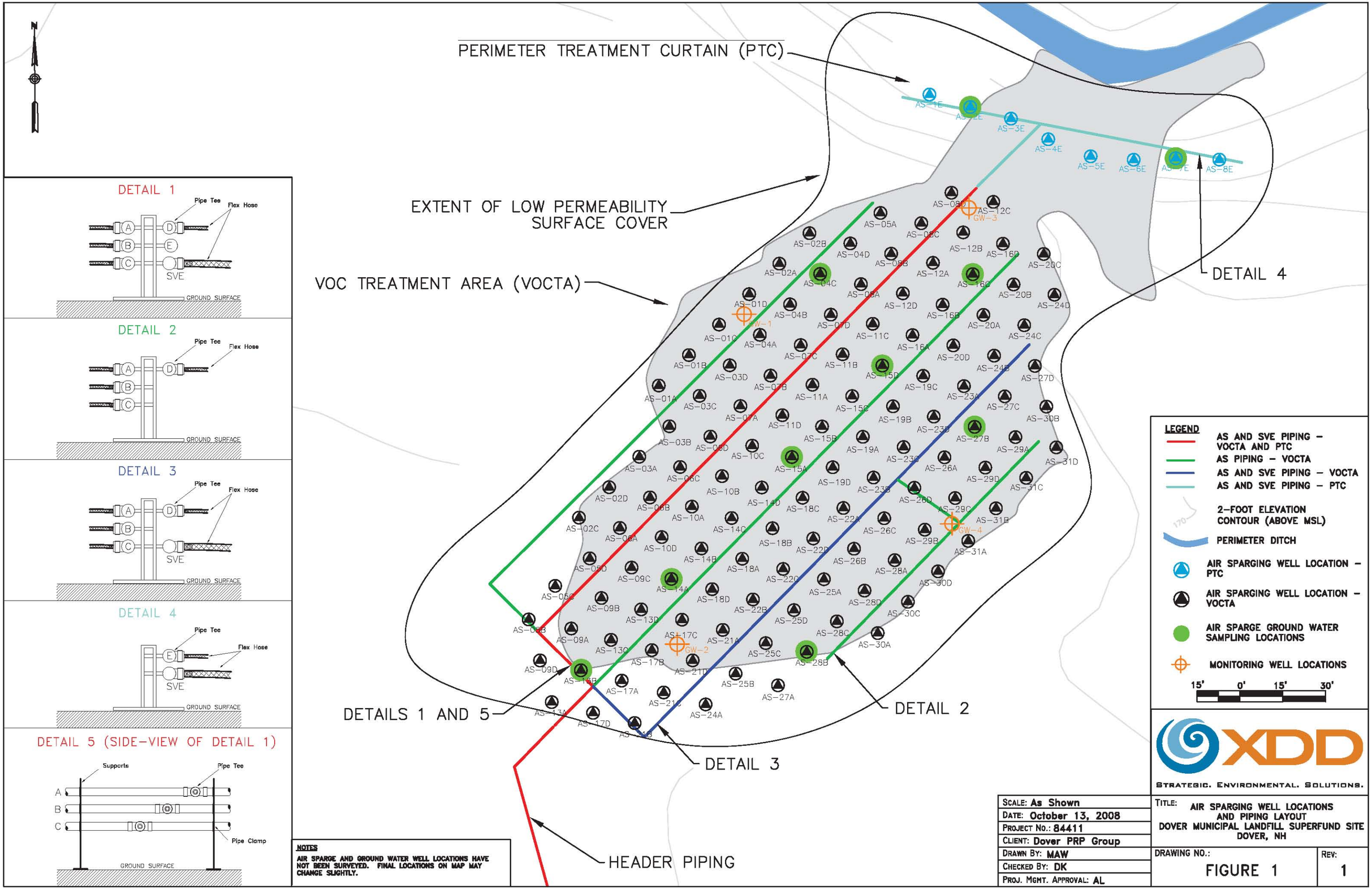
Sample ID	Operational System Component	Sample Date	Cumulative Run Time	Flow Rate	trans-1,2-Dichloroethene			Vinyl Chloride			1,2,4-Trimethylbenzene			1,3,5-Trimethylbenzene			Benzene			Ethylbenzene		
			hours	scfm	ppmv	lb/hr	total lbs	ppmv	lb/hr	Total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs
STACK 050911	SVE - Startup	5/9/2011	6,807	900	0.08	0.001	NC	18	0.155	NC	0.4	0.007	NC	0.2	0.003	NC	0.3	0.003	NC	0.7	0.010	NC
STACK 051611	SVE	5/16/2011	6,971	900	0.04	0.001	0.1	2.6	0.022	15	0.2	0.003	1	0.1	0.002	0	0.0	0.000	0.3	0.4	0.000	1
SVE Sample 051811	AS+SVE	5/18/2011	7,018	900	0.03	0.000	0.0	7.3	0.063	2	0.1	0.002	0	0.1	0.002	0	0.0	0.000	0.0	0.2	0.000	0
SVE stack 052311	AS+SVE	5/23/2011	7,137	725	0.26	0.003	0.2	14.0	0.097	10	1.6	0.021	1	0.9	0.012	1	0.0	0.000	0.0	2.6	0.000	0
Stack SVE 060311	SVE	6/3/2011	7,238	725	0.18	0.003	0	12.0	0.175	14	1.3	0.019	2	0.8	0.009	1	0.0	0.000	0.0	2.1	0.023	1
SVE stack 061011	AS+SVE	6/10/2011	7,342	725	1.00	0.018	1	10.0	0.146	17	0.7	0.010	2	0.5	0.005	1	0.0	0.000	0.0	0.9	0.010	2
Total Mass Removed:							**2**			**57**			**6**			**3**			**0**			**4**

Sample ID	Operational System Component	Sample Date	Cumulative Run Time	Flow Rate	Toluene			m&p-Xylenes			o-Xylene			Methylene Chloride			Total VOCs Removed in 2011		
			hours	scfm	ppmv	lb/hr	total lbs	ppmv	lb/hr	Total lbs	ppmv	lb/hr	Total lbs	ppmv	lb/hr	total lbs	ppmv	lb/day	total lbs
STACK 050911	SVE - Startup	5/9/2011	6,807	900	8	0.102	NC	2	0.029	NC	0.8	0.012	NC	5	0.058	NC	66	22	NC
STACK 051611	SVE	5/16/2011	6,971	900	4	0.051	13	1	0.015	4	0.5	0.007	2	2	0.023	7	26	9	106
SVE Sample 051811	AS+SVE	5/18/2011	7,018	900	3	0.038	2	1	0.015	1	0.3	0.004	0	1	0.012	1	23	8	16
SVE stack 052311	AS+SVE	5/23/2011	7,137	725	26	0.266	18	9	0.106	7	4	0.041	3	13	0.123	8	180	54	154
Stack SVE 060311	SVE	6/3/2011	7,238	725	19	0.350	31	7	0.102	10	3	0.047	4	8	0.088	11	136	49	217
SVE stack 061011	AS+SVE	6/10/2011	7,406	725	9	0.166	43	3	0.044	12	2	0.025	6	3	0.033	10	71	26	190
Total Mass Removed:							**107**			**34**			**15**			**36**			**683**
																Total VOCs Removed in 2010:			**22,525**
																Total VOCs Removed:			**40,811**

Notes:

scfm = standard cubic feet per minute
ppmv = parts per million by volume
hr = hour
NC = not calculated
lb = pound
SVE = system operating in soil vapor extraction mode only
AS = system operating in air sparging and soil vapor extraction mode
VOCs = volatile organic compounds

FIGURES


PERIMETER TREATMENT CURTAIN (PTC)
EXTENT OF LOW PERMEABILITY SURFACE COVER
VOC TREATMENT AREA (VOCTA)
DETAIL 4
DETAILS 1 AND 5
DETAIL 2
DETAIL 3
HEADER PIPING
DETAIL 1
Pipe Tee
Flex Hose
SVE
GROUND SURFACE
DETAIL 2
DETAIL 3
DETAIL 4
DETAIL 5 (SIDE-VIEW OF DETAIL 1)
Supports
Pipe Clamp
LEGEND
AS AND SVE PIPING – VOCTA AND PTC
AS PIPING – VOCTA
AS AND SVE PIPING – VOCTA
AS AND SVE PIPING – PTC
2-FOOT ELEVATION CONTOUR (ABOVE MSL)
PERIMETER DITCH
AIR SPARGING WELL LOCATION – PTC
AIR SPARGING WELL LOCATION – VOCTA
AIR SPARGE GROUND WATER SAMPLING LOCATIONS
MONITORING WELL LOCATIONS
15' 0' 15' 30'
XDD
STRATEGIC. ENVIRONMENTAL. SOLUTIONS.
NOTES
AIR SPARGE AND GROUND WATER WELL LOCATIONS HAVE NOT BEEN SURVEYED. FINAL LOCATIONS ON MAP MAY CHANGE SLIGHTLY.
SCALE: As Shown
DATE: October 13, 2008
PROJECT NO.: 84411
CLIENT: Dover PRP Group
DRAWN BY: MAW
CHECKED BY: DK
PROJ. MGMT. APPROVAL: AL
TITLE: AIR SPARGING WELL LOCATIONS AND PIPING LAYOUT DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NH
DRAWING NO.: FIGURE 1
REV: 1

EXTENT OF LOW PERMEABILITY SURFACE COVER

DETAILS 3 AND 4

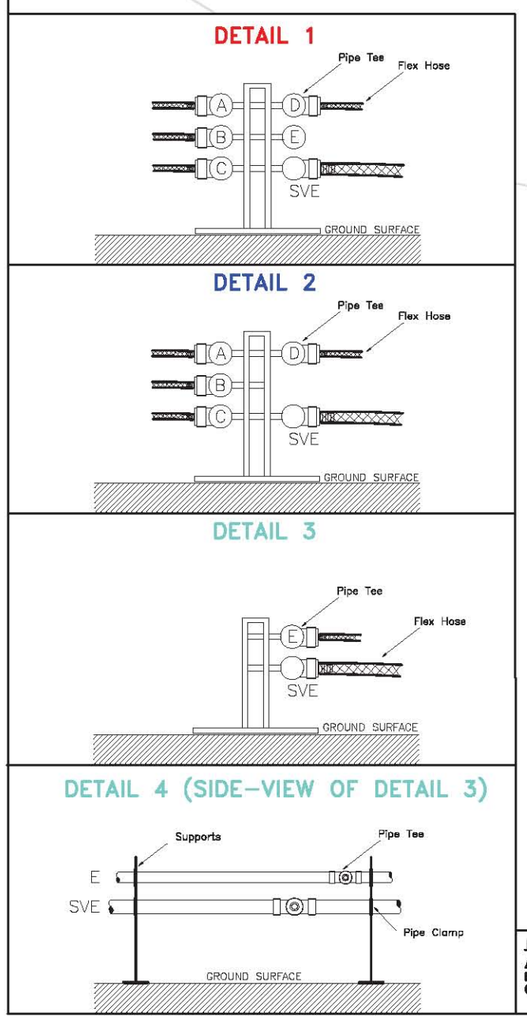
DETAIL 1

DETAIL 2

HEADER PIPING

SVE-01
SVE-02
SVE-03
SVE-04
SVE-05
SVE-06
SVE-07
SVE-08
SVE-09
SVE-10
SVE-11
SVE-12
SVE-13
SVE-14
SVE-15
SVE-16
SVE-17
SVE-18
SVE-19
SVE-20
SVE-21
SVE-22
SVE-23
SVE-24
SVE-25
SVE-26
SVE-27
SVE-28
SVE-29
SVE-30
SVE-31

VP-1
VP-2
VP-3
VP-4
VP-5
VP-6



LEGEND

- SVE PIPING – VOCTA AND PTC
- SVE PIPING – VOCTA
- SVE PIPING – PTC
- AS PIPING – VOCTA AND PTC
- 2-FOOT ELEVATION CONTOUR (ABOVE MSL)
- PERIMETER DITCH
- SOIL VAPOR EXTRACTION WELL LOCATION – PERIMETER TREATMENT CURTAIN
- SOIL VAPOR EXTRACTION WELL LOCATION – VOC TREATMENT AREA
- SOIL VAPOR EXTRACTION WELL SAMPLING LOCATIONS
- VAPOR PROBE LOCATIONS

15' 0' 15' 30'

XDD
STRATEGIC. ENVIRONMENTAL. SOLUTIONS.

NOTES

AIR SPARGE AND GROUND WATER WELL LOCATIONS HAVE NOT BEEN SURVEYED. FINAL LOCATIONS ON MAP MAY CHANGE SLIGHTLY.

SCALE: As Shown	TITLE: SOIL VAPOR EXTRACTION WELL LOCATIONS AND PIPING LAYOUT DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NH
DATE: October 13, 2008	
PROJECT NO.: 84411	
CLIENT: Dover PRP Group	
DRAWN BY: AG	DRAWING NO.: FIGURE 2
CHECKED BY: DK	REV: 2
PROJ. MGMT. APPROVAL: AL	

APPENDIX A

Air Toxics LTD.
Laboratory Services Since 1989

4/19/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 1104142

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 4/7/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1104142

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2123
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	04/07/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	04/19/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Tolend Road	Modified TO-15	3.0 "Hg	5 psi
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 04/19/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1104142

One 6 Liter Summa Canister sample was received on April 07, 2011. 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

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Tolend Road

Lab ID#: 1104142-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	3.0	12	7.1	28
2-Butanone (Methyl Ethyl Ketone)	3.0	12	8.8	34
Tetrahydrofuran	0.74	9.3	2.2	27

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend Road

Lab ID#: 1104142-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041418**	**Date of Collection:**	**4/1/11 11:50:00 AM**
Dil. Factor:	**1.49**	**Date of Analysis:**	**4/14/11 05:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.74	Not Detected	3.7	Not Detected
Freon 114	0.74	Not Detected	5.2	Not Detected
Chloromethane	3.0	Not Detected	6.2	Not Detected
Vinyl Chloride	0.74	Not Detected	1.9	Not Detected
1,3-Butadiene	0.74	Not Detected	1.6	Not Detected
Bromomethane	0.74	Not Detected	2.9	Not Detected
Chloroethane	3.0	Not Detected	7.9	Not Detected
Freon 11	0.74	Not Detected	4.2	Not Detected
Ethanol	3.0	Not Detected	5.6	Not Detected
Freon 113	0.74	Not Detected	5.7	Not Detected
1,1-Dichloroethene	0.74	Not Detected	3.0	Not Detected
Acetone	3.0	12	7.1	28
2-Propanol	3.0	Not Detected	7.3	Not Detected
Carbon Disulfide	3.0	Not Detected	9.3	Not Detected
3-Chloropropene	3.0	Not Detected	9.3	Not Detected
Methylene Chloride	0.74	Not Detected	2.6	Not Detected
Methyl tert-butyl ether	0.74	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.74	Not Detected	3.0	Not Detected
Hexane	0.74	Not Detected	2.6	Not Detected
1,1-Dichloroethane	0.74	Not Detected	3.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.0	12	8.8	34
cis-1,2-Dichloroethene	0.74	Not Detected	3.0	Not Detected
Tetrahydrofuran	0.74	9.3	2.2	27
Chloroform	0.74	Not Detected	3.6	Not Detected
1,1,1-Trichloroethane	0.74	Not Detected	4.1	Not Detected
Cyclohexane	0.74	Not Detected	2.6	Not Detected
Carbon Tetrachloride	0.74	Not Detected	4.7	Not Detected
2,2,4-Trimethylpentane	0.74	Not Detected	3.5	Not Detected
Benzene	0.74	Not Detected	2.4	Not Detected
1,2-Dichloroethane	0.74	Not Detected	3.0	Not Detected
Heptane	0.74	Not Detected	3.0	Not Detected
Trichloroethene	0.74	Not Detected	4.0	Not Detected
1,2-Dichloropropane	0.74	Not Detected	3.4	Not Detected
1,4-Dioxane	3.0	Not Detected	11	Not Detected
Bromodichloromethane	0.74	Not Detected	5.0	Not Detected
cis-1,3-Dichloropropene	0.74	Not Detected	3.4	Not Detected
4-Methyl-2-pentanone	0.74	Not Detected	3.0	Not Detected
Toluene	0.74	Not Detected	2.8	Not Detected
trans-1,3-Dichloropropene	0.74	Not Detected	3.4	Not Detected
1,1,2-Trichloroethane	0.74	Not Detected	4.1	Not Detected
Tetrachloroethene	0.74	Not Detected	5.0	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend Road

Lab ID#: 1104142-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041418**	**Date of Collection:**	**4/1/11 11:50:00 AM**
Dil. Factor:	**1.49**	**Date of Analysis:**	**4/14/11 05:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	3.0	Not Detected	12	Not Detected
Dibromochloromethane	0.74	Not Detected	6.3	Not Detected
1,2-Dibromoethane (EDB)	0.74	Not Detected	5.7	Not Detected
Chlorobenzene	0.74	Not Detected	3.4	Not Detected
Ethyl Benzene	0.74	Not Detected	3.2	Not Detected
m,p-Xylene	0.74	Not Detected	3.2	Not Detected
o-Xylene	0.74	Not Detected	3.2	Not Detected
Styrene	0.74	Not Detected	3.2	Not Detected
Bromoform	0.74	Not Detected	7.7	Not Detected
Cumene	0.74	Not Detected	3.7	Not Detected
1,1,2,2-Tetrachloroethane	0.74	Not Detected	5.1	Not Detected
Propylbenzene	0.74	Not Detected	3.7	Not Detected
4-Ethyltoluene	0.74	Not Detected	3.7	Not Detected
1,3,5-Trimethylbenzene	0.74	Not Detected	3.7	Not Detected
1,2,4-Trimethylbenzene	0.74	Not Detected	3.7	Not Detected
1,3-Dichlorobenzene	0.74	Not Detected	4.5	Not Detected
1,4-Dichlorobenzene	0.74	Not Detected	4.5	Not Detected
alpha-Chlorotoluene	0.74	Not Detected	3.8	Not Detected
1,2-Dichlorobenzene	0.74	Not Detected	4.5	Not Detected
1,2,4-Trichlorobenzene	3.0	Not Detected	22	Not Detected
Hexachlorobutadiene	3.0	Not Detected	32	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1104142-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041411**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 01:22 PM**	

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	2.0	Not Detected	5.3	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	2.0	Not Detected	6.2	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)	2.0	Not Detected	5.9	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#: 1104142-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041411**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 01:22 PM**	

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	100	70-130
1,2-Dichloroethane-d4	115	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1104142-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 06:59 AM**	

Compound	%Recovery
Freon 12	115
Freon 114	105
Chloromethane	102
Vinyl Chloride	105
1,3-Butadiene	112
Bromomethane	100
Chloroethane	105
Freon 11	115
Ethanol	129
Freon 113	106
1,1-Dichloroethene	105
Acetone	115
2-Propanol	118
Carbon Disulfide	100
3-Chloropropene	103
Methylene Chloride	113
Methyl tert-butyl ether	110
trans-1,2-Dichloroethene	104
Hexane	110
1,1-Dichloroethane	112
2-Butanone (Methyl Ethyl Ketone)	103
cis-1,2-Dichloroethene	105
Tetrahydrofuran	116
Chloroform	111
1,1,1-Trichloroethane	118
Cyclohexane	105
Carbon Tetrachloride	119
2,2,4-Trimethylpentane	116
Benzene	105
1,2-Dichloroethane	122
Heptane	108
Trichloroethene	106
1,2-Dichloropropane	110
1,4-Dioxane	103
Bromodichloromethane	112
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	119
Toluene	103
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	102
Tetrachloroethene	106

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1104142-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 06:59 AM**	

Compound	**%Recovery**
2-Hexanone	117
Dibromochloromethane	109
1,2-Dibromoethane (EDB)	103
Chlorobenzene	102
Ethyl Benzene	99
m,p-Xylene	101
o-Xylene	102
Styrene	102
Bromoform	110
Cumene	103
1,1,2,2-Tetrachloroethane	98
Propylbenzene	105
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	103
1,3-Dichlorobenzene	98
1,4-Dichlorobenzene	99
alpha-Chlorotoluene	106
1,2-Dichlorobenzene	99
1,2,4-Trichlorobenzene	99
Hexachlorobutadiene	106

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1104142-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 07:38 AM**	

Compound	%Recovery
Freon 12	116
Freon 114	106
Chloromethane	113
Vinyl Chloride	107
1,3-Butadiene	112
Bromomethane	100
Chloroethane	105
Freon 11	115
Ethanol	130
Freon 113	108
1,1-Dichloroethene	114
Acetone	111
2-Propanol	118
Carbon Disulfide	122
3-Chloropropene	119
Methylene Chloride	111
Methyl tert-butyl ether	112
trans-1,2-Dichloroethene	117
Hexane	110
1,1-Dichloroethane	112
2-Butanone (Methyl Ethyl Ketone)	102
cis-1,2-Dichloroethene	106
Tetrahydrofuran	112
Chloroform	111
1,1,1-Trichloroethane	120
Cyclohexane	106
Carbon Tetrachloride	119
2,2,4-Trimethylpentane	114
Benzene	104
1,2-Dichloroethane	122
Heptane	108
Trichloroethene	106
1,2-Dichloropropane	110
1,4-Dioxane	100
Bromodichloromethane	113
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	110
Toluene	101
trans-1,3-Dichloropropene	107
1,1,2-Trichloroethane	102
Tetrachloroethene	105

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1104142-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 07:38 AM**	

Compound	%Recovery
2-Hexanone	109
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	101
Chlorobenzene	101
Ethyl Benzene	98
m,p-Xylene	101
o-Xylene	100
Styrene	100
Bromoform	106
Cumene	103
1,1,2,2-Tetrachloroethane	97
Propylbenzene	103
4-Ethyltoluene	94
1,3,5-Trimethylbenzene	99
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	95
1,4-Dichlorobenzene	95
alpha-Chlorotoluene	101
1,2-Dichlorobenzene	96
1,2,4-Trichlorobenzene	90
Hexachlorobutadiene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1104142-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041404a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 08:08 AM**	

Compound	%Recovery
Freon 12	116
Freon 114	108
Chloromethane	111
Vinyl Chloride	108
1,3-Butadiene	111
Bromomethane	103
Chloroethane	106
Freon 11	116
Ethanol	116
Freon 113	110
1,1-Dichloroethene	114
Acetone	114
2-Propanol	119
Carbon Disulfide	122
3-Chloropropene	120
Methylene Chloride	111
Methyl tert-butyl ether	113
trans-1,2-Dichloroethene	117
Hexane	111
1,1-Dichloroethane	114
2-Butanone (Methyl Ethyl Ketone)	100
cis-1,2-Dichloroethene	106
Tetrahydrofuran	112
Chloroform	112
1,1,1-Trichloroethane	120
Cyclohexane	107
Carbon Tetrachloride	121
2,2,4-Trimethylpentane	115
Benzene	104
1,2-Dichloroethane	121
Heptane	108
Trichloroethene	107
1,2-Dichloropropane	111
1,4-Dioxane	99
Bromodichloromethane	112
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	113
Toluene	101
trans-1,3-Dichloropropene	110
1,1,2-Trichloroethane	105
Tetrachloroethene	108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1104142-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p041404a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/14/11 08:08 AM**	

Compound	**%Recovery**
2-Hexanone	115
Dibromochloromethane	110
1,2-Dibromoethane (EDB)	103
Chlorobenzene	104
Ethyl Benzene	102
m,p-Xylene	103
o-Xylene	103
Styrene	104
Bromoform	109
Cumene	106
1,1,2,2-Tetrachloroethane	101
Propylbenzene	107
4-Ethyltoluene	98
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	102
1,3-Dichlorobenzene	100
1,4-Dichlorobenzene	98
alpha-Chlorotoluene	106
1,2-Dichlorobenzene	100
1,2,4-Trichlorobenzene	97
Hexachlorobutadiene	106

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	116	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.
Laboratory Services Since 1989

5/22/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 1105166

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 5/10/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1105166

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2201
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	05/10/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	05/20/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	STACK 050911	Modified TO-15	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 05/22/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1105166

One 1 Liter Tedlar Bag sample was received on May 10, 2011. 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

There were no receiving discrepancies.

Analytical Notes

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.

Sample STACK 050911 was transferred from Tedlar bag into a summa canister to extend the hold time from 72 hours to 14 days. Canister pressurization resulted in a dilution factor which was applied to all analytical results.

Dilution was performed on sample STACK 050911 due to the presence of high level target species.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: STACK 050911

Lab ID#: 1105166-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	30	31	150	150
Vinyl Chloride	30	18000	77	46000
Chloroethane	120	350	320	930
Freon 11	30	540	170	3000
Freon 113	30	110	230	860
1,1-Dichloroethene	30	120	120	500
Methylene Chloride	30	4700	100	16000
trans-1,2-Dichloroethene	30	80	120	320
Hexane	30	720	110	2500
1,1-Dichloroethane	30	1400	120	5500
2-Butanone (Methyl Ethyl Ketone)	120	240	360	700
cis-1,2-Dichloroethene	30	16000	120	64000
1,1,1-Trichloroethane	30	1000	160	5500
Cyclohexane	30	300	100	1000
2,2,4-Trimethylpentane	30	52	140	240
Benzene	30	320	97	1000
Heptane	30	560	120	2300
Trichloroethene	30	1900	160	10000
4-Methyl-2-pentanone	30	210	120	850
Toluene	30	8400	110	32000
Tetrachloroethene	30	10000	200	70000
Ethyl Benzene	30	720	130	3100
m,p-Xylene	30	2100	130	9200
o-Xylene	30	790	130	3400
Cumene	30	60	150	290
Propylbenzene	30	88	150	430
4-Ethyltoluene	30	420	150	2100
1,3,5-Trimethylbenzene	30	200	150	1000
1,2,4-Trimethylbenzene	30	350	150	1700

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: STACK 050911

Lab ID#: 1105166-01A

EPA METHOD TO-15 GC/MS

File Name:	**14051930**	**Date of Collection:**	**5/9/11 2:00:00 PM**
Dil. Factor:	**6.05**	**Date of Analysis:**	**5/19/11 07:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	30	31	150	150
Freon 114	30	Not Detected	210	Not Detected
Chloromethane	120	Not Detected	250	Not Detected
Vinyl Chloride	30	18000	77	46000
1,3-Butadiene	30	Not Detected	67	Not Detected
Bromomethane	30	Not Detected	120	Not Detected
Chloroethane	120	350	320	930
Freon 11	30	540	170	3000
Ethanol	120	Not Detected	230	Not Detected
Freon 113	30	110	230	860
1,1-Dichloroethene	30	120	120	500
Acetone	120	Not Detected	290	Not Detected
2-Propanol	120	Not Detected	300	Not Detected
Carbon Disulfide	30	Not Detected	94	Not Detected
3-Chloropropene	120	Not Detected	380	Not Detected
Methylene Chloride	30	4700	100	16000
Methyl tert-butyl ether	30	Not Detected	110	Not Detected
trans-1,2-Dichloroethene	30	80	120	320
Hexane	30	720	110	2500
1,1-Dichloroethane	30	1400	120	5500
2-Butanone (Methyl Ethyl Ketone)	120	240	360	700
cis-1,2-Dichloroethene	30	16000	120	64000
Tetrahydrofuran	30	Not Detected	89	Not Detected
Chloroform	30	Not Detected	150	Not Detected
1,1,1-Trichloroethane	30	1000	160	5500
Cyclohexane	30	300	100	1000
Carbon Tetrachloride	30	Not Detected	190	Not Detected
2,2,4-Trimethylpentane	30	52	140	240
Benzene	30	320	97	1000
1,2-Dichloroethane	30	Not Detected	120	Not Detected
Heptane	30	560	120	2300
Trichloroethene	30	1900	160	10000
1,2-Dichloropropane	30	Not Detected	140	Not Detected
1,4-Dioxane	120	Not Detected	440	Not Detected
Bromodichloromethane	30	Not Detected	200	Not Detected
cis-1,3-Dichloropropene	30	Not Detected	140	Not Detected
4-Methyl-2-pentanone	30	210	120	850
Toluene	30	8400	110	32000
trans-1,3-Dichloropropene	30	Not Detected	140	Not Detected
1,1,2-Trichloroethane	30	Not Detected	160	Not Detected
Tetrachloroethene	30	10000	200	70000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: STACK 050911

Lab ID#: 1105166-01A

EPA METHOD TO-15 GC/MS

File Name:	**14051930**	**Date of Collection:**	**5/9/11 2:00:00 PM**
Dil. Factor:	**6.05**	**Date of Analysis:**	**5/19/11 07:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	120	Not Detected	500	Not Detected
Dibromochloromethane	30	Not Detected	260	Not Detected
1,2-Dibromoethane (EDB)	30	Not Detected	230	Not Detected
Chlorobenzene	30	Not Detected	140	Not Detected
Ethyl Benzene	30	720	130	3100
m,p-Xylene	30	2100	130	9200
o-Xylene	30	790	130	3400
Styrene	30	Not Detected	130	Not Detected
Bromoform	30	Not Detected	310	Not Detected
Cumene	30	60	150	290
1,1,2,2-Tetrachloroethane	30	Not Detected	210	Not Detected
Propylbenzene	30	88	150	430
4-Ethyltoluene	30	420	150	2100
1,3,5-Trimethylbenzene	30	200	150	1000
1,2,4-Trimethylbenzene	30	350	150	1700
1,3-Dichlorobenzene	30	Not Detected	180	Not Detected
1,4-Dichlorobenzene	30	Not Detected	180	Not Detected
alpha-Chlorotoluene	30	Not Detected	160	Not Detected
1,2-Dichlorobenzene	30	Not Detected	180	Not Detected
1,2,4-Trichlorobenzene	120	Not Detected	900	Not Detected
Hexachlorobutadiene	120	Not Detected	1300	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	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105166-02A

EPA METHOD TO-15 GC/MS

File Name:	**14051906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 07:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105166-02A

EPA METHOD TO-15 GC/MS

File Name:	**14051906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 07:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	20	Not Detected	82	Not Detected
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV
Lab ID#: 1105166-03A
EPA METHOD TO-15 GC/MS

File Name:	**14051902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:17 AM**	

Compound	%Recovery
Freon 12	96
Freon 114	92
Chloromethane	84
Vinyl Chloride	84
1,3-Butadiene	80
Bromomethane	88
Chloroethane	88
Freon 11	93
Ethanol	102
Freon 113	91
1,1-Dichloroethene	95
Acetone	92
2-Propanol	91
Carbon Disulfide	88
3-Chloropropene	87
Methylene Chloride	92
Methyl tert-butyl ether	99
trans-1,2-Dichloroethene	91
Hexane	95
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	96
Tetrahydrofuran	94
Chloroform	95
1,1,1-Trichloroethane	97
Cyclohexane	94
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	98
Benzene	101
1,2-Dichloroethane	94
Heptane	97
Trichloroethene	96
1,2-Dichloropropane	97
1,4-Dioxane	97
Bromodichloromethane	96
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	94
Toluene	98
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105166-03A

EPA METHOD TO-15 GC/MS

File Name:	**14051902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:17 AM**	

Compound	%Recovery
2-Hexanone	91
Dibromochloromethane	97
1,2-Dibromoethane (EDB)	95
Chlorobenzene	98
Ethyl Benzene	97
m,p-Xylene	98
o-Xylene	100
Styrene	103
Bromoform	100
Cumene	103
1,1,2,2-Tetrachloroethane	102
Propylbenzene	104
4-Ethyltoluene	105
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	106
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	121
Hexachlorobutadiene	118

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS
Lab ID#: 1105166-04A
EPA METHOD TO-15 GC/MS

File Name:	**14051903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:39 AM**	

Compound	%Recovery
Freon 12	93
Freon 114	92
Chloromethane	88
Vinyl Chloride	85
1,3-Butadiene	76
Bromomethane	88
Chloroethane	86
Freon 11	93
Ethanol	82
Freon 113	98
1,1-Dichloroethene	100
Acetone	90
2-Propanol	91
Carbon Disulfide	108
3-Chloropropene	100
Methylene Chloride	91
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	102
Hexane	93
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	97
Tetrahydrofuran	90
Chloroform	97
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	96
Benzene	100
1,2-Dichloroethane	94
Heptane	96
Trichloroethene	96
1,2-Dichloropropane	96
1,4-Dioxane	93
Bromodichloromethane	93
cis-1,3-Dichloropropene	95
4-Methyl-2-pentanone	93
Toluene	96
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1105166-04A

EPA METHOD TO-15 GC/MS

File Name:	**14051903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:39 AM**	

Compound	**%Recovery**
2-Hexanone	93
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	97
Chlorobenzene	97
Ethyl Benzene	98
m,p-Xylene	98
o-Xylene	100
Styrene	102
Bromoform	96
Cumene	103
1,1,2,2-Tetrachloroethane	104
Propylbenzene	106
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	107
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	113
1,2-Dichlorobenzene	110
1,2,4-Trichlorobenzene	142 Q
Hexachlorobutadiene	130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD
Lab ID#: 1105166-04AA
EPA METHOD TO-15 GC/MS

File Name:	**14051904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:58 AM**	

Compound	%Recovery
Freon 12	92
Freon 114	89
Chloromethane	86
Vinyl Chloride	81
1,3-Butadiene	70
Bromomethane	87
Chloroethane	86
Freon 11	91
Ethanol	85
Freon 113	102
1,1-Dichloroethene	100
Acetone	91
2-Propanol	91
Carbon Disulfide	108
3-Chloropropene	100
Methylene Chloride	92
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	104
Hexane	94
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	97
Tetrahydrofuran	90
Chloroform	97
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	97
Benzene	100
1,2-Dichloroethane	95
Heptane	95
Trichloroethene	95
1,2-Dichloropropane	96
1,4-Dioxane	96
Bromodichloromethane	96
cis-1,3-Dichloropropene	95
4-Methyl-2-pentanone	93
Toluene	97
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD
Lab ID#: 1105166-04AA
EPA METHOD TO-15 GC/MS

File Name:	**14051904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:58 AM**	

Compound	%Recovery
2-Hexanone	94
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	97
Chlorobenzene	98
Ethyl Benzene	98
m,p-Xylene	99
o-Xylene	101
Styrene	103
Bromoform	97
Cumene	105
1,1,2,2-Tetrachloroethane	105
Propylbenzene	108
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	109
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	107
alpha-Chlorotoluene	115
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	144 Q
Hexachlorobutadiene	132 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

Air Toxics LTD.
Laboratory Services Since 1989

5/22/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 1105335

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 5/17/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1105335

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2209
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	05/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	05/20/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	STACK051611	Modified TO-15	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 05/22/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1105335

One 1 Liter Tedlar Bag sample was received on May 17, 2011. The laboratory performed analysis via 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

There were no receiving discrepancies.

Analytical Notes

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.

Dilution was performed on sample STACK051611 due to the presence of high level target species.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: STACK051611

Lab ID#: 1105335-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	10	2600	26	6700
Chloroethane	40	76	100	200
Freon 11	10	120	56	700
Freon 113	10	26	77	200
1,1-Dichloroethene	10	24	40	97
Acetone	40	71	95	170
Carbon Disulfide	10	12	31	38
Methylene Chloride	10	2000	35	6800
trans-1,2-Dichloroethene	10	35	40	140
Hexane	10	70	35	250
1,1-Dichloroethane	10	460	40	1900
2-Butanone (Methyl Ethyl Ketone)	40	130	120	390
cis-1,2-Dichloroethene	10	5900	40	24000
Tetrahydrofuran	10	10	29	31
1,1,1-Trichloroethane	10	380	54	2100
Cyclohexane	10	56	34	190
2,2,4-Trimethylpentane	10	14	47	65
Heptane	10	140	41	560
Trichloroethene	10	830	54	4400
4-Methyl-2-pentanone	10	140	41	550
Toluene	10	4200	38	16000
Tetrachloroethene	10	7200	68	49000
Ethyl Benzene	10	420	43	1800
m,p-Xylene	10	1400	43	6000
o-Xylene	10	490	43	2100
Cumene	10	33	49	160
Propylbenzene	10	50	49	240
4-Ethyltoluene	10	250	49	1200
1,3,5-Trimethylbenzene	10	120	49	590
1,2,4-Trimethylbenzene	10	200	49	1000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: STACK051611

Lab ID#: 1105335-01A

EPA METHOD TO-15 GC/MS

File Name:	**14051931**	**Date of Collection:**	**5/16/11 10:35:00 AM**
Dil. Factor:	**2.00**	**Date of Analysis:**	**5/19/11 07:56 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	10	Not Detected	49	Not Detected
Freon 114	10	Not Detected	70	Not Detected
Chloromethane	40	Not Detected	83	Not Detected
Vinyl Chloride	10	2600	26	6700
1,3-Butadiene	10	Not Detected	22	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Chloroethane	40	76	100	200
Freon 11	10	120	56	700
Ethanol	40	Not Detected	75	Not Detected
Freon 113	10	26	77	200
1,1-Dichloroethene	10	24	40	97
Acetone	40	71	95	170
2-Propanol	40	Not Detected	98	Not Detected
Carbon Disulfide	10	12	31	38
3-Chloropropene	40	Not Detected	120	Not Detected
Methylene Chloride	10	2000	35	6800
Methyl tert-butyl ether	10	Not Detected	36	Not Detected
trans-1,2-Dichloroethene	10	35	40	140
Hexane	10	70	35	250
1,1-Dichloroethane	10	460	40	1900
2-Butanone (Methyl Ethyl Ketone)	40	130	120	390
cis-1,2-Dichloroethene	10	5900	40	24000
Tetrahydrofuran	10	10	29	31
Chloroform	10	Not Detected	49	Not Detected
1,1,1-Trichloroethane	10	380	54	2100
Cyclohexane	10	56	34	190
Carbon Tetrachloride	10	Not Detected	63	Not Detected
2,2,4-Trimethylpentane	10	14	47	65
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	40	Not Detected
Heptane	10	140	41	560
Trichloroethene	10	830	54	4400
1,2-Dichloropropane	10	Not Detected	46	Not Detected
1,4-Dioxane	40	Not Detected	140	Not Detected
Bromodichloromethane	10	Not Detected	67	Not Detected
cis-1,3-Dichloropropene	10	Not Detected	45	Not Detected
4-Methyl-2-pentanone	10	140	41	550
Toluene	10	4200	38	16000
trans-1,3-Dichloropropene	10	Not Detected	45	Not Detected
1,1,2-Trichloroethane	10	Not Detected	54	Not Detected
Tetrachloroethene	10	7200	68	49000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: STACK051611

Lab ID#: 1105335-01A

EPA METHOD TO-15 GC/MS

File Name:	**14051931**	**Date of Collection:**	**5/16/11 10:35:00 AM**
Dil. Factor:	**2.00**	**Date of Analysis:**	**5/19/11 07:56 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	40	Not Detected	160	Not Detected
Dibromochloromethane	10	Not Detected	85	Not Detected
1,2-Dibromoethane (EDB)	10	Not Detected	77	Not Detected
Chlorobenzene	10	Not Detected	46	Not Detected
Ethyl Benzene	10	420	43	1800
m,p-Xylene	10	1400	43	6000
o-Xylene	10	490	43	2100
Styrene	10	Not Detected	42	Not Detected
Bromoform	10	Not Detected	100	Not Detected
Cumene	10	33	49	160
1,1,2,2-Tetrachloroethane	10	Not Detected	69	Not Detected
Propylbenzene	10	50	49	240
4-Ethyltoluene	10	250	49	1200
1,3,5-Trimethylbenzene	10	120	49	590
1,2,4-Trimethylbenzene	10	200	49	1000
1,3-Dichlorobenzene	10	Not Detected	60	Not Detected
1,4-Dichlorobenzene	10	Not Detected	60	Not Detected
alpha-Chlorotoluene	10	Not Detected	52	Not Detected
1,2-Dichlorobenzene	10	Not Detected	60	Not Detected
1,2,4-Trichlorobenzene	40	Not Detected	300	Not Detected
Hexachlorobutadiene	40	Not Detected	430	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105335-02A

EPA METHOD TO-15 GC/MS

File Name:	**14051906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 07:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105335-02A

EPA METHOD TO-15 GC/MS

File Name:	**14051906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 07:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	20	Not Detected	82	Not Detected
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV
Lab ID#: 1105335-03A
EPA METHOD TO-15 GC/MS

File Name:	**14051902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:17 AM**	

Compound	%Recovery
Freon 12	96
Freon 114	92
Chloromethane	84
Vinyl Chloride	84
1,3-Butadiene	80
Bromomethane	88
Chloroethane	88
Freon 11	93
Ethanol	102
Freon 113	91
1,1-Dichloroethene	95
Acetone	92
2-Propanol	91
Carbon Disulfide	88
3-Chloropropene	87
Methylene Chloride	92
Methyl tert-butyl ether	99
trans-1,2-Dichloroethene	91
Hexane	95
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	96
Tetrahydrofuran	94
Chloroform	95
1,1,1-Trichloroethane	97
Cyclohexane	94
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	98
Benzene	101
1,2-Dichloroethane	94
Heptane	97
Trichloroethene	96
1,2-Dichloropropane	97
1,4-Dioxane	97
Bromodichloromethane	96
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	94
Toluene	98
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105335-03A

EPA METHOD TO-15 GC/MS

File Name:	**14051902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:17 AM**	

Compound	%Recovery
2-Hexanone	91
Dibromochloromethane	97
1,2-Dibromoethane (EDB)	95
Chlorobenzene	98
Ethyl Benzene	97
m,p-Xylene	98
o-Xylene	100
Styrene	103
Bromoform	100
Cumene	103
1,1,2,2-Tetrachloroethane	102
Propylbenzene	104
4-Ethyltoluene	105
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	106
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	121
Hexachlorobutadiene	118

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS
Lab ID#: 1105335-04A
EPA METHOD TO-15 GC/MS

File Name:	**14051903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:39 AM**	

Compound	%Recovery
Freon 12	93
Freon 114	92
Chloromethane	88
Vinyl Chloride	85
1,3-Butadiene	76
Bromomethane	88
Chloroethane	86
Freon 11	93
Ethanol	82
Freon 113	98
1,1-Dichloroethene	100
Acetone	90
2-Propanol	91
Carbon Disulfide	108
3-Chloropropene	100
Methylene Chloride	91
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	102
Hexane	93
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	97
Tetrahydrofuran	90
Chloroform	97
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	96
Benzene	100
1,2-Dichloroethane	94
Heptane	96
Trichloroethene	96
1,2-Dichloropropane	96
1,4-Dioxane	93
Bromodichloromethane	93
cis-1,3-Dichloropropene	95
4-Methyl-2-pentanone	93
Toluene	96
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1105335-04A

EPA METHOD TO-15 GC/MS

File Name:	**14051903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:39 AM**	

Compound	%Recovery
2-Hexanone	93
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	97
Chlorobenzene	97
Ethyl Benzene	98
m,p-Xylene	98
o-Xylene	100
Styrene	102
Bromoform	96
Cumene	103
1,1,2,2-Tetrachloroethane	104
Propylbenzene	106
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	107
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	113
1,2-Dichlorobenzene	110
1,2,4-Trichlorobenzene	142 Q
Hexachlorobutadiene	130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD
Lab ID#: 1105335-04AA
EPA METHOD TO-15 GC/MS

File Name:	**14051904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:58 AM**	

Compound	%Recovery
Freon 12	92
Freon 114	89
Chloromethane	86
Vinyl Chloride	81
1,3-Butadiene	70
Bromomethane	87
Chloroethane	86
Freon 11	91
Ethanol	85
Freon 113	102
1,1-Dichloroethene	100
Acetone	91
2-Propanol	91
Carbon Disulfide	108
3-Chloropropene	100
Methylene Chloride	92
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	104
Hexane	94
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	97
Tetrahydrofuran	90
Chloroform	97
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	96
2,2,4-Trimethylpentane	97
Benzene	100
1,2-Dichloroethane	95
Heptane	95
Trichloroethene	95
1,2-Dichloropropane	96
1,4-Dioxane	96
Bromodichloromethane	96
cis-1,3-Dichloropropene	95
4-Methyl-2-pentanone	93
Toluene	97
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	96
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1105335-04AA

EPA METHOD TO-15 GC/MS

File Name:	**14051904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/19/11 06:58 AM**	

Compound	%Recovery
2-Hexanone	94
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	97
Chlorobenzene	98
Ethyl Benzene	98
m,p-Xylene	99
o-Xylene	101
Styrene	103
Bromoform	97
Cumene	105
1,1,2,2-Tetrachloroethane	105
Propylbenzene	108
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	109
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	107
alpha-Chlorotoluene	115
1,2-Dichlorobenzene	111
1,2,4-Trichlorobenzene	144 Q
Hexachlorobutadiene	132 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

Air Toxics LTD.
Laboratory Services Since 1989

6/2/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 1105397

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 5/19/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1105397

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2210
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	05/19/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/02/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVE SAMPLE 051811	Modified TO-15	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 06/02/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1105397

One 1 Liter Tedlar Bag sample was received on May 19, 2011. The laboratory performed analysis via 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) information for sample SVE SAMPLE 051811 did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

Analytical Notes

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.

Sample SVE SAMPLE 051811 was transferred from Tedlar bag into a summa canister to extend the hold time from 72 hours to 14 days. Canister pressurization resulted in a dilution factor which was applied to all analytical results.

All Quality Control Limit exceedences and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: SVE SAMPLE 051811

Lab ID#: 1105397-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	23	7300	58	19000
Freon 11	23	160	130	930
Ethanol	90	400	170	750
Freon 113	23	98	170	750
1,1-Dichloroethene	23	48	90	190
Methylene Chloride	23	1100	78	3800
trans-1,2-Dichloroethene	23	33	90	130
Hexane	23	68	80	240
1,1-Dichloroethane	23	350	91	1400
cis-1,2-Dichloroethene	23	5000	90	20000
1,1,1-Trichloroethane	23	420	120	2300
Cyclohexane	23	40	78	140
Heptane	23	120	93	470
Trichloroethene	23	500	120	2700
4-Methyl-2-pentanone	23	77	92	310
Toluene	23	2600	85	9700
Tetrachloroethene	23	4300	150	29000
Ethyl Benzene	23	240	98	1000
m,p-Xylene	23	800	98	3500
o-Xylene	23	280	98	1200
Propylbenzene	23	30	110	150
4-Ethyltoluene	23	160	110	790
1,3,5-Trimethylbenzene	23	77	110	380
1,2,4-Trimethylbenzene	23	130	110	640

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE SAMPLE 051811

Lab ID#: 1105397-01A

EPA METHOD TO-15 GC/MS

File Name:	**14052640**	**Date of Collection:**	**5/18/11 12:45:00 PM**
Dil. Factor:	**4.52**	**Date of Analysis:**	**5/27/11 06:03 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	23	Not Detected	110	Not Detected
Freon 114	23	Not Detected	160	Not Detected
Chloromethane	90	Not Detected	190	Not Detected
Vinyl Chloride	23	7300	58	19000
1,3-Butadiene	23	Not Detected	50	Not Detected
Bromomethane	23	Not Detected	88	Not Detected
Chloroethane	90	Not Detected	240	Not Detected
Freon 11	23	160	130	930
Ethanol	90	400	170	750
Freon 113	23	98	170	750
1,1-Dichloroethene	23	48	90	190
Acetone	90	Not Detected	210	Not Detected
2-Propanol	90	Not Detected	220	Not Detected
Carbon Disulfide	23	Not Detected	70	Not Detected
3-Chloropropene	90	Not Detected	280	Not Detected
Methylene Chloride	23	1100	78	3800
Methyl tert-butyl ether	23	Not Detected	81	Not Detected
trans-1,2-Dichloroethene	23	33	90	130
Hexane	23	68	80	240
1,1-Dichloroethane	23	350	91	1400
2-Butanone (Methyl Ethyl Ketone)	90	Not Detected	270	Not Detected
cis-1,2-Dichloroethene	23	5000	90	20000
Tetrahydrofuran	23	Not Detected	67	Not Detected
Chloroform	23	Not Detected	110	Not Detected
1,1,1-Trichloroethane	23	420	120	2300
Cyclohexane	23	40	78	140
Carbon Tetrachloride	23	Not Detected	140	Not Detected
2,2,4-Trimethylpentane	23	Not Detected	100	Not Detected
Benzene	23	Not Detected	72	Not Detected
1,2-Dichloroethane	23	Not Detected	91	Not Detected
Heptane	23	120	93	470
Trichloroethene	23	500	120	2700
1,2-Dichloropropane	23	Not Detected	100	Not Detected
1,4-Dioxane	90	Not Detected	320	Not Detected
Bromodichloromethane	23	Not Detected	150	Not Detected
cis-1,3-Dichloropropene	23	Not Detected	100	Not Detected
4-Methyl-2-pentanone	23	77	92	310
Toluene	23	2600	85	9700
trans-1,3-Dichloropropene	23	Not Detected	100	Not Detected
1,1,2-Trichloroethane	23	Not Detected	120	Not Detected
Tetrachloroethene	23	4300	150	29000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE SAMPLE 051811

Lab ID#: 1105397-01A

EPA METHOD TO-15 GC/MS

File Name:	**14052640**	**Date of Collection:**	**5/18/11 12:45:00 PM**
Dil. Factor:	**4.52**	**Date of Analysis:**	**5/27/11 06:03 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	90	Not Detected	370	Not Detected
Dibromochloromethane	23	Not Detected	190	Not Detected
1,2-Dibromoethane (EDB)	23	Not Detected	170	Not Detected
Chlorobenzene	23	Not Detected	100	Not Detected
Ethyl Benzene	23	240	98	1000
m,p-Xylene	23	800	98	3500
o-Xylene	23	280	98	1200
Styrene	23	Not Detected	96	Not Detected
Bromoform	23	Not Detected	230	Not Detected
Cumene	23	Not Detected	110	Not Detected
1,1,2,2-Tetrachloroethane	23	Not Detected	160	Not Detected
Propylbenzene	23	30	110	150
4-Ethyltoluene	23	160	110	790
1,3,5-Trimethylbenzene	23	77	110	380
1,2,4-Trimethylbenzene	23	130	110	640
1,3-Dichlorobenzene	23	Not Detected	140	Not Detected
1,4-Dichlorobenzene	23	Not Detected	140	Not Detected
alpha-Chlorotoluene	23	Not Detected	120	Not Detected
1,2-Dichlorobenzene	23	Not Detected	140	Not Detected
1,2,4-Trichlorobenzene	90	Not Detected	670	Not Detected
Hexachlorobutadiene	90	Not Detected	960	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105397-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 09:20 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	2.0	Not Detected	5.3	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	2.0	Not Detected	6.2	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)	2.0	Not Detected	5.9	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#: 1105397-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 09:20 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	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105397-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:20 AM**	

Compound	%Recovery
Freon 12	111
Freon 114	109
Chloromethane	107
Vinyl Chloride	106
1,3-Butadiene	106
Bromomethane	111
Chloroethane	113
Freon 11	108
Ethanol	116
Freon 113	88
1,1-Dichloroethene	106
Acetone	110
2-Propanol	111
Carbon Disulfide	104
3-Chloropropene	105
Methylene Chloride	108
Methyl tert-butyl ether	109
trans-1,2-Dichloroethene	103
Hexane	107
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	104
Tetrahydrofuran	109
Chloroform	104
1,1,1-Trichloroethane	104
Cyclohexane	107
Carbon Tetrachloride	104
2,2,4-Trimethylpentane	107
Benzene	105
1,2-Dichloroethane	103
Heptane	106
Trichloroethene	102
1,2-Dichloropropane	105
1,4-Dioxane	105
Bromodichloromethane	105
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	108
Toluene	104
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	107
Tetrachloroethene	104

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105397-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:20 AM**	

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	104
Chlorobenzene	102
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	107
Styrene	112
Bromoform	111
Cumene	110
1,1,2,2-Tetrachloroethane	112
Propylbenzene	112
4-Ethyltoluene	113
1,3,5-Trimethylbenzene	117
1,2,4-Trimethylbenzene	114
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	114
alpha-Chlorotoluene	125
1,2-Dichlorobenzene	114
1,2,4-Trichlorobenzene	120
Hexachlorobutadiene	121

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1105397-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:54 AM**	

Compound	%Recovery
Freon 12	112
Freon 114	110
Chloromethane	112
Vinyl Chloride	104
1,3-Butadiene	104
Bromomethane	111
Chloroethane	108
Freon 11	108
Ethanol	110
Freon 113	91
1,1-Dichloroethene	112
Acetone	108
2-Propanol	113
Carbon Disulfide	126
3-Chloropropene	120
Methylene Chloride	107
Methyl tert-butyl ether	112
trans-1,2-Dichloroethene	116
Hexane	108
1,1-Dichloroethane	107
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	108
Tetrahydrofuran	105
Chloroform	106
1,1,1-Trichloroethane	107
Cyclohexane	108
Carbon Tetrachloride	107
2,2,4-Trimethylpentane	108
Benzene	108
1,2-Dichloroethane	104
Heptane	106
Trichloroethene	106
1,2-Dichloropropane	108
1,4-Dioxane	103
Bromodichloromethane	106
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	105
Toluene	104
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	108
Tetrachloroethene	106

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1105397-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:54 AM**	

Compound	%Recovery
2-Hexanone	106
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	106
Chlorobenzene	106
Ethyl Benzene	106
m,p-Xylene	109
o-Xylene	109
Styrene	117
Bromoform	110
Cumene	112
1,1,2,2-Tetrachloroethane	117
Propylbenzene	115
4-Ethyltoluene	110
1,3,5-Trimethylbenzene	115
1,2,4-Trimethylbenzene	113
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	123
1,2-Dichlorobenzene	116
1,2,4-Trichlorobenzene	128
Hexachlorobutadiene	124

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1105397-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 08:20 AM**	

Compound	%Recovery
Freon 12	109
Freon 114	108
Chloromethane	109
Vinyl Chloride	101
1,3-Butadiene	101
Bromomethane	110
Chloroethane	110
Freon 11	108
Ethanol	111
Freon 113	95
1,1-Dichloroethene	112
Acetone	107
2-Propanol	112
Carbon Disulfide	125
3-Chloropropene	120
Methylene Chloride	108
Methyl tert-butyl ether	114
trans-1,2-Dichloroethene	118
Hexane	109
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	108
cis-1,2-Dichloroethene	108
Tetrahydrofuran	107
Chloroform	108
1,1,1-Trichloroethane	109
Cyclohexane	108
Carbon Tetrachloride	108
2,2,4-Trimethylpentane	108
Benzene	106
1,2-Dichloroethane	104
Heptane	107
Trichloroethene	106
1,2-Dichloropropane	109
1,4-Dioxane	104
Bromodichloromethane	106
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	104
Toluene	104
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	108
Tetrachloroethene	103

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1105397-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14052604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 08:20 AM**	

Compound	**%Recovery**
2-Hexanone	106
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	107
Chlorobenzene	104
Ethyl Benzene	108
m,p-Xylene	109
o-Xylene	108
Styrene	116
Bromoform	110
Cumene	111
1,1,2,2-Tetrachloroethane	116
Propylbenzene	116
4-Ethyltoluene	110
1,3,5-Trimethylbenzene	114
1,2,4-Trimethylbenzene	113
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	129
1,2-Dichlorobenzene	116
1,2,4-Trichlorobenzene	131 Q
Hexachlorobutadiene	129

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

6/8/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover
Project #: 8411
Workorder #: 1105471

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 5/24/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1105471

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2220
FAX:	603-778-2121	**PROJECT #**	8411 Dover
DATE RECEIVED:	05/24/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	sve stack 052311	Modified TO-15	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 06/08/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1105471

One 1 Liter Tedlar Bag sample was received on May 24, 2011. The laboratory performed analysis via 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

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit exceedences and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Dilution was performed on sample sve stack 052311 due to the presence of high level target species.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: sve stack 052311

Lab ID#: 1105471-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	62	14000	160	37000
Chloroethane	250	290	660	760
Freon 11	62	750	350	4200
Freon 113	62	160	480	1200
1,1-Dichloroethene	62	190	250	750
Methylene Chloride	62	13000	220	46000
trans-1,2-Dichloroethene	62	260	250	1000
Hexane	62	240	220	830
1,1-Dichloroethane	62	2800	250	11000
cis-1,2-Dichloroethene	62	48000	250	190000
1,1,1-Trichloroethane	62	3600	340	19000
Cyclohexane	62	240	220	840
Heptane	62	580	260	2400
Trichloroethene	62	5500	340	29000
4-Methyl-2-pentanone	62	490	260	2000
Toluene	62	26000	240	96000
Tetrachloroethene	62	49000	420	330000
Ethyl Benzene	62	2600	270	12000
m,p-Xylene	62	8600	270	37000
o-Xylene	62	3500	270	15000
Cumene	62	220	310	1100
Propylbenzene	62	360	310	1800
4-Ethyltoluene	62	1900	310	9300
1,3,5-Trimethylbenzene	62	880	310	4300
1,2,4-Trimethylbenzene	62	1600	310	7600

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: sve stack 052311

Lab ID#: 1105471-01A

EPA METHOD TO-15 GC/MS

File Name:	**14052633**	**Date of Collection:**	**5/23/11 2:10:00 PM**
Dil. Factor:	**12.5**	**Date of Analysis:**	**5/26/11 09:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	62	Not Detected	310	Not Detected
Freon 114	62	Not Detected	440	Not Detected
Chloromethane	250	Not Detected	520	Not Detected
Vinyl Chloride	62	14000	160	37000
1,3-Butadiene	62	Not Detected	140	Not Detected
Bromomethane	62	Not Detected	240	Not Detected
Chloroethane	250	290	660	760
Freon 11	62	750	350	4200
Ethanol	250	Not Detected	470	Not Detected
Freon 113	62	160	480	1200
1,1-Dichloroethene	62	190	250	750
Acetone	250	Not Detected	590	Not Detected
2-Propanol	250	Not Detected	610	Not Detected
Carbon Disulfide	62	Not Detected	190	Not Detected
3-Chloropropene	250	Not Detected	780	Not Detected
Methylene Chloride	62	13000	220	46000
Methyl tert-butyl ether	62	Not Detected	220	Not Detected
trans-1,2-Dichloroethene	62	260	250	1000
Hexane	62	240	220	830
1,1-Dichloroethane	62	2800	250	11000
2-Butanone (Methyl Ethyl Ketone)	250	Not Detected	740	Not Detected
cis-1,2-Dichloroethene	62	48000	250	190000
Tetrahydrofuran	62	Not Detected	180	Not Detected
Chloroform	62	Not Detected	300	Not Detected
1,1,1-Trichloroethane	62	3600	340	19000
Cyclohexane	62	240	220	840
Carbon Tetrachloride	62	Not Detected	390	Not Detected
2,2,4-Trimethylpentane	62	Not Detected	290	Not Detected
Benzene	62	Not Detected	200	Not Detected
1,2-Dichloroethane	62	Not Detected	250	Not Detected
Heptane	62	580	260	2400
Trichloroethene	62	5500	340	29000
1,2-Dichloropropane	62	Not Detected	290	Not Detected
1,4-Dioxane	250	Not Detected	900	Not Detected
Bromodichloromethane	62	Not Detected	420	Not Detected
cis-1,3-Dichloropropene	62	Not Detected	280	Not Detected
4-Methyl-2-pentanone	62	490	260	2000
Toluene	62	26000	240	96000
trans-1,3-Dichloropropene	62	Not Detected	280	Not Detected
1,1,2-Trichloroethane	62	Not Detected	340	Not Detected
Tetrachloroethene	62	49000	420	330000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: sve stack 052311

Lab ID#: 1105471-01A

EPA METHOD TO-15 GC/MS

File Name:	**14052633**	**Date of Collection:**	**5/23/11 2:10:00 PM**
Dil. Factor:	**12.5**	**Date of Analysis:**	**5/26/11 09:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	250	Not Detected	1000	Not Detected
Dibromochloromethane	62	Not Detected	530	Not Detected
1,2-Dibromoethane (EDB)	62	Not Detected	480	Not Detected
Chlorobenzene	62	Not Detected	290	Not Detected
Ethyl Benzene	62	2600	270	12000
m,p-Xylene	62	8600	270	37000
o-Xylene	62	3500	270	15000
Styrene	62	Not Detected	270	Not Detected
Bromoform	62	Not Detected	650	Not Detected
Cumene	62	220	310	1100
1,1,2,2-Tetrachloroethane	62	Not Detected	430	Not Detected
Propylbenzene	62	360	310	1800
4-Ethyltoluene	62	1900	310	9300
1,3,5-Trimethylbenzene	62	880	310	4300
1,2,4-Trimethylbenzene	62	1600	310	7600
1,3-Dichlorobenzene	62	Not Detected	380	Not Detected
1,4-Dichlorobenzene	62	Not Detected	380	Not Detected
alpha-Chlorotoluene	62	Not Detected	320	Not Detected
1,2-Dichlorobenzene	62	Not Detected	380	Not Detected
1,2,4-Trichlorobenzene	250	Not Detected	1800	Not Detected
Hexachlorobutadiene	250	Not Detected	2700	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105471-02A

EPA METHOD TO-15 GC/MS

File Name:	**14052606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 09:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1105471-02A

EPA METHOD TO-15 GC/MS

File Name:	**14052606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 09:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	20	Not Detected	82	Not Detected
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

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

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105471-03A

EPA METHOD TO-15 GC/MS

File Name:	**14052602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:20 AM**	

Compound	%Recovery
Freon 12	111
Freon 114	109
Chloromethane	107
Vinyl Chloride	106
1,3-Butadiene	106
Bromomethane	111
Chloroethane	113
Freon 11	108
Ethanol	116
Freon 113	88
1,1-Dichloroethene	106
Acetone	110
2-Propanol	111
Carbon Disulfide	104
3-Chloropropene	105
Methylene Chloride	108
Methyl tert-butyl ether	109
trans-1,2-Dichloroethene	103
Hexane	107
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	104
Tetrahydrofuran	109
Chloroform	104
1,1,1-Trichloroethane	104
Cyclohexane	107
Carbon Tetrachloride	104
2,2,4-Trimethylpentane	107
Benzene	105
1,2-Dichloroethane	103
Heptane	106
Trichloroethene	102
1,2-Dichloropropane	105
1,4-Dioxane	105
Bromodichloromethane	105
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	108
Toluene	104
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	107
Tetrachloroethene	104

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1105471-03A

EPA METHOD TO-15 GC/MS

File Name:	**14052602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:20 AM**	

Compound	%Recovery
2-Hexanone	107
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	104
Chlorobenzene	102
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	107
Styrene	112
Bromoform	111
Cumene	110
1,1,2,2-Tetrachloroethane	112
Propylbenzene	112
4-Ethyltoluene	113
1,3,5-Trimethylbenzene	117
1,2,4-Trimethylbenzene	114
1,3-Dichlorobenzene	112
1,4-Dichlorobenzene	114
alpha-Chlorotoluene	125
1,2-Dichlorobenzene	114
1,2,4-Trichlorobenzene	120
Hexachlorobutadiene	121

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS
Lab ID#: 1105471-04A
EPA METHOD TO-15 GC/MS

File Name:	**14052603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:54 AM**	

Compound	%Recovery
Freon 12	112
Freon 114	110
Chloromethane	112
Vinyl Chloride	104
1,3-Butadiene	104
Bromomethane	111
Chloroethane	108
Freon 11	108
Ethanol	110
Freon 113	91
1,1-Dichloroethene	112
Acetone	108
2-Propanol	113
Carbon Disulfide	126
3-Chloropropene	120
Methylene Chloride	107
Methyl tert-butyl ether	112
trans-1,2-Dichloroethene	116
Hexane	108
1,1-Dichloroethane	107
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	108
Tetrahydrofuran	105
Chloroform	106
1,1,1-Trichloroethane	107
Cyclohexane	108
Carbon Tetrachloride	107
2,2,4-Trimethylpentane	108
Benzene	108
1,2-Dichloroethane	104
Heptane	106
Trichloroethene	106
1,2-Dichloropropane	108
1,4-Dioxane	103
Bromodichloromethane	106
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	105
Toluene	104
trans-1,3-Dichloropropene	108
1,1,2-Trichloroethane	108
Tetrachloroethene	106

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1105471-04A

EPA METHOD TO-15 GC/MS

File Name:	**14052603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 07:54 AM**	

Compound	%Recovery
2-Hexanone	106
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	106
Chlorobenzene	106
Ethyl Benzene	106
m,p-Xylene	109
o-Xylene	109
Styrene	117
Bromoform	110
Cumene	112
1,1,2,2-Tetrachloroethane	117
Propylbenzene	115
4-Ethyltoluene	110
1,3,5-Trimethylbenzene	115
1,2,4-Trimethylbenzene	113
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	123
1,2-Dichlorobenzene	116
1,2,4-Trichlorobenzene	128
Hexachlorobutadiene	124

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1105471-04AA

EPA METHOD TO-15 GC/MS

File Name:	**14052604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 08:20 AM**	

Compound	%Recovery
Freon 12	109
Freon 114	108
Chloromethane	109
Vinyl Chloride	101
1,3-Butadiene	101
Bromomethane	110
Chloroethane	110
Freon 11	108
Ethanol	111
Freon 113	95
1,1-Dichloroethene	112
Acetone	107
2-Propanol	112
Carbon Disulfide	125
3-Chloropropene	120
Methylene Chloride	108
Methyl tert-butyl ether	114
trans-1,2-Dichloroethene	118
Hexane	109
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	108
cis-1,2-Dichloroethene	108
Tetrahydrofuran	107
Chloroform	108
1,1,1-Trichloroethane	109
Cyclohexane	108
Carbon Tetrachloride	108
2,2,4-Trimethylpentane	108
Benzene	106
1,2-Dichloroethane	104
Heptane	107
Trichloroethene	106
1,2-Dichloropropane	109
1,4-Dioxane	104
Bromodichloromethane	106
cis-1,3-Dichloropropene	106
4-Methyl-2-pentanone	104
Toluene	104
trans-1,3-Dichloropropene	104
1,1,2-Trichloroethane	108
Tetrachloroethene	103

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1105471-04AA

EPA METHOD TO-15 GC/MS

File Name:	**14052604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/26/11 08:20 AM**	

Compound	%Recovery
2-Hexanone	106
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	107
Chlorobenzene	104
Ethyl Benzene	108
m,p-Xylene	109
o-Xylene	108
Styrene	116
Bromoform	110
Cumene	111
1,1,2,2-Tetrachloroethane	116
Propylbenzene	116
4-Ethyltoluene	110
1,3,5-Trimethylbenzene	114
1,2,4-Trimethylbenzene	113
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	113
alpha-Chlorotoluene	129
1,2-Dichlorobenzene	116
1,2,4-Trichlorobenzene	131 Q
Hexachlorobutadiene	129

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

6/15/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 1106114

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 6/6/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1106114

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2238
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	06/06/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/15/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Stack SVE 060311	Modified TO-15	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman DATE: 06/15/11

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1106114

One 1 Liter Tedlar Bag sample was received on June 06, 2011. The laboratory performed analysis via 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

Sample Stack SVE 060311 was received past the recommended hold time of 24 hours. Analysis proceeded.

Analytical Notes

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.

Dilution was performed on sample Stack SVE 060311 due to the presence of high level target species.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: Stack SVE 060311

Lab ID#: 1106114-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	56	12000	140	30000
Freon 11	56	620	310	3500
Freon 113	56	130	420	970
1,1-Dichloroethene	56	120	220	490
Methylene Chloride	56	8300	190	29000
trans-1,2-Dichloroethene	56	180	220	720
Hexane	56	160	200	570
1,1-Dichloroethane	56	2000	220	8200
cis-1,2-Dichloroethene	56	31000	220	120000
1,1,1-Trichloroethane	56	2500	300	14000
Cyclohexane	56	180	190	610
Heptane	56	380	230	1600
Trichloroethene	56	4700	300	25000
4-Methyl-2-pentanone	56	160	230	640
Toluene	56	19000	210	70000
Tetrachloroethene	56	42000	380	280000
Ethyl Benzene	56	2100	240	9100
m,p-Xylene	56	7000	240	30000
o-Xylene	56	3200	240	14000
Cumene	56	180	270	880
Propylbenzene	56	300	270	1400
4-Ethyltoluene	56	1700	270	8500
1,3,5-Trimethylbenzene	56	840	270	4100
1,2,4-Trimethylbenzene	56	1300	270	6500

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Stack SVE 060311

Lab ID#: 1106114-01A

EPA METHOD TO-15 GC/MS

File Name:	**14060625**	**Date of Collection:**	**6/3/11 1:00:00 PM**
Dil. Factor:	**11.1**	**Date of Analysis:**	**6/6/11 03:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	56	Not Detected	270	Not Detected
Freon 114	56	Not Detected	390	Not Detected
Chloromethane	220	Not Detected	460	Not Detected
Vinyl Chloride	56	12000	140	30000
1,3-Butadiene	56	Not Detected	120	Not Detected
Bromomethane	56	Not Detected	220	Not Detected
Chloroethane	220	Not Detected	580	Not Detected
Freon 11	56	620	310	3500
Ethanol	220	Not Detected	420	Not Detected
Freon 113	56	130	420	970
1,1-Dichloroethene	56	120	220	490
Acetone	220	Not Detected	530	Not Detected
2-Propanol	220	Not Detected	540	Not Detected
Carbon Disulfide	56	Not Detected	170	Not Detected
3-Chloropropene	220	Not Detected	690	Not Detected
Methylene Chloride	56	8300	190	29000
Methyl tert-butyl ether	56	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	56	180	220	720
Hexane	56	160	200	570
1,1-Dichloroethane	56	2000	220	8200
2-Butanone (Methyl Ethyl Ketone)	220	Not Detected	650	Not Detected
cis-1,2-Dichloroethene	56	31000	220	120000
Tetrahydrofuran	56	Not Detected	160	Not Detected
Chloroform	56	Not Detected	270	Not Detected
1,1,1-Trichloroethane	56	2500	300	14000
Cyclohexane	56	180	190	610
Carbon Tetrachloride	56	Not Detected	350	Not Detected
2,2,4-Trimethylpentane	56	Not Detected	260	Not Detected
Benzene	56	Not Detected	180	Not Detected
1,2-Dichloroethane	56	Not Detected	220	Not Detected
Heptane	56	380	230	1600
Trichloroethene	56	4700	300	25000
1,2-Dichloropropane	56	Not Detected	260	Not Detected
1,4-Dioxane	220	Not Detected	800	Not Detected
Bromodichloromethane	56	Not Detected	370	Not Detected
cis-1,3-Dichloropropene	56	Not Detected	250	Not Detected
4-Methyl-2-pentanone	56	160	230	640
Toluene	56	19000	210	70000
trans-1,3-Dichloropropene	56	Not Detected	250	Not Detected
1,1,2-Trichloroethane	56	Not Detected	300	Not Detected
Tetrachloroethene	56	42000	380	280000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Stack SVE 060311

Lab ID#: 1106114-01A

EPA METHOD TO-15 GC/MS

File Name:	**14060625**	**Date of Collection:**	**6/3/11 1:00:00 PM**
Dil. Factor:	**11.1**	**Date of Analysis:**	**6/6/11 03:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	220	Not Detected	910	Not Detected
Dibromochloromethane	56	Not Detected	470	Not Detected
1,2-Dibromoethane (EDB)	56	Not Detected	430	Not Detected
Chlorobenzene	56	Not Detected	260	Not Detected
Ethyl Benzene	56	2100	240	9100
m,p-Xylene	56	7000	240	30000
o-Xylene	56	3200	240	14000
Styrene	56	Not Detected	240	Not Detected
Bromoform	56	Not Detected	570	Not Detected
Cumene	56	180	270	880
1,1,2,2-Tetrachloroethane	56	Not Detected	380	Not Detected
Propylbenzene	56	300	270	1400
4-Ethyltoluene	56	1700	270	8500
1,3,5-Trimethylbenzene	56	840	270	4100
1,2,4-Trimethylbenzene	56	1300	270	6500
1,3-Dichlorobenzene	56	Not Detected	330	Not Detected
1,4-Dichlorobenzene	56	Not Detected	330	Not Detected
alpha-Chlorotoluene	56	Not Detected	290	Not Detected
1,2-Dichlorobenzene	56	Not Detected	330	Not Detected
1,2,4-Trichlorobenzene	220	Not Detected	1600	Not Detected
Hexachlorobutadiene	220	Not Detected	2400	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1106114-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 08:10 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	2.0	Not Detected	5.3	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	2.0	Not Detected	6.2	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)	2.0	Not Detected	5.9	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#: 1106114-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 08:10 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	101	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1106114-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 06:32 AM**	

Compound	%Recovery
Freon 12	95
Freon 114	102
Chloromethane	95
Vinyl Chloride	92
1,3-Butadiene	91
Bromomethane	105
Chloroethane	106
Freon 11	101
Ethanol	120
Freon 113	89
1,1-Dichloroethene	105
Acetone	108
2-Propanol	104
Carbon Disulfide	101
3-Chloropropene	106
Methylene Chloride	104
Methyl tert-butyl ether	109
trans-1,2-Dichloroethene	104
Hexane	106
1,1-Dichloroethane	105
2-Butanone (Methyl Ethyl Ketone)	108
cis-1,2-Dichloroethene	106
Tetrahydrofuran	106
Chloroform	103
1,1,1-Trichloroethane	102
Cyclohexane	109
Carbon Tetrachloride	102
2,2,4-Trimethylpentane	109
Benzene	106
1,2-Dichloroethane	97
Heptane	107
Trichloroethene	103
1,2-Dichloropropane	106
1,4-Dioxane	105
Bromodichloromethane	100
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	102
Toluene	104
trans-1,3-Dichloropropene	99
1,1,2-Trichloroethane	105
Tetrachloroethene	102

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1106114-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 06:32 AM**	

Compound	%Recovery
2-Hexanone	103
Dibromochloromethane	98
1,2-Dibromoethane (EDB)	101
Chlorobenzene	101
Ethyl Benzene	102
m,p-Xylene	104
o-Xylene	103
Styrene	105
Bromoform	102
Cumene	106
1,1,2,2-Tetrachloroethane	109
Propylbenzene	108
4-Ethyltoluene	109
1,3,5-Trimethylbenzene	108
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	107
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	114
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	104
Hexachlorobutadiene	110

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	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#: 1106114-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 07:07 AM**	

Compound	%Recovery
Freon 12	100
Freon 114	101
Chloromethane	99
Vinyl Chloride	94
1,3-Butadiene	93
Bromomethane	100
Chloroethane	102
Freon 11	99
Ethanol	99
Freon 113	94
1,1-Dichloroethene	103
Acetone	100
2-Propanol	101
Carbon Disulfide	117
3-Chloropropene	114
Methylene Chloride	100
Methyl tert-butyl ether	106
trans-1,2-Dichloroethene	112
Hexane	102
1,1-Dichloroethane	103
2-Butanone (Methyl Ethyl Ketone)	103
cis-1,2-Dichloroethene	101
Tetrahydrofuran	98
Chloroform	100
1,1,1-Trichloroethane	99
Cyclohexane	104
Carbon Tetrachloride	99
2,2,4-Trimethylpentane	102
Benzene	103
1,2-Dichloroethane	93
Heptane	102
Trichloroethene	98
1,2-Dichloropropane	103
1,4-Dioxane	99
Bromodichloromethane	95
cis-1,3-Dichloropropene	99
4-Methyl-2-pentanone	98
Toluene	99
trans-1,3-Dichloropropene	96
1,1,2-Trichloroethane	102
Tetrachloroethene	97

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1106114-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 07:07 AM**	

Compound	%Recovery
2-Hexanone	96
Dibromochloromethane	94
1,2-Dibromoethane (EDB)	99
Chlorobenzene	97
Ethyl Benzene	99
m,p-Xylene	100
o-Xylene	100
Styrene	105
Bromoform	97
Cumene	102
1,1,2,2-Tetrachloroethane	108
Propylbenzene	106
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	104
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	111
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	120
Hexachlorobutadiene	117

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1106114-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 07:25 AM**	

Compound	%Recovery
Freon 12	97
Freon 114	97
Chloromethane	96
Vinyl Chloride	86
1,3-Butadiene	82
Bromomethane	99
Chloroethane	99
Freon 11	96
Ethanol	109
Freon 113	93
1,1-Dichloroethene	102
Acetone	99
2-Propanol	100
Carbon Disulfide	116
3-Chloropropene	112
Methylene Chloride	96
Methyl tert-butyl ether	105
trans-1,2-Dichloroethene	112
Hexane	102
1,1-Dichloroethane	102
2-Butanone (Methyl Ethyl Ketone)	106
cis-1,2-Dichloroethene	102
Tetrahydrofuran	98
Chloroform	100
1,1,1-Trichloroethane	99
Cyclohexane	106
Carbon Tetrachloride	98
2,2,4-Trimethylpentane	101
Benzene	102
1,2-Dichloroethane	95
Heptane	102
Trichloroethene	99
1,2-Dichloropropane	102
1,4-Dioxane	98
Bromodichloromethane	95
cis-1,3-Dichloropropene	99
4-Methyl-2-pentanone	97
Toluene	98
trans-1,3-Dichloropropene	97
1,1,2-Trichloroethane	101
Tetrachloroethene	99

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1106114-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**14060604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/11 07:25 AM**	

Compound	**%Recovery**
2-Hexanone	98
Dibromochloromethane	94
1,2-Dibromoethane (EDB)	100
Chlorobenzene	100
Ethyl Benzene	101
m,p-Xylene	102
o-Xylene	102
Styrene	107
Bromoform	98
Cumene	105
1,1,2,2-Tetrachloroethane	110
Propylbenzene	108
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	104
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	108
1,2,4-Trichlorobenzene	120
Hexachlorobutadiene	119

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

6/16/2011
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover
Project #: 84411
Workorder #: 1106251

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 6/11/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-14A/15 (5&20 ppbv) are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1106251

Work Order Summary

CLIENT:	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3 Stratham, NH 03885	**BILL TO:**	Ms. Amy Gibney XDD (Xpert Design & Diagnostics, LLP) 22 Marin Way Suite 3
PHONE:	603-778-1100	**P.O. #**	2220
FAX:	603-778-2121	**PROJECT #**	84411 Dover
DATE RECEIVED:	06/11/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/16/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVE Stack 061011	Modified TO-14A/15 (5&20]	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-14A/15 (5&20]	NA	NA
03A	CCV	Modified TO-14A/15 (5&20]	NA	NA
04A	LCS	Modified TO-14A/15 (5&20]	NA	NA
04AA	LCSD	Modified TO-14A/15 (5&20]	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 06/16/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 1106251

One 1 Liter Tedlar Bag sample was received on June 11, 2011. The laboratory performed analysis via 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

There were no receiving discrepancies.

Analytical Notes

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.

Dilution was performed on sample SVE Stack 061011 due to the presence of high level target species.

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 and/or LCS.
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
EPA METHOD TO-15 GC/MS

Client Sample ID: SVE Stack 061011

Lab ID#: 1106251-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	25	10000	64	25000
Chloroethane	100	140	260	370
Freon 11	25	410	140	2300
Freon 113	25	140	190	1000
1,1-Dichloroethene	25	78	99	310
Methylene Chloride	25	3200	87	11000
trans-1,2-Dichloroethene	25	100	99	420
Hexane	25	140	88	490
1,1-Dichloroethane	25	970	100	3900
cis-1,2-Dichloroethene	25	16000	99	64000
Tetrahydrofuran	25	32	74	94
1,1,1-Trichloroethane	25	1500	140	8100
Cyclohexane	25	120	86	400
Heptane	25	200	100	820
Trichloroethene	25	2700	130	14000
4-Methyl-2-pentanone	25	27	100	110
Toluene	25	8600	94	32000
Tetrachloroethene	25	20000	170	140000
Ethyl Benzene	25	920	110	4000
m,p-Xylene	25	3200	110	14000
o-Xylene	25	1700	110	7400
Cumene	25	90	120	440
Propylbenzene	25	150	120	740
4-Ethyltoluene	25	920	120	4500
1,3,5-Trimethylbenzene	25	490	120	2400
1,2,4-Trimethylbenzene	25	700	120	3400

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE Stack 061011

Lab ID#: 1106251-01A

EPA METHOD TO-15 GC/MS

File Name:	**14061329**	**Date of Collection:**	**6/10/11 2:00:00 PM**
Dil. Factor:	**5.00**	**Date of Analysis:**	**6/13/11 09:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	25	Not Detected	120	Not Detected
Freon 114	25	Not Detected	170	Not Detected
Chloromethane	100	Not Detected	210	Not Detected
Vinyl Chloride	25	10000	64	25000
1,3-Butadiene	25	Not Detected	55	Not Detected
Bromomethane	25	Not Detected	97	Not Detected
Chloroethane	100	140	260	370
Freon 11	25	410	140	2300
Ethanol	100	Not Detected	190	Not Detected
Freon 113	25	140	190	1000
1,1-Dichloroethene	25	78	99	310
Acetone	100	Not Detected	240	Not Detected
2-Propanol	100	Not Detected	240	Not Detected
Carbon Disulfide	25	Not Detected	78	Not Detected
3-Chloropropene	100	Not Detected	310	Not Detected
Methylene Chloride	25	3200	87	11000
Methyl tert-butyl ether	25	Not Detected	90	Not Detected
trans-1,2-Dichloroethene	25	100	99	420
Hexane	25	140	88	490
1,1-Dichloroethane	25	970	100	3900
2-Butanone (Methyl Ethyl Ketone)	100	Not Detected	290	Not Detected
cis-1,2-Dichloroethene	25	16000	99	64000
Tetrahydrofuran	25	32	74	94
Chloroform	25	Not Detected	120	Not Detected
1,1,1-Trichloroethane	25	1500	140	8100
Cyclohexane	25	120	86	400
Carbon Tetrachloride	25	Not Detected	160	Not Detected
2,2,4-Trimethylpentane	25	Not Detected	120	Not Detected
Benzene	25	Not Detected	80	Not Detected
1,2-Dichloroethane	25	Not Detected	100	Not Detected
Heptane	25	200	100	820
Trichloroethene	25	2700	130	14000
1,2-Dichloropropane	25	Not Detected	120	Not Detected
1,4-Dioxane	100	Not Detected	360	Not Detected
Bromodichloromethane	25	Not Detected	170	Not Detected
cis-1,3-Dichloropropene	25	Not Detected	110	Not Detected
4-Methyl-2-pentanone	25	27	100	110
Toluene	25	8600	94	32000
trans-1,3-Dichloropropene	25	Not Detected	110	Not Detected
1,1,2-Trichloroethane	25	Not Detected	140	Not Detected
Tetrachloroethene	25	20000	170	140000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE Stack 061011

Lab ID#: 1106251-01A

EPA METHOD TO-15 GC/MS

File Name:	**14061329**	**Date of Collection:**	**6/10/11 2:00:00 PM**
Dil. Factor:	**5.00**	**Date of Analysis:**	**6/13/11 09:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	100	Not Detected	410	Not Detected
Dibromochloromethane	25	Not Detected	210	Not Detected
1,2-Dibromoethane (EDB)	25	Not Detected	190	Not Detected
Chlorobenzene	25	Not Detected	120	Not Detected
Ethyl Benzene	25	920	110	4000
m,p-Xylene	25	3200	110	14000
o-Xylene	25	1700	110	7400
Styrene	25	Not Detected	110	Not Detected
Bromoform	25	Not Detected	260	Not Detected
Cumene	25	90	120	440
1,1,2,2-Tetrachloroethane	25	Not Detected	170	Not Detected
Propylbenzene	25	150	120	740
4-Ethyltoluene	25	920	120	4500
1,3,5-Trimethylbenzene	25	490	120	2400
1,2,4-Trimethylbenzene	25	700	120	3400
1,3-Dichlorobenzene	25	Not Detected	150	Not Detected
1,4-Dichlorobenzene	25	Not Detected	150	Not Detected
alpha-Chlorotoluene	25	Not Detected	130	Not Detected
1,2-Dichlorobenzene	25	Not Detected	150	Not Detected
1,2,4-Trichlorobenzene	100	Not Detected	740	Not Detected
Hexachlorobutadiene	100	Not Detected	1100	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1106251-02A

EPA METHOD TO-15 GC/MS

File Name:	**14061309**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 09:07 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1106251-02A

EPA METHOD TO-15 GC/MS

File Name:	**14061309**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 09:07 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Hexanone	20	Not Detected	82	Not Detected
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV
Lab ID#: 1106251-03A
EPA METHOD TO-15 GC/MS

File Name:	**14061304**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:01 AM**	

Compound	%Recovery
Freon 12	96
Freon 114	97
Chloromethane	101
Vinyl Chloride	98
1,3-Butadiene	96
Bromomethane	97
Chloroethane	104
Freon 11	97
Ethanol	121
Freon 113	88
1,1-Dichloroethene	100
Acetone	108
2-Propanol	105
Carbon Disulfide	98
3-Chloropropene	105
Methylene Chloride	105
Methyl tert-butyl ether	106
trans-1,2-Dichloroethene	101
Hexane	107
1,1-Dichloroethane	105
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	104
Tetrahydrofuran	110
Chloroform	102
1,1,1-Trichloroethane	98
Cyclohexane	109
Carbon Tetrachloride	98
2,2,4-Trimethylpentane	109
Benzene	107
1,2-Dichloroethane	95
Heptane	107
Trichloroethene	100
1,2-Dichloropropane	109
1,4-Dioxane	105
Bromodichloromethane	96
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	102
Toluene	104
trans-1,3-Dichloropropene	99
1,1,2-Trichloroethane	104
Tetrachloroethene	99

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1106251-03A

EPA METHOD TO-15 GC/MS

File Name:	**14061304**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:01 AM**	

Compound	%Recovery
2-Hexanone	104
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	99
Chlorobenzene	99
Ethyl Benzene	101
m,p-Xylene	101
o-Xylene	103
Styrene	103
Bromoform	99
Cumene	104
1,1,2,2-Tetrachloroethane	111
Propylbenzene	109
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	108
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	117
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	126
Hexachlorobutadiene	121

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS
Lab ID#: 1106251-04A
EPA METHOD TO-15 GC/MS

File Name:	**14061305**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:24 AM**	

Compound	%Recovery
Freon 12	92
Freon 114	91
Chloromethane	99
Vinyl Chloride	94
1,3-Butadiene	90
Bromomethane	93
Chloroethane	100
Freon 11	91
Ethanol	99
Freon 113	86
1,1-Dichloroethene	101
Acetone	99
2-Propanol	98
Carbon Disulfide	113
3-Chloropropene	109
Methylene Chloride	97
Methyl tert-butyl ether	102
trans-1,2-Dichloroethene	108
Hexane	101
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	104
cis-1,2-Dichloroethene	100
Tetrahydrofuran	100
Chloroform	97
1,1,1-Trichloroethane	94
Cyclohexane	102
Carbon Tetrachloride	93
2,2,4-Trimethylpentane	102
Benzene	102
1,2-Dichloroethane	92
Heptane	102
Trichloroethene	95
1,2-Dichloropropane	102
1,4-Dioxane	97
Bromodichloromethane	92
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	97
Toluene	99
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	98
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS
Lab ID#: 1106251-04A
EPA METHOD TO-15 GC/MS

File Name:	**14061305**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:24 AM**	

Compound	%Recovery
2-Hexanone	97
Dibromochloromethane	88
1,2-Dibromoethane (EDB)	96
Chlorobenzene	95
Ethyl Benzene	96
m,p-Xylene	98
o-Xylene	98
Styrene	103
Bromoform	91
Cumene	100
1,1,2,2-Tetrachloroethane	108
Propylbenzene	105
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	101
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	101
alpha-Chlorotoluene	112
1,2-Dichlorobenzene	105
1,2,4-Trichlorobenzene	126
Hexachlorobutadiene	122

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD
Lab ID#: 1106251-04AA
EPA METHOD TO-15 GC/MS

File Name:	**14061306**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:42 AM**	

Compound	%Recovery
Freon 12	92
Freon 114	92
Chloromethane	100
Vinyl Chloride	86
1,3-Butadiene	85
Bromomethane	92
Chloroethane	97
Freon 11	91
Ethanol	98
Freon 113	91
1,1-Dichloroethene	99
Acetone	100
2-Propanol	99
Carbon Disulfide	113
3-Chloropropene	112
Methylene Chloride	100
Methyl tert-butyl ether	103
trans-1,2-Dichloroethene	110
Hexane	102
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	104
cis-1,2-Dichloroethene	102
Tetrahydrofuran	101
Chloroform	99
1,1,1-Trichloroethane	95
Cyclohexane	103
Carbon Tetrachloride	92
2,2,4-Trimethylpentane	103
Benzene	102
1,2-Dichloroethane	90
Heptane	100
Trichloroethene	96
1,2-Dichloropropane	103
1,4-Dioxane	98
Bromodichloromethane	92
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	97
Toluene	98
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	98
Tetrachloroethene	94

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1106251-04AA

EPA METHOD TO-15 GC/MS

File Name:	**14061306**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/13/11 07:42 AM**	

Compound	**%Recovery**
2-Hexanone	99
Dibromochloromethane	90
1,2-Dibromoethane (EDB)	97
Chlorobenzene	97
Ethyl Benzene	99
m,p-Xylene	99
o-Xylene	99
Styrene	103
Bromoform	92
Cumene	102
1,1,2,2-Tetrachloroethane	110
Propylbenzene	106
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	101
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	103
1,4-Dichlorobenzene	102
alpha-Chlorotoluene	116
1,2-Dichlorobenzene	104
1,2,4-Trichlorobenzene	128
Hexachlorobutadiene	125

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	101	70-130