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

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

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

DATE: January 8, 2010

RE: Quarterly Progress Report

Christene Binger

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REPORTING PERIOD:

__January to March – Due April 10th
__April to June – Due July 10th
__July to September – Due October 10th
_X_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)." Pre-Design Investigation (PDI), Remedial Design (RD), and 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 will only include updates for ongoing PDIs, RD, and 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 October to December 2009. During this reporting period, activities were conducted associated with:

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

SDMS DocID 460979

- Northwest Landfill Hot Spot Remedial Design and Remedial Action (summary attached);
- Ecotoxicity and Human Health Assessment of the Cocheco River PDI (summary attached); and
- Source Control (discussed in Section III).

On December 1, 2009, members of the Group met with Darryl Luce to review the status of Landfill activities and conduct a Site visit to observe current conditions.

A master schedule of anticipated activities for 2010 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. STATUS OF SOURCE CONTROL ACTIVITIES

A Source Control Remedial Design Work Plan (SCRD-WP) was submitted to the Agencies on October 5, 2009. On November 9, 2009, USEPA responded with approval and comments on the SCRD-WP. Comments will be incorporated into a revised SCRD-WP that will be submitted to the Agencies during Q1 of 2010.

IV. COMMUNITY RELATIONS PLAN

Public meetings were not completed during the fourth quarter of 2009.

V. SUMMARY OF REMEDIAL ACTIVITIES

This section of the Quarterly Progress Report will provide 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**	**Total**
Southern Plume MOM	4.6	4.0	8.6
Northwest Landfill Hotspot	0	17,600	17,600

VI. ATTACHMENTS

- Master Schedule of Anticipated Activities - Year 2010; and
- Summary and Status of Activities (three attachments).

MASTER SCHEDULE OF ANTICIPATED ACTIVITIES - YEAR 2010
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
TOLEND ROAD
DOVER, NEW HAMPSHIRE

	2009			2010											
	Q4			Q1			Q2			Q3			Q4		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SOURCE CONTROL															
Source Control Remedial Design															
Work Plan for Remedial Design															
30 Percent Remedial Design (120 days from Work Plan approval)															
75 Percent Remedial Design (90 days from approval of 30 percent design)															
100 Percent Remedial Design (60 days from approval of 75 percent design)															
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 Sampling															
System Start Up															
Seasonal Operation															
Performance Monitoring															
System Shutdown															
Data submittals (with Quarterly Progress Reports)															
OTHER RESPONSE ACTIONS															
Soil Vapor Intrusion - Indoor Air Pre-Design Investigation															
Focused Monitoring during EMP Events															
Ecotoxicity and Human Health Assessment of the Cocheco River															
Final Report															
Environmental Monitoring Plan															
Second Monitoring Event (Winter) 2009															
Summary Report: First Monitoring Event (Summer) Year 2009															
Summary Report: Second Monitoring Event (Winter) Year 2009															
EMP Program Proposed Modifications Summary															
First Monitoring Event (Spring) 2010															
Second Monitoring Event (Winter) 2010															
Summary Report: First Monitoring Event (Summer) Year 2010															

SUMMARY AND STATUS OF ACTIVITIES – Q4 – JANUARY 8, 2010
SOUTHERN PLUME MANAGEMENT OF MIGRATION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

- performance monitoring events were completed on October 6 and December 2, 2009;
- weekly system operation, monitoring, and maintenance activities;
- weekly and monthly sampling activities from extraction wells and the frac tank, respectively; and
- discharge of extracted ground water was overseen weekly between September 8, 2009 and December 1, 2009;
- demobilization of the frac tank and removal of accumulated silt on December 1, 2009; and
- seasonal system shut down.

2. Deliverables and Correspondence

Deliverables were not submitted or received by the agencies during this monitoring period.

3. Schedule for Next Quarter

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

- planning system start-up and baseline activities; and
- preparing an Annual Remedy Performance report for 2009 that will be included in the April 10, 2010 progress report.

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 Status:	Second system operating season in complete.

Mass Removal 2008:	4.6 pounds
Mass Removal 2009 (to date):	4.0 pounds
Total Mass Removal	**8.6 pounds**

5. Modifications

The timing for submittal of the August to November Quarterly Progress Report was changed from the January 10 report to the April 10 report.

SUMMARY AND STATUS OF ACTIVITIES – Q4 – JANUARY 8, 2010
ECOTOXICITY AND HUMAN HEALTH ASSESSMENT OF THE COCHECO RIVER
PRE-DESIGN INVESTIGATION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

EnviroSystems, Inc. (ESI) completed the *Chironomous dilutus* (*C. dilutus*) testing in November 2009 and provided GeoInsight with a draft report in November 2009. Based upon ESI's draft report, GeoInsight completed a Draft Project Technical Memorandum summarizing the results of the Supplementary Ecotoxicity Pre-Design Investigation activities that were conducted between June and November 2009. The draft document is currently under review by the Group. ESI's final report is expected during the week of January 4, 2010. The final version of the Project Technical Memorandum is anticipated to be distributed to USEPA and NHDES by January 18, 2009.

2. Deliverables and Correspondence

None.

3. Schedule for Next Quarter

There are no activities scheduled for next quarter.

4. Status of Activities

The Draft Project Technical Memorandum is currently under review by the Group and is expected to be finalized and distributed to USEPA and NHDES by January 18, 2009.

5. Modifications

None.

SUMMARY AND STATUS OF ACTIVITIES – Q4 – JANUARY 8, 2010
NORTHWEST LANDFILL HOTSPOT REMEDIAL DESIGN AND REMEDIAL ACTION
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NEW HAMPSHIRE

1. Summary of Activities

Baseline Data Reports – 2008/2009

- Tables 1 and 2 summarize static soil vapor and ground water sampling results, respectively.
- No data was collected for inclusion in Table 1 during Q4, but the table has been provided for informational purposes.
- During Q4, post treatment ground water samples were collected for inclusion in Table 2; however, analytical results were not available for publication in the Q4 Summary and Status of Activities. Results will be provided and discussed in the 2009 Annual Report for the AS and SVE system.

2009 Field Work – Q4

- Collection of air samples along Tolend Road: Table 3 presents a summary of ambient air exposure monitoring results for this location. The corresponding laboratory report has been provided as Attachment A.
- System operation and well adjustments: Figures 1 and 2 present AS and SVE system layout with respect to the volatile organic compound treatment area (VOCTA) and the perimeter treatment curtain (PTC). Tables 4 and 5 present a summary of AS and SVE well air flow data, respectively.
- Weekly system checks: Table 6 presents a summary of the system process monitoring data collected weekly via telemetry and monthly via site system checks.
- Monthly Operations and Management Field Events – October 22 and 23, 2009 and November 23 and 24, 2009: Tables 4 and 5 present a summary of AS and SVE well air flow data, respectively; Table 7 presents a summary of laboratory results collected from the SVE discharge; Table 8 presents a summary of vapor probe data; and Table 9 for a summary of aqueous carbon treatment results collected prior to and after activated carbon treatment. The mass was not exceeded and no compounds were detected above the lab MDLs for aqueous carbon treatment. The corresponding laboratory reports have been provided in Attachment A.
- System Shut Down Field Event – November 23 and 24, 2009.

Mass Removal Calculation

- Table 10 presents the mass removed at the site during operation of the AS and SVE system.
- Approximately 17,600 pounds of volatile organic compounds (primarily cis-1,2-dichloroethene, tetrachloroethene, and toluene) have been removed through November 24, 2009.

2. Deliverables and Correspondence

None.

3. Schedule for Next Quarter

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

- AS well redevelopment/de-silting efforts (estimate to occur mid March 2010)
- Baseline groundwater and soil vapor sampling activities (estimated to occur late March 2010)

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

Due to high pressure conditions observed in the month of October, the cycling component of the AS system was modified from the Work Plan, where the four groupings are operated for two hours at a time in succession Group (A, B, C, and D) to two groupings (A - D, and B - C) operating for two hours at a time in succession. The AS system operated under these conditions from October 16 until the seasonal shutdown on November 23.

The high pressure condition is believed to be caused by excess silt in the AS wells. The AS wells will be de-silted prior to baseline sampling in March of 2010 and the high pressure condition re-evaluated as a component of the seasonal startup field event.

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
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
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
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
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
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
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
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
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
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
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
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
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
	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
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
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
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
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
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
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
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

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-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
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
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
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
Trip Blank																	
	9/03/08	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	2 U	2 U	5 U
	4/01/09	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	2 U	2 U	5 U

Notes:

VOC = volatile organic compound
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
G = grab sample was collected after attempting EPA low flow sampling procedures; the well was purged unti 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
			(Concentrations are presented in ppbv)															
Annual AAL Criteria			59.71	119.09	833.45	335.49	50.44	1984.20	1984.20	2.43	83.81	83.81	1.19	230.31	106.15	23.03	23.03	119.17
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
	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
	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
	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
	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

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
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 start up.
[C] = Sample was collected 3 months after official AS and SVE operations began (August 8, 2009); In October 2009, the sample was collected during heavy traffic conditions.
[D] = Sample was collected to verify concentration data detected in the October 2009 sample.

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
7/14/2009				
	AS-01A	6.0	8.0	11.1
	AS-02A	6.0	7.5	10.4
	AS-03A	7.0	4.0	5.8
	AS-04A	7.0	4.5	6.5
	AS-05A	5.0	8.0	10.5
	AS-06A	5.0	10.0	13.1
	AS-07A	5.5	8.0	10.8
	AS-08A	7.0	5.5	8.0
	AS-09A	7.0	6.0	8.7
	AS-10A	5.0	8.5	11.2
	AS-11A	7.0	4.5	6.5
	AS-12A	8.0	4.5	6.8
	AS-13A	4.5	9.5	12.2
	AS-14A	2.0	10.0	11.1
	AS-15A	4.0	9.0	11.2
	AS-16A	4.0	10.0	12.5
	AS-17A	6.0	7.5	10.4
	AS-18A	4.0	10.0	12.5
	AS-19A	5.0	9.0	11.8
	AS-20A	5.5	9.0	12.1
	AS-21A	3.0	10.0	11.8
	AS-22A	2.5	10.0	11.5
	AS-23A	4.0	8.0	10.0
	AS-24A	6.0	4.5	6.2
	AS-25A	5.0	10.0	13.1
	AS-26A	4.0	10.0	12.5
	AS-27A	6.0	8.5	11.7
	AS-28A	3.0	10.0	11.8
	AS-29A	7.0	4.0	5.8
	AS-30A	4.5	10.0	12.8
	AS-31A	2.0	10.0	11.1
	AS-01C	7.5	0.0	0.0
	AS-02C	8.0	0.0	0.0
	AS-03C	5.5	9.0	12.1
	AS-04C	5.0	7.5	9.9
	AS-05C	5.0	10.0	13.1
	AS-06C	4.0	8.0	10.0
	AS-07C	7.0	0.0	0.0
	AS-08C	4.0	7.5	9.4
	AS-09C	7.0	7.5	10.9
	AS-10C	4.0	9.5	11.9
	AS-11C	5.0	7.5	9.9
	AS-12C	5.5	5.5	7.4
	AS-13C	8.0	7.5	11.4
	AS-14C	4.0	10.0	12.5
	AS-15C	4.0	10.0	12.5

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
7/14/2009				
	AS-16C	4.0	9.0	11.2
	AS-17C	8.0	5.0	7.6
	AS-18C	3.5	9.0	10.9
	AS-19C	5.5	6.5	8.8
	AS-20C	4.0	10.0	12.5
	AS-21C	9.0	5.0	7.9
	AS-22C	4.5	10.0	12.8
	AS-23C	3.5	10.0	12.1
	AS-24C	4.5	10.0	12.8
	AS-25C	9.0	3.0	4.7
	AS-26C	3.5	10.0	12.1
	AS-27C	4.5	10.0	12.8
	AS-28C	7.5	6.0	8.9
	AS-29C	7.0	6.0	8.7
	AS-30C	4.0	10.0	12.5
	AS-31C	5.5	9.5	12.8
7/15/2009				
	AS-01B	2.0	9.0	10.0
	AS-02B	8.0	0.0	0.0
	AS-03B	8.0	4.0	6.1
	AS-04B	8.0	4.0	6.1
	AS-05B	2.0	9.5	10.6
	AS-06B	5.0	9.5	12.5
	AS-07B	2.0	8.0	8.9
	AS-08B	8.0	3.0	4.5
	AS-09B	6.0	3.0	4.1
	AS-10B	4.5	10.0	12.8
	AS-11B	8.0	4.5	6.8
	AS-12B	8.0	3.0	4.5
	AS-13B	2.0	10.0	11.1
	AS-14B	3.5	8.0	9.7
	AS-15B	3.5	9.5	11.5
	AS-16B	2.5	9.0	10.3
	AS-17B	4.0	7.5	9.4
	AS-18B	4.0	10.0	12.5
	AS-19B	2.0	9.5	10.6
	AS-20B	3.0	9.0	10.6
	AS-21B	4.0	8.0	10.0
	AS-22B	4.5	10.0	12.8
	AS-23B	5.0	10.0	13.1
	AS-24B	3.0	9.0	10.6
	AS-25B	4.5	10.0	12.8
	AS-26B	5.0	8.5	11.2
	AS-27B	4.0	10.0	12.5
	AS-28B	1.0	10.0	10.5

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
7/15/2009				
	AS-29B	2.5	8.0	9.2
	AS-30B	7.5	6.0	8.9
	AS-31B	3.0	10.0	11.8
	AS-01D	NR	NR	NR
	AS-02D	3.5	7.5	9.1
	AS-03D	7.0	3.0	4.3
	AS-04D	7.0	5.0	7.2
	AS-05D	3.0	8.0	9.5
	AS-06D	5.5	7.0	9.4
	AS-07D	7.0	5.5	8.0
	AS-08D	4.0	8.5	10.6
	AS-09D	3.5	10.0	12.1
	AS-10D	4.0	10.0	12.5
	AS-11D	8.0	0.0	0.0
	AS-12D	5.5	9.0	12.1
	AS-13D	4.5	10.0	12.8
	AS-14D	4.0	10.0	12.5
	AS-15D	4.0	10.0	12.5
	AS-16D	6.0	7.0	9.7
	AS-17D	4.0	8.5	10.6
	AS-18D	3.0	10.0	11.8
	AS-19D	5.0	10.0	13.1
	AS-20D	4.5	10.0	12.8
	AS-21D	6.0	6.5	9.0
	AS-22D	3.0	10.0	11.8
	AS-23D	4.5	9.0	11.5
	AS-24D	6.5	6.0	8.5
	AS-25D	4.0	8.5	10.6
	AS-26D	5.0	9.0	11.8
	AS-27D	5.5	8.0	10.8
	AS-28D	4.0	8.0	10.0
	AS-29D	5.0	8.0	10.5
	AS-30D	5.0	8.0	10.5
	AS-31D	3.5	9.5	11.5
7/27/2009				
	AS-01E	3.0	9.8	11.5
	AS-02E	7.0	5.5	8.0
	AS-03E	2.0	10.0	11.1
	AS-04E	8.0	5.0	7.6
	AS-05E	10.0	3.0	4.9
	AS-06E	8.0	9.0	13.6
	AS-07E	7.5	8.5	12.6
	AS-08E	6.0	8.5	11.7
8/24/2009				
	AS-01A	9.0	3.0	4.7

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
8/24/2009				
	AS-02A	11.0	2.5	4.3
	AS-03A	10.0	3.0	4.9
	AS-04A	9.0	7.5	11.9
	AS-05A	11.0	0.0	0.0
	AS-06A	9.0	8.0	12.7
	AS-07A	9.0	7.0	11.1
	AS-08A	11.0	0.0	0.0
	AS-09A	10.0	6.0	9.9
	AS-10A	7.0	10.0	14.5
	AS-11A	11.0	0.0	0.0
	AS-12A	11.0	2.5	4.3
	AS-13A	3.0	10.0	11.8
	AS-14A	4.0	10.0	12.5
	AS-15A	4.0	10.0	12.5
	AS-16A	3.0	10.0	11.8
	AS-17A	10.0	5.0	8.2
	AS-18A	3.0	10.0	11.8
	AS-19A	4.0	10.0	12.5
	AS-20A	8.0	9.0	13.6
	AS-21A	7.0	10.0	14.5
	AS-22A	4.0	10.0	12.5
	AS-23A	7.0	10.0	14.5
	AS-24A	11.0	0.0	0.0
	AS-25A	6.5	10.0	14.1
	AS-26A	6.0	10.0	13.8
	AS-27A	10.0	5.0	8.2
	AS-28A	6.0	9.0	12.4
	AS-29A	10.0	5.0	8.2
	AS-30A	9.0	7.0	11.1
	AS-31A	5.0	10.0	13.1
	AS-01B	10.0	0.0	0.0
	AS-02B	11.0	0.0	0.0
	AS-03B	10.0	2.5	4.1
	AS-04B	4.0	10.0	12.5
	AS-05B	5.0	10.0	13.1
	AS-06B	8.0	9.0	13.6
	AS-07B	9.5	5.5	8.9
	AS-08B	10.5	3.0	5.0
	AS-09B	4.0	10.0	12.5
	AS-10B	5.0	10.0	13.1
	AS-11B	9.5	7.0	11.3
	AS-12B	10.0	4.0	6.6
	AS-13B	7.0	5.0	7.2
	AS-14B	6.0	10.3	14.2
	AS-15B	4.0	10.0	12.5
	AS-16B	10.5	3.5	5.9

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
8/24/2009				
	AS-17B	10.5	0.0	0.0
	AS-18B	3.0	10.0	11.8
	AS-19B	2.0	10.0	11.1
	AS-20B	5.0	10.0	13.1
	AS-21B	9.0	5.5	8.7
	AS-22B	10.0	4.0	6.6
	AS-23B	4.0	10.0	12.5
	AS-24B	8.0	10.0	15.2
	AS-25B	10.0	5.0	8.2
	AS-26B	11.0	4.0	6.9
	AS-27B	2.5	10.0	11.5
	AS-28B	2.0	10.0	11.1
	AS-29B	6.0	10.0	13.8
	AS-30B	NR	NR	NR
	AS-31B	6.0	10.0	13.8
	AS-01C	13.0	0.0	0.0
	AS-02C	13.0	0.0	0.0
	AS-03C	11.0	7.0	12.0
	AS-04C	12.0	6.0	10.7
	AS-05C	4.5	10.0	12.8
	AS-06C	5.0	5.0	6.6
	AS-07C	6.0	0.0	0.0
	AS-08C	6.0	0.0	0.0
	AS-09C	10.0	6.5	10.7
	AS-10C	10.0	4.0	6.6
	AS-11C	10.0	5.5	9.1
	AS-12C	8.0	9.0	13.6
	AS-13C	5.0	4.0	5.3
	AS-14C	3.0	5.5	6.5
	AS-15C	4.0	9.5	11.9
	AS-16C	5.5	9.5	12.8
	AS-17C	9.5	8.0	12.9
	AS-18C	4.0	10.0	12.5
	AS-19C	7.5	10.0	14.8
	AS-20C	11.0	5.5	9.4
	AS-21C	10.0	6.5	10.7
	AS-22C	4.0	10.0	12.5
	AS-23C	4.0	10.0	12.5
	AS-24C	6.0	10.0	13.8
	AS-25C	13.0	0.0	0.0
	AS-26C	6.0	10.0	13.8
	AS-27C	6.5	7.0	9.9
	AS-28C	10.0	7.0	11.5
	AS-29C	8.5	8.5	13.2
	AS-30C	8.0	8.0	12.1
	AS-31C	6.0	8.0	11.1

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
8/24/2009				
	AS-01D	9.0	7.0	11.1
	AS-02D	10.5	0.0	0.0
	AS-03D	7.0	8.0	11.6
	AS-04D	11.0	0.0	0.0
	AS-05D	6.0	9.0	12.4
	AS-06D	8.0	8.5	12.9
	AS-07D	10.0	3.0	4.9
	AS-08D	9.5	5.5	8.9
	AS-09D	4.0	11.8	14.7
	AS-10D	8.0	8.0	12.1
	AS-11D	11.0	0.0	0.0
	AS-12D	9.0	7.0	11.1
	AS-13D	2.0	10.0	11.1
	AS-14D	3.0	10.0	11.8
	AS-15D	9.0	7.0	11.1
	AS-16D	10.0	3.0	4.9
	AS-17D	7.0	8.0	11.6
	AS-18D	5.0	10.0	13.1
	AS-19D	3.0	10.0	11.8
	AS-20D	7.0	10.0	14.5
	AS-21D	10.5	0.0	0.0
	AS-22D	3.0	10.0	11.8
	AS-23D	8.0	10.0	15.2
	AS-24D	9.5	6.0	9.7
	AS-25D	5.0	10.0	13.1
	AS-26D	7.0	9.5	13.8
	AS-27D	8.5	3.0	4.6
	AS-28D	9.0	7.0	11.1
	AS-29D	7.0	9.8	14.1
	AS-30D	6.0	10.0	13.8
	AS-31D	5.0	10.0	13.1
	AS-01E	5.0	10.0	13.1
	AS-02E	10.0	0.0	0.0
	AS-03E	4.0	8.0	10.0
	AS-04E	10.0	4.5	7.4
	AS-05E	10.0	4.5	7.4
	AS-06E	8.0	6.5	9.8
	AS-07E	5.0	10.0	13.1
	AS-08E	4.0	10.0	12.5
9/2/2009				
	AS-01A	12.0	4.5	8.0
	AS-02A	10.0	6.5	10.7
	AS-03A	11.0	6.5	11.1
	AS-04A	6.5	9.0	12.7
	AS-05A	13.0	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)
9/2/2009				
	AS-06A	8.0	8.0	12.1
	AS-07A	10.0	7.5	12.4
	AS-08A	14.0	0.0	0.0
	AS-09A	11.0	6.0	10.3
	AS-10A	5.0	9.0	11.8
	AS-11A	11.0	7.0	12.0
	AS-12A	11.0	5.5	9.4
	AS-13A	NR	NR	NR
	AS-14A	4.0	9.0	11.2
	AS-15A	3.0	9.5	11.2
	AS-16A	5.0	9.0	11.8
	AS-17A	12.0	4.0	7.1
	AS-18A	4.0	9.5	11.9
	AS-19A	4.0	10.0	12.5
	AS-20A	12.0	3.5	6.2
	AS-21A	10.0	7.0	11.5
	AS-22A	4.0	9.0	11.2
	AS-23A	6.0	9.0	12.4
	AS-24A	11.5	4.5	7.9
	AS-25A	10.0	7.0	11.5
	AS-26A	6.0	9.0	12.4
	AS-27A	8.0	8.0	12.1
	AS-28A	10.0	6.0	9.9
	AS-29A	8.5	6.0	9.3
	AS-30A	6.0	9.0	12.4
	AS-31A	8.0	7.0	10.6
	AS-01B	14.0	3.0	5.7
	AS-02B	11.5	7.0	12.2
	AS-03B	13.0	4.5	8.3
	AS-04B	11.0	6.5	11.1
	AS-05B	3.0	10.0	11.8
	AS-06B	8.0	8.0	12.1
	AS-07B	13.0	3.0	5.5
	AS-08B	12.0	5.0	8.9
	AS-09B	4.0	10.0	12.5
	AS-10B	4.5	9.0	11.5
	AS-11B	11.0	7.0	12.0
	AS-12B	10.0	6.0	9.9
	AS-13B	8.5	7.5	11.6
	AS-14B	8.0	8.0	12.1
	AS-15B	4.0	10.0	12.5
	AS-16B	13.0	4.5	8.3
	AS-17B	13.0	3.0	5.5
	AS-18B	6.0	9.0	12.4
	AS-19B	4.5	10.0	12.8
	AS-20B	8.0	8.0	12.1

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
9/2/2009				
	AS-21B	12.5	3.0	5.4
	AS-22B	12.5	3.5	6.4
	AS-23B	4.5	9.0	11.5
	AS-24B	8.0	8.0	12.1
	AS-25B	13.0	4.0	7.4
	AS-26B	11.0	7.5	12.9
	AS-27B	4.0	10.0	12.5
	AS-28B	3.0	10.0	11.8
	AS-29B	8.5	7.0	10.8
	AS-30B	13.0	3.0	5.5
	AS-31B	5.0	8.0	10.5
	AS-01C	15.0	3.0	5.9
	AS-02C	16.0	3.0	6.1
	AS-03C	8.0	10.0	15.2
	AS-04C	15.0	5.0	9.9
	AS-05C	5.0	10.0	13.1
	AS-06C	8.0	8.0	12.1
	AS-07C	16.0	0.0	0.0
	AS-08C	12.0	7.0	12.5
	AS-09C	10.0	7.0	11.5
	AS-10C	13.5	6.5	12.2
	AS-11C	8.0	8.0	12.1
	AS-12C	7.0	9.0	13.0
	AS-13C	13.0	6.5	12.0
	AS-14C	3.0	6.0	7.1
	AS-15C	4.0	9.0	11.2
	AS-16C	10.0	7.0	11.5
	AS-17C	8.0	8.0	12.1
	AS-18C	4.5	9.0	11.5
	AS-19C	7.0	8.0	11.6
	AS-20C	15.0	4.0	7.9
	AS-21C	15.0	4.0	7.9
	AS-22C	4.0	9.0	11.2
	AS-23C	4.5	9.0	11.5
	AS-24C	8.0	8.0	12.1
	AS-25C	15.0	3.0	5.9
	AS-26C	14.0	6.0	11.5
	AS-27C	15.0	3.5	6.9
	AS-28C	15.0	3.0	5.9
	AS-29C	10.0	7.0	11.5
	AS-30C	8.0	8.0	12.1
	AS-31C	14.0	4.0	7.7
	AS-01D	9.0	6.5	10.3
	AS-02D	16.0	0.0	0.0
	AS-03D	13.0	8.0	14.8
	AS-04D	14.0	8.0	15.3

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
9/2/2009				
	AS-05D	4.0	10.0	12.5
	AS-06D	6.5	9.0	12.7
	AS-07D	10.0	6.0	9.9
	AS-08D	8.0	6.5	9.8
	AS-09D	NR	NR	NR
	AS-10D	5.0	8.0	10.5
	AS-11D	15.5	0.0	0.0
	AS-12D	5.0	7.5	9.9
	AS-13D	4.0	8.0	10.0
	AS-14D	3.5	8.0	9.7
	AS-15D	5.0	8.0	10.5
	AS-16D	10.0	6.0	9.9
	AS-17D	13.0	4.5	8.3
	AS-18D	4.0	8.0	10.0
	AS-19D	3.0	8.5	10.0
	AS-20D	6.5	7.0	9.9
	AS-21D	12.0	5.5	9.8
	AS-22D	3.0	9.0	10.6
	AS-23D	7.0	5.5	8.0
	AS-24D	8.0	7.0	10.6
	AS-25D	6.0	10.0	13.8
	AS-26D	5.5	7.5	10.1
	AS-27D	10.5	6.0	10.1
	AS-28D	8.0	7.0	10.6
	AS-29D	7.0	7.0	10.1
	AS-30D	8.0	7.0	10.6
	AS-31D	5.0	8.0	10.5
	AS-01E	5.0	8.0	10.5
	AS-02E	11.0	4.0	6.9
	AS-03E	6.0	7.0	9.7
	AS-04E	10.0	6.0	9.9
	AS-05E	9.0	6.0	9.5
	AS-06E	10.0	7.0	11.5
	AS-07E	8.0	8.0	12.1
	AS-08E	4.0	10.0	12.5
9/11/2009				
	AS-01D	10.0	5.5	9.1
	AS-02D	15.0	0.0	0.0
	AS-03D	9.0	5.0	7.9
	AS-04D	13.0	5.0	9.2
	AS-05D	6.0	9.5	13.1
	AS-06D	6.0	8.5	11.7
	AS-07D	10.0	5.0	8.2
	AS-08D	11.5	7.0	12.2
	AS-09D	3.0	9.5	11.2

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
9/11/2009				
	AS-10D	7.0	7.0	10.1
	AS-11D	15.0	0.0	0.0
	AS-12D	15.0	0.0	0.0
	AS-13D	5.0	9.0	11.8
	AS-14D	5.0	8.0	10.5
	AS-15D	5.0	8.0	10.5
	AS-16D	11.0	8.0	13.7
	AS-17D	15.0	4.0	7.9
	AS-18D	5.0	10.0	13.1
	AS-19D	3.0	9.0	10.6
	AS-20D	12.0	7.5	13.4
	AS-21D	12.0	7.0	12.5
	AS-22D	2.5	10.0	11.5
	AS-23D	14.0	3.0	5.7
	AS-24D	11.5	7.5	13.1
	AS-25D	3.0	10.0	11.8
	AS-26D	5.0	10.0	13.1
	AS-27D	12.0	7.0	12.5
	AS-28D	10.0	7.0	11.5
	AS-29D	12.5	5.5	10.0
	AS-30D	14.0	3.3	6.2
	AS-31D	13.0	6.0	11.1
10/23/2009				
	AS-01A	9.0	0.0	0.0
	AS-02A	8.0	4.6	7.0
	AS-03A	6.0	8.0	11.1
	AS-04A	6.5	5.7	8.0
	AS-05A	9.0	0.0	0.0
	AS-06A	5.0	7.0	9.2
	AS-07A	8.5	0.0	0.0
	AS-08A	8.0	2.0	3.0
	AS-09A	7.5	3.9	5.8
	AS-10A	5.0	6.2	8.2
	AS-11A	8.8	0.0	0.0
	AS-12A	8.0	4.0	6.1
	AS-13A	2.0	6.0	6.7
	AS-14A	3.0	7.6	9.0
	AS-15A	3.0	8.0	9.5
	AS-16A	4.0	7.0	8.7
	AS-17A	8.8	0.0	0.0
	AS-18A	3.5	7.2	8.7
	AS-19A	3.0	8.0	9.5
	AS-20A	8.0	0.0	0.0
	AS-21A	8.0	0.0	0.0
	AS-22A	3.0	7.0	8.3

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
10/23/2009				
	AS-23A	3.0	5.1	6.0
	AS-24A	5.0	0.0	0.0
	AS-25A	8.5	0.0	0.0
	AS-26A	3.5	7.4	9.0
	AS-27A	7.0	5.0	7.2
	AS-28A	8.0	0.0	0.0
	AS-29A	7.0	5.5	8.0
	AS-30A	6.0	6.0	8.3
	AS-31A	8.0	0.0	0.0
	AS-01B	8.5	0.0	0.0
	AS-02B	3.5	7.0	8.5
	AS-03B	8.0	4.0	6.1
	AS-04B	8.5	0.0	0.0
	AS-05B	3.0	8.0	9.5
	AS-06B	5.0	5.5	7.2
	AS-07B	8.5	0.0	0.0
	AS-08B	9.0	6.0	9.5
	AS-09B	5.0	7.0	9.2
	AS-10B	3.0	7.0	8.3
	AS-11B	7.5	5.2	7.7
	AS-12B	10.0	0.0	0.0
	AS-13B	5.0	6.5	8.5
	AS-14B	4.5	6.9	8.9
	AS-15B	5.0	8.0	10.5
	AS-16B	10.0	0.0	0.0
	AS-17B	8.5	0.0	0.0
	AS-18B	8.0	0.0	0.0
	AS-19B	6.5	5.7	8.0
	AS-20B	7.0	6.5	9.4
	AS-21B	8.0	0.0	0.0
	AS-22B	10.0	0.0	0.0
	AS-23B	5.0	6.5	8.5
	AS-24B	6.0	5.4	7.5
	AS-25B	7.0	6.0	8.7
	AS-26B	10.0	0.0	0.0
	AS-27B	3.5	6.0	7.3
	AS-28B	2.0	10.0	11.1
	AS-29B	8.0	0.0	0.0
	AS-30B	8.0	0.0	0.0
	AS-31B	7.0	4.0	5.8
	AS-01C	11.0	0.0	0.0
	AS-02C	7.0	0.0	0.0
	AS-03C	10.0	0.0	0.0
	AS-04C	10.0	5.8	9.5
	AS-05C	5.0	7.0	9.2
	AS-06C	8.0	6.3	9.5

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
10/23/2009				
	AS-07C	9.0	0.0	0.0
	AS-08C	6.0	4.0	5.5
	AS-09C	7.0	4.0	5.8
	AS-10C	7.5	3.6	5.4
	AS-11C	8.0	0.0	0.0
	AS-12C	5.5	5.0	6.8
	AS-13C	10.0	0.0	0.0
	AS-14C	6.0	10.0	13.8
	AS-15C	3.0	6.0	7.1
	AS-16C	6.5	4.0	5.7
	AS-17C	6.0	5.0	6.9
	AS-18C	6.0	4.0	5.5
	AS-19C	8.0	4.0	6.0
	AS-20C	7.0	5.0	7.2
	AS-21C	8.5	1.9	3.0
	AS-22C	3.0	6.0	7.1
	AS-23C	6.0	6.0	8.3
	AS-24C	9.0	6.0	9.5
	AS-25C	8.0	2.0	3.0
	AS-26C	9.0	0.0	0.0
	AS-27C	8.0	0.0	0.0
	AS-28C	10.0	0.0	0.0
	AS-29C	8.0	0.0	0.0
	AS-30C	6.0	6.0	8.3
	AS-31C	10.0	0.0	0.0
	AS-01D	9.0	0.0	0.0
	AS-02D	9.0	0.0	0.0
	AS-03D	9.0	0.0	0.0
	AS-04D	9.0	1.9	3.0
	AS-05D	3.5	7.0	8.5
	AS-06D	6.5	5.7	8.0
	AS-07D	9.0	0.0	0.0
	AS-08D	7.0	6.0	8.7
	AS-09D	2.0	0.0	0.0
	AS-10D	4.5	6.0	7.7
	AS-11D	8.5	0.0	0.0
	AS-12D	6.5	5.7	8.0
	AS-13D	3.0	7.0	8.3
	AS-14D	5.0	5.0	6.6
	AS-15D	4.0	5.6	7.0
	AS-16D	7.0	3.5	5.0
	AS-17D	3.0	0.0	0.0
	AS-18D	4.0	6.4	8.0
	AS-19D	5.0	5.0	6.6
	AS-20D	8.0	0.0	0.0
	AS-21D	7.0	6.0	8.7

Table 4
Air Sparge Well Air Flow Data

Dover Municipal Landfill Superfund Site, Dover, NH

	AS Well ID	Pressure (psi)	Flow (acfm)	Flow (scfm)
10/23/2009				
	AS-22D	3.0	6.8	8.0
	AS-23D	8.5	0.0	0.0
	AS-24D	5.0	6.5	8.5
	AS-25D	5.0	0.0	0.0
	AS-26D	4.0	7.0	8.7
	AS-27D	6.0	5.8	8.0
	AS-28D	3.0	6.0	7.1
	AS-29D	9.0	0.0	0.0
	AS-30D	6.0	0.0	0.0
	AS-31D	8.0	0.0	0.0
	AS-01E	6.5	7.4	10.5
	AS-02E	11.0	0.0	0.0
	AS-03E	6.5	7.0	9.9
	AS-04E	10.0	3.6	6.0
	AS-05E	10.5	4.0	6.7
	AS-06E	10.0	7.0	11.5
	AS-07E	10.0	8.5	14.0
	AS-08E	4.0	11.0	13.7

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
System start date was 8/10/2009 and all data was collected prior to 8/10/09 was a component of either startup/shake down or compliance sampling.
Initial Design Flow Rate = 10 scfm
Suffix A,B,C,D = each leg 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	0.94	53.02	7.0
	SVE-02	2.8	0.88	51.34	10.5
	SVE-03	2.2	0.65	44.15	19.8
	SVE-04	2.2	0.22	25.69	19.3
	SVE-05	2.2	0.04	10.95	9.4
	SVE-06	1.4	0.14	20.51	5.5
	SVE-07	4.6	2.00	77.22	12.2
	SVE-08	3.8	0.20	24.44	54.8
	SVE-09	3	0.10	17.30	909.0
	SVE-10	2.2	0.12	18.97	2,875.0
	SVE-11	1.6	0.26	27.95	178.0
	SVE-12	1.2	0.18	23.26	76.2
	SVE-13	7.8	0.20	24.32	507.0
	SVE-14	5.8	0.70	45.62	631.0
	SVE-15	5.8	0.22	25.57	525.0
	SVE-16	5.4	0.16	21.82	4,221.0
	SVE-16	5.4	0.26	27.81	4,221.0
	SVE-17	4.8	0.30	29.90	3,306.0
	SVE-18	5	0.38	33.64	35.0
	SVE-19	5.8	0.08	15.42	118.0
	SVE-20	4.8	0.24	26.74	100.0
	SVE-21	1.2	0.14	20.52	7.3
	SVE-22	1.6	0.04	10.96	10.3
	SVE-23	1.4	0.08	15.51	36.2
7/6/2009					
	SVE-01	1.4	0.30	30.03	nm
	SVE-02	1.2	0.28	29.01	nm
	SVE-03	1.3	0.30	30.03	nm
	SVE-04	1.4	0.26	27.95	nm
	SVE-05	6.8	0.02	7.70	nm
	SVE-06	2	0.30	30.00	nm
	SVE-07	1	0.26	27.97	nm
	SVE-08	5	0.32	30.87	nm
	SVE-09	8.2	0.34	31.70	nm
	SVE-10	2.5	0.20	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	0.30	30.03	nm
	SVE-12	1.6	0.24	26.85	nm
	SVE-13	0.1	0.30	30.07	nm
	SVE-14	3.2	0.27	28.42	nm
	SVE-15	6	0.24	26.70	nm
	SVE-16	6	0.24	26.70	nm
	SVE-17	3.4	0.22	25.65	nm
	SVE-18	3.8	0.26	27.87	nm
	SVE-19	9	0.20	24.29	nm
	SVE-20	5.8	0.36	32.71	nm
	SVE-21	1	0.20	24.53	nm
	SVE-22	5	0.16	21.83	nm
	SVE-23	4.4	0.24	26.76	nm
	SVE-24	5	0.02	7.72	nm
	SVE-25	4.8	0.06	13.37	nm
	SVE-26	4.8	0.02	7.72	nm
	SVE-27	4.7	0.06	13.37	nm
	SVE-28	5	0.04	10.91	nm
	SVE-29	5	0.06	13.37	nm
	SVE-30	4.8	0.06	13.37	nm
	SVE-31	4.6	0.08	15.44	nm
8/21/2009					
	SVE-01	1.65	0.25	27.40	42.6
	SVE-02	1.05	0.25	27.42	203.0
	SVE-03	1.15	0.25	27.42	499.0
	SVE-04	1.25	0.25	27.41	54.6
	SVE-05	4.75	0.15	21.14	231.0
	SVE-06	1.6	0.25	27.40	26.0
	SVE-07	1	0.30	30.04	268.0
	SVE-08	6	0.25	27.25	1,020.0
	SVE-09	5.8	0.30	29.86	1,650.0
	SVE-10	3	0.30	29.97	3,450.0
	SVE-11	1.05	0.25	27.42	1,030.0
	SVE-12	0.9	0.20	24.53	611.0
	SVE-13	10	0.25	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	0.25	27.39	1,370.0
	SVE-15	6.5	0.30	29.84	4,000.0
	SVE-16	4	0.25	27.32	4,000.0
	SVE-17	3	0.17	22.56	2,480.0
	SVE-18	5	0.30	29.89	547.0
	SVE-19	8.5	0.28	28.75	320.0
	SVE-20	7	0.26	27.76	204.0
	SVE-21	1.1	0.30	30.04	29.0
	SVE-22	4.5	0.22	25.61	59.2
	SVE-23	2	0.30	30.00	69.4
	SVE-24	4.5	0.05	12.21	15.5
	SVE-25	4.5	0.05	12.21	10.3
	SVE-26	4.5	0.05	12.21	163.0
	SVE-27	4.5	0.05	12.21	6.5
	SVE-28	4.5	0.05	12.21	13.3
	SVE-29	2	0.05	12.25	55.4
	SVE-30	4.5	0.05	12.21	8.2
	SVE-31	4.5	0.05	12.21	6.1
10/23/2009					
	SVE-01	2.2	0.30	30.00	20.0
	SVE-02	1.35	0.25	27.41	4.2
	SVE-03	1.75	0.30	30.01	439.0
	SVE-04	1.9	0.38	33.55	70.4
	SVE-05	8	0.20	24.32	61.0
	SVE-06	2.05	0.40	34.64	27.2
	SVE-07	0.85	0.32	31.27	254.0
	SVE-08	7.6	0.32	31.01	351.0
	SVE-09	8.2	0.25	27.18	1,093.0
	SVE-10	3.8	0.40	34.57	3,334.0
	SVE-11	1.65	0.45	36.76	593.0
	SVE-12	1.3	0.40	34.67	636.0
	SVE-13	10	0.30	29.71	966.0
	SVE-14	3	0.25	27.36	1,822.0
	SVE-15	10	0.30	29.71	4,709.0
	SVE-16	8	0.25	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	0.25	27.33	1,917.0
	SVE-18	6	0.38	33.38	373.0
	SVE-19	10	0.25	27.12	951.0
	SVE-20	8	0.20	24.32	72.7
	SVE-21	1.35	0.45	36.78	10.0
	SVE-22	7	0.25	27.22	84.6
	SVE-23	0.2	0.05	12.28	897.0
	SVE-24	6.6	0.05	12.18	7.4
	SVE-25	-	-	-	nm
	SVE-26	-	-	-	nm
	SVE-27	5.8	0.05	12.19	17.3
	SVE-28	6.4	0.05	12.18	0.4
	SVE-29	6.6	0.05	12.18	12.7
	SVE-30	6.4	0.05	12.18	3.0
	SVE-31	6.4	0.05	12.18	29.7

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

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-01 through SVE-23 Design Flow Rate per the Workplan = 25 scfm.
SVE-24 through SVE-31 Design Flow Rate per the Workplan = 12.5 scfm.
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 (scfm)	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^ (hrs)
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
10/9/2009	B	725	3	130	1,814	100	13	116	477	339	19	93	2,286	10

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 (scfm)	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^ (hrs)
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

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 due to seasonal shutdown
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 8/10/09.

* = 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.

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	0.6 U	9.4	140	25	6.2	84
SVE	7/6/2009	58	8.5	4.0	7.4	0.5	210	0.5	13.0	3.7	1.4	0.3 U	11.0	120	31	8.4	40
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	0.3	14.0	140	38	10.0	46
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	0.5 U	15.0	160	42	11.0	52
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	0.3 U	13.0	130	35	9.8	39
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	0.3 U	13.0	140	36	10.0	43
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	0.2 U	11.0	110	32	9.0	28
SVE	8/14/2009	68	8.9	13.0	7.6	0.4 U	130	0.4	6.0	2.2	1.1	0.4 U	8.6	100	25	7.2	36
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	1.1 U	17.0	190	53	16.0	65
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	1.0 U	11.0	140	40	12.0	30
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	1.0 U	9.0	100	35	12.0	19
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	0.2 U	10.0	78	41	16.0	18

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

Table 8
Vapor Probe Data

Dover Municipal Landfill Superfund Site, Dover, NH

	Vapor Probe ID	Vacuum (in. H2O)	Total VOCs (ppmv)	Methane (%)
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

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 OM 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	MEK	2-Hex-anone	MIBK	Ace-tone	n-propyl-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	1800	150	1100	820	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	10 U	10 U	10 U	50 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	1100	50 U	780	370	11	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	10 U	10 U	10 U	50 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	400	58	470	250 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	10 U	10 U	10 U	50 U	2 U	10 U

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 = methy ethyl ketone
MIBK = methy isobutyl ketone
THF = tetrahydrofuran
G = grab sample was collected after attempting EPA low flow sampling procedures; the well was purged unti dry and allowed to recharge before the sample was collected.
S = sample collected via EPA low flow methodology

Table 10
Mass Removal Total
Dover Muncipal Landfill Superfund Site, Dover, NH

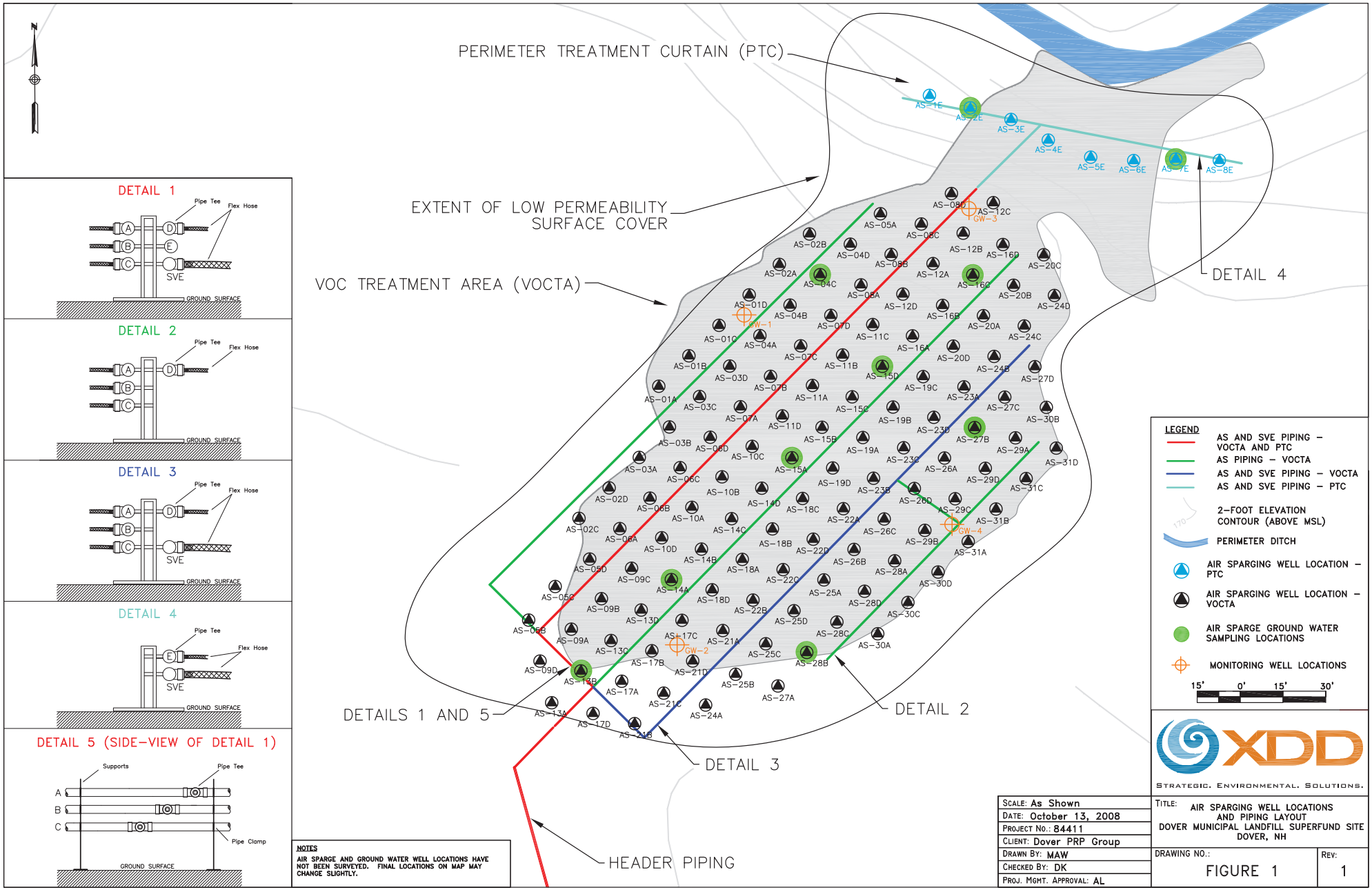
Sample ID	Operational System Component	Sample Date	Cumulative Run Time	Flow Rate	Tetrachloroethene			Trichloroethene			1,1,1-Trichloroethane			1,1-Dichloroethane			1,1-Dichloroethene			cis-1,2-Dichloroethene		
			hours	scfm	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	total lbs	ppmv	lb/hr	Total lbs	ppmv	lb/hr	total lbs
Stack-061909-A	SVE - Startup	6/23/2009	15	750	43	0.819	NC	9.2	0.139	NC	5.9	0.090	NC	14.0	0.159	NC	1.4	0.016	NC	410	4.561	NC
Stack-070609-A	SVE - Startup	7/6/2009	214	750	58	1.105	192	8.5	0.128	27	4.0	0.061	15	7.4	0.084	24	0.5	0.005	2.1	210	2.336	687
Stack-081409	SVE	8/14/2009	816	750	68	1.295	722	8.9	0.134	79	13.0	0.199	78	7.6	0.086	51	0.0	0.000	1.5	130	1.446	1,139
Stack-082109	AS+SVE	8/21/2009	993	725	140	2.578	457	12.0	0.175	31	26.0	0.386	68	13.0	0.143	25	0.0	0.000	0.0	200	2.151	382
Stack-092509	AS+SVE	9/25/2009	1,675	730	140	2.595	1,770	11.0	0.162	110	14.0	0.209	143	6.5	0.072	49	0.0	0.000	0.0	110	1.191	812
SVESTACK102209	AS+SVE	10/22/2009	2,059	740	120	2.255	864	8.4	0.125	48	8.2	0.124	48	4.4	0.049	19	0.0	0.000	0.0	70	0.768	294
SVE STACK 112409	AS+SVE	11/24/2009	2,825	750	140	2.667	2,044	9.9	0.149	115	9.0	0.138	106	3.9	0.044	34	0.2	0.002	1.8	60	0.667	512
Total Mass Removed:							**6,050**			**409**			**458**			**203**			**5.4**			**3,825**

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-061909-A	SVE - Startup	6/23/2009	15	750	0.8	0.008	NC	71.0	0.511	NC	1.5	0.021	NC	0.7	0.010	NC	0	0.000	NC	9.4	0.115	NC
Stack-070609-A	SVE - Startup	7/6/2009	214	750	0.5	0.005	1.4	13.0	0.093	60	3.7	0.051	7	1.4	0.019	3	0	0.000	0	11.0	0.134	25
Stack-081409	SVE	8/14/2009	816	750	0.4	0.004	3.0	6.0	0.043	41	2.2	0.030	25	1.1	0.015	10	0	0.000	0	8.6	0.105	72
Stack-082109	AS+SVE	8/21/2009	993	725	0.0	0.000	0.0	6.6	0.046	8	6.3	0.084	15	3.0	0.040	7	0	0.000	0	17.0	0.200	36
Stack-092509	AS+SVE	9/25/2009	1,675	730	0.0	0.000	0.0	3.9	0.027	19	4.9	0.066	45	2.6	0.035	24	0	0.000	0	11.0	0.131	89
SVESTACK102209	AS+SVE	10/22/2009	2,059	740	0.0	0.000	0.0	2.4	0.017	7	4.6	0.063	24	2.5	0.034	13	0	0.000	0	9.0	0.108	41
SVE STACK 112409	AS+SVE	11/24/2009	2,825	750	0.2	0.003	2.0	2.2	0.016	12	7.2	0.100	76	3.9	0.054	41	0	0.000	0	10.0	0.122	93
Total Mass Removed:							**6.3**			**147**			**192**			**99**			**0**			**356**

Sample ID	Operational System Component	Sample Date	Cumulative Run Time	Flow Rate	Toluene			m&p-Xylenes			o-Xylene			Methylene Chloride			Total VOCs		
			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-061909-A	SVE - Startup	6/23/2009	15	750	140	1.483	NC	25	0.305	NC	6.2	0.076	NC	84	0.819	NC	822	219	NC
Stack-070609-A	SVE - Startup	7/6/2009	214	750	120	1.271	274	31	0.378	68	8.4	0.102	18	40	0.390	120	517	148	1,523
Stack-081409	SVE	8/14/2009	816	750	100	1.059	701	25	0.305	206	7.2	0.088	57	36	0.351	223	414	124	3,409
Stack-082109	AS+SVE	8/21/2009	993	725	190	1.945	345	53	0.625	111	16.0	0.189	33	65	0.613	109	748	220	1,627
Stack-092509	AS+SVE	9/25/2009	1,675	730	140	1.443	984	40	0.475	324	12.0	0.142	97	30	0.285	194	526	164	4,660
SVESTACK102209	AS+SVE	10/22/2009	2,059	740	100	1.045	400	35	0.421	161	12.0	0.144	55	19	0.183	70	396	128	2,045
SVE STACK 112409	AS+SVE	11/24/2009	2,825	750	78	0.826	633	41	0.500	383	16.0	0.195	150	18	0.175	135	400	136	4,338
Total Mass Removed:							**3,339**			**1,253**			**410**			**851**			**17,603**

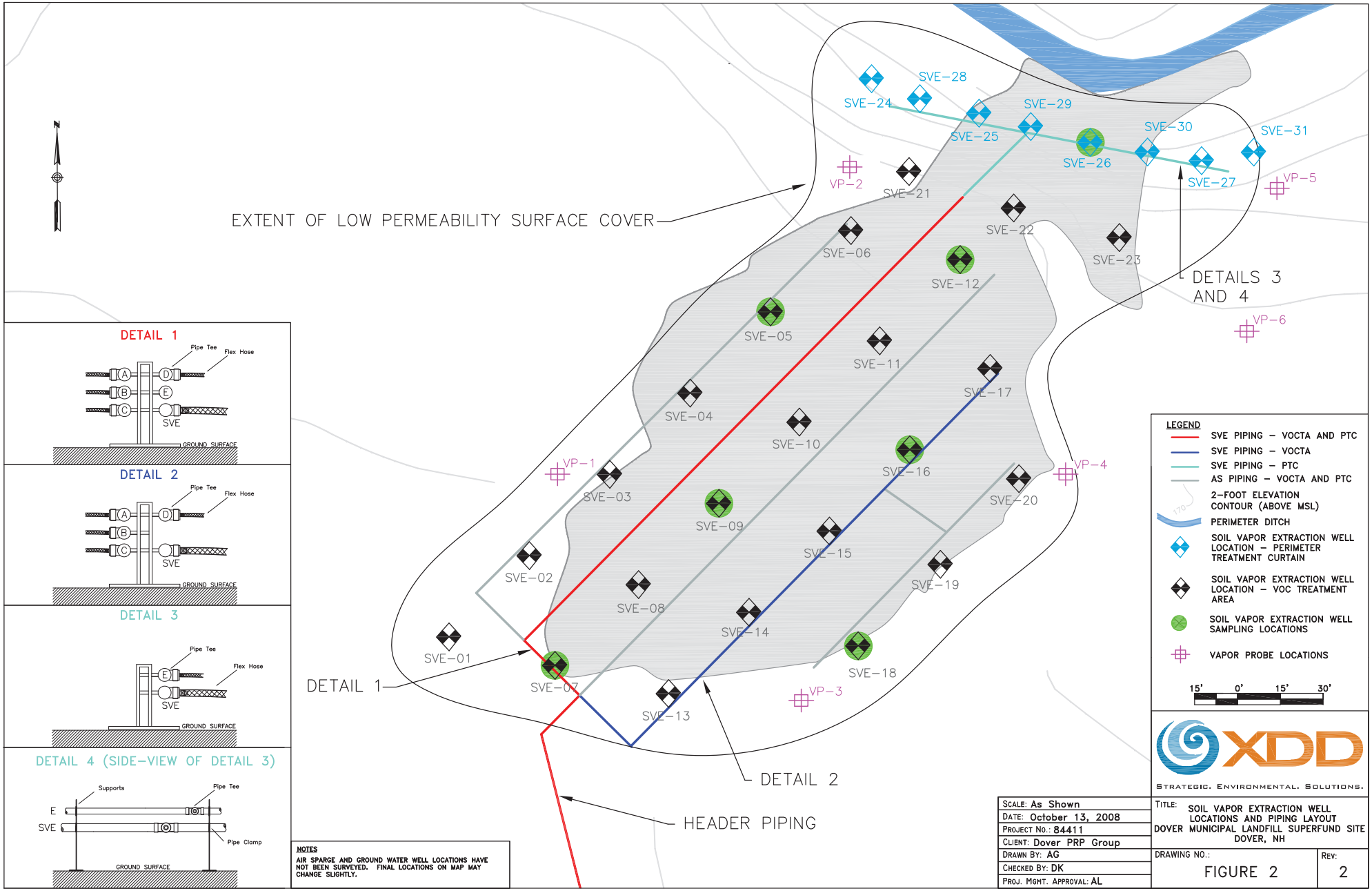
Notes:
scfm = standard cubic feet per minute
ppmv = parts per million by volume
hr = hour
NC = not calculated
lb = pound
SVE = system operating in soil vapor extraction mode only
AS = system operating in air sparging and soil vapor extraction mode
VOCs = volatile organic compounds

FIGURES



NOTES

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


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
DETAIL 1
Pipe Tee
Flex Hose
SVE
GROUND SURFACE
DETAIL 2
Pipe Tee
Flex Hose
SVE
GROUND SURFACE
DETAIL 3
Pipe Tee
Flex Hose
SVE
GROUND SURFACE
DETAIL 4 (SIDE-VIEW OF DETAIL 3)
Supports
Pipe Tee
E
SVE
Pipe Clamp
GROUND SURFACE
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
DATE: October 13, 2008
PROJECT NO.: 84411
CLIENT: Dover PRP Group
DRAWN BY: AG
CHECKED BY: DK
PROJ. MGMT. APPROVAL: AL
TITLE: SOIL VAPOR EXTRACTION WELL LOCATIONS AND PIPING LAYOUT
DOVER MUNICIPAL LANDFILL SUPERFUND SITE
DOVER, NH
DRAWING NO.: FIGURE 2
REV: 2

ATTACHMENT A

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-001
Sample ID: Carbon Inf.
Matrix: Water
Sampled: 10/22/09 12:08

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
chloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
vinyl chloride	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
bromomethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
chloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
trichlorofluoromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
diethyl ether	< 25	25	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
acetone	**370**	250	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1-dichloroethene	< 5	5	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
methylene chloride	**1100**	25	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
carbon disulfide	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
trans-1,2-dichloroethene	**12**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1-dichloroethane	**120**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
t-butanol (TBA)	< 150	150	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
2-butanone (MEK)	**1100**	50	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
2,2-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
cis-1,2-dichloroethene	**2800**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
chloroform	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
bromochloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
tetrahydrofuran (THF)	**210**	50	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1,1-trichloroethane	**110**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
carbon tetrachloride	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2-dichloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
benzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
trichloroethene	**180**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,4-dioxane	**540**	250	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
dibromomethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
4-methyl-2-pentanone (MIBK)	**780**	50	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
toluene	**2400**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
2-hexanone	< 50	50	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,3-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
tetrachloroethene	**1600**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
dibromochloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-001
Sample ID: Carbon Inf.
Matrix: Water
Sampled: 10/22/09 12:08

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
chlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
ethylbenzene	**160**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
m&p-xylenes	**680**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
o-xylene	**450**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
styrene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
bromoform	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
isopropylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
n-propylbenzene	**11**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
bromobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,3,5-trimethylbenzene	**74**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
2-chlorotoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
4-chlorotoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
tert-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2,4-trimethylbenzene	**150**	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
sec-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
4-isopropyltoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
n-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,3,5-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
naphthalene	< 25	25	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	100	78-114	%	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
toluene-D8 SUR	104	88-110	%	5	LMM		0902974	10/30/09	19:14	SW5030B8260B
4-bromofluorobenzene SUR	95	86-115	%	5	LMM		0902974	10/30/09	19:14	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-002
Sample ID: Carbon Eff.
Matrix: Water
Sampled: 10/22/09 12:04

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
chloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
vinyl chloride	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
bromomethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
chloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
trichlorofluoromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
diethyl ether	< 5	5	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
acetone	< 50	50	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1-dichloroethene	< 1	1	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
methylene chloride	< 5	5	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
carbon disulfide	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1-dichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
t-butanol (TBA)	< 30	30	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
2-butanone (MEK)	< 10	10	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
2,2-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
chloroform	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
bromochloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
carbon tetrachloride	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2-dichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
benzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
trichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,4-dioxane	< 50	50	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
dibromomethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
toluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
2-hexanone	< 10	10	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,3-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
tetrachloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
dibromochloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-002
Sample ID: Carbon Eff.
Matrix: Water
Sampled: 10/22/09 12:04

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
chlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
ethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
m&p-xylenes	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
o-xylene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
styrene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
bromoform	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
isopropylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
n-propylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
bromobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
2-chlorotoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
4-chlorotoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
tert-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
sec-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
4-isopropyltoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
n-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
naphthalene	< 5	5	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	102	78-114	%	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
toluene-D8 SUR	103	88-110	%	1	LMM		0902974	10/30/09	13:35	SW5030B8260B
4-bromofluorobenzene SUR	92	86-115	%	1	LMM		0902974	10/30/09	13:35	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-003
Sample ID: DUP-01
Matrix: Water
Sampled: 10/22/09 12:12

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
chloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
vinyl chloride	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
bromomethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
chloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
trichlorofluoromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
diethyl ether	< 25	25	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
acetone	**400**	250	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1-dichloroethene	< 5	5	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
methylene chloride	**1100**	25	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
carbon disulfide	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
trans-1,2-dichloroethene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1-dichloroethane	**120**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
t-butanol (TBA)	< 150	150	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
2-butanone (MEK)	**1100**	50	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
2,2-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
cis-1,2-dichloroethene	**2900**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
chloroform	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
bromochloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
tetrahydrofuran (THF)	**220**	50	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1,1-trichloroethane	**110**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
carbon tetrachloride	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2-dichloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
benzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
trichloroethene	**190**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,4-dioxane	**560**	250	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
dibromomethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
4-methyl-2-pentanone (MIBK)	**810**	50	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
toluene	**2400**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
2-hexanone	< 50	50	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,3-dichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
tetrachloroethene	**1700**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
dibromochloromethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-003
Sample ID: DUP-01
Matrix: Water
Sampled: 10/22/09 12:12

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
chlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
ethylbenzene	**170**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
m&p-xylenes	**730**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
o-xylene	**490**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
styrene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
bromoform	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
isopropylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
n-propylbenzene	**12**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
bromobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,3,5-trimethylbenzene	**82**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
2-chlorotoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
4-chlorotoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
tert-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2,4-trimethylbenzene	**150**	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
sec-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
4-isopropyltoluene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
n-butylbenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,3,5-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
naphthalene	< 25	25	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	99	78-114	%	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
toluene-D8 SUR	103	88-110	%	5	LMM		0902974	10/30/09	19:48	SW5030B8260B
4-bromofluorobenzene SUR	99	86-115	%	5	LMM		0902974	10/30/09	19:48	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 10/22/09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
chloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
vinyl chloride	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
bromomethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
chloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
trichlorofluoromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
diethyl ether	< 5	5	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
acetone	< 50	50	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1-dichloroethene	< 1	1	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
methylene chloride	< 5	5	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
carbon disulfide	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1-dichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
t-butanol (TBA)	< 30	30	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
2-butanone (MEK)	< 10	10	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
2,2-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
chloroform	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
bromochloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
carbon tetrachloride	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2-dichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
benzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
trichloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,4-dioxane	< 50	50	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
dibromomethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
toluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
2-hexanone	< 10	10	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,3-dichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
tetrachloroethene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
dibromochloromethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 17900
Lab Number: 17900-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 10/22/09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
chlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
ethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
m&p-xylenes	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
o-xylene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
styrene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
bromoform	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
isopropylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
n-propylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
bromobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
2-chlorotoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
4-chlorotoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
tert-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
sec-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
4-isopropyltoluene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
n-butylbenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
naphthalene	< 5	5	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	102	78-114	%	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
toluene-D8 SUR	102	88-110	%	1	LMM		0902974	10/30/09	11:55	SW5030B8260B
4-bromofluorobenzene SUR	90	86-115	%	1	LMM		0902974	10/30/09	11:55	SW5030B8260B

RL Resource Laboratories, LLC
124 Heritage Avenue • Portsmouth, NH 03801
Phone: 603-436-2001 • Fax: 603-430-2100

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

17900

Company Name: XDD, LLC

Company Address: 22 Marin Way Unit #3 Stratham, NH 03885

Report To: Dennis Keane

Phone #: 603-778-1100

Invoice To: Mary Scuderi

Project Name: Dover Landfill

Project #: 84411

Project Location: (NH) MA ME VT Other

Protocol: RCRA MCP SDWA NHDES NPDES (OTHER)

Reporting Limits: QAPP EPA DW GW-1 Other Standard S-1

Quote #

PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Preservation Method: OTHER (Specify)	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER*	☒ VOC 8260 ☐ VOC 8260 MADEP	☐ VOC 8260 NHDES ☐ MtBE, only	☐ VOC 624 ☐ VOC BTEX	☐ VPH MADEP ☐ MEGRO ☐ GRO 8015	☐ VOC 524.2 ☐ VOC 524.2 NH List	☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB 504.1	☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB	☐ O&G 1664 ☐ Mineral O&G SM5520F	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals	☐ Total Metals-list	☐ Dissolved Metals-list	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON	☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ TOC ☐ Grain Size ☐ TCLP Herbicides				Grab (G) or Composite (C)
17900-01	Carbon Inf.	2	X			X						10/22/09	1208	JH	X																								
-02	Carbon Eff.	2	X			X						10/22/09	1207	JH	X																								
-03	DUP-01	2	X			X						10/22/09	1212	JH	X																								
-04	Trip Blank	1	X			X						10/10/09	—	—	X																								

TAT REQUESTED
Priority (24 hr)** ☐
Expedited (48 hr)** ☐
Standard (10 Business Days) ☒
**Date Needed _____

* See www.reslabs.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☐ NO HARD COPY REQUIRED ☐ FAX (FAX#) _____ ☒ EXCEL SPREADSHEET
☒ PDF (e-mail address) Keane@xdd-llc.com ☐ OTHER (specify) _____

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 4 °C

CUSTODY RECORD

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
[signature]	10/23/09	13:10	—		
Relinquished by: —	Date	Time	Received by: —	Date	Time
Relinquished by: —	Date	Time	Received by Laboratory: [signature] Way Bill#:	10-23-09	13:10

Air Toxics LTD.
Laboratory Services Since 1989

11/4/2009
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 0910543

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 10/23/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-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: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0910543

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 Stratham, NH 03885
PHONE:	603-778-1100	**P.O. #**	1530
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	10/23/2009	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	11/04/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVE STACK 102209	Modified TO-15 (5&20 ppbv	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15 (5&20 ppbv	NA	NA
03A	CCV	Modified TO-15 (5&20 ppbv	NA	NA
04A	LCS	Modified TO-15 (5&20 ppbv	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 11/04/09

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
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: 06/30/10
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
Modified TO-15 Soil Gas
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 0910543

One 1 Liter Tedlar Bag sample was received on October 23, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

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

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

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

Client Sample ID: SVE STACK 102209

Lab ID#: 0910543-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1000	2400	2600	6100
Methylene Chloride	1000	19000	3500	66000
1,1-Dichloroethane	1000	4400	4000	18000
cis-1,2-Dichloroethene	1000	70000	4000	280000
1,1,1-Trichloroethane	1000	8200	5400	45000
2,2,4-Trimethylpentane	1000	2700	4700	12000
Heptane	1000	1600	4100	6400
Trichloroethene	1000	8400	5400	45000
Toluene	1000	100000	3800	390000
Tetrachloroethene	1000	120000	6800	800000
Ethyl Benzene	1000	9000	4300	39000
m,p-Xylene	1000	35000	4300	150000
o-Xylene	1000	12000	4300	51000
4-Ethyltoluene	1000	5800	4900	29000
1,3,5-Trimethylbenzene	1000	2500	4900	12000
1,2,4-Trimethylbenzene	1000	4600	4900	23000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE STACK 102209

Lab ID#: 0910543-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102408**	**Date of Collection:**	**10/22/09 11:40:00 A**
Dil. Factor:	**200**	**Date of Analysis:**	**10/24/09 10:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1000	Not Detected	4900	Not Detected
Freon 114	1000	Not Detected	7000	Not Detected
Chloromethane	4000	Not Detected	8300	Not Detected
Vinyl Chloride	1000	2400	2600	6100
1,3-Butadiene	1000	Not Detected	2200	Not Detected
Bromomethane	1000	Not Detected	3900	Not Detected
Chloroethane	1000	Not Detected	2600	Not Detected
Freon 11	1000	Not Detected	5600	Not Detected
Ethanol	4000	Not Detected	7500	Not Detected
Freon 113	1000	Not Detected	7700	Not Detected
1,1-Dichloroethene	1000	Not Detected	4000	Not Detected
Acetone	4000	Not Detected	9500	Not Detected
2-Propanol	4000	Not Detected	9800	Not Detected
Carbon Disulfide	1000	Not Detected	3100	Not Detected
3-Chloropropene	4000	Not Detected	12000	Not Detected
Methylene Chloride	1000	19000	3500	66000
Methyl tert-butyl ether	1000	Not Detected	3600	Not Detected
trans-1,2-Dichloroethene	1000	Not Detected	4000	Not Detected
Hexane	1000	Not Detected	3500	Not Detected
1,1-Dichloroethane	1000	4400	4000	18000
2-Butanone (Methyl Ethyl Ketone)	1000	Not Detected	2900	Not Detected
cis-1,2-Dichloroethene	1000	70000	4000	280000
Tetrahydrofuran	1000	Not Detected	2900	Not Detected
Chloroform	1000	Not Detected	4900	Not Detected
1,1,1-Trichloroethane	1000	8200	5400	45000
Cyclohexane	1000	Not Detected	3400	Not Detected
Carbon Tetrachloride	1000	Not Detected	6300	Not Detected
2,2,4-Trimethylpentane	1000	2700	4700	12000
Benzene	1000	Not Detected	3200	Not Detected
1,2-Dichloroethane	1000	Not Detected	4000	Not Detected
Heptane	1000	1600	4100	6400
Trichloroethene	1000	8400	5400	45000
1,2-Dichloropropane	1000	Not Detected	4600	Not Detected
1,4-Dioxane	4000	Not Detected	14000	Not Detected
Bromodichloromethane	1000	Not Detected	6700	Not Detected
cis-1,3-Dichloropropene	1000	Not Detected	4500	Not Detected
4-Methyl-2-pentanone	1000	Not Detected	4100	Not Detected
Toluene	1000	100000	3800	390000
trans-1,3-Dichloropropene	1000	Not Detected	4500	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE STACK 102209

Lab ID#: 0910543-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102408**	**Date of Collection:**	**10/22/09 11:40:00 A**
Dil. Factor:	**200**	**Date of Analysis:**	**10/24/09 10:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	1000	Not Detected	5400	Not Detected
Tetrachloroethene	1000	120000	6800	800000
2-Hexanone	4000	Not Detected	16000	Not Detected
Dibromochloromethane	1000	Not Detected	8500	Not Detected
1,2-Dibromoethane (EDB)	1000	Not Detected	7700	Not Detected
Chlorobenzene	1000	Not Detected	4600	Not Detected
Ethyl Benzene	1000	9000	4300	39000
m,p-Xylene	1000	35000	4300	150000
o-Xylene	1000	12000	4300	51000
Styrene	1000	Not Detected	4200	Not Detected
Bromoform	1000	Not Detected	10000	Not Detected
Cumene	1000	Not Detected	4900	Not Detected
1,1,2,2-Tetrachloroethane	1000	Not Detected	6900	Not Detected
Propylbenzene	1000	Not Detected	4900	Not Detected
4-Ethyltoluene	1000	5800	4900	29000
1,3,5-Trimethylbenzene	1000	2500	4900	12000
1,2,4-Trimethylbenzene	1000	4600	4900	23000
1,3-Dichlorobenzene	1000	Not Detected	6000	Not Detected
1,4-Dichlorobenzene	1000	Not Detected	6000	Not Detected
alpha-Chlorotoluene	1000	Not Detected	5200	Not Detected
1,2-Dichlorobenzene	1000	Not Detected	6000	Not Detected
1,2,4-Trichlorobenzene	4000	Not Detected	30000	Not Detected
Hexachlorobutadiene	4000	Not Detected	43000	Not Detected

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	83	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0910543-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102405a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 09:17 PM**	

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	5.0	Not Detected	13	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)	5.0	Not Detected	15	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

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0910543-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102405a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 09:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
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	84	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0910543-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 07:46 PM**	

Compound	%Recovery
Freon 12	91
Freon 114	99
Chloromethane	94
Vinyl Chloride	98
1,3-Butadiene	96
Bromomethane	94
Chloroethane	115
Freon 11	84
Ethanol	97
Freon 113	97
1,1-Dichloroethene	90
Acetone	96
2-Propanol	95
Carbon Disulfide	101
3-Chloropropene	109
Methylene Chloride	92
Methyl tert-butyl ether	130
trans-1,2-Dichloroethene	100
Hexane	97
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	100
cis-1,2-Dichloroethene	93
Tetrahydrofuran	94
Chloroform	89
1,1,1-Trichloroethane	85
Cyclohexane	98
Carbon Tetrachloride	86
2,2,4-Trimethylpentane	96
Benzene	101
1,2-Dichloroethane	86
Heptane	100
Trichloroethene	94
1,2-Dichloropropane	99
1,4-Dioxane	100
Bromodichloromethane	91
cis-1,3-Dichloropropene	97
4-Methyl-2-pentanone	96
Toluene	97
trans-1,3-Dichloropropene	95

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0910543-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 07:46 PM**	

Compound	**%Recovery**
1,1,2-Trichloroethane	99
Tetrachloroethene	96
2-Hexanone	98
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	99
Chlorobenzene	100
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	102
Styrene	105
Bromoform	97
Cumene	99
1,1,2,2-Tetrachloroethane	99
Propylbenzene	98
4-Ethyltoluene	94
1,3,5-Trimethylbenzene	91
1,2,4-Trimethylbenzene	95
1,3-Dichlorobenzene	92
1,4-Dichlorobenzene	98
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	92
1,2,4-Trichlorobenzene	81
Hexachlorobutadiene	72

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	82	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0910543-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 08:44 PM**	

Compound	%Recovery
Freon 12	98
Freon 114	105
Chloromethane	100
Vinyl Chloride	104
1,3-Butadiene	100
Bromomethane	102
Chloroethane	119
Freon 11	88
Ethanol	76
Freon 113	115
1,1-Dichloroethene	109
Acetone	105
2-Propanol	109
Carbon Disulfide	106
3-Chloropropene	114
Methylene Chloride	109
Methyl tert-butyl ether	125
trans-1,2-Dichloroethene	108
Hexane	106
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	109
cis-1,2-Dichloroethene	102
Tetrahydrofuran	101
Chloroform	99
1,1,1-Trichloroethane	92
Cyclohexane	106
Carbon Tetrachloride	91
2,2,4-Trimethylpentane	106
Benzene	110
1,2-Dichloroethane	92
Heptane	106
Trichloroethene	99
1,2-Dichloropropane	103
1,4-Dioxane	102
Bromodichloromethane	94
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	98
Toluene	107
trans-1,3-Dichloropropene	95

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0910543-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b102404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/24/09 08:44 PM**	

Compound	**%Recovery**
1,1,2-Trichloroethane	106
Tetrachloroethene	103
2-Hexanone	99
Dibromochloromethane	98
1,2-Dibromoethane (EDB)	98
Chlorobenzene	103
Ethyl Benzene	103
m,p-Xylene	104
o-Xylene	102
Styrene	97
Bromoform	93
Cumene	100
1,1,2,2-Tetrachloroethane	98
Propylbenzene	97
4-Ethyltoluene	93
1,3,5-Trimethylbenzene	90
1,2,4-Trimethylbenzene	91
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	91
alpha-Chlorotoluene	79
1,2-Dichlorobenzene	86
1,2,4-Trichlorobenzene	62 Q
Hexachlorobutadiene	60 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

11/4/2009
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 0910570

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 10/24/2009 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: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0910570

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 Stratham, NH 03885
PHONE:	603-778-1100	**P.O. #**	1530
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	10/24/2009	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	11/04/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Tolend Road 10/22/09	Modified TO-15	10.5 "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

CERTIFIED BY: Linda L. Freeman DATE: 11/04/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
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: 06/30/10
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
Modified TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 0910570

One 6 Liter Summa Canister sample was received on October 24, 2009. 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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

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

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

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

Client Sample ID: Tolend Road 10/22/09

Lab ID#: 0910570-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	4.1	15	7.8	28
Acetone	4.1	8.9	9.8	21
2-Propanol	4.1	7.4	10	18
2-Butanone (Methyl Ethyl Ketone)	1.0	3.0	3.0	8.7
Tetrahydrofuran	1.0	1.1	3.0	3.1
Toluene	1.0	1.2	3.9	4.5

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend Road 10/22/09

Lab ID#: 0910570-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110117**	**Date of Collection:**	**10/22/09 1:11:00 PM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**11/1/09 07:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.1	Not Detected
Freon 114	1.0	Not Detected	7.2	Not Detected
Chloromethane	4.1	Not Detected	8.5	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.3	Not Detected
Bromomethane	1.0	Not Detected	4.0	Not Detected
Chloroethane	1.0	Not Detected	2.7	Not Detected
Freon 11	1.0	Not Detected	5.8	Not Detected
Ethanol	4.1	15	7.8	28
Freon 113	1.0	Not Detected	7.9	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	4.1	8.9	9.8	21
2-Propanol	4.1	7.4	10	18
Carbon Disulfide	1.0	Not Detected	3.2	Not Detected
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	1.0	Not Detected	3.6	Not Detected
Methyl tert-butyl ether	1.0	Not Detected	3.7	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.0	3.0	3.0	8.7
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrahydrofuran	1.0	1.1	3.0	3.1
Chloroform	1.0	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.5	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.3	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.2	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.8	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.9	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	1.2	3.9	4.5
trans-1,3-Dichloropropene	1.0	Not Detected	4.7	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend Road 10/22/09

Lab ID#: 0910570-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110117**	**Date of Collection:**	**10/22/09 1:11:00 PM**
Dil. Factor:	**2.06**	**Date of Analysis:**	**11/1/09 07:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
2-Hexanone	4.1	Not Detected	17	Not Detected
Dibromochloromethane	1.0	Not Detected	8.8	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.9	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Bromoform	1.0	Not Detected	11	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.2	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0910570-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 10:14 AM**	

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

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0910570-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 10:14 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
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	103	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0910570-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110102**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 08:08 AM**

Compound	%Recovery
Freon 12	98
Freon 114	100
Chloromethane	104
Vinyl Chloride	103
1,3-Butadiene	98
Bromomethane	84
Chloroethane	97
Freon 11	98
Ethanol	104
Freon 113	102
1,1-Dichloroethene	105
Acetone	104
2-Propanol	103
Carbon Disulfide	105
3-Chloropropene	102
Methylene Chloride	103
Methyl tert-butyl ether	99
trans-1,2-Dichloroethene	101
Hexane	106
1,1-Dichloroethane	103
2-Butanone (Methyl Ethyl Ketone)	105
cis-1,2-Dichloroethene	105
Tetrahydrofuran	104
Chloroform	102
1,1,1-Trichloroethane	100
Cyclohexane	103
Carbon Tetrachloride	101
2,2,4-Trimethylpentane	111
Benzene	96
1,2-Dichloroethane	95
Heptane	105
Trichloroethene	97
1,2-Dichloropropane	96
1,4-Dioxane	95
Bromodichloromethane	97
cis-1,3-Dichloropropene	108
4-Methyl-2-pentanone	104
Toluene	98
trans-1,3-Dichloropropene	105

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0910570-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 08:08 AM**	

Compound	**%Recovery**
1,1,2-Trichloroethane	94
Tetrachloroethene	97
2-Hexanone	100
Dibromochloromethane	96
1,2-Dibromoethane (EDB)	97
Chlorobenzene	98
Ethyl Benzene	100
m,p-Xylene	97
o-Xylene	102
Styrene	84
Bromoform	103
Cumene	105
1,1,2,2-Tetrachloroethane	101
Propylbenzene	100
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	106
1,2,4-Trimethylbenzene	96
1,3-Dichlorobenzene	95
1,4-Dichlorobenzene	88
alpha-Chlorotoluene	108
1,2-Dichlorobenzene	102
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	95

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0910570-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 08:48 AM**	

Compound	%Recovery
Freon 12	82
Freon 114	85
Chloromethane	87
Vinyl Chloride	86
1,3-Butadiene	81
Bromomethane	76
Chloroethane	82
Freon 11	83
Ethanol	62
Freon 113	98
1,1-Dichloroethene	98
Acetone	94
2-Propanol	94
Carbon Disulfide	89
3-Chloropropene	88
Methylene Chloride	96
Methyl tert-butyl ether	86
trans-1,2-Dichloroethene	89
Hexane	92
1,1-Dichloroethane	92
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	90
Tetrahydrofuran	91
Chloroform	91
1,1,1-Trichloroethane	87
Cyclohexane	88
Carbon Tetrachloride	88
2,2,4-Trimethylpentane	94
Benzene	86
1,2-Dichloroethane	87
Heptane	93
Trichloroethene	86
1,2-Dichloropropane	85
1,4-Dioxane	87
Bromodichloromethane	86
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	94
Toluene	92
trans-1,3-Dichloropropene	92

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0910570-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**s110103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/1/09 08:48 AM**	

Compound	**%Recovery**
1,1,2-Trichloroethane	83
Tetrachloroethene	87
2-Hexanone	90
Dibromochloromethane	85
1,2-Dibromoethane (EDB)	84
Chlorobenzene	88
Ethyl Benzene	88
m,p-Xylene	85
o-Xylene	91
Styrene	76
Bromoform	91
Cumene	95
1,1,2,2-Tetrachloroethane	89
Propylbenzene	91
4-Ethyltoluene	89
1,3,5-Trimethylbenzene	92
1,2,4-Trimethylbenzene	85
1,3-Dichlorobenzene	87
1,4-Dichlorobenzene	82
alpha-Chlorotoluene	108
1,2-Dichlorobenzene	92
1,2,4-Trichlorobenzene	104
Hexachlorobutadiene	98

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

12/8/2009
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 0911489

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 11/20/2009 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: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0911489

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 Stratham, NH 03885
PHONE:	603-778-1100	**P.O. #**	1565
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	11/20/2009	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	12/08/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Tolend RD	Modified TO-15	1.5 "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

CERTIFIED BY: Linda L. Freeman DATE: 12/08/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
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: 06/30/10
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
Modified TO-15
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 0911489

One 6 Liter Summa Canister sample was received on November 20, 2009. 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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

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. 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

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

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

Client Sample ID: Tolend RD

Lab ID#: 0911489-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	2.8	3.3	5.3	6.3
Acetone	2.8	2.8	6.7	6.7

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend RD

Lab ID#: 0911489-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113017**	**Date of Collection:**	**11/12/09 10:45:00 AM**
Dil. Factor:	**1.41**	**Date of Analysis:**	**11/30/09 05:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.70	Not Detected	3.5	Not Detected
Freon 114	0.70	Not Detected	4.9	Not Detected
Chloromethane	2.8	Not Detected	5.8	Not Detected
Vinyl Chloride	0.70	Not Detected	1.8	Not Detected
1,3-Butadiene	0.70	Not Detected	1.6	Not Detected
Bromomethane	0.70	Not Detected	2.7	Not Detected
Chloroethane	0.70	Not Detected	1.9	Not Detected
Freon 11	0.70	Not Detected	4.0	Not Detected
Ethanol	2.8	3.3	5.3	6.3
Freon 113	0.70	Not Detected	5.4	Not Detected
1,1-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Acetone	2.8	2.8	6.7	6.7
2-Propanol	2.8	Not Detected	6.9	Not Detected
Carbon Disulfide	0.70	Not Detected	2.2	Not Detected
3-Chloropropene	2.8	Not Detected	8.8	Not Detected
Methylene Chloride	0.70	Not Detected	2.4	Not Detected
Methyl tert-butyl ether	0.70	Not Detected	2.5	Not Detected
trans-1,2-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Hexane	0.70	Not Detected	2.5	Not Detected
1,1-Dichloroethane	0.70	Not Detected	2.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.70	Not Detected	2.1	Not Detected
cis-1,2-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Tetrahydrofuran	0.70	Not Detected	2.1	Not Detected
Chloroform	0.70	Not Detected	3.4	Not Detected
1,1,1-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Cyclohexane	0.70	Not Detected	2.4	Not Detected
Carbon Tetrachloride	0.70	Not Detected	4.4	Not Detected
2,2,4-Trimethylpentane	0.70	Not Detected	3.3	Not Detected
Benzene	0.70	Not Detected	2.2	Not Detected
1,2-Dichloroethane	0.70	Not Detected	2.8	Not Detected
Heptane	0.70	Not Detected	2.9	Not Detected
Trichloroethene	0.70	Not Detected	3.8	Not Detected
1,2-Dichloropropane	0.70	Not Detected	3.2	Not Detected
1,4-Dioxane	2.8	Not Detected	10	Not Detected
Bromodichloromethane	0.70	Not Detected	4.7	Not Detected
cis-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
4-Methyl-2-pentanone	0.70	Not Detected	2.9	Not Detected
Toluene	0.70	Not Detected	2.6	Not Detected
trans-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Tolend RD

Lab ID#: 0911489-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113017**	**Date of Collection:**	**11/12/09 10:45:00 AM**
Dil. Factor:	**1.41**	**Date of Analysis:**	**11/30/09 05:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Tetrachloroethene	0.70	Not Detected	4.8	Not Detected
2-Hexanone	2.8	Not Detected	12	Not Detected
Dibromochloromethane	0.70	Not Detected	6.0	Not Detected
1,2-Dibromoethane (EDB)	0.70	Not Detected	5.4	Not Detected
Chlorobenzene	0.70	Not Detected	3.2	Not Detected
Ethyl Benzene	0.70	Not Detected	3.1	Not Detected
m,p-Xylene	0.70	Not Detected	3.1	Not Detected
o-Xylene	0.70	Not Detected	3.1	Not Detected
Styrene	0.70	Not Detected	3.0	Not Detected
Bromoform	0.70	Not Detected	7.3	Not Detected
Cumene	0.70	Not Detected	3.5	Not Detected
1,1,2,2-Tetrachloroethane	0.70	Not Detected	4.8	Not Detected
Propylbenzene	0.70	Not Detected	3.5	Not Detected
4-Ethyltoluene	0.70	Not Detected	3.5	Not Detected
1,3,5-Trimethylbenzene	0.70	Not Detected	3.5	Not Detected
1,2,4-Trimethylbenzene	0.70	Not Detected	3.5	Not Detected
1,3-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
1,4-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
alpha-Chlorotoluene	0.70	Not Detected	3.6	Not Detected
1,2-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
1,2,4-Trichlorobenzene	2.8	Not Detected	21	Not Detected
Hexachlorobutadiene	2.8	Not Detected	30	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0911489-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 08:43 AM**	

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

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0911489-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 08:43 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
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	97	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0911489-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 07:23 AM**

Compound	%Recovery
Freon 12	108
Freon 114	111
Chloromethane	108
Vinyl Chloride	99
1,3-Butadiene	106
Bromomethane	101
Chloroethane	97
Freon 11	99
Ethanol	112
Freon 113	106
1,1-Dichloroethene	112
Acetone	107
2-Propanol	111
Carbon Disulfide	114
3-Chloropropene	113
Methylene Chloride	103
Methyl tert-butyl ether	112
trans-1,2-Dichloroethene	111
Hexane	111
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	112
Tetrahydrofuran	104
Chloroform	106
1,1,1-Trichloroethane	105
Cyclohexane	112
Carbon Tetrachloride	104
2,2,4-Trimethylpentane	112
Benzene	107
1,2-Dichloroethane	100
Heptane	108
Trichloroethene	105
1,2-Dichloropropane	103
1,4-Dioxane	110
Bromodichloromethane	106
cis-1,3-Dichloropropene	111
4-Methyl-2-pentanone	112
Toluene	105
trans-1,3-Dichloropropene	116

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0911489-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 07:23 AM**

Compound	**%Recovery**
1,1,2-Trichloroethane	107
Tetrachloroethene	110
2-Hexanone	121
Dibromochloromethane	113
1,2-Dibromoethane (EDB)	111
Chlorobenzene	107
Ethyl Benzene	117
m,p-Xylene	118
o-Xylene	118
Styrene	121
Bromoform	119
Cumene	119
1,1,2,2-Tetrachloroethane	109
Propylbenzene	118
4-Ethyltoluene	117
1,3,5-Trimethylbenzene	118
1,2,4-Trimethylbenzene	122
1,3-Dichlorobenzene	110
1,4-Dichlorobenzene	110
alpha-Chlorotoluene	132 Q
1,2-Dichlorobenzene	110
1,2,4-Trichlorobenzene	113
Hexachlorobutadiene	113

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0911489-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113003**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 08:11 AM**

Compound	%Recovery
Freon 12	80
Freon 114	84
Chloromethane	79
Vinyl Chloride	72
1,3-Butadiene	78
Bromomethane	76
Chloroethane	74
Freon 11	73
Ethanol	143 Q
Freon 113	77
1,1-Dichloroethene	83
Acetone	78
2-Propanol	82
Carbon Disulfide	79
3-Chloropropene	85
Methylene Chloride	75
Methyl tert-butyl ether	83
trans-1,2-Dichloroethene	80
Hexane	82
1,1-Dichloroethane	77
2-Butanone (Methyl Ethyl Ketone)	83
cis-1,2-Dichloroethene	83
Tetrahydrofuran	76
Chloroform	77
1,1,1-Trichloroethane	76
Cyclohexane	83
Carbon Tetrachloride	75
2,2,4-Trimethylpentane	84
Benzene	79
1,2-Dichloroethane	74
Heptane	82
Trichloroethene	79
1,2-Dichloropropane	76
1,4-Dioxane	87
Bromodichloromethane	78
cis-1,3-Dichloropropene	82
4-Methyl-2-pentanone	85
Toluene	78
trans-1,3-Dichloropropene	91

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0911489-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3113003**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/30/09 08:11 AM**

Compound	**%Recovery**
1,1,2-Trichloroethane	84
Tetrachloroethene	86
2-Hexanone	99
Dibromochloromethane	88
1,2-Dibromoethane (EDB)	88
Chlorobenzene	85
Ethyl Benzene	91
m,p-Xylene	93
o-Xylene	93
Styrene	94
Bromoform	92
Cumene	95
1,1,2,2-Tetrachloroethane	85
Propylbenzene	94
4-Ethyltoluene	94
1,3,5-Trimethylbenzene	96
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	89
alpha-Chlorotoluene	101
1,2-Dichlorobenzene	88
1,2,4-Trichlorobenzene	83
Hexachlorobutadiene	87

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	98	70-130

Laboratory Report

Resource Laboratories, LLC
124 Heritage Avenue #10 Portsmouth, NH 03801

Dennis Keane
Xpert Design & Diagnostics, LLC
22 Marin Way
Unit 3
Stratham, NH 03885

PO Number: None
LabID: 18139
Date Received: 11/24/09

Project: Dover Landfill 84411

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Resource Laboratories, LLC

(for)

Susan Sylvester
Principal, General Manager

12/3/09
Date

Total number of pages 10

Resource Laboratories, LLC Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-001
Sample ID: Carbon Inf.
Matrix: Water
Sampled: 11/23/09 15:09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
chloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
vinyl chloride	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
bromomethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
chloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
trichlorofluoromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
diethyl ether	< 25	25	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
acetone	< 250	250	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1-dichloroethene	< 5	5	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
methylene chloride	**730**	25	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
carbon disulfide	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
trans-1,2-dichloroethene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1-dichloroethane	**86**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
t-butanol (TBA)	**260**	150	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
2-butanone (MEK)	**400**	50	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
2,2-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
cis-1,2-dichloroethene	**1600**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
chloroform	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
bromochloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
tetrahydrofuran (THF)	**140**	50	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1,1-trichloroethane	**98**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
carbon tetrachloride	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2-dichloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
benzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
trichloroethene	**140**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,4-dioxane	**490**	250	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
dibromomethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
4-methyl-2-pentanone (MIBK)	**470**	50	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
toluene	**1100**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
2-hexanone	**58**	50	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,3-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
tetrachloroethene	**1700**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
dibromochloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-001
Sample ID: Carbon Inf.
Matrix: Water
Sampled: 11/23/09 15:09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
chlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
ethylbenzene	**84**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
m&p-xylenes	**480**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
o-xylene	**350**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
styrene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
bromoform	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
isopropylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
n-propylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
bromobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,3,5-trimethylbenzene	**92**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
2-chlorotoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
4-chlorotoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
tert-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2,4-trimethylbenzene	**150**	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
sec-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
4-isopropyltoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
n-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,3,5-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
naphthalene	< 25	25	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	98	78-114	%	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
toluene-D8 SUR	100	88-110	%	5	LMM		0903278	12/1/09	19:59	SW5030B8260B
4-bromofluorobenzene SUR	97	86-115	%	5	LMM		0903278	12/1/09	19:59	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-002
Sample ID: Carbon Eff.
Matrix: Water
Sampled: 11/23/09 15:04

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
chloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
vinyl chloride	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
bromomethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
chloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
trichlorofluoromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
diethyl ether	< 5	5	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
acetone	< 50	50	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1-dichloroethene	< 1	1	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
methylene chloride	< 5	5	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
carbon disulfide	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1-dichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
t-butanol (TBA)	< 30	30	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
2-butanone (MEK)	< 10	10	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
2,2-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
chloroform	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
bromochloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
carbon tetrachloride	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2-dichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
benzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
trichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,4-dioxane	< 50	50	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
dibromomethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
toluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
2-hexanone	< 10	10	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,3-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
tetrachloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
dibromochloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-002
Sample ID: Carbon Eff.
Matrix: Water
Sampled: 11/23/09 15:04

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
chlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
ethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
m&p-xylenes	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
o-xylene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
styrene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
bromoform	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
isopropylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
n-propylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
bromobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
2-chlorotoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
4-chlorotoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
tert-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
sec-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
4-isopropyltoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
n-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
naphthalene	< 5	5	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	110	78-114	%	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
toluene-D8 SUR	108	88-110	%	1	LMM		0903253	11/25/09	19:45	SW5030B8260B
4-bromofluorobenzene SUR	88	86-115	%	1	LMM		0903253	11/25/09	19:45	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-003
Sample ID: DUP-01
Matrix: Water
Sampled: 11/23/09 15:14

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
chloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
vinyl chloride	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
bromomethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
chloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
trichlorofluoromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
diethyl ether	< 25	25	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
acetone	< 250	250	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1-dichloroethene	< 5	5	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
methylene chloride	**460**	25	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
carbon disulfide	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
methyl t-butyl ether (MTBE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
trans-1,2-dichloroethene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
isopropyl ether (DIPE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1-dichloroethane	**50**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
t-butanol (TBA)	**250**	150	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
2-butanone (MEK)	**370**	50	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
2,2-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
cis-1,2-dichloroethene	**960**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
chloroform	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
bromochloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
tetrahydrofuran (THF)	**130**	50	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1,1-trichloroethane	**54**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
t-amyl-methyl ether (TAME)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
carbon tetrachloride	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2-dichloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
benzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
trichloroethene	**84**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
bromodichloromethane	< 3.0	3.0	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,4-dioxane	**550**	250	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
dibromomethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
4-methyl-2-pentanone (MIBK)	**430**	50	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
cis-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
toluene	**680**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
trans-1,3-dichloropropene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
2-hexanone	**51**	50	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1,2-trichloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,3-dichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
tetrachloroethene	**990**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
dibromochloromethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2-dibromoethane (EDB)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-003
Sample ID: DUP-01
Matrix: Water
Sampled: 11/23/09 15:14

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
chlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1,1,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
ethylbenzene	**48**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
m&p-xylenes	**310**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
o-xylene	**240**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
styrene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
bromoform	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
isopropylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,1,2,2-tetrachloroethane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2,3-trichloropropane	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
n-propylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
bromobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,3,5-trimethylbenzene	**72**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
2-chlorotoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
4-chlorotoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
tert-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2,4-trimethylbenzene	**99**	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
sec-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,3-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
4-isopropyltoluene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,4-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2-dichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
n-butylbenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2,4-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,3,5-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
hexachlorobutadiene	< 2.5	2.5	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
naphthalene	< 25	25	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
1,2,3-trichlorobenzene	< 10	10	ug/L	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	98	78-114	%	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
toluene-D8 SUR	99	88-110	%	5	LMM		0903278	12/1/09	19:24	SW5030B8260B
4-bromofluorobenzene SUR	100	86-115	%	5	LMM		0903278	12/1/09	19:24	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 11/23/09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
chloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
vinyl chloride	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
bromomethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
chloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
trichlorofluoromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
diethyl ether	< 5	5	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
acetone	< 50	50	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1-dichloroethene	< 1	1	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
methylene chloride	< 5	5	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
carbon disulfide	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1-dichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
t-butanol (TBA)	< 30	30	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
2-butanone (MEK)	< 10	10	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
2,2-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
chloroform	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
bromochloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
carbon tetrachloride	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2-dichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
benzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
trichloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,4-dioxane	< 50	50	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
dibromomethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
toluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
2-hexanone	< 10	10	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,3-dichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
tetrachloroethene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
dibromochloromethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B

Project ID: Dover Landfill 84411
Lab ID: 18139
Lab Number: 18139-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 11/23/09

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
chlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
ethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
m&p-xylenes	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
o-xylene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
styrene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
bromoform	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
isopropylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
n-propylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
bromobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
2-chlorotoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
4-chlorotoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
tert-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
sec-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
4-isopropyltoluene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
n-butylbenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
naphthalene	< 5	5	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	110	78-114	%	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
toluene-D8 SUR	105	88-110	%	1	LMM		0903253	11/25/09	15:38	SW5030B8260B
4-bromofluorobenzene SUR	90	86-115	%	1	LMM		0903253	11/25/09	15:38	SW5030B8260B

RL Resource Laboratories, LLC
124 Heritage Avenue • Portsmouth, NH 03801
Phone: 603-436-2001 • Fax: 603-430-2100

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

18139

Company Name: XDD, LLC

Company Address: 22 Marin Way #3 Stratham, NH 03885

Report To: Dennis Keane

Phone #: 603-778-1100

Invoice To: Mary Scudieri

Project Name: Dover Landfill

Project #: 84411

Project Location: (NH) MA ME VT Other

Protocol: (RCRA) MCP SDWA NHDES NPDES OTHER

Reporting Limits: QAPP (EPA DW) GW-1 S-1 Other

Quote #

PO # 1571

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB 504.1 ☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Total Metals-list ☐ Dissolved Metals-list ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ TOC ☐ Grain Size ☐ TCLP Herbicides

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER (Specify)	Sampling: DATE	TIME (MW)	SAMPLER*	VOC 8260	Grab (G) or Composite (C)
18139-01	Carbon Inf.	2	X			X						11-23-09	1509	MW JH	X	
02	Carbon Eff.	2	X			X						11-23-09	1504	MW JH	X	
03	DUP-01	2	X			X						11-23-09	1514	MW JH	X	
04	Trip Blank	1	X			X									X	

TAT REQUESTED
Priority (24 hr)** ☐
Expedited (48 hr)** ☐
Standard (10 Business Days) ☒
**Date Needed _____

* See www.reslabs.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☐ NO HARD COPY REQUIRED ☐ FAX (FAX#) _____ ☒ EXCEL SPREADSHEET
☒ PDF (e-mail address) keane@xdd-llc.com ☐ OTHER (specify) _____

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 2 °C

CUSTODY RECORD

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
[signature]	11/23/09		XDD Cold Storage	11/23/09	
Relinquished by: [signature]	11/24/09	1535	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory: Way Bill#: Joanne King	11/24/09	15:35

Air Toxics LTD.
Laboratory Services Since 1989

12/11/2009
Ms. Amy Gibney
XDD (Xpert Design & Diagnostics, LLP)
22 Marin Way
Suite 3
Stratham NH 03885

Project Name: Dover Landfill
Project #: 84411
Workorder #: 0911563

Dear Ms. Amy Gibney

The following report includes the data for the above referenced project for sample(s) received on 11/25/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-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: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 PST

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0911563

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 Stratham, NH 03885
PHONE:	603-778-1100	**P.O. #**	1572
FAX:	603-778-2121	**PROJECT #**	84411 Dover Landfill
DATE RECEIVED:	11/25/2009	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	12/11/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVE STACK 112409 Dover Landfill, Dover N	Modified TO-15 (5&20 ppbv)	Tedlar Bag	Tedlar Bag
02A	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
03A	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
04A	LCS	Modified TO-15 (5&20 ppbv)	NA	NA

CERTIFIED BY: Linda L. Freeman DATE: 12/11/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
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: 06/30/10
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
Modified TO-15 Soil Gas
XDD (Xpert Design & Diagnostics, LLP)
Workorder# 0911563

One 1 Liter Tedlar Bag sample was received on November 25, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. A signature and date was not provided.

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.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

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

Air Toxics LTD.
Laboratory Services Since 1989

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

Client Sample ID: SVE STACK 112409 Dover Landfill, Dover NH

Lab ID#: 0911563-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	170	2200	420	5600
Freon 11	170	1300	940	7300
Freon 113	170	280	1300	2200
1,1-Dichloroethene	170	210	660	830
Methylene Chloride	170	18000	580	62000
trans-1,2-Dichloroethene	170	230	660	920
Hexane	170	410	590	1400
1,1-Dichloroethane	170	3900	670	16000
2-Butanone (Methyl Ethyl Ketone)	170	400	490	1200
cis-1,2-Dichloroethene	170	60000	660	240000
1,1,1-Trichloroethane	170	9000	910	49000
Heptane	170	1100	680	4600
Trichloroethene	170	9900	890	53000
4-Methyl-2-pentanone	170	550	680	2300
Toluene	170	78000	630	290000
Tetrachloroethene	170	140000	1100	920000
Ethyl Benzene	170	10000	720	43000
m,p-Xylene	170	41000	720	180000
o-Xylene	170	16000	720	68000
Cumene	170	860	820	4200
Propylbenzene	170	1400	820	6700
4-Ethyltoluene	170	8200	820	40000
1,3,5-Trimethylbenzene	170	3900	820	19000
1,2,4-Trimethylbenzene	170	7200	820	35000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE STACK 112409 Dover Landfill, Dover NH

Lab ID#: 0911563-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112528**	**Date of Collection:**	**11/24/09 9:20:00 AM**
Dil. Factor:	**33.3**	**Date of Analysis:**	**11/25/09 10:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	170	Not Detected	820	Not Detected
Freon 114	170	Not Detected	1200	Not Detected
Chloromethane	670	Not Detected	1400	Not Detected
Vinyl Chloride	170	2200	420	5600
1,3-Butadiene	170	Not Detected	370	Not Detected
Bromomethane	170	Not Detected	650	Not Detected
Chloroethane	170	Not Detected	440	Not Detected
Freon 11	170	1300	940	7300
Ethanol	670	Not Detected	1200	Not Detected
Freon 113	170	280	1300	2200
1,1-Dichloroethene	170	210	660	830
Acetone	670	Not Detected	1600	Not Detected
2-Propanol	670	Not Detected	1600	Not Detected
Carbon Disulfide	170	Not Detected	520	Not Detected
3-Chloropropene	670	Not Detected	2100	Not Detected
Methylene Chloride	170	18000	580	62000
Methyl tert-butyl ether	170	Not Detected	600	Not Detected
trans-1,2-Dichloroethene	170	230	660	920
Hexane	170	410	590	1400
1,1-Dichloroethane	170	3900	670	16000
2-Butanone (Methyl Ethyl Ketone)	170	400	490	1200
cis-1,2-Dichloroethene	170	60000	660	240000
Tetrahydrofuran	170	Not Detected	490	Not Detected
Chloroform	170	Not Detected	810	Not Detected
1,1,1-Trichloroethane	170	9000	910	49000
Cyclohexane	170	Not Detected	570	Not Detected
Carbon Tetrachloride	170	Not Detected	1000	Not Detected
2,2,4-Trimethylpentane	170	Not Detected	780	Not Detected
Benzene	170	Not Detected	530	Not Detected
1,2-Dichloroethane	170	Not Detected	670	Not Detected
Heptane	170	1100	680	4600
Trichloroethene	170	9900	890	53000
1,2-Dichloropropane	170	Not Detected	770	Not Detected
1,4-Dioxane	670	Not Detected	2400	Not Detected
Bromodichloromethane	170	Not Detected	1100	Not Detected
cis-1,3-Dichloropropene	170	Not Detected	760	Not Detected
4-Methyl-2-pentanone	170	550	680	2300
Toluene	170	78000	630	290000
trans-1,3-Dichloropropene	170	Not Detected	760	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SVE STACK 112409 Dover Landfill, Dover NH

Lab ID#: 0911563-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112528**	**Date of Collection:**	**11/24/09 9:20:00 AM**
Dil. Factor:	**33.3**	**Date of Analysis:**	**11/25/09 10:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	170	Not Detected	910	Not Detected
Tetrachloroethene	170	140000	1100	920000
2-Hexanone	670	Not Detected	2700	Not Detected
Dibromochloromethane	170	Not Detected	1400	Not Detected
1,2-Dibromoethane (EDB)	170	Not Detected	1300	Not Detected
Chlorobenzene	170	Not Detected	770	Not Detected
Ethyl Benzene	170	10000	720	43000
m,p-Xylene	170	41000	720	180000
o-Xylene	170	16000	720	68000
Styrene	170	Not Detected	710	Not Detected
Bromoform	170	Not Detected	1700	Not Detected
Cumene	170	860	820	4200
1,1,2,2-Tetrachloroethane	170	Not Detected	1100	Not Detected
Propylbenzene	170	1400	820	6700
4-Ethyltoluene	170	8200	820	40000
1,3,5-Trimethylbenzene	170	3900	820	19000
1,2,4-Trimethylbenzene	170	7200	820	35000
1,3-Dichlorobenzene	170	Not Detected	1000	Not Detected
1,4-Dichlorobenzene	170	Not Detected	1000	Not Detected
alpha-Chlorotoluene	170	Not Detected	860	Not Detected
1,2-Dichlorobenzene	170	Not Detected	1000	Not Detected
1,2,4-Trichlorobenzene	670	Not Detected UJ	4900	Not Detected UJ
Hexachlorobutadiene	670	Not Detected UJ	7100	Not Detected UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0911563-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 10:23 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	5.0	Not Detected	13	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)	5.0	Not Detected	15	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

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0911563-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 10:23 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
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 UJ	150	Not Detected UJ
Hexachlorobutadiene	20	Not Detected UJ	210	Not Detected UJ

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0911563-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 08:07 AM**

Compound	%Recovery
Freon 12	95
Freon 114	91
Chloromethane	96
Vinyl Chloride	92
1,3-Butadiene	86
Bromomethane	88
Chloroethane	93
Freon 11	89
Ethanol	97
Freon 113	92
1,1-Dichloroethene	91
Acetone	89
2-Propanol	89
Carbon Disulfide	88
3-Chloropropene	92
Methylene Chloride	88
Methyl tert-butyl ether	114
trans-1,2-Dichloroethene	88
Hexane	90
1,1-Dichloroethane	91
2-Butanone (Methyl Ethyl Ketone)	89
cis-1,2-Dichloroethene	87
Tetrahydrofuran	88
Chloroform	88
1,1,1-Trichloroethane	89
Cyclohexane	90
Carbon Tetrachloride	88
2,2,4-Trimethylpentane	91
Benzene	90
1,2-Dichloroethane	90
Heptane	92
Trichloroethene	88
1,2-Dichloropropane	89
1,4-Dioxane	87
Bromodichloromethane	88
cis-1,3-Dichloropropene	88
4-Methyl-2-pentanone	87
Toluene	91
trans-1,3-Dichloropropene	86

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0911563-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 08:07 AM**

Compound	**%Recovery**
1,1,2-Trichloroethane	90
Tetrachloroethene	91
2-Hexanone	83
Dibromochloromethane	91
1,2-Dibromoethane (EDB)	86
Chlorobenzene	86
Ethyl Benzene	87
m,p-Xylene	85
o-Xylene	86
Styrene	88
Bromoform	92
Cumene	85
1,1,2,2-Tetrachloroethane	86
Propylbenzene	84
4-Ethyltoluene	83
1,3,5-Trimethylbenzene	79
1,2,4-Trimethylbenzene	85
1,3-Dichlorobenzene	80
1,4-Dichlorobenzene	81
alpha-Chlorotoluene	84
1,2-Dichlorobenzene	78
1,2,4-Trichlorobenzene	62 Q
Hexachlorobutadiene	64 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0911563-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112503**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 08:50 AM**

Compound	%Recovery
Freon 12	86
Freon 114	88
Chloromethane	90
Vinyl Chloride	86
1,3-Butadiene	87
Bromomethane	83
Chloroethane	88
Freon 11	85
Ethanol	132
Freon 113	78
1,1-Dichloroethene	78
Acetone	80
2-Propanol	82
Carbon Disulfide	84
3-Chloropropene	84
Methylene Chloride	78
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	83
Hexane	84
1,1-Dichloroethane	82
2-Butanone (Methyl Ethyl Ketone)	83
cis-1,2-Dichloroethene	81
Tetrahydrofuran	83
Chloroform	81
1,1,1-Trichloroethane	84
Cyclohexane	85
Carbon Tetrachloride	84
2,2,4-Trimethylpentane	87
Benzene	84
1,2-Dichloroethane	83
Heptane	86
Trichloroethene	83
1,2-Dichloropropane	86
1,4-Dioxane	85
Bromodichloromethane	83
cis-1,3-Dichloropropene	86
4-Methyl-2-pentanone	84
Toluene	84
trans-1,3-Dichloropropene	86

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0911563-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**b112503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/25/09 08:50 AM**	

Compound	**%Recovery**
1,1,2-Trichloroethane	88
Tetrachloroethene	89
2-Hexanone	88
Dibromochloromethane	90
1,2-Dibromoethane (EDB)	88
Chlorobenzene	87
Ethyl Benzene	89
m,p-Xylene	89
o-Xylene	89
Styrene	91
Bromoform	95
Cumene	86
1,1,2,2-Tetrachloroethane	93
Propylbenzene	87
4-Ethyltoluene	87
1,3,5-Trimethylbenzene	87
1,2,4-Trimethylbenzene	94
1,3-Dichlorobenzene	88
1,4-Dichlorobenzene	92
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	90
1,2,4-Trichlorobenzene	90
Hexachlorobutadiene	94

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130