Shaw® Shaw E & I

Date: August 30, 2005

Project No.: 681076.02000000

TRANSMITTAL LETTER:

To: Mr. Steve Morrow

Address: Olin Corporation
1186 Lower River Road
P.O. Box 248
Charleston, Tennessee 37310

Re: August 2005 Status Report for
Olin Site in Wilmington, MA

For: Review ____ *As Requested* ____ *Approval* x *Corrections* ____ *Submittal* ____ *Other* ____

Item No:	*No. of Copies*	*Date:*	*Document Title*
1	2	August 2005	**IRA Status Report for Plant B Area Remediation Systems**

Steve – Here is final version of Shaw portion of IRA Status Report. I have addressed comments provided.

I have only included the revised text and Table A-25 for you to insert into previous draft version to save some paper.

Please let me know if you have any comments or questions or want a new set of originals. Thank you,

Sincerely:

David P. Cobb
Project Manager

CC: G. Hilliard – Olin Corp, Shaw File, E. Axelrod - MACTEC,
M. Hanley - S, H, and D

100 Technology Center Drive Stoughton, MA 02072 Phone: (617) 589-8000/Fax: (617) 589-2160

SEMS Doc ID 647586

IRA STATUS REPORT FOR PLANT B AREA REMEDIATION SYSTEMS

51 Eames Street Site
Wilmington, MA

MADEP RTN 3-0471

Prepared For:

Olin Corporation
1186 Lower River Road, NW
Charleston, TN 37310

Prepared By:

Shaw Environmental, Inc.
100 Technology Center Drive
Stoughton, MA 02072

August 2005

IRA Status Report
Plant B Groundwater - Recovery/Treatment System
Olin Corporation
Wilmington, Massachusetts RTN 3-0741

August 2005

INTRODUCTION

An Immediate Response Action (IRA) Plan was prepared by Shaw Environmental, Inc. (Shaw) on behalf of Olin Corporation (Olin) in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0424) and submitted to the Massachusetts Department of Environmental Protection (MADEP) on July 13, 2000 and subsequent revision dated October 31, 2000. The proposed IRA consisted of the implementation of an *in-situ* remediation system for the Plant B facility at the 51 Eames Street in Wilmington, Massachusetts (Site; RTN 3-0741). The IRA Plan was subsequently approved by MADEP in a letter dated August 4, 2000 and the revision approved on November 2, 2000.

A Pilot Test Report prepared by Envirogen, Inc. (now Shaw) was submitted to the MADEP in conjunction with the July 2001 IRA Status Report. The Pilot Test Report summarized the laboratory treatability study, the installation activities and operational results of the air sparging and soil vapor extraction (AS/SVE) system installed at the Site to address contaminants previously detected in soils in the non-aqueous phase liquid (NAPL) and extractable/volatile petroleum hydrocarbons (E/VPH) Areas around the Plant B facility.

This status report presents the status of the IRA for the period between November 25, 2004 and June 23, 2005 in accordance with 310 CMR 40.0425.

BACKGROUND

Two separate areas are being addressed with *in-situ* remediation technologies. The VPH/EPH Impacted Groundwater Area (E/VPH Area) is in the vicinity of monitoring well GW-16 located southwest of the Plant B building. The plasticizer NAPL Impacted Groundwater Area (NAPL Area) consists of the area east of Plant B where the existing groundwater recovery wells and treatment system is in operation. See Figure 1 for approximate areas.

E/VPH Area

AS/SVE was selected by Olin as the most feasible technology to enhance the rate of recovery of volatile organic compounds (VOCs) in soil and groundwater in the vicinity of Plant B. The area around monitoring well GW-16 was previously identified as a location of elevated VOCs in groundwater, particularly tri methyl pentenes (Law 2000, HLA 2000, GEI 2000).

A series of AS and SVE points was installed in October 2000 in the area around monitoring well GW-16. The original limits of the remediation area were expanded after elevated headspace readings were detected in samples collected during boring installation activities south, southwest

and west of GW-16. Due to total VOC concentrations in headspace samples from soils collected from Boring B-10, test pits located in the vicinity of the former building slab were performed on November 1, 2000 to further delineate the nature and extent of the impacted area. A modification to the IRA was submitted to the MADEP in a letter from GEI Consultants Inc. (GEI) dated October 31, 2000 (Modification #2 of Plant B IRA Plan). MADEP approved the modification verbally on November 1, 2000 and in writing in a letter to Olin dated November 2, 2000.

Additional borings were conducted and SVE wells installed from November 14 through 16, 2000 to delineate the extent of impact around the perimeter of the slab and allow for treatment of the soil. Elevated headspace readings were encountered during the advancement of borings and test pits in the slab area. Laboratory analyses of samples collected from the area during test pitting activities indicated 2,4,4-trimethyl-1-pentene, 2,4,4-trimethyl-2-pentene, and Bis-2-ethylhexyl phthalate (BEHP) as the primary compounds detected in the soils and groundwater. Maximum concentrations detected in the soil were 6,400,000 microgram per kilogram (µg/kg) of 2,4,4-trimethyl-1-pentene, 3,700,000 µg/kg of 2,4,4-trimethyl-2-pentene, and 580,000 µg/kg of BEHP. Maximum groundwater concentrations detected in the samples were 67,000 micrograms per liter (µg/l) of 2,4,4-trimethyl-1-pentene, 120,000 µg/l of 2,4,4-trimethyl-2-pentene and 7,500 µg/l of BEHP.

Air sparge wells were installed in borings that could be advanced to approximately 8 to 10 feet below the water table (approximately 18 to 20 feet BGS). Additional information regarding the well installation activities, boring logs, and soil sampling activities was presented in the January 2001 IRA Status Report for Plant B. Figure 1 shows the locations of the SVE and AS wells installed at the Site.

NAPL Area

Five AS and multi-phase extraction (MPE) well clusters (AS/MPE-21 through AS/MPE-25; see Figure 1) were installed along the back (northeastern) side of Plant B, adjacent to the building and upgradient from the wells and groundwater extraction wells. The primary contaminants of concern are BEHP, N-nitrosodiphynlamine (NDPA), and other semi-volatile organic compounds (SVOCs). Groundwater is located approximately 10 to 12 feet BGS and NAPL have been detected on the groundwater table in several wells in the NAPL Area. Additional information regarding the installation of the AS and MPE wells (boring logs, well construction details, etc.) is provided in a previously submitted IRA Status Report dated January 2001. The NAPL Area is presented on Figure 1.

Treatment System Installation

The treatment system trailer (Figure 1) houses the components of the AS and SVE system. The treatment system was installed in October and November 2000. The AS system manifold is split into two sections each with a manual timer to control the injection of air into the E/VPH and NAPL Areas. The installed SVE system consists of two 2 horsepower regenerative blowers and one 60 gallon air/water separator equipped with a 10 gallon per minute liquid transfer pump. The SVE system is connected to vapor extraction wells in both the NAPL and EVPH areas and is in continuous operation at the site. Extracted air is

routed through an off-gas treatment unit consisting of two 2,000 pound vapor phase carbon vessels in series.

An as-built drawing of the existing pipe network is shown in Figure 1. Additional system information is provided in Envirogen's report entitled "Pilot Test Summary Report for Plant B Area Remediation Systems" (August 2001).

Pilot Test Results

The results of the Pilot Test are summarized in Envirogen's report "Pilot Test Summary Report for Plant B Area Remediation Systems", dated August 2001. The report was submitted to the MADEP as part of the August 2001 IRA Status Report. Based on the field results, AS/SVE is an effective method for removal of residual VOCs in soils and groundwater at the vadose/saturated zone interface when high groundwater conditions are encountered. Effectiveness of AS in the NAPL Area was found to be limited by the sensitivity of the groundwater table to mounding in the NAPL Area to small amounts of injected air.

Laboratory Treatability Study Results

Envirogen conducted a Laboratory Treatability Study (LTS) in May 2001 on the soil samples collected during the October 2000 drilling event from the NAPL Area. The results from the LTS indicated that soils at the groundwater/NAPL interface in the NAPL Area does have an active microbial population capable of degrading both BEHP and NDPA. Degradation of the NDPA was found to be more dependent upon the aeration of the test sediments than the addition of nutrients with the majority of the NDPA degradation occurring within the first month of the study. BEHP levels were found to decline more appreciably in the nutrient-amended samples. The fact that biodegradation occurred in nutrient-amended, but not in unamended samples, suggests that the microbial population degrading BEHP is limited in either nitrogen or phosphorous in the Site soils. The results of the LTS are summarized in Envirogen's report "Pilot Test Summary Report for Plant B Area Remediation Systems", dated August 2001. The report was submitted to the MADEP as part of the August 2002 IRA Status Report.

IRA STATUS REPORT INFORMATION

The following sections of the report summarize relevant information related to the operation of the AS/SVE system as part of the remedial action at the Site. The format is accordance with categories presented in the MCP (310 CMR 40.0425).

(a) The status of assessment and/or remedial actions;

Operation and Maintenance

The installed AS/SVE system (E/VPH Area) and AS/MPE system (NAPL Area) remained operational during this reporting period. The SVE/AS system was shutdown for routine operation and maintenance (O&M) procedures on November 25, 2004, January 6, 2005 and

January 14, 2005 during this reporting period. The system also was down temporarily on December 2, 2004 (power outage), March 31, 2005 (LEL shutdown), and May 26, 2005 (LEL shutdown).

The AS/SVE system continues to remove residual VOCs in vadose zone soils and groundwater. Approximately 29 pounds of VOCs have been removed during this reporting period for a cumulative system total of approximately 2196 pounds. Based on analytical results collected from air samples from the combined influent to the AS/SVE system, the removed contaminants remained primarily 2,4,4-trimethyl-1-pentene and 2,4,4-trimethyl-2-pentene.

Shaw and Olin Site personnel continued performing weekly O&M activities during the reporting period. Information collected during Site visits consisted of periodic groundwater level readings, weekly soil vapor sample collection for field organic vapor meter (OVM) screening from wellheads in the NAPL and E/VPH Areas as well as SVE system influents and effluent, and routine system maintenance. In accordance with MADEP requirements, air samples from the SVE system influents and effluent were also collected on a monthly basis and submitted to a laboratory for VOC analysis using EPA method TO-14 and MADEP method Air Phase Petroleum Hydrocarbon (APH). Information collected during the Site visits were done so in accordance with the O&M schedule submitted in previous IRA status reports. A discussion of the field data is presented in Section (d) below.

System Operation Modifications

No significant modifications were made to the operation of the AS and SVE systems during this reporting period. The AS/SVE system configuration in the E/VPH area continues to focus more on the former test pit area (wells SVE-16 through SVE-20) where it appears residual VOCs are still present in vadose zone soils. The NAPL portion of the system focuses equally on the five MPE wells (MPE21 through MPE25).

Nutrient Injection System (NIS)

After receiving approval from MADEP, the nutrient mix was changed in January 2005 to a solution of monoammonium and diammonium phosphate. This mixture replaced the original solution of potassium mono- and di-basic phosphate. The intent of the inclusion of a nitrogen component in the mixture was to satisfy the nitrogen requirements of the BEHP- and NDPA-degrading bacterial population. Table J-1 presents a summary of nutrient addition event information. Table J-2 presents pre- and post-injection groundwater elevation monitoring information for wells within the NAPL area.

The NIS was in operation for approximately 3.5 months during this reporting period. Nutrient addition was conducted on a weekly basis between the dates of November 24, 2004 and February 23, 2005. Elevated concentrations of orthophosphate-P and ammonia-N were detected in groundwater samples collected from extraction wells IW11, IW12, and IW13 by Olin site personnel using field screening kits on February 23, 2005. The increased concentrations of orthophosphate-P and ammonia-N indicate that biodegradation activities are limited by dissolved oxygen in the groundwater in the impacted area. A

decision was made to cease nutrient addition until orthophosphate-P and ammonia-N levels detected in groundwater samples returned approximately to their pre-injection concentrations. Nutrient injections were resumed on June 14, 2005. Approximately 9,285 gallons of nutrient were added during this reporting period.

Table I-2 summarizes results of the field kit analyses of the groundwater samples. Although no groundwater samples were collected for laboratory analysis during this reporting period, Tables I1 (Baseline Groundwater Sampling Results) and I3 (NIS Groundwater laboratory Results) have been included in this report for reference purposes.

(b) Any significant new Site information or data;

Tables summarizing groundwater measurements (Tables A1 through A25) and soil gas field screening readings (Tables B1 through B25 and C1 through C5) for this reporting period have been attached. The maximum NAPL thickness measured during this period was 0.46 feet in well P-5 on February 23, 2005. The previous detected maximum NAPL thickness was 0.45 feet in well P-5 in 2002. No other significant increases in NAPL thickness were detected in the other monitoring wells during this reporting period.

The estimated total mass of VOCs removed during this reporting period is 29 pounds. A summary of estimated VOC contaminants removed by the SVE system during this reporting period has been included as Table H1.

(c) Details of and/or plans for the management of Remediation Waste, Remedial Wastewater and/or Remedial Additives;

No remedial wastewater requiring off-site disposal was generated by the SVE treatment system during the operating period.

Remedial additives in the form of the phosphate and ammonium phosphate nutrient solutions were injected at the Site during the reporting period. Groundwater samples from wells IW11, IW12, and IW13 were periodically collected and analyzed for orthophosphate-P, using field kits, to demonstrate compliance with the requirements of MCP 310 CMR 40.046. Table I-2 summarizes results of the field kit analyses of the groundwater samples. In addition, measurements of weekly pre- and post-injection groundwater elevations in and around the NAPL area (see Table J-2) indicate that there was no mounding within two feet of the ground surface.

(d) Monitoring data related to the operation of remedial systems, including treatment works discharging Remedial Wastewater, where applicable;

Groundwater

Groundwater monitoring was performed in both the E/VPH and NAPL Areas during the reporting period in accordance with the monitoring program previously submitted. Groundwater monitoring consisted of the periodic collection of depth to groundwater and

product thickness measurements in wells in the NAPL Area on a weekly, biweekly and periodic basis. Groundwater elevations in wells GW100, GW101, and GW102, located along the northeastern boundary of the property and hydraulically downgradient of Plant B, were monitored on a weekly basis to verify there was no migration of NAPL off-Site into adjacent properties. Wells in which groundwater and product thickness are monitored in the E/VPH Area include GW-16 (weekly), B17 (periodically), and B7A (periodically). Tables summarizing the groundwater monitoring data are included as Tables A1 through A25.

No significant increases in NAPL thickness in the sentinel wells downgradient of the NAPL area (GW-100, GW-101 and GW-102) or abnormal fluctuations in groundwater elevations in the NAPL area were observed during this period.

Soil Gas

Soil gas samples were collected from individual well heads in the E/VPH and NAPL Area and screened in the field for total VOCs using an OVM. Total VOC concentrations in the E/VPH area as measured by the OVM were low to non-detectable during this reporting period and remained consistent with those measured during the previous reporting period. The maximum total VOC concentration in this reporting period was 5.7 parts per million by volume (ppmv) at SVE19 on June 22, 2005. Total VOC readings were as calibrated to isobutylene. Tables B1 through B25 summarize the field screening results for soil gas samples collected from the E/VPH Area. Graphs G1 through G8 present the soil gas and groundwater data collected during the reporting period on one graph for individual SVE wells. Graph G9 presents soil gas and groundwater data collected from the vapor probes installed in the E/VPH Area.

Total VOC readings measured in the NAPL Area during this reporting period remained low but consistent with those observed in the previous reporting period. The maximum total VOC concentration (as measured with the OVM) in the NAPL Area recorded during this reporting period was 12.2 ppmv at MPE 21 on December 9 and December 23, 2004. Tables C1 through C5 summarize the field screening results for soil gas samples collected from the E/VPH Area. Graph G10 presents the soil gas and groundwater data collected during the reporting period on one graph for individual SVE wells.

Air Sampling Results

Air samples were collected from the influent SVE air stream from both the E/VPH and NAPL Area, the combined influent from the remediation areas just prior to entering the carbon filtration beds, and the effluent of the secondary vapor phase carbon unit. The samples were collected on a monthly basis during the reporting period and submitted to Air Toxics, Ltd. for analysis. The influent air samples were analyzed for VOCs using EPA Method TO-14 with the target compound list modified to include 2,4,4-trimethyl-1-pentene and 2,4,4-trimethyl-2-pentene, the primary VOCs of concern in the E/VPH Area. The

effluent air samples were submitted for analysis by MADEP's Air Phase Petroleum Hydrocarbon (APH) method. The samples were collected using 6 liter SUMMA canisters. Air samples were collected on December 16, 2004, January 31, February 23, March 31, April 21, and May 20, 2005.

Laboratory results received for the influent air samples collected from the E/VPH area and NAPL area during this reporting period indicated decreased concentrations of 2,4,4-trimethyl-1-pentene and 2,4,4-trimethyl-2-pentene with the majority of the pentenes detected in the influent emanating from the NAPL area.

As evidenced by the results received from the laboratory for effluent air samples, the carbon filtration canisters on the effluent air discharge of the AS/SVE effectively removed greater than 99% of the contaminants in the air stream during the reporting period.

Table F1 summarizes the laboratory results received for the analyzed air samples. Copies of the laboratory data received for the air samples are included as Attachment A. Graph G11 presents total influent VOC concentrations entering the treatment system from the E/VPH and NAPL Areas versus time.

Visual Inspection

In addition to the above referenced monitoring activities, Shaw and Olin personnel also visually inspected the drainage ditch located along the northeastern property boundary of the Plant B area on a weekly basis for the presence of free product. Free product was not observed on the standing water in the drainage ditch during the reporting period.

(e) Any other information required by the Department in its approval of the Immediate Response Action Plan, and

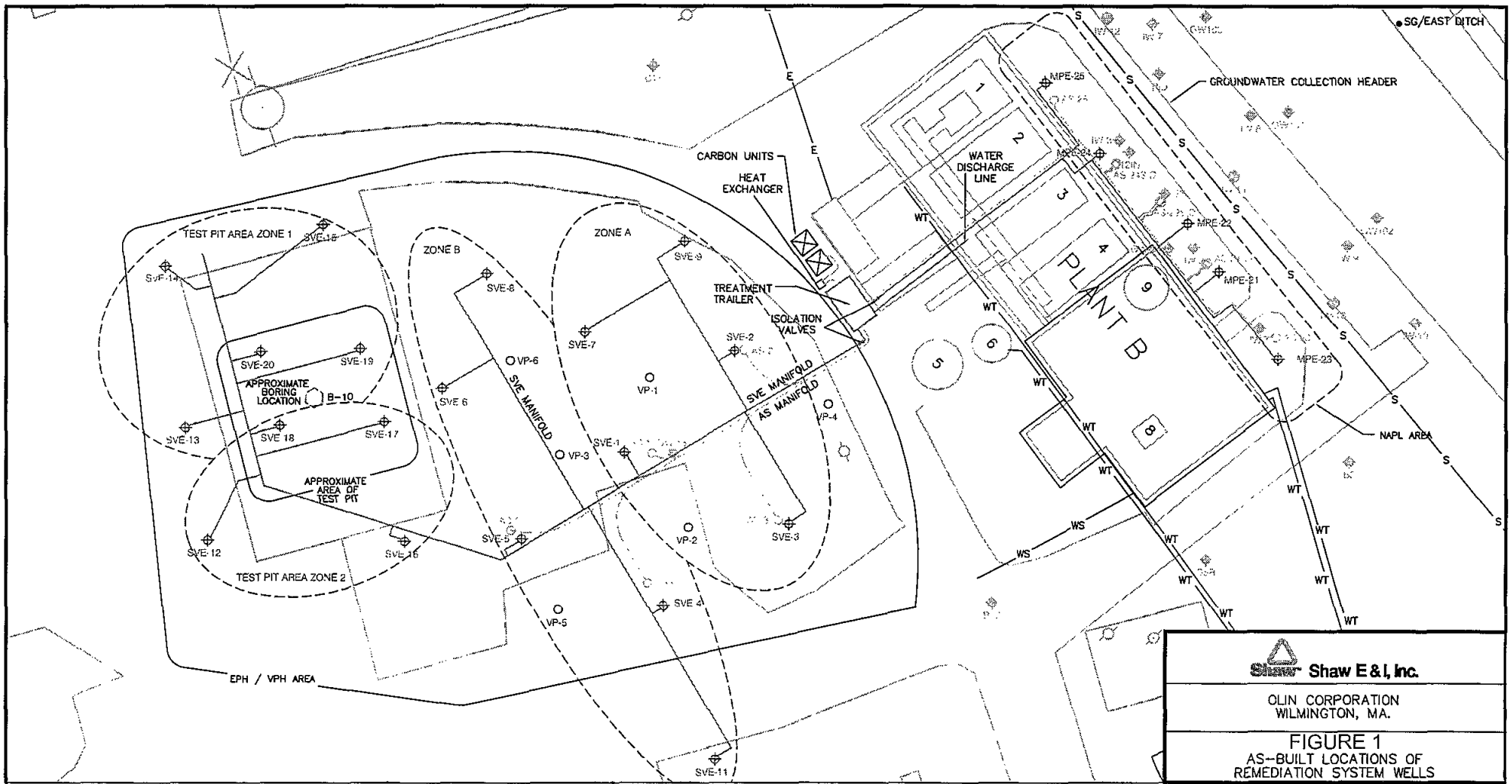
Outside of that presented above, no other significant information related to the operation of the AS/SVE system is being reported.

(f) An LSP Opinion as to whether the Immediate Response Action is being conducted in conformance with the Immediate Response Action Plan and any conditions of approval established by the Department.

It is Shaw's opinion that the AS/SVE system in the E/VPH and NAPL Areas around Plant B is currently being operated in accordance with the conditional approval letters issued by MADEP to Olin dated August 4, 2000 and October 31, 2000 and in accordance with the procedures and schedule presented in the Pilot Test Report (PTR) previously submitted to MADEP (August 2001). An LSP Opinion regarding the operation of the AS/SVE system during this monitoring period is attached to the Semi-Annual IRA Status Report.

ATTACHMENTS

Figure 1	Site Plan
Figure 2	Nutrient Injection System Layout
Table A1 through A25	Groundwater Monitoring Data
Tables B1 through B25	E/VPH Area Soil Gas Data
Tables C1 through C5	NAPL Area Soil Gas Data
Tables D1 through D4	SVE Influent /Effluent Air Data
Table E1	SVE System Physical Data
Table F1	Summary of Air Sample Laboratory Results
Table H1	Summary of VOC Removal Calculations
Table I1	Summary of Baseline Groundwater Sampling Results
Table I2	NIS Field Kit Analytical Results
Table I3	NIS Groundwater Laboratory Analytical Results
Table J1	NIS Weekly Injection Volume
Table J2	NIS Pre- and Post-Injection Groundwater Monitoring
Graphs G1 through G8	Soil Vapor Concentrations and Groundwater vs. Time (E/VPH area)
Graphs G9	Soil Vapor Concentrations in Vapor Probes vs. Time (E/VPH area)
Graph G10	Soil Vapor Concentrations and Groundwater vs. Time (NAPL area)
Graph G11	Influent and Effluent Contaminant Concentrations vs. Time
Graph G12	Cumulative Contaminant Mass Removal vs. Time
Attachment A	Laboratory Analytical Results for Air Samples



NOTES:

1. BASE PLAN PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES INC.
2. LOCATIONS OF REMEDIATION SYSTEM WELLS INSTALLED BETWEEN OCTOBER 2000 NOVEMBER 2000 ARE APPROXIMATE.

LEGEND

- SVE-4 / MPE-22 — SOIL VAPOR OR MULTI-PHASE EXTRACTION WELL
- AS-6 — AIR SPARGING WELL
- VP-5 — VAPOR PROBE
- SVE MANIFOLD
- AIR SPARGE MANIFOLD

20 0 20

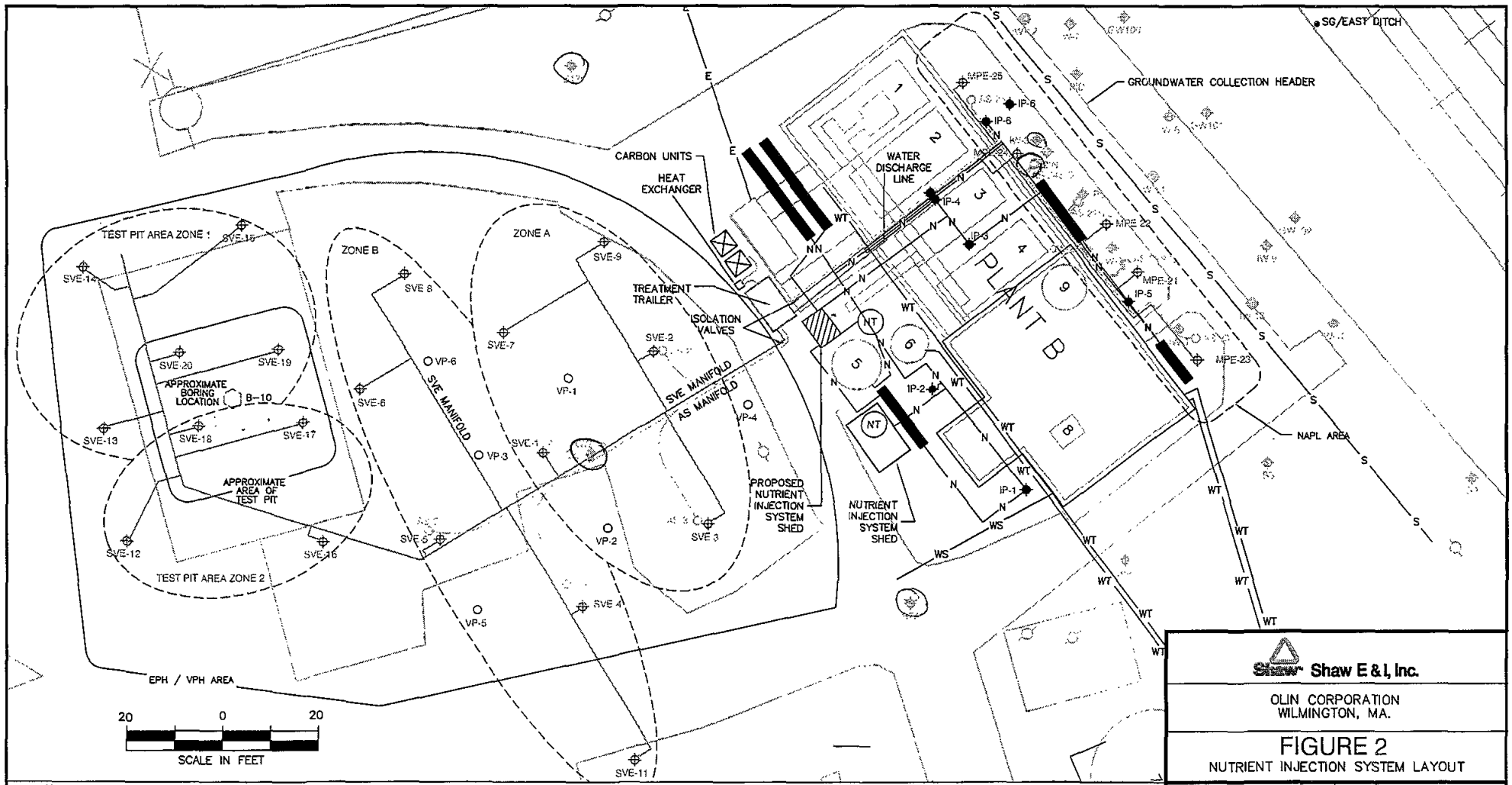
SCALE IN FEET

Shaw E & I, Inc.

OLIN CORPORATION
WILMINGTON, MA.

FIGURE 1
AS-BUILT LOCATIONS OF REMEDIATION SYSTEM WELLS

DRAWN BY: DAF	SCALE: 1" = 20'
PROJECT MGR.: DC	PROJECT NO.: 681076
CHECKED BY: DC	DRAWING NO.: 681076-1-INJ
DATE: 12/15/04	SHEET: 1 OF 1



NOTES:
1. BASE PLAN PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES INC.
2. LOCATIONS OF REMEDIATION SYSTEM WELLS INSTALLED BETWEEN OCTOBER 2000 AND NOVEMBER 2000 ARE APPROXIMATE
3. ESTIMATED DEPTH FOR NUTRIENT INJECTION TRENCHES IS 6–8 FEET.
4. NUTRIENT INJECTIONS WILL BE ON A DAILY BASIS UNLESS SITE CONDITIONS DICTATE OTHERWISE.
5. NUTRIENT INJECTION POINT/TRENCH LOCATIONS ARE APPROXIMATE.
6. UTILITIES SHOWN ARE APPROXIMATE BASED ON DISCUSSIONS WITH OLIN SITE PERSONNEL.

M:/ACAD/AUTOCAD/92185/92185-1.DWG

LEGEND

- SVE-1 / MPE-22 – SOIL VAPOR OR MULTI-PHASE EXTRACTION WELL
- AS-1 – AIR SPARGING WELL
- VP-5 – VAPOR PROBE
- NUTRIENT INJECTION POINT
- NUTRIENT INJECTION TRENCH
- NT – NUTRIENT FEED TANK
- E – ELECTRIC
- N – NUTRIENT FEED MANIFOLD
- S – SEWER
- WT – WATER TREATMENT LINE
- WS – WATER SUPPLY LINE

Shaw E & I, Inc.

OLIN CORPORATION
WILMINGTON, MA.

FIGURE 2
NUTRIENT INJECTION SYSTEM LAYOUT

DRAWN BY: DAF	SCALE: 1" = 20'
PROJECT MGR.: DC	PROJECT NO.: 681076
CHECKED BY: DC	DRAWING NO.: 681076-1-INJ
DATE: 12/15/04	SHEET: 1 OF 1

Table A-1

Groundwater Monitoring Data for Well 12-IN

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.66	12.64	0.02	77.18	77.20
01/06/01	12.22	12.21	0.01	77.62	77.63
01/06/01	12.45	12.40	0.05	77.39	77.44
01/06/01	12.48	12.47	0.01	77.36	77.37
01/08/01	12.78	12.46	0.32	77.06	77.36
01/16/01	16.64	12.60	4.04	73.20	77.04
01/22/01	12.66	12.64	0.02	77.18	77.20
01/22/01	12.22	12.21	0.01	77.62	77.63
04/13/01	10.10	10.10	Trace	79.74	79.74
04/20/01	11.27	11.26	0.01	78.57	78.58
06/08/01	12.15	12.14	0.01	77.69	77.70
06/08/01	12.33	ND	0	77.51	77.51
12/07/01	ND (Dry)	ND	N/A	N/A	N/A
12/13/01	ND (Dry)	ND	N/A	N/A	N/A
01/04/02	ND (Dry)	ND	N/A	N/A	N/A
02/15/02	ND (Dry)	ND	N/A	N/A	N/A
03/08/02	12.65	12.65	0	77.19	77.19
04/05/02	11.92	ND	0	77.92	77.92
04/05/02	11.93	ND	0	77.91	77.91
05/03/02	12.12	12.11	0.01	77.72	77.73
05/03/02	12.12	12.12	Trace	77.72	77.72
05/31/02	11.79	11.78	0.01	78.05	78.06
05/31/02	11.76	11.75	0.01	78.08	78.09
06/21/02	12.83	ND	Trace	77.01	77.01
06/21/02	12.83	ND	Trace	77.01	77.01
06/28/02	12.09	12.08	0.01	77.75	77.76
06/28/02	12.09	12.08	0.01	77.75	77.76
07/26/02	11.71	11.70	0.01	78.13	78.14
08/23/02	12.21	12.20	0.01	77.63	77.64
08/23/02	12.22	12.21	0.01	77.62	77.63
09/20/02	ND (Dry)	ND	N/A	N/A	N/A
09/20/02	ND (Dry)	ND	N/A	N/A	N/A
10/18/02	12.20	12.18	0.02	77.64	77.66
10/18/02	12.18	12.18	Trace	77.66	77.66
12/06/02	11.36	11.35	0.01	78.48	78.49
12/06/02	11.37	11.36	0.01	78.47	78.48
01/03/03	11.00	10.98	0.01	78.84	78.85
01/03/03	10.99	10.97	0.01	78.85	78.86
02/10/03	11.21	ND	0	78.63	78.63
03/07/03	11.61	11.60	0.01	78.23	78.24
04/02/03	10.81	10.80	0.01	79.03	79.04
05/02/03	11.22	11.22	Trace	78.62	78.62
05/30/03	11.19	11.19	Trace	78.65	78.65
08/06/03	11.64	11.64	Trace	78.20	78.20
09/18/03	12.55	12.55	Trace	77.29	77.29
11/03/03	12.07	12.07	Trace	77.77	77.77
01/06/04	12.12	12.12	Trace	77.72	77.72
01/22/04	12.28	12.28	Trace	77.56	77.56

Table A-1

Groundwater Monitoring Data for Well 12-IN

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
02/19/04	12.38	12.38	Trace	77.46	77.46
04/29/04	11.03	11.03	Trace	78.81	78.81
05/27/04	11.96	ND	0	77.88	77.88
09/24/04	12.17	ND	0	77.67	77.67
11/04/04	12.50	ND	Trace	77.34	77.34
12/03/04	12.66	12.65	0	77.18	77.18
01/13/05	12.48	ND	Trace	77.36	77.36
02/23/05	12.02	12.01	0	77.82	77.82
03/31/05	11.20	ND	0	78.64	78.64
04/21/05	11.81	ND	0	78.03	78.03
05/20/05	11.95	ND	0	77.89	77.89

Notes:

1) Reference Elevation for 12-IN is 89.84.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-2

Groundwater Monitoring Data for Well B-2

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/22/01	12.69	ND	0	77.79	77.79
01/22/01	12.67	ND	0	77.81	77.81
01/26/01	12.71	ND	0	77.77	77.77
01/31/01	12.62	ND	Trace	77.86	77.86
01/31/01	12.63	ND	Trace	77.85	77.85
01/31/01	12.65	ND	Trace	77.83	77.83
01/31/01	12.64	ND	Trace	77.84	77.84
01/31/01	12.64	ND	Trace	77.84	77.84
01/31/01	12.62	ND	Trace	77.86	77.86
01/31/01	12.63	ND	Trace	77.85	77.85
01/31/01	12.59	ND	Trace	77.89	77.89
01/31/01	12.65	ND	Trace	77.83	77.83
01/31/01	12.64	ND	Trace	77.84	77.84
01/31/01	12.64	ND	Trace	77.84	77.84
02/06/01	12.69	12.69	Trace	77.79	77.79
02/06/01	12.68	ND	0	77.80	77.80
02/06/01	12.67	ND	0	77.81	77.81
02/08/01	12.57	ND	0	77.91	77.91
02/16/01	12.66	ND	0	77.82	77.82
04/06/01	11.34	11.34	Trace	79.14	79.14
04/13/01	11.50	ND	0	78.98	78.98
04/20/01	11.77	11.76	0.01	78.71	78.72
06/01/01	12.47	ND	0	78.01	78.01
12/07/01	13.51	ND	0	76.97	76.97
12/07/01	13.52	ND	0	76.96	76.96
12/13/01	12.26	ND	0	78.22	78.22
03/08/02	12.66	ND	0	77.82	77.82
03/08/02	12.66	ND	0	77.82	77.82
04/05/02	12.17	ND	0	78.31	78.31
04/05/02	12.19	ND	0	78.29	78.29
05/03/02	12.31	ND	0	78.17	78.17
05/03/02	12.32	ND	0	78.16	78.16
05/31/02	12.08	ND	0	78.40	78.40
05/31/02	12.08	ND	0	78.40	78.40
06/28/02	12.37	ND	0	78.11	78.11
06/28/02	12.38	ND	0	78.10	78.10
07/26/02	12.46	ND	0	78.02	78.02
09/20/02	13.02	ND	0	77.46	77.46
09/20/02	13.02	ND	0	77.46	77.46
10/18/02	12.56	ND	0	77.92	77.92
10/18/02	12.55	ND	0	77.93	77.93
12/06/02	11.94	ND	0	78.54	78.54
12/06/02	11.92	ND	0	78.56	78.56
01/03/03	10.58	ND	0	79.90	79.90
01/03/03	10.60	ND	0	79.88	79.88
02/10/03	12.06	ND	0	78.42	78.42
03/07/03	11.94	ND	0	78.54	78.54
04/02/03	11.42	ND	0	79.06	79.06

Table A-2

Groundwater Monitoring Data for Well B-2

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
05/02/03	11.77	ND	0	78.71	78.71
06/12/03	11.68	ND	0	78.80	78.80
08/06/03	12.13	ND	0	78.35	78.35
09/18/03	12.89	ND	0	77.59	77.59
11/03/03	12.57	12.57	Trace	77.91	77.91
01/06/04	12.50	12.50	Trace	77.98	77.98
01/22/04	12.58	ND	0	77.90	77.90
02/19/04	12.69	ND	0	77.79	77.79
03/31/04	12.87	ND	0	77.61	77.61
04/29/04	11.99	ND	0	78.49	78.49
05/27/04	12.48	ND	0	78.00	78.00
07/14/04	12.76	ND	0	77.72	77.72
09/24/04	12.52	ND	0	77.96	77.96
11/04/04	12.77	ND	0	77.71	77.71
12/03/04	12.68	12.67	0	77.80	77.80
01/13/05	12.57	ND	0	77.91	77.91
02/23/05	12.25	ND	0	78.23	78.23
03/31/05	11.66	ND	0	78.82	78.82
04/21/05	12.13	ND	0	78.35	78.35
05/20/05	12.23	ND	0	78.25	78.25

Notes:

1) Reference Elevation for B-2 is 90.48.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-3

Groundwater Monitoring Data for Well B-3

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.77	ND	0	77.55	77.55
01/06/01	12.77	ND	0	77.55	77.55
01/06/01	12.77	12.77	Trace	77.55	77.55
01/06/01	12.73	ND	0	77.59	77.59
01/08/01	12.89	ND	0	77.43	77.43
01/16/01	12.71	ND	0	77.61	77.61
01/22/01	12.77	ND	0	77.55	77.55
01/22/01	12.60	ND	0	77.72	77.72
01/22/01	12.73	ND	0	77.59	77.59
01/26/01	12.81	ND	0	77.51	77.51
01/31/01	12.71	ND	Trace	77.61	77.61
01/31/01	12.69	ND	Trace	77.63	77.63
01/31/01	12.71	ND	Trace	77.61	77.61
01/31/01	12.52	NN	Trace	77.80	77.80
01/31/01	12.73	ND	Trace	77.59	77.59
01/31/01	12.76	ND	Trace	77.56	77.56
01/31/01	12.75	ND	Trace	77.57	77.57
01/31/01	12.72	ND	Trace	77.60	77.60
01/31/01	12.74	ND	Trace	77.58	77.58
01/31/01	12.71	ND	Trace	77.61	77.61
01/31/01	12.72	ND	Trace	77.60	77.60
04/06/01	10.62	10.62	Trace	79.70	79.70
04/13/01	10.84	10.84	Trace	79.48	79.48
04/20/01	11.25	11.24	0.01	79.07	79.08
06/08/01	12.36	ND	0	77.96	77.96
12/07/01	13.76	ND	0	76.56	76.56
12/07/01	13.76	ND	0	76.56	76.56
12/13/01	13.48	ND	0	76.84	76.84
01/04/02	13.41	ND	0	76.91	76.91
02/15/02	13.11	ND	0	77.21	77.21
03/08/02	12.80	ND	0	77.52	77.52
03/08/02	12.78	ND	0	77.54	77.54
04/05/02	12.06	ND	0	78.26	78.26
04/05/02	12.01	ND	0	78.31	78.31
05/03/02	12.26	ND	0	78.06	78.06
05/03/02	12.28	ND	0	78.04	78.04
05/31/02	11.91	ND	0	78.41	78.41
05/31/02	11.90	ND	0	78.42	78.42
06/21/02	12.08	ND	0	78.24	78.24
06/21/02	12.14	ND	0	78.18	78.18
06/28/02	12.29	ND	0	78.03	78.03
06/28/02	12.28	ND	0	78.04	78.04
07/26/02	12.31	ND	0	78.01	78.01
09/20/02	12.98	ND	0	77.34	77.34
09/20/02	12.98	ND	0	77.34	77.34
10/18/02	12.46	ND	0	77.86	77.86
10/18/02	12.44	ND	0	77.88	77.88
12/06/02	11.64	ND	0	78.68	78.68

Table A-3

Groundwater Monitoring Data for Well B-3

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/06/02	11.56	ND	0	78.76	78.76
01/03/03	11.28	ND	0	79.04	79.04
01/03/03	11.28	ND	0	79.04	79.04
02/10/03	11.87	ND	0	78.45	78.45
03/07/03	11.80	ND	0	78.52	78.52
04/02/03	10.99	ND	0	79.33	79.33
05/02/03	11.44	ND	0	78.88	78.88
06/12/03	11.60	ND	0	78.72	78.72
08/06/03	11.97	11.97	Trace	78.35	78.35
09/18/03	12.83	ND	0	77.49	77.49
11/03/03	12.42	ND	0	77.90	77.90
01/06/04	12.32	12.32	Trace	78.00	78.00
01/22/04	12.46	ND	0	77.86	77.86
02/19/04	12.60	ND	0	77.72	77.72
04/29/04	11.40	ND	0	78.92	78.92
05/27/04	12.27	ND	0	78.05	78.05
07/14/04	12.69	ND	0	77.63	77.63
09/24/04	12.40	ND	0	77.92	77.92
11/04/04	12.78	ND	0	77.54	77.54
12/03/04	12.78	ND	0	77.54	77.54
01/13/05	12.61	ND	0	77.71	77.71
02/23/05	12.03	ND	0	78.29	78.29
03/31/05	11.34	ND	0	78.98	78.98
04/21/05	11.87	ND	0	78.45	78.45
05/20/05	12.05	ND	0	78.27	78.27

Notes:

1) Reference Elevation for B-3 is 90.32.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

TABLE A-4

Groundwater Monitoring Data for Well B5-R

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/08/01	12.73		0	78.65	78.65
01/10/01	12.69		0	78.69	78.69
04/13/01	10.40		0	80.98	80.98
07/26/02	12.66		0	78.72	78.72
03/13/03	11.58	ND	0	79.80	79.80
03/26/03	11.11	ND	0	80.27	80.27
11/03/03	12.59	ND	0	78.79	78.79
01/06/04	12.19	12.19	Trace	79.19	79.19
01/22/04	12.52	ND	0	78.86	78.86
02/19/04	12.90	ND	0	78.48	78.48
03/31/04	13.28	ND	0	78.10	78.10
04/29/04	11.08	ND	0	80.30	80.30
05/27/04	12.25	ND	0	79.13	79.13
07/14/04	12.85	ND	0	78.53	78.53
09/24/04	12.27	ND	0	79.11	79.11
11/03/04	12.95	ND	0	78.43	78.43
11/04/04	12.97	ND	0	78.41	78.41
11/10/04	13.10	ND	0	78.28	78.28
11/17/04	13.23	ND	0	78.15	78.15
11/23/04	13.38	ND	0	78.00	78.00
12/02/04	13.02	ND	0	78.36	78.36
12/03/04	12.96	ND	0	78.42	78.42
12/08/04	12.79	ND	0	78.59	78.59
12/15/04	12.31	ND	0	79.07	79.07
12/22/04	12.57	ND	0	78.81	78.81
12/28/04	12.58	ND	0	78.80	78.80
01/04/05	12.66	ND	0	78.72	78.72
01/13/05	12.47	ND	0	78.91	78.91
01/19/05	11.78	ND	0	79.60	79.60
01/26/05	12.16	ND	0	79.22	79.22
02/01/05	12.55	ND	0	78.83	78.83
02/08/05	12.79	ND	0	78.59	78.59
02/15/05	12.49	ND	0	78.89	78.89
02/23/05	11.76	ND	0	79.62	79.62
02/23/05	11.77	ND	0	79.61	79.61
03/31/05	11.04	ND	0	80.34	80.34
04/21/05	11.67	ND	0	79.71	79.71
05/20/05	12.02	ND	0	79.36	79.36

Notes:

1) Reference Elevation for B5-R is 91.38.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-5

Groundwater Monitoring Data for Well B-7A

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
05/25/01	8.67	ND	0	80.14	80.14
05/25/01	8.66	ND	0	80.15	80.15
04/27/01	7.37	7.37	Trace	81.44	81.44
02/22/01	8.89	ND	0	79.92	79.92
02/22/01	8.83	ND	0	79.98	79.98
01/25/02	10.09	ND	0	78.72	78.72
02/08/02	10.80	ND	0	78.01	78.01
03/08/02	9.38	ND	0	79.43	79.43
03/08/02	9.36	ND	0	79.45	79.45
03/22/02	9.26	ND	0	79.55	79.55
03/22/02	9.27	ND	0	79.54	79.54
04/05/02	8.36	ND	0	80.45	80.45
04/05/02	8.36	ND	0	80.45	80.45
04/19/02	8.84	ND	0	79.97	79.97
04/19/02	8.82	ND	0	79.99	79.99
05/03/02	8.74	ND	0	80.07	80.07
05/03/02	8.72	ND	0	80.09	80.09
05/17/02	7.88	ND	0	80.93	80.93
05/17/02	7.89	ND	0	80.92	80.92
05/31/02	7.82	ND	0	80.99	80.99
05/31/02	7.85	ND	0	80.96	80.96
06/28/02	8.51	ND	0	80.30	80.30
06/28/02	8.56	ND	0	80.25	80.25
07/03/02	9.12	ND	0	79.69	79.69
07/19/02	9.20	ND	0	79.61	79.61
07/26/02	9.11	ND	0	79.70	79.70
07/26/02	9.09	ND	0	79.72	79.72
08/09/02	9.40	ND	0	79.41	79.41
08/23/02	9.78	ND	0	79.03	79.03
08/23/02	9.79	ND	0	79.02	79.02
09/20/02	10.10	ND	0	78.71	78.71
09/20/02	10.12	ND	0	78.69	78.69
10/18/02	9.58	ND	0	79.23	79.23
10/18/02	9.59	ND	0	79.22	79.22
10/30/02	8.84	ND	0	79.97	79.97
10/30/02	8.84	ND	0	79.97	79.97
11/14/02	8.87	ND	0	79.94	79.94
11/26/02	7.95	ND	0	80.86	80.86
12/09/02	8.47	ND	0	80.34	80.34
12/27/02	NT	NT			
01/10/03	7.92	ND	0	80.89	80.89
01/24/03	8.55	ND	0	80.26	80.26
02/10/03	8.50	ND	0	80.31	80.31
02/21/03	8.95	ND	0	79.86	79.86
03/07/03	8.10	ND	0	80.71	80.71
03/21/03	7.30	ND	0	81.51	81.51
06/12/03	7.30	ND	0	81.51	81.51
06/30/03	7.60	ND	0	81.21	81.21

Table A-5

Groundwater Monitoring Data for Well B-7A

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/10/03	8.20	ND	0	80.61	80.61
07/24/03	8.50	ND	0	80.31	80.31
08/06/03	8.49	ND	0	80.32	80.32
08/21/03	9.53	ND	0	79.28	79.28
09/04/03	9.14	ND	0	79.67	79.67
09/18/03	9.61	ND	0	79.20	79.20
10/02/03	10.02	ND	0	78.79	78.79
10/16/03	9.23	ND	0	79.58	79.58
11/03/03	8.69	ND	0	80.12	80.12
11/13/03	9.01	ND	0	79.80	79.80
11/26/03	9.35	ND	0	79.46	79.46
12/23/03	7.66	ND	0	81.15	81.15
01/06/04	8.29	ND	0	80.52	80.52
02/05/04	9.22	ND	0	79.59	79.59
02/19/04	9.30	ND	0	79.51	79.51
03/03/04	9.72	ND	0	79.09	79.09
03/18/04	9.90	ND	0	78.91	78.91
03/31/04	9.66	ND	0	79.15	79.15
04/15/04	6.84	ND	0	81.97	81.97
04/29/04	7.07	ND	0	81.74	81.74
05/14/04	7.80	ND	0	81.01	81.01
05/27/04	8.36	ND	0	80.45	80.45
06/10/04	8.66	ND	0	80.15	80.15
06/24/04	8.79	ND	0	80.02	80.02
07/14/04	9.07	ND	0	79.74	79.74
08/27/04	8.21	ND	0	80.60	80.60
09/24/04	8.36	ND	0	80.45	80.45
10/08/04	8.60	ND	0	80.21	80.21
10/22/04	8.87	ND	0	79.94	79.94
11/04/04	9.30	ND	0	79.51	79.51
12/03/04	9.19	ND	0	79.62	79.62
12/08/04	8.51	ND	0	80.30	80.30
12/30/04	8.80	ND	0	80.01	80.01
01/31/05	8.65	ND	0	80.16	80.16
02/23/05	7.82	ND	0	80.99	80.99
03/31/05	7.04	ND	0	81.77	81.77
04/09/05	6.90	ND	0	81.91	81.91
04/21/05	7.75	ND	0	81.06	81.06
05/05/05	7.79	ND	0	81.02	81.02
05/20/05	8.16	ND	0	80.65	80.65

Notes:

1) Reference Elevation for B-7A is 88.81.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-6

Groundwater Monitoring Data for Well B-17

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/08/01	10.77	ND	0	80.78	80.78
01/10/01	10.19	ND	0	81.36	81.36
02/22/01	9.47	9.47	Trace	82.08	82.08
04/13/01	7.41	ND	0	84.14	84.14
04/20/01	7.96	7.94	0.02	83.59	83.61
04/27/01	8.37	8.37	Trace	83.18	83.18
05/25/01	9.78	ND	0	81.77	81.77
05/25/01	9.79	ND	0	81.76	81.76
06/08/01	9.81	ND	0	81.74	81.74
06/08/01	12.68	ND	0	78.87	78.87
12/13/01	12.73	ND	0	78.82	78.82
12/21/01	11.27	ND	0	80.28	80.28
01/11/02	11.33	ND	0	80.22	80.22
01/11/02	11.56	ND	0	79.99	79.99
01/25/02	10.55	ND	0	81.00	81.00
02/08/02	10.07	ND	0	81.48	81.48
03/08/02	9.71	ND	0	81.84	81.84
03/08/02	9.73	ND	0	81.82	81.82
03/22/02	9.71	ND	0	81.84	81.84
03/22/02	9.69	ND	0	81.86	81.86
04/05/02	8.69	ND	0	82.86	82.86
04/05/02	8.69	ND	0	82.86	82.86
04/19/02	9.62	ND	0	81.93	81.93
04/19/02	9.62	ND	0	81.93	81.93
05/03/02	9.27	ND	0	82.28	82.28
05/03/02	9.29	ND	0	82.26	82.26
05/17/02	8.41	ND	0	83.14	83.14
05/17/02	8.40	ND	0	83.15	83.15
05/31/02	8.59	ND	0	82.96	82.96
05/31/02	8.59	ND	0	82.96	82.96
06/28/02	9.61	ND	0	81.94	81.94
06/28/02	9.59	ND	0	81.96	81.96
07/03/02	9.79	ND	0	81.76	81.76
07/19/02	12.56	ND	0	78.99	78.99
07/26/02	10.59	ND	0	80.96	80.96
07/26/02	10.57	ND	0	80.98	80.98
08/09/02	11.17	ND	0	80.38	80.38
08/23/02	11.76	ND	0	79.79	79.79
08/23/02	11.76	ND	0	79.79	79.79
09/20/02	11.96	ND	0	79.59	79.59
09/20/02	11.95	ND	0	79.60	79.60
10/18/02	10.88	ND	0	80.67	80.67
10/18/02	10.84	ND	0	80.71	80.71
10/30/02	9.75	ND	0	81.80	81.80
10/30/02	9.75	ND	0	81.80	81.80
11/14/02	9.50	ND	0	82.05	82.05
11/26/02	8.67	ND	0	82.88	82.88
12/09/02	9.48	ND	0	82.07	82.07

Table A-6

Groundwater Monitoring Data for Well B-17

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/27/02	8.31	ND	0	83.24	83.24
01/10/03	8.96	8.95	0.01	82.59	82.60
01/24/03	9.67	ND	0	81.88	81.88
02/10/03	9.77	ND	0	81.78	81.78
02/21/03	10.23	ND	0	81.32	81.32
03/07/03	8.86	ND	0	82.69	82.69
03/21/03	8.07	ND	0	83.48	83.48
03/28/03	8.41	ND	0	83.14	83.14
03/23/03	8.29	ND	0	83.26	83.26
06/12/03	8.45	ND	0	83.10	83.10
06/30/03	8.79	ND	0	82.76	82.76
07/10/03	9.55	ND	0	82.00	82.00
07/24/03	9.80	ND	0	81.75	81.75
08/06/03	9.76	9.75	0.01	81.79	81.80
08/15/03	9.89	ND	0	81.66	81.66
08/15/03	9.85	ND	0	81.70	81.70
08/21/03	9.81	9.80	0.01	81.74	81.75
09/04/03	10.73	ND	0	80.82	80.82
09/18/03	11.24	11.24	Trace	80.31	80.31
10/02/03	11.65	11.65	Trace	79.90	79.90
10/16/03	10.60	10.60	Trace	80.95	80.95
11/03/03	9.50	9.50	Trace	82.05	82.05
11/13/03	9.96	ND	0	81.59	81.59
11/26/03	10.32	ND	0	81.23	81.23
12/08/03	10.50	10.50	Trace	81.05	81.05
12/23/03	8.22	ND	0	83.33	83.33
01/06/04	9.19	9.18	0.01	82.36	82.37
01/22/04	9.89	9.89	Trace	81.66	81.66
02/05/04	10.50	ND	0.00	81.05	81.05
02/19/04	10.71	10.71	Trace	80.84	80.84
03/03/04	11.20	11.19	0.01	80.35	80.36
03/18/04	11.30	ND	0.00	80.25	80.25
03/24/04	10.58	ND	0.00	80.97	80.97
04/15/04	7.37	ND	0.00	84.18	84.18
04/29/04	7.84	7.84	Trace	83.71	83.71
05/14/04	8.69	8.69	Trace	82.86	82.86
05/27/04	8.36	ND	0.00	83.19	83.19
06/10/04	9.62	ND	0.00	81.93	81.93
06/24/04	9.92	9.91	0.01	81.63	81.64
07/14/04	10.16	ND	0.00	81.39	81.39
08/27/04	9.22	9.22	Trace	82.33	82.33
09/24/04	9.40	ND	0.00	82.15	82.15
10/08/04	9.57	9.57	Trace	81.98	81.98
10/22/04	9.84	9.84	Trace	81.71	81.71
11/04/04	10.50	ND	0.00	81.05	81.05
11/19/04	10.80	10.80	Trace	80.75	80.75
12/03/04	9.51	ND	0.00	82.04	82.04
12/08/04	8.91	ND	Trace	82.64	82.64

Table A-6

Groundwater Monitoring Data for Well B-17

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/30/04	9.45	ND	Trace	82.10	82.10
01/13/05	9.20	ND	Trace	82.35	82.35
01/31/05	9.38	ND	Trace	82.17	82.17
02/23/05	8.42	ND	Trace	83.13	83.13
03/10/05	9.28	ND	Trace	82.27	82.27
03/31/05	7.60	ND	0.00	83.95	83.95
04/09/05	7.77	ND	0.00	83.78	83.78
04/21/05	8.74	ND	0.00	82.81	82.81
05/20/05	9.16	ND	0.00	82.39	82.39
06/03/05	8.02	ND	0.00	83.53	83.53

Notes:

1) Reference Elevation for B-17 is 91.55.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-7

Groundwater Monitoring Data for Well GW-13

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.73	ND	0.00	77.84	77.84
01/06/01	12.69	12.68	0.01	77.88	77.89
01/06/01	12.74	12.73	0.01	77.83	77.84
01/06/01	12.75	12.75	TRACE	77.82	77.82
01/06/01	12.76	12.75	TRACE	77.81	77.81
01/08/01	12.99	ND	0.00	77.58	77.58
01/10/01	12.59	ND	0.00	77.98	77.98
01/16/01	13.16	ND	0.00	77.41	77.41
01/22/01	12.69	12.68	0.01	77.88	77.89
01/22/01	12.74	12.73	0.01	77.83	77.84
01/26/01	12.47	ND	0.00	78.10	78.10
01/31/01	12.69	ND	0.00	77.88	77.88
01/31/01	12.70	ND	0.00	77.87	77.87
01/31/01	12.70	ND	0.00	77.87	77.87
01/31/01	12.73	ND	0.00	77.84	77.84
04/06/01	10.52	10.52	TRACE	80.05	80.05
04/13/01	10.29	ND	0.00	80.42	80.42
06/01/01	12.42	ND	0.00	78.29	78.29
12/13/01	12.98	ND	0.00	77.73	77.73
03/08/02	12.54	ND	0	78.17	78.17
03/08/02	12.55	ND	0	78.16	78.16
05/03/02	12.26	ND	0	78.45	78.45
05/03/02	12.25	ND	0	78.46	78.46
05/31/02	11.82	ND	0	78.89	78.89
05/31/02	11.82	ND	0	78.89	78.89
06/21/02	11.94	ND	0	78.77	78.77
06/21/02	11.95	ND	0	78.76	78.76
06/28/02	12.21	ND	0	78.50	78.50
06/28/02	12.28	ND	0	78.43	78.43
07/26/02	12.18	ND	0	78.53	78.53
07/26/02	12.09	ND	0	78.62	78.62
08/23/02	12.69	ND	0	78.02	78.02
08/23/02	12.73	ND	0	77.98	77.98
09/20/02	13.06	ND	0	77.65	77.65
09/20/02	13.07	ND	0	77.64	77.64
10/18/02	12.58	ND	0	78.13	78.13
10/18/02	12.58	ND	0	78.13	78.13
12/06/02	11.84	ND	0	78.87	78.87
12/06/02	11.82	ND	0	78.89	78.89
01/03/03	11.41	ND	0	79.30	79.30
01/03/03	11.40	ND	0	79.31	79.31
02/10/03	11.61	ND	0	79.10	79.10
03/07/03	12.19	ND	0	78.52	78.52
03/13/03	11.50	ND	0	79.21	79.21
03/26/03	11.19	11.18	0.01	79.52	79.53
04/02/03	10.90	ND	0.00	79.81	79.81
05/02/03	11.41	ND	0.00	79.30	79.30
06/12/03	11.28	ND	0.00	79.43	79.43

Table A-7

Groundwater Monitoring Data for Well GW-13

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
08/06/03	11.59	ND	0.00	79.12	79.12
11/03/03	12.27	12.27	TRACE	78.44	78.44
01/06/04	12.22	12.21	0.01	78.49	78.50
01/22/04	12.44	ND	0.00	78.27	78.27
02/19/04	12.61	12.61	TRACE	78.10	78.10
03/31/04	12.72	ND	0.00	77.99	77.99
04/29/04	11.40	11.40	TRACE	79.31	79.31
05/27/04	12.20	12.19	0.01	78.51	78.52
07/14/04	12.63	ND	0.00	78.08	78.08
09/24/04	12.29	12.29	Trace	78.42	78.42
11/03/04	12.64	ND	0.00	78.07	78.07
11/04/04	12.62	ND	0.00	78.09	78.09
11/10/04	12.86	ND	0.00	77.85	77.85
11/17/04	12.95	ND	0.00	77.76	77.76
11/23/04	13.03	ND	0.00	77.68	77.68
12/02/04	12.66	ND	0.00	78.05	78.05
12/03/04	12.62	ND	TRACE	78.09	78.09
12/08/04	12.39	ND	0.00	78.32	78.32
12/15/04	12.00	ND	0.00	78.71	78.71
12/22/04	12.40	ND	0.00	78.31	78.31
12/28/04	12.38	ND	0.00	78.33	78.33
01/04/05	12.50	ND	0.00	78.21	78.21
01/13/05	12.35	ND	0.00	78.36	78.36
01/19/05	11.76	ND	0.00	78.95	78.95
01/26/05	12.18	ND	0.00	78.53	78.53
02/01/05	12.52	ND	0.00	78.19	78.19
02/08/05	12.67	ND	0.00	78.04	78.04
02/15/05	12.40	ND	0.00	78.31	78.31
02/23/05	11.87	ND	0.00	78.84	78.84
02/23/05	11.85	ND	TRACE	78.86	78.86
03/31/05	11.08	ND	0.00	79.63	79.63
04/21/05	11.86	ND	0.00	78.85	78.85
05/20/05	11.98	ND	0.00	78.73	78.73

Notes:

1) Reference Elevation for GW-13 is 90.57.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	10.49	ND	0	80.69	80.69
01/06/01	10.47	ND	0	80.71	80.71
01/08/01	10.95	ND	0	80.23	80.23
01/10/01	10.46	ND	0	80.72	80.72
02/22/01	10.46	ND	0	80.72	80.72
02/22/01	10.27	ND	0	80.91	80.91
03/14/01	10.09	ND	0	81.09	81.09
03/14/01	10.20	ND	0	80.98	80.98
03/26/01	6.42	ND	0	84.76	84.76
03/29/01	6.77	ND	0	84.41	84.41
04/06/01	6.79	ND	0	84.39	84.39
04/13/01	7.32	ND	0	83.86	83.86
04/27/01	8.86	8.86	Trace	82.32	82.32
05/18/01	9.76	ND	0	81.42	81.42
05/18/01	9.86	ND	0	81.32	81.32
05/25/01	10.17	ND	0	81.01	81.01
05/25/01	10.07	ND	0	81.11	81.11
06/01/01	10.42	ND	0	80.76	80.76
06/08/01	9.84	ND	0	81.34	81.34
06/08/01	10.22	ND	0	80.96	80.96
06/15/01	10.48	ND	0	80.70	80.70
06/28/01	10.50	ND	0	80.68	80.68
07/10/01	10.32	ND	0	80.86	80.86
07/20/01	10.53	ND	0	80.65	80.65
07/27/01	10.63	ND	0	80.55	80.55
07/27/01	10.41	ND	0	80.77	80.77
08/03/01	10.69	ND	0	80.49	80.49
08/17/01	9.78	ND	0	81.40	81.40
08/17/01	9.83	ND	0	81.35	81.35
09/07/01	11.12	ND	0	80.06	80.06
09/14/01	11.51	ND	0	79.67	79.67
09/21/01	11.68	ND	0	79.50	79.50
09/28/01	11.74	ND	0	79.44	79.44
09/28/01	11.71	ND	0	79.47	79.47
10/12/01	12.11	ND	0	79.07	79.07
10/26/01	12.39	ND	0	78.79	78.79
11/01/01	12.39	ND	0	78.79	78.79
11/19/01	12.62	ND	0	78.56	78.56
11/28/01	12.77	ND	0	78.41	78.41
12/07/01	13.89	ND	0	77.29	77.29
12/13/01	12.62	ND	0	78.56	78.56
12/21/01	11.92	ND	0	79.26	79.26
12/28/01	11.77	ND	0	79.41	79.41
01/11/02	12.01	ND	0	79.17	79.17
01/11/02	11.95	ND	0	79.23	79.23
01/25/02	11.56	ND	0	79.62	79.62
02/08/02	11.19	ND	0	79.99	79.99
02/15/02	10.90	ND	0	80.28	80.28

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
02/22/02	11.01	ND	0	80.17	80.17
02/22/02	10.99	ND	0	80.19	80.19
03/01/02	10.87	ND	0	80.31	80.31
03/08/02	10.68	ND	0	80.50	80.50
03/08/02	10.67	ND	0	80.51	80.51
03/15/02	10.84	ND	0	80.34	80.34
03/22/02	10.68	ND	0	80.50	80.50
03/22/02	10.62	ND	0	80.56	80.56
03/29/02	10.08	ND	0	81.10	81.10
04/05/02	9.50	ND	0	81.68	81.68
04/05/02	9.45	ND	0	81.73	81.73
04/12/02	9.96	ND	0	81.22	81.22
04/12/02	9.87	ND	0	81.31	81.31
04/19/02	10.34	ND	0	80.84	80.84
04/19/02	10.20	ND	0	80.98	80.98
04/26/02	10.41	ND	0	80.77	80.77
05/03/02	10.03	ND	0	81.15	81.15
05/03/02	10.06	ND	0	81.12	81.12
05/10/02	10.12	ND	0	81.06	81.06
05/17/02	9.16	ND	0	82.02	82.02
05/17/02	9.12	ND	0	82.06	82.06
05/24/02	9.07	ND	0	82.11	82.11
05/31/02	9.42	ND	0	81.76	81.76
05/31/02	9.43	ND	0	81.75	81.75
06/06/02	9.64	ND	0	81.54	81.54
06/14/02	9.60	ND	0	81.58	81.58
06/14/02	9.47	ND	0	81.71	81.71
06/21/02	9.65	ND	0	81.53	81.53
06/28/02	9.77	ND	0	81.41	81.41
06/28/02	9.78	ND	0	81.40	81.40
07/03/02	9.94	ND	0	81.24	81.24
07/12/02	10.41	ND	0	80.77	80.77
07/12/02	10.40	ND	0	80.78	80.78
07/19/02	10.70	ND	0	80.48	80.48
07/26/02	10.71	ND	0	80.47	80.47
07/26/02	10.51	ND	0	80.67	80.67
08/02/02	10.87	ND	0	80.31	80.31
08/09/02	11.07	ND	0	80.11	80.11
08/16/02	11.36	ND	0	79.82	79.82
08/23/02	11.55	ND	0	79.63	79.63
08/23/02	11.52	ND	0	79.66	79.66
08/30/02	11.48	ND	0	79.70	79.70
09/13/02	11.88	ND	0	79.30	79.30
09/20/02	11.82	ND	0	79.36	79.36
09/20/02	11.81	ND	0	79.37	79.37
09/26/02	11.56	ND	0	79.62	79.62
10/04/02	11.29	ND	0	79.89	79.89
10/04/02	11.28	ND	0	79.90	79.90

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/10/02	11.64	ND	0	79.54	79.54
10/18/02	11.15	ND	0	80.03	80.03
10/18/02	11.09	ND	0	80.09	80.09
10/25/02	11.09	ND	0	80.09	80.09
10/30/02	10.39	ND	0	80.79	80.79
10/30/02	10.41	ND	0	80.77	80.77
11/07/02	12.76	ND	0	78.42	78.42
11/07/02	10.77	ND	0	80.41	80.41
11/14/02	9.78	ND	0	81.40	81.40
11/21/02	9.78	ND	0	81.40	81.40
11/21/02	9.72	ND	0	81.46	81.46
11/26/02	9.88	ND	0	81.30	81.30
12/09/02	10.80	ND	0	80.38	80.38
12/20/02	9.04	ND	0	82.14	82.14
12/20/02	9.08	ND	0	82.10	82.10
12/27/02	8.96	ND	0	82.22	82.22
01/10/03	9.65	ND	Trace	81.53	81.53
01/17/03	9.49	ND	0	81.69	81.69
01/17/03	9.44	ND	0	81.74	81.74
01/24/03	9.87	ND	0	81.31	81.31
01/31/03	10.28	ND	0	80.90	80.90
01/31/03	10.22	ND	0	80.96	80.96
02/10/03	10.40	ND	0	80.78	80.78
02/21/03	10.72	ND	0	80.46	80.46
03/07/03	10.00	ND	0	81.18	81.18
03/14/03	9.00	ND	0	82.18	82.18
03/21/03	8.78	ND	0	82.40	82.40
04/02/03	8.10	ND	0	83.08	83.08
04/11/03	9.27	ND	0	81.91	81.91
04/11/03	9.25	ND	0	81.93	81.93
04/25/03	8.75	ND	0	82.43	82.43
04/25/03	8.50	ND	0	82.68	82.68
05/02/03	8.64	ND	0	82.54	82.54
05/09/03	9.06	ND	0	82.12	82.12
05/09/03	9.02	ND	0	82.16	82.16
05/23/03	9.62	ND	0	81.56	81.56
05/23/03	9.60	ND	0	81.58	81.58
06/06/03	8.45	ND	0	82.73	82.73
06/06/03	8.44	ND	0	82.74	82.74
06/12/03	8.75	ND	0	82.43	82.43
06/20/03	9.16	ND	0	82.02	82.02
06/20/03	9.27	ND	0	81.91	81.91
06/30/03	9.02	ND	0	82.16	82.16
07/03/03	9.00	ND	0	82.18	82.18
07/03/03	9.00	ND	0	82.18	82.18
07/10/03	9.58	ND	0	81.60	81.60
07/18/03	10.12	ND	0	81.06	81.06
07/18/03	10.12	ND	0	81.06	81.06

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/24/03	9.80	ND	0	81.38	81.38
08/06/03	9.85	ND	0	81.33	81.33
08/21/03	9.67	ND	0	81.51	81.51
08/29/03	10.68	ND	0	80.50	80.50
08/29/03	10.70	ND	0	80.48	80.48
09/04/03	10.72	ND	0	80.46	80.46
09/11/03	11.01	ND	0	80.17	80.17
09/18/03	11.26	ND	0	79.92	79.92
09/26/03	11.06	ND	0	80.12	80.12
09/26/03	11.10	ND	0	80.08	80.08
10/02/03	11.87	ND	0	79.31	79.31
10/10/03	11.45	ND	0	79.73	79.73
10/10/03	11.84	ND	0	79.34	79.34
10/16/03	10.69	ND	0	80.49	80.49
10/24/03	11.11	ND	0	80.07	80.07
11/03/03	9.82	ND	0	81.36	81.36
11/07/03	10.58	ND	0	80.60	80.60
11/07/03	10.39	ND	0	80.79	80.79
11/13/03	10.49	ND	0	80.69	80.69
11/21/03	11.16	ND	0	80.02	80.02
11/21/03	11.18	ND	0	80.00	80.00
11/26/03	11.17	ND	0	80.01	80.01
12/05/03	11.30	ND	0	79.88	79.88
12/05/03	11.30	ND	0	79.88	79.88
12/08/03	10.90	ND	0	80.28	80.28
12/23/03	9.86	ND	0	81.32	81.32
12/31/03	8.48	ND	0	82.70	82.70
12/31/03	8.50	ND	0	82.68	82.68
01/06/04	10.31	10.31	Trace	80.87	80.87
01/13/04	9.80	ND	0	81.38	81.38
01/13/04	9.82	ND	0	81.36	81.36
01/22/04	10.60	ND	0	80.58	80.58
01/30/04	11.73	ND	0	79.45	79.45
01/30/04	11.70	ND	0	79.48	79.48
02/05/04	11.48	ND	0	79.70	79.70
02/13/04	10.85	ND	0	80.33	80.33
02/13/04	10.85	ND	0	80.33	80.33
02/19/04	12.03	ND	0	79.15	79.15
02/27/04	11.76	ND	0	79.42	79.42
02/27/04	11.78	ND	0	79.40	79.40
03/03/04	12.56	ND	0	78.62	78.62
03/12/04	12.04	ND	0	79.14	79.14
03/12/04	12.08	ND	0	79.10	79.10
03/18/04	12.45	ND	0	78.73	78.73
03/24/04	11.98	ND	0	79.20	79.20
03/24/04	11.98	ND	0	79.20	79.20
03/31/04	11.75	ND	0	79.43	79.43

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/08/04	7.02	ND	0	84.16	84.16
04/08/04	6.82	ND	0	84.36	84.36
04/15/04	9.32	ND	0	81.86	81.86
04/23/04	9.60	ND	0	81.58	81.58
04/23/04	9.65	ND	0	81.53	81.53
04/29/04	9.92	ND	0	81.26	81.26
05/07/04	7.54	ND	0	83.64	83.64
05/07/04	7.47	ND	0	83.71	83.71
05/14/04	8.50	ND	0	82.68	82.68
05/21/04	10.88	ND	0	80.30	80.30
05/21/04	9.74	ND	0	81.44	81.44
05/27/04	9.30	ND	0	81.88	81.88
06/04/04	11.11	ND	0	80.07	80.07
06/04/04	9.00	ND	0	82.18	82.18
06/10/04	9.20	ND	0	81.98	81.98
06/18/04	11.32	ND	0	79.86	79.86
06/18/04	11.32	ND	0	79.86	79.86
06/24/04	11.52	ND	0	79.66	79.66
06/30/04	11.70	ND	0	79.48	79.48
06/30/04	11.70	ND	0	79.48	79.48
07/09/04	11.56	ND	0	79.62	79.62
07/09/04	11.79	ND	0	79.39	79.39
07/14/04	11.47	ND	0	79.71	79.71
08/27/04	10.00	ND	0	81.18	81.18
09/03/04	9.46	ND	0	81.72	81.72
09/03/04	9.48	ND	0	81.70	81.70
09/17/04	9.76	ND	0	81.42	81.42
09/17/04	9.76	ND	0	81.42	81.42
09/24/04	9.12	ND	0	82.06	82.06
10/01/04	9.06	ND	0	82.12	82.12
10/01/04	8.95	ND	0	82.23	82.23
10/08/04	9.66	ND	0	81.52	81.52
10/15/04	10.52	ND	0	80.66	80.66
10/15/04	10.54	ND	0	80.64	80.64
10/22/04	9.35	ND	0	81.83	81.83
10/28/04	9.38	ND	0	81.80	81.80
10/28/04	10.62	ND	0	80.56	80.56
11/04/04	11.27	ND	0	79.91	79.91
11/12/04	10.89	ND	0	80.29	80.29
11/12/04	10.72	ND	0	80.46	80.46
11/19/04	10.59	ND	0	80.59	80.59
11/24/04	11.15	ND	0	80.03	80.03
11/24/04	11.25	ND	0	79.93	79.93
12/03/04	9.27	ND	0	81.91	81.91
12/08/04	10.85	ND	0	80.33	80.33
12/08/04	9.35	ND	0	81.83	81.83

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/08/04	9.78	ND	0	81.40	81.40
12/23/04	10.40	ND	0	80.78	80.78
12/23/04	10.64	ND	0	80.54	80.54
12/30/04	10.03	ND	0	81.15	81.15
01/06/05	9.82	ND	0	81.36	81.36
01/06/05	9.79	ND	0	81.39	81.39
01/13/05	9.72	ND	0	81.46	81.46
01/20/05	8.56	ND	0	82.62	82.62
01/20/05	9.24	ND	0	81.94	81.94
01/31/05	9.80	ND	0	81.38	81.38
02/03/05	10.13	ND	0	81.05	81.05
02/03/05	9.86	ND	0	81.32	81.32
02/09/05	10.68	ND	0	80.50	80.50
02/09/05	10.68	ND	0	80.50	80.50
02/17/05	8.65	ND	0	82.53	82.53
02/23/05	8.36	ND	0	82.82	82.82
03/04/05	9.78	ND	0	81.40	81.40
03/04/05	9.75	ND	0	81.43	81.43
03/10/05	9.90	ND	0	81.28	81.28
03/18/05	9.94	ND	0	81.24	81.24
03/18/05	9.61	ND	0	81.57	81.57
03/31/05	7.03	ND	0	84.15	84.15
04/09/05	8.59	ND	0	82.59	82.59
04/14/05	8.47	ND	0	82.71	82.71
04/14/05	8.52	ND	0	82.66	82.66
04/21/05	8.21	ND	0	82.97	82.97
04/29/05	9.21	ND	0	81.97	81.97
04/29/05	9.77	ND	0	81.41	81.41
05/05/05	9.43	ND	0	81.75	81.75
05/13/05	9.37	ND	0	81.81	81.81
05/13/05	8.77	ND	0	82.41	82.41
05/20/05	9.89	ND	0	81.29	81.29
05/27/05	8.23	ND	0	82.95	82.95
06/03/05	8.02	ND	0	83.16	83.16
06/09/05	8.97	ND	0	82.21	82.21
06/09/05	8.72	ND	0	82.46	82.46
06/23/05	9.51	ND	0	81.67	81.67
06/23/05	9.51	ND	0	81.67	81.67
07/25/05	10.78	ND	0	80.40	80.40
07/25/05	10.76	ND	0	80.42	80.42

Table A-8

Groundwater Monitoring Data for Well GW-16

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation

Notes:

1) Reference Elevation for GW-16 is 91.18.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.87	12.85	0.02	77.28	77.30
01/06/01	12.71	12.70	0.01	77.44	77.45
01/06/01	12.84	12.83	0.01	77.31	77.32
01/06/01	12.89	12.87	0.02	77.26	77.28
01/06/01	12.83	12.82	0.01	77.32	77.33
01/06/01	12.86	12.86	Trace	77.29	77.29
01/08/01	12.76	12.74	0.02	77.39	77.41
01/16/01	12.85	12.84	0.01	77.30	77.31
01/22/01	12.87	12.85	0.02	77.28	77.30
01/22/01	12.71	12.70	0.01	77.44	77.45
01/22/01	12.84	12.83	0.01	77.31	77.32
01/26/01	12.91	12.90	0.01	77.24	77.25
01/31/01	12.85	ND	0	77.30	77.30
01/31/01	12.86	12.86	Trace	77.29	77.29
01/31/01	12.86	12.86	Trace	77.29	77.29
01/31/01	12.84	12.84	Trace	77.31	77.31
01/31/01	12.81	12.81	Trace	77.34	77.34
01/31/01	12.78	12.78	Trace	77.37	77.37
01/31/01	12.83	12.83	Trace	77.32	77.32
01/31/01	12.78	12.78	Trace	77.37	77.37
02/16/01	12.61	12.61	Trace	77.54	77.54
02/16/01	12.62	12.62	Trace	77.53	77.53
02/22/01	12.68	ND	0	77.47	77.47
02/22/01	12.67	ND	0	77.48	77.48
03/14/01	12.45	12.42	0.03	77.70	77.73
03/14/01	12.45	12.43	0.02	77.70	77.72
03/26/01	11.34	11.34	Trace	78.81	78.81
03/29/01	11.60	11.60	Trace	78.55	78.55
04/06/01	11.65	11.65	Trace	78.50	78.50
04/13/01	11.58	11.58	Trace	78.57	78.57
04/13/01	11.57	ND	0	78.58	78.58
04/20/01	12.01	12.01	Trace	78.14	78.14
04/27/01	12.19	12.18	0.01	77.96	77.97
05/18/01	12.53	12.53	Trace	77.62	77.62
05/18/01	12.51	12.51	Trace	77.64	77.64
05/25/01	12.55	ND	0	77.60	77.60
05/25/01	12.55	ND	0	77.60	77.60
06/01/01	12.59	12.59	Trace	77.56	77.56
06/01/01	12.58	12.58	Trace	77.57	77.57
06/08/01	12.62	12.62	Trace	77.53	77.53
06/08/01	12.62	12.62	Trace	77.53	77.53
06/15/01	12.67	12.67	Trace	77.48	77.48
06/15/01	12.66	12.66	Trace	77.49	77.49
06/28/01	12.58	ND	0	77.57	77.57
06/28/01	12.57	ND	0	77.58	77.58
07/10/01	12.47	12.47	Trace	77.68	77.68
07/10/01	12.46	12.46	Trace	77.69	77.69
07/20/01	12.61	ND	0	77.54	77.54

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/20/01	12.61	ND	0	77.54	77.54
07/27/01	12.59	ND	0	77.56	77.56
07/27/01	12.59	ND	0	77.56	77.56
08/03/01	12.63	ND	0	77.52	77.52
08/03/01	12.61	ND	0	77.54	77.54
08/17/01	12.51	ND	0	77.64	77.64
08/17/01	12.50	ND	0	77.65	77.65
09/07/01	12.55	ND	0	77.60	77.60
09/07/01	12.55	ND	0	77.60	77.60
09/14/01	12.84	ND	0	77.31	77.31
09/14/01	12.82	ND	0	77.33	77.33
09/21/01	12.91	ND	0	77.24	77.24
09/21/01	12.91	ND	0	77.24	77.24
09/28/01	12.96	ND	0	77.19	77.19
09/28/01	12.96	ND	0	77.19	77.19
10/12/01	13.06	ND	0	77.09	77.09
10/12/01	13.07	ND	0	77.08	77.08
10/19/01	12.92	12.92	Trace	77.23	77.23
10/19/01	12.93	12.93	Trace	77.22	77.22
10/26/01	13.32	ND	0	76.83	76.83
10/26/01	13.33	ND	0	76.82	76.82
10/26/01	13.32	ND	0	76.83	76.83
11/01/01	13.33	ND	0	76.82	76.82
11/01/01	13.32	ND	0	76.83	76.83
11/19/01	13.26	13.26	Trace	76.89	76.89
11/19/01	13.26	13.26	Trace	76.89	76.89
11/28/01	13.33	ND	0	76.82	76.82
12/07/01	13.33	ND	0	76.82	76.82
12/13/01	13.08	ND	0	77.07	77.07
12/21/01	12.84	ND	0	77.31	77.31
12/21/01	12.84	ND	0	77.31	77.31
12/28/01	13.18	ND	0	76.97	76.97
01/11/02	13.18	13.26	Trace	76.97	76.97
01/11/02	13.15	ND	0	77.00	77.00
01/25/02	13.25	ND	0	76.90	76.90
02/08/02	13.12	ND	0	77.03	77.03
02/08/02	13.12	ND	0	77.03	77.03
02/15/02	13.10	ND	0	77.05	77.05
02/15/02	13.10	ND	0	77.05	77.05
02/22/02	13.04	13.04	Trace	77.11	77.11
02/22/02	13.04	13.04	Trace	77.11	77.11
03/01/02	12.73	ND	0	77.42	77.42
03/01/02	12.73	ND	0	77.42	77.42
03/08/02	12.82	12.80	0.02	77.33	77.35
03/08/02	12.82	12.82	0	77.33	77.33
03/15/02	12.87	12.87	Trace	77.28	77.28
03/15/02	12.86	12.86	Trace	77.29	77.29
03/22/02	12.55	12.53	0.02	77.60	77.62

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/22/02	12.55	12.54	0.01	77.60	77.61
03/29/02	12.41	12.41	Trace	77.74	77.74
03/29/02	12.41	12.41	Trace	77.74	77.74
04/05/02	12.36	12.35	0.01	77.79	77.80
04/05/02	12.35	12.34	0.01	77.80	77.81
04/12/02	13.84	13.51	0.33	76.31	76.62
04/12/02	12.51	12.51	Trace	77.64	77.64
04/19/02	12.61	12.60	0.01	77.54	77.55
04/19/02	12.61	12.60	0.01	77.54	77.55
04/26/02	12.57	12.57	Trace	77.58	77.58
04/26/02	12.57	12.57	Trace	77.58	77.58
05/03/02	12.48	12.47	0.01	77.67	77.68
05/03/02	12.49	12.48	0.01	77.66	77.67
05/10/02	12.54	12.54	Trace	77.61	77.61
05/10/02	12.53	12.54	Trace	77.62	77.62
05/17/02	12.20	12.19	0.01	77.95	77.96
05/17/02	12.20	12.19	0.01	77.95	77.96
05/24/02	12.28	12.28	Trace	77.87	77.87
05/24/02	12.28	12.28	Trace	77.87	77.87
05/31/02	12.25	12.24	0.01	77.90	77.91
05/31/02	12.24	12.23	0.01	77.91	77.92
06/06/02	12.32	12.32	Trace	77.83	77.83
06/06/02	12.31	12.31	Trace	77.84	77.84
06/14/02	12.05	12.04	0.01	78.10	78.11
06/14/02	12.04	12.03	0.01	78.11	78.12
06/21/02	12.35	12.35	Trace	77.80	77.80
06/21/02	12.35	12.35	Trace	77.80	77.80
06/28/02	12.45	12.44	0.01	77.70	77.71
06/28/02	12.45	12.44	0.01	77.70	77.71
07/03/02	12.51	12.51	Trace	77.64	77.64
07/03/02	12.42	12.41	0.01	77.73	77.74
07/12/02	12.53	12.52	0.01	77.62	77.63
07/12/02	12.53	12.52	0.01	77.62	77.63
07/19/02	12.35	12.35	Trace	77.80	77.80
07/26/02	12.40	12.42	0.02	77.75	77.77
07/26/02	12.40	12.39	0.01	77.75	77.76
08/02/02	12.50	ND	0	77.65	77.65
08/09/02	12.64	12.62	0.02	77.51	77.53
08/16/02	12.81	12.81	Trace	77.34	77.34
08/23/02	12.70	12.69	0.01	77.45	77.46
08/23/02	12.70	12.69	0.01	77.45	77.46
08/30/02	12.66	12.65	0.01	77.49	77.50
08/30/02	12.66	12.65	0.01	77.49	77.50
09/13/02	12.91	12.91	Trace	77.24	77.24
09/13/02	12.90	12.90	Trace	77.25	77.25
09/20/02	12.97	12.96	0.01	77.18	77.19
09/20/02	12.99	12.98	0.01	77.16	77.17
09/26/02	12.68	ND	0	77.47	77.47

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
09/26/02	12.67	ND	0	77.48	77.48
10/04/02	12.71	ND	0	77.44	77.44
10/04/02	12.70	ND	0	77.45	77.45
10/10/02	12.87	12.87	Trace	77.28	77.28
10/18/02	12.57	12.56	Trace	77.58	77.58
10/18/02	12.57	12.59	Trace	77.58	77.58
10/25/02	12.58	ND	0	77.57	77.57
10/25/02	12.58	ND	0	77.57	77.57
10/30/02	12.27	ND	0	77.88	77.88
10/30/02	12.28	ND	0	77.87	77.87
11/07/02	12.49	ND	0	77.66	77.66
11/07/02	12.50	ND	0	77.65	77.65
11/14/02	12.20	ND	0	77.95	77.95
11/14/02	12.20	ND	0	77.95	77.95
11/21/02	10.81	ND	0	79.34	79.34
11/21/02	10.76	ND	0	79.39	79.39
11/26/02	11.90	ND	0	78.25	78.25
11/26/02	11.89	ND	0	78.26	78.26
12/06/02	11.96	ND	0	78.19	78.19
12/06/02	11.96	ND	0	78.19	78.19
12/09/02	12.07	ND	0	78.08	78.08
12/09/02	12.05	ND	0	78.10	78.10
12/20/02	11.71	ND	0	78.44	78.44
12/20/02	11.70	ND	0	78.45	78.45
12/27/02	11.73	ND	0	78.42	78.42
12/27/02	11.75	ND	0	78.40	78.40
01/03/03	11.68	ND	0	78.47	78.47
01/03/03	11.67	ND	0	78.48	78.48
01/10/03	12.00	ND	0	78.15	78.15
01/10/03	12.00	ND	0	78.15	78.15
01/17/03	11.87	ND	0	78.28	78.28
01/17/03	11.88	ND	0	78.27	78.27
01/24/03	12.07	ND	0	78.08	78.08
01/24/03	12.17	ND	0	77.98	77.98
01/31/03	12.09	ND	0	78.06	78.06
01/31/03	12.09	ND	0	78.06	78.06
02/10/03	11.92	ND	0	78.23	78.23
02/10/03	11.93	11.93	Trace	78.22	78.22
02/21/03	12.27	12.27	Trace	77.88	77.88
02/21/03	12.27	12.27	Trace	77.88	77.88
02/27/03	12.10	ND	0	78.05	78.05
02/27/03	12.10	ND	0	78.05	78.05
03/07/03	12.04	ND	0	78.11	78.11
03/14/03	11.97	ND	0	78.18	78.18
03/14/03	11.99	ND	0	78.16	78.16
03/21/03	11.79	ND	0	78.36	78.36
03/21/03	11.78	ND	0	78.37	78.37
03/28/03	11.88	ND	0	78.27	78.27

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/28/03	11.88	ND	0	78.27	78.27
04/02/03	11.60	11.60	Trace	78.55	78.55
04/02/03	11.56	11.56	Trace	78.59	78.59
04/11/03	11.72	ND	0	78.43	78.43
04/11/03	11.72	ND	0	78.43	78.43
04/18/03	11.76	11.76	Trace	78.39	78.39
04/18/03	11.77	11.77	Trace	78.38	78.38
04/25/03	11.91	ND	0	78.24	78.24
04/25/03	11.91	ND	0	78.24	78.24
05/02/03	11.82	ND	0	78.33	78.33
05/09/03	11.94	ND	0	78.21	78.21
05/09/03	11.91	ND	0	78.24	78.24
05/15/03	11.89	ND	0	78.26	78.26
05/15/03	11.90	ND	0	78.25	78.25
05/23/03	12.07	ND	0	78.08	78.08
05/23/03	12.05	ND	0	78.10	78.10
05/30/03	11.84	ND	0	78.31	78.31
05/30/03	11.85	ND	0	78.30	78.30
06/06/03	11.64	ND	0	78.51	78.51
06/06/03	11.64	ND	0	78.51	78.51
06/12/03	11.72	ND	0	78.43	78.43
06/12/03	11.70	ND	0	78.45	78.45
06/20/03	11.84	ND	0	78.31	78.31
06/20/03	11.83	ND	0	78.32	78.32
06/30/03	11.96	ND	0	78.19	78.19
06/30/03	11.95	ND	0	78.20	78.20
07/03/03	12.00	ND	0	78.15	78.15
07/03/03	11.96	ND	0	78.19	78.19
07/10/03	12.15	ND	0	78.00	78.00
07/10/03	12.16	ND	0	77.99	77.99
07/18/03	12.24	ND	0	77.91	77.91
07/18/03	12.24	ND	0	77.91	77.91
07/24/03	12.13	12.13	Trace	78.02	78.02
07/24/03	12.14	ND	0	78.01	78.01
08/01/03	11.06	ND	0	79.09	79.09
08/01/03	11.12	ND	0	79.03	79.03
08/06/03	12.07	ND	0	78.08	78.08
08/06/03	12.07	12.07	Trace	78.08	78.08
08/15/03	12.10	ND	0	78.05	78.05
08/15/03	12.10	ND	0	78.05	78.05
08/21/03	12.26	ND	0	77.89	77.89
08/21/03	12.26	ND	0	77.89	77.89
08/29/03	12.38	ND	0	77.77	77.77
08/29/03	12.38	ND	0	77.77	77.77
09/04/03	12.74	ND	0	77.41	77.41
09/04/03	12.75	ND	0	77.40	77.40
09/11/03	12.88	ND	0	77.27	77.27
09/18/03	12.88	12.88	Trace	77.27	77.27

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
09/18/03	12.92	12.92	Trace	77.23	77.23
09/26/03	12.92	ND	0	77.23	77.23
09/26/03	12.88	ND	0	77.27	77.27
10/02/03	12.91	12.91	Trace	77.24	77.24
10/02/03	12.91	12.91	Trace	77.24	77.24
10/10/03	12.96	ND	0	77.19	77.19
10/10/03	12.95	ND	0	77.20	77.20
10/16/03	12.61	ND	0	77.54	77.54
10/16/03	12.61	ND	0	77.54	77.54
10/24/13	12.70	ND	0	77.45	77.45
11/03/03	12.47	ND	0	77.68	77.68
11/03/03	12.61	ND	0	77.54	77.54
11/07/03	12.88	ND	0	77.27	77.27
11/07/03	12.86	ND	0	77.29	77.29
11/13/03	12.80	ND	0	77.35	77.35
11/13/03	12.79	ND	0	77.36	77.36
11/21/03	12.82	ND	0	77.33	77.33
11/21/03	12.82	ND	0	77.33	77.33
11/26/03	12.89	ND	0	77.26	77.26
11/26/03	12.89	ND	0	77.26	77.26
12/05/03	11.82	ND	0	78.33	78.33
12/05/03	11.84	ND	0	78.31	78.31
12/08/03	12.47	ND	0	77.68	77.68
12/19/03	12.22	ND	0	77.93	77.93
12/19/03	12.24	ND	0	77.91	77.91
12/23/03	12.39	ND	0	77.76	77.76
12/23/03	12.38	ND	0	77.77	77.77
12/31/03	12.55	ND	0	77.60	77.60
12/31/03	12.48	ND	0	77.67	77.67
01/06/04	12.66	ND	0	77.49	77.49
01/06/04	12.66	ND	0	77.49	77.49
01/13/04	12.54	ND	0	77.61	77.61
01/13/04	12.54	ND	0	77.61	77.61
01/22/04	12.75	ND	0	77.40	77.40
01/22/04	12.76	12.76	Trace	77.39	77.39
01/30/04	12.84	ND	0	77.31	77.31
01/30/04	12.82	ND	0	77.33	77.33
02/05/04	12.86	ND	0	77.29	77.29
02/05/04	12.85	ND	0	77.30	77.30
02/13/04	12.68	ND	0	77.47	77.47
02/13/04	12.70	ND	0	77.45	77.45
02/19/04	12.84	ND	0	77.31	77.31
02/19/04	12.83	ND	0	77.32	77.32
02/27/04	12.98	ND	0	77.17	77.17
02/27/04	12.92	ND	0	77.23	77.23
03/03/04	12.99	ND	0	77.16	77.16
03/03/04	12.99	ND	0	77.16	77.16
03/12/04	13.08	ND	0	77.07	77.07

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/12/04	13.05	ND	0	77.10	77.10
03/18/04	13.00	ND	0	77.15	77.15
03/18/04	13.00	ND	0	77.15	77.15
03/24/04	12.92	ND	0	77.23	77.23
03/24/04	12.96	ND	0	77.19	77.19
03/31/04	12.93	ND	0	77.22	77.22
03/31/04	12.91	ND	0	77.24	77.24
04/08/04	12.08	ND	0	78.07	78.07
04/08/04	12.06	ND	0	78.09	78.09
04/15/04	12.08	ND	0	78.07	78.07
04/15/04	12.08	ND	0	78.07	78.07
04/23/04	12.22	ND	0	77.93	77.93
04/23/04	12.25	ND	0	77.90	77.90
04/29/04	12.00	ND	0	78.15	78.15
04/29/04	11.99	ND	0	78.16	78.16
05/07/04	12.12	ND	0	78.03	78.03
05/07/04	12.22	ND	0	77.93	77.93
05/14/04	12.44	ND	0	77.71	77.71
05/14/04	12.53	ND	0	77.62	77.62
05/21/04	12.65	ND	0	77.50	77.50
05/21/04	12.68	ND	0	77.47	77.47
05/27/04	12.65	ND	0	77.50	77.50
05/27/04	12.64	ND	0	77.51	77.51
06/04/04	12.74	ND	0	77.41	77.41
06/04/04	12.76	ND	0	77.39	77.39
06/10/04	12.79	ND	0	77.36	77.36
06/10/04	12.79	ND	0	77.36	77.36
06/18/04	12.66	ND	0	77.49	77.49
06/18/04	12.66	ND	0	77.49	77.49
06/24/04	12.80	12.79	0.01	77.35	77.36
06/24/04	12.78	12.78	Trace	77.37	77.37
06/30/04	12.79	ND	0	77.36	77.36
06/30/04	12.80	ND	0	77.35	77.35
07/09/04	12.61	ND	0	77.54	77.54
07/09/04	12.59	ND	0	77.56	77.56
07/14/04	12.94	ND	0	77.21	77.21
08/27/04	12.79	ND	0	77.36	77.36
08/27/04	12.77	ND	0	77.38	77.38
09/03/04	12.95	ND	0	77.20	77.20
09/03/04	12.95	ND	0	77.20	77.20
09/17/04	12.88	ND	0	77.27	77.27
09/17/04	12.89	ND	0	77.26	77.26
09/24/04	12.73	ND	0	77.42	77.42
09/24/04	13.80	ND	0	76.35	76.35
10/01/04	12.61	ND	0	77.54	77.54
10/01/04	12.60	ND	0	77.55	77.55
10/08/04	12.70	ND	0	77.45	77.45
10/08/04	12.72	ND	0	77.43	77.43

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/15/04	12.81	ND	0	77.34	77.34
10/15/04	12.82	ND	0	77.33	77.33
10/22/04	12.73	ND	0	77.42	77.42
10/22/04	12.75	ND	0	77.40	77.40
10/28/04	12.79	ND	0	77.36	77.36
10/28/04	12.79	ND	0	77.36	77.36
11/04/04	12.87	ND	0	77.28	77.28
11/04/04	12.87	ND	0	77.28	77.28
11/12/04	13.23	ND	0	76.92	76.92
11/12/04	13.24	ND	0	76.91	76.91
11/19/04	13.30	ND	0	76.85	76.85
11/24/04	13.32	ND	0	76.83	76.83
11/24/04	13.33	ND	0	76.82	76.82
12/03/04	13.08	ND	0	77.07	77.07
12/03/04	13.07	ND	0	77.08	77.08
12/08/04	12.88	Sheen	0	77.27	77.27
12/08/04	12.85	ND	0	77.30	77.30
12/08/04	12.60	ND	0	77.55	77.55
12/08/04	12.72	ND	0	77.43	77.43
12/23/04	12.89	ND	0	77.26	77.26
12/23/04	12.89	ND	0	77.26	77.26
12/30/04	12.97	ND	0	77.18	77.18
12/30/04	12.96	ND	0	77.19	77.19
01/06/05	12.82	ND	0	77.33	77.33
01/06/05	12.81	ND	0	77.34	77.34
01/13/05	12.92	ND	0	77.23	77.23
01/20/05	12.66	ND	0	77.49	77.49
01/20/05	12.68	ND	0	77.47	77.47
01/31/05	12.99	ND	0	77.16	77.16
01/31/05	12.97	ND	0	77.18	77.18
02/03/05	13.04	ND	0	77.11	77.11
02/03/05	13.05	ND	0	77.10	77.10
02/09/05	13.06	ND	0	77.09	77.09
02/09/05	13.06	ND	0	77.09	77.09
02/17/05	12.72	ND	0	77.43	77.43
02/17/05	12.72	ND	Trace	77.43	77.43
02/23/05	12.51	ND	0	77.64	77.64
02/23/05	12.55	ND	0	77.60	77.60
03/04/05	12.65	ND	0	77.50	77.50
03/04/05	12.66	ND	0	77.49	77.49
03/10/05	12.66	ND	0	77.49	77.49
03/10/05	12.65	ND	0	77.50	77.50
03/18/05	12.56	ND	0	77.59	77.59
03/18/05	13.50	ND	0	76.65	76.65
03/31/05	11.92	ND	0	78.23	78.23
03/31/05	11.92	ND	0	78.23	78.23
04/09/05	11.86	ND	0	78.29	78.29
04/09/05	11.88	ND	0	78.27	78.27

Table A-10

Groundwater Monitoring Data for Well GW-100

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/14/05	12.22	ND	0	77.93	77.93
04/14/05	12.22	ND	0	77.93	77.93
04/21/05	12.37	ND	0	77.78	77.78
04/21/05	12.37	ND	0	77.78	77.78
04/29/05	12.38	ND	0	77.77	77.77
04/29/05	12.39	ND	0	77.76	77.76
05/05/05	12.37	ND	0	77.78	77.78
05/05/05	12.35	ND	0	77.80	77.80
05/13/05	12.35	ND	0	77.80	77.80
05/13/05	12.37	ND	0	77.78	77.78
05/20/05	12.35	ND	0	77.80	77.80
05/20/05	12.35	ND	0	77.80	77.80
05/27/05	12.01	ND	0	78.14	78.14
06/03/05	12.02	ND	0	78.13	78.13
06/09/05	11.98	ND	0	78.17	78.17
06/09/05	11.98	ND	0	78.17	78.17
06/23/05	12.41	ND	0	77.74	77.74
06/23/05	12.41	ND	0	77.74	77.74
07/25/05	12.65	ND	0	77.50	77.50
07/25/05	12.65	ND	0	77.50	77.50

Notes:

1) Reference Elevation for GW100 is 90.15.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.06	ND	0	77.08	77.08
01/06/01	13.04	ND	0	77.10	77.10
01/06/01	12.73	ND	0	77.41	77.41
01/08/01	12.92	ND	0	77.22	77.22
01/16/01	13.04	ND	0	77.10	77.10
01/22/01	13.06	ND	0	77.08	77.08
01/22/01	12.73	ND	0	77.41	77.41
01/31/01	13.04	13.04	Trace	77.10	77.10
01/31/01	13.03	13.03	Trace	77.11	77.11
01/31/01	13.04	13.04	Trace	77.10	77.10
01/31/01	12.83	12.83	Trace	77.31	77.31
01/31/01	13.07	13.07	Trace	77.07	77.07
01/31/01	13.09	13.09	Trace	77.05	77.05
01/31/01	13.09	13.09	Trace	77.05	77.05
01/31/01	13.07	13.07	Trace	77.07	77.07
01/31/01	12.91	12.91	Trace	77.23	77.23
01/31/01	13.04	13.04	Trace	77.10	77.10
01/31/01	12.91	12.91	Trace	77.23	77.23
02/16/01	12.75	12.75	Trace	77.39	77.39
02/16/01	12.79	12.79	Trace	77.35	77.35
02/22/01	12.85	ND	0	77.29	77.29
02/22/01	12.77	ND	0	77.37	77.37
03/14/01	12.51	ND	0	77.63	77.63
03/14/01	12.59	ND	0	77.55	77.55
03/26/01	11.46	11.46	Trace	78.68	78.68
03/26/01	10.72	ND	0	79.42	79.42
04/06/01	11.75	11.75	Trace	78.39	78.39
04/13/01	11.58	11.58	Trace	78.56	78.56
04/13/01	11.62	ND	0	78.52	78.52
04/20/01	12.06	ND	0	78.08	78.08
04/27/01	12.33	12.33	Trace	77.81	77.81
05/18/01	12.63	12.63	Trace	77.51	77.51
05/18/01	12.59	12.59	Trace	77.55	77.55
05/25/01	12.66	ND	0	77.48	77.48
05/25/01	12.64	ND	0	77.50	77.50
06/01/01	12.71	ND	0	77.43	77.43
06/01/01	12.66	ND	0	77.48	77.48
06/08/01	12.71	ND	0	77.43	77.43
06/08/01	12.74	ND	0	77.40	77.40
06/15/01	12.79	ND	0	77.35	77.35
06/15/01	12.75	ND	0	77.39	77.39
06/28/01	12.71	ND	0	77.43	77.43
06/28/01	12.66	ND	0	77.48	77.48
07/10/01	12.64	ND	0	77.50	77.50
07/10/01	12.56	ND	0	77.58	77.58
07/20/01	12.72	ND	0	77.42	77.42
07/20/01	12.68	ND	0	77.46	77.46
07/27/01	12.72	ND	0	77.42	77.42

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/27/01	12.69	ND	0	77.45	77.45
08/03/01	12.76	ND	0	77.38	77.38
08/03/01	12.73	ND	0	77.41	77.41
08/17/01	12.68	ND	0	77.46	77.46
08/17/01	12.62	ND	0	77.52	77.52
09/07/01	12.78	ND	0	77.36	77.36
09/07/01	12.74	ND	0	77.40	77.40
09/14/01	13.01	ND	0	77.13	77.13
09/14/01	12.98	ND	0	77.16	77.16
09/21/01	13.12	ND	0	77.02	77.02
09/21/01	13.08	ND	0	77.06	77.06
09/28/01	13.17	ND	0	76.97	76.97
09/28/01	13.12	ND	0	77.02	77.02
10/12/01	13.23	ND	0	76.91	76.91
10/12/01	13.22	ND	0	76.92	76.92
10/19/01	13.06	ND	0	77.08	77.08
10/19/01	13.03	ND	0	77.11	77.11
10/26/01	13.65	ND	0	76.49	76.49
10/26/01	13.62	ND	0	76.52	76.52
11/01/01	13.65	ND	0	76.49	76.49
11/01/01	13.62	ND	0	76.52	76.52
11/19/01	13.76	ND	0	76.38	76.38
11/19/01	13.78	ND	0	76.36	76.36
11/28/01	13.56	ND	0	76.58	76.58
12/07/01	13.57	ND	0	76.57	76.57
12/13/01	13.26	ND	0	76.88	76.88
12/21/01	12.92	ND	0	77.22	77.22
12/21/01	13.05	ND	0	77.09	77.09
12/28/01	13.54	ND	0	76.60	76.60
01/11/02	13.65	ND	0	76.49	76.49
01/11/02	13.58	ND	0	76.56	76.56
01/25/02	13.59	ND	0	76.55	76.55
02/08/02	13.44	ND	0	76.70	76.70
02/08/02	13.39	ND	0	76.75	76.75
02/15/02	13.42	ND	0	76.72	76.72
02/15/02	13.37	ND	0	76.77	76.77
02/22/02	13.31	ND	0	76.83	76.83
02/22/02	13.28	ND	0	76.86	76.86
03/01/02	13.06	ND	0	77.08	77.08
03/01/02	12.96	ND	0	77.18	77.18
03/08/02	13.14	ND	0	77.00	77.00
03/08/02	13.04	ND	0	77.10	77.10
03/15/02	13.17	ND	0	76.97	76.97
03/15/02	13.11	ND	0	77.03	77.03
03/22/01	12.70	ND	0	77.44	77.44
03/22/01	12.66	ND	0	77.48	77.48
03/29/02	12.50	ND	0	77.64	77.64
03/29/02	12.52	ND	0	77.62	77.62

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/05/02	12.60	ND	0	77.54	77.54
04/05/02	12.55	ND	0	77.59	77.59
04/12/02	12.78	ND	0	77.36	77.36
04/12/02	12.72	ND	0	77.42	77.42
04/19/02	12.82	ND	0	77.32	77.32
04/19/02	12.84	ND	0	77.30	77.30
04/26/02	12.69	ND	0	77.45	77.45
04/26/02	12.78	ND	0	77.36	77.36
05/03/02	12.66	ND	0	77.48	77.48
05/03/02	12.68	ND	0	77.46	77.46
05/10/02	12.76	ND	0	77.38	77.38
05/10/02	12.72	ND	0	77.42	77.42
05/17/02	12.35	ND	0	77.79	77.79
05/17/02	12.37	ND	0	77.77	77.77
05/24/02	12.58	ND	0	77.56	77.56
05/24/02	12.54	ND	0	77.60	77.60
05/31/02	12.48	ND	0	77.66	77.66
05/31/02	12.44	ND	0	77.70	77.70
06/06/02	12.56	ND	0	77.58	77.58
06/06/02	12.50	ND	0	77.64	77.64
06/14/02	12.36	ND	0	77.78	77.78
06/14/02	12.36	ND	0	77.78	77.78
06/21/02	12.60	ND	0	77.54	77.54
06/21/02	12.57	ND	0	77.57	77.57
06/28/02	12.69	ND	0	77.45	77.45
06/28/02	12.67	ND	0	77.47	77.47
07/03/02	12.73	ND	0	77.41	77.41
07/03/02	12.61	ND	0	77.53	77.53
07/12/02	12.63	ND	0	77.51	77.51
07/12/02	12.69	ND	0	77.45	77.45
07/19/02	12.56	ND	0	77.58	77.58
07/26/02	11.64	ND	0	78.50	78.50
07/26/02	12.48	ND	0	77.66	77.66
08/02/02	12.59	ND	0	77.55	77.55
08/09/02	12.67	ND	0	77.47	77.47
08/16/02	12.89	ND	0	77.25	77.25
08/23/02	12.78	ND	0	77.36	77.36
08/23/02	12.76	ND	0	77.38	77.38
08/30/02	12.69	ND	0	77.45	77.45
08/30/02	12.65	ND	0	77.49	77.49
09/13/02	12.98	ND	0	77.16	77.16
09/13/02	12.93	ND	0	77.21	77.21
09/20/02	13.06	ND	0	77.08	77.08
09/20/02	13.08	ND	0	77.06	77.06
09/26/02	12.72	ND	0	77.42	77.42
09/26/02	12.70	ND	0	77.44	77.44
10/04/02	12.70	ND	0	77.44	77.44
10/04/02	12.70	ND	0	77.44	77.44

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/10/02	12.90	ND	0	77.24	77.24
10/18/02	12.60	ND	0	77.54	77.54
10/18/02	12.59	ND	0	77.55	77.55
10/25/02	11.44	ND	0	78.70	78.70
10/25/02	12.63	ND	0	77.51	77.51
10/30/02	12.27	ND	0	77.87	77.87
10/30/02	12.24	ND	0	77.90	77.90
11/07/02	12.53	ND	0	77.61	77.61
11/07/02	12.56	ND	0	77.58	77.58
11/14/02	12.23	ND	0	77.91	77.91
11/14/02	12.21	ND	0	77.93	77.93
11/21/02	11.87	ND	0	78.27	78.27
11/21/02	11.90	ND	0	78.24	78.24
11/26/02	11.91	ND	0	78.23	78.23
11/26/02	11.82	ND	0	78.32	78.32
12/06/02	11.91	ND	0	78.23	78.23
12/06/02	11.90	ND	0	78.24	78.24
12/09/02	12.10	ND	0	78.04	78.04
12/09/02	11.97	ND	0	78.17	78.17
12/20/02	11.79	ND	0	78.35	78.35
12/20/02	11.71	ND	0	78.43	78.43
12/27/02	11.76	ND	0	78.38	78.38
12/27/02	11.82	ND	0	78.32	78.32
01/03/03	11.62	ND	0	78.52	78.52
01/03/03	11.70	ND	0	78.44	78.44
01/10/03	12.23	ND	0	77.91	77.91
01/10/03	12.26	ND	0	77.88	77.88
01/17/03	11.84	ND	0	78.30	78.30
01/17/03	11.84	ND	0	78.30	78.30
01/24/03	12.30	ND	0	77.84	77.84
01/24/03	12.35	ND	Trace	77.79	77.79
01/31/03	12.26	ND	0	77.88	77.88
01/31/03	12.30	ND	0	77.84	77.84
02/10/03	12.10	ND	0	78.04	78.04
02/10/03	12.02	12.02	Trace	78.12	78.12
02/21/03	12.53	12.52	0.01	77.61	77.62
02/21/03	12.41	ND	0	77.73	77.73
02/27/03	12.18	ND	0	77.96	77.96
02/27/03	12.20	ND	0	77.94	77.94
03/07/03	12.25	ND	0	77.89	77.89
03/14/03	12.17	ND	0	77.97	77.97
03/14/03	12.10	ND	0	78.04	78.04
03/21/03	11.98	ND	0	78.16	78.16
03/21/03	11.88	ND	0	78.26	78.26
03/28/03	12.00	ND	0	78.14	78.14
03/28/03	12.06	ND	0	78.08	78.08
04/02/03	11.72	ND	0	78.42	78.42
04/02/03	11.75	11.75	Trace	78.39	78.39

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/11/03	11.80	ND	0	78.34	78.34
04/11/03	11.82	ND	0	78.32	78.32
04/18/03	11.92	11.92	Trace	78.22	78.22
04/18/03	11.88	11.88	Trace	78.26	78.26
04/25/03	12.14	ND	0	78.00	78.00
04/25/03	12.11	ND	0	78.03	78.03
05/02/03	11.95	ND	0	78.19	78.19
05/09/03	12.08	ND	0	78.06	78.06
05/09/03	11.96	ND	0	78.18	78.18
05/15/03	12.07	ND	0	78.07	78.07
05/15/03	12.03	ND	0	78.11	78.11
05/23/03	12.12	ND	0	78.02	78.02
05/23/03	12.12	ND	0	78.02	78.02
05/30/03	11.99	ND	0	78.15	78.15
05/30/03	11.92	ND	0	78.22	78.22
06/06/03	11.72	ND	0	78.42	78.42
06/06/03	11.74	ND	0	78.40	78.40
06/12/03	11.72	ND	0	78.42	78.42
06/12/03	11.80	ND	0	78.34	78.34
06/20/03	12.03	ND	0	78.11	78.11
06/20/03	12.05	ND	0	78.09	78.09
06/30/03	12.06	ND	0	78.08	78.08
06/30/03	12.07	ND	0	78.07	78.07
07/03/03	12.08	ND	0	78.06	78.06
07/03/03	12.09	ND	0	78.05	78.05
07/10/03	12.30	ND	0	77.84	77.84
07/10/03	12.36	ND	0	77.78	77.78
07/18/03	12.39	ND	0	77.75	77.75
07/18/03	12.40	ND	0	77.74	77.74
07/24/03	12.29	ND	0	77.85	77.85
07/24/03	12.31	ND	0	77.83	77.83
08/01/03	12.31	ND	0	77.83	77.83
08/01/03	12.37	ND	0	77.77	77.77
08/06/03	12.28	ND	0	77.86	77.86
08/06/03	12.29	ND	0	77.85	77.85
08/15/03	12.35	ND	0	77.79	77.79
08/15/03	12.35	ND	0	77.79	77.79
08/21/03	12.45	ND	0	77.69	77.69
08/21/03	12.51	ND	0	77.63	77.63
08/29/03	12.60	ND	0	77.54	77.54
08/29/03	12.60	ND	0	77.54	77.54
09/04/03	12.91	ND	0	77.23	77.23
09/04/03	12.96	ND	0	77.18	77.18
09/11/03	13.00	ND	0	77.14	77.14
09/18/03	12.99	ND	0	77.15	77.15
09/18/03	13.03	ND	0	77.11	77.11
09/26/03	12.88	ND	0	77.26	77.26
09/26/03	12.88	ND	0	77.26	77.26

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/02/03	12.96	ND	0	77.18	77.18
10/02/03	12.99	ND	0	77.15	77.15
10/10/03	13.02	ND	0	77.12	77.12
10/10/03	13.08	ND	0	77.06	77.06
10/16/03	12.70	ND	0	77.44	77.44
10/16/03	12.71	ND	0	77.43	77.43
10/24/03	12.70	ND	0	77.44	77.44
11/03/03	12.80	ND	0	77.34	77.34
11/03/03	12.90	12.90	Trace	77.24	77.24
11/07/03	12.88	ND	0	77.26	77.26
11/07/03	12.88	ND	0	77.26	77.26
11/13/03	12.96	ND	0	77.18	77.18
11/13/03	13.03	ND	0	77.11	77.11
11/21/03	13.08	ND	0	77.06	77.06
11/21/03	13.05	ND	0	77.09	77.09
11/26/03	13.14	ND	0	77.00	77.00
11/26/03	13.19	ND	0	76.95	76.95
12/05/03	13.15	ND	0	76.99	76.99
12/05/03	13.15	ND	0	76.99	76.99
12/08/03	12.75	ND	0	77.39	77.39
12/19/03	12.42	ND	0	77.72	77.72
12/19/03	12.50	ND	0	77.64	77.64
12/23/03	12.64	ND	0	77.50	77.50
12/23/03	12.64	ND	0	77.50	77.50
12/31/03	12.85	ND	0	77.29	77.29
12/31/03	12.81	ND	0	77.33	77.33
01/06/04	12.85	ND	0	77.29	77.29
01/06/04	12.94	ND	0	77.20	77.20
01/13/04	12.75	ND	0	77.39	77.39
01/13/04	12.80	ND	0	77.34	77.34
01/22/04	12.90	ND	0	77.24	77.24
01/22/04	12.97	ND	0	77.17	77.17
01/30/04	13.06	ND	0	77.08	77.08
01/30/04	13.04	ND	0	77.10	77.10
02/05/04	13.06	ND	0	77.08	77.08
02/05/04	13.01	ND	0	77.13	77.13
02/13/04	12.88	ND	0	77.26	77.26
02/13/04	12.85	ND	0	77.29	77.29
02/19/04	13.03	ND	0	77.11	77.11
02/19/04	13.04	ND	0	77.10	77.10
02/27/04	12.28	ND	0	77.86	77.86
02/27/04	13.22	ND	0	76.92	76.92
03/03/04	13.18	ND	0	76.96	76.96
03/03/04	13.25	ND	0	76.89	76.89
03/12/04	13.40	ND	0	76.74	76.74
03/12/04	13.40	ND	0	76.74	76.74
03/18/04	13.32	ND	0	76.82	76.82
03/18/04	13.36	ND	0	76.78	76.78

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/24/04	13.20	ND	0	76.94	76.94
03/24/04	13.28	ND	0	76.86	76.86
03/31/04	13.17	ND	0	76.97	76.97
03/31/04	13.25	ND	0	76.89	76.89
04/08/04	12.36	ND	0	77.78	77.78
04/08/04	12.42	ND	0	77.72	77.72
04/15/04	12.37	ND	0	77.77	77.77
04/15/04	12.37	ND	0	77.77	77.77
04/23/04	12.40	ND	0	77.74	77.74
04/23/04	12.52	ND	0	77.62	77.62
04/29/04	11.89	ND	0	78.25	78.25
04/29/04	11.96	ND	0	78.18	78.18
05/07/04	12.40	ND	0	77.74	77.74
05/07/04	12.52	ND	0	77.62	77.62
05/14/04	12.63	ND	0	77.51	77.51
05/14/04	12.70	ND	0	77.44	77.44
05/21/04	12.78	ND	0	77.36	77.36
05/21/04	12.90	ND	0	77.24	77.24
05/27/04	12.69	ND	0	77.45	77.45
05/27/04	12.79	ND	0	77.35	77.35
06/04/04	12.82	ND	0	77.32	77.32
06/04/04	12.88	ND	0	77.26	77.26
06/10/04	12.87	ND	0	77.27	77.27
06/10/04	12.93	ND	0	77.21	77.21
06/18/04	12.10	ND	0	78.04	78.04
06/18/04	12.08	ND	0	78.06	78.06
06/24/04	12.72	ND	0	77.42	77.42
06/18/04	12.85	ND	0	77.29	77.29
06/30/04	12.83	ND	0	77.31	77.31
06/30/04	12.89	ND	0	77.25	77.25
07/09/04	12.37	ND	0	77.77	77.77
07/09/04	12.61	ND	0	77.53	77.53
07/14/04	12.91	ND	0	77.23	77.23
08/27/04	12.68	ND	0	77.46	77.46
08/27/04	12.90	ND	0	77.24	77.24
09/03/04	13.11	ND	0	77.03	77.03
09/03/04	12.69	ND	0	77.45	77.45
09/17/04	13.02	ND	0	77.12	77.12
09/17/04	12.63	ND	0	77.51	77.51
09/17/04	12.24	ND	0	77.90	77.90
09/17/04	11.85	ND	0	78.29	78.29
09/24/04	12.61	ND	0	77.53	77.53
09/24/04	13.03	ND	0	77.11	77.11
10/01/04	12.90	ND	0	77.24	77.24
10/01/04	12.51	ND	0	77.63	77.63
10/08/04	12.61	ND	0	77.53	77.53
10/08/04	13.03	ND	0	77.11	77.11
10/15/04	12.90	ND	0	77.24	77.24

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/15/04	13.08	ND	0	77.06	77.06
10/22/04	12.81	ND	0	77.33	77.33
10/22/04	13.04	ND	0	77.10	77.10
10/28/04	13.08	ND	0	77.06	77.06
10/28/04	12.90	ND	0	77.24	77.24
11/04/04	12.99	ND	0	77.15	77.15
11/04/04	13.18	ND	0	76.96	76.96
11/12/04	13.18	ND	0	76.96	76.96
11/12/04	13.32	ND	0	76.82	76.82
11/19/04	13.45	ND	0	76.69	76.69
11/24/04	13.39	ND	0	76.75	76.75
11/24/04	13.47	ND	0	76.67	76.67
12/03/04	13.12	ND	0	77.02	77.02
12/03/04	13.25	ND	0	76.89	76.89
12/08/04	13.11	Sheen	0	77.03	77.03
12/08/04	13.04	ND	0	77.10	77.10
12/08/04	12.85	ND	0	77.29	77.29
12/08/04	13.00	ND	0	77.14	77.14
12/23/04	13.08	ND	0	77.06	77.06
12/23/04	13.18	ND	0	76.96	76.96
12/30/04	13.14	ND	0	77.00	77.00
12/30/04	13.20	ND	0	76.94	76.94
01/06/05	12.96	ND	0	77.18	77.18
01/06/05	13.03	ND	0	77.11	77.11
01/13/05	13.17	ND	0	76.97	76.97
01/13/05	13.30	ND	0	76.84	76.84
01/20/05	12.94	ND	0	77.20	77.20
01/20/05	13.04	ND	0	77.10	77.10
01/31/05	13.13	ND	0	77.01	77.01
01/31/05	13.25	ND	0	76.89	76.89
02/03/05	13.31	ND	0	76.83	76.83
02/03/05	13.26	ND	0	76.88	76.88
02/09/05	13.23	ND	0	76.91	76.91
02/09/05	13.30	ND	0	76.84	76.84
02/17/05	12.95	ND	0	77.19	77.19
02/17/05	12.97	ND	0	77.17	77.17
02/23/05	12.65	ND	0	77.49	77.49
02/23/05	12.75	ND	0	77.39	77.39
03/04/05	12.86	ND	0	77.28	77.28
03/04/05	12.80	ND	0	77.34	77.34
03/10/05	12.81	ND	0	77.33	77.33
03/10/05	12.86	ND	0	77.28	77.28
03/18/05	12.82	ND	0	77.32	77.32
03/18/05	12.75	ND	0	77.39	77.39
03/31/05	12.15	ND	0	77.99	77.99
03/31/05	12.21	ND	0	77.93	77.93
04/09/05	12.10	ND	0	78.04	78.04
04/09/05	12.17	ND	0	77.97	77.97

Table A-11

Groundwater Monitoring Data for Well GW-101

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/14/05	12.32	ND	0	77.82	77.82
04/14/05	12.40	ND	0	77.74	77.74
04/21/05	12.52	ND	0	77.62	77.62
04/21/05	12.58	ND	0	77.56	77.56
04/29/05	12.49	ND	0	77.65	77.65
04/29/05	12.43	ND	0	77.71	77.71
05/05/05	12.45	ND	0	77.69	77.69
05/05/05	12.50	ND	0	77.64	77.64
05/13/05	12.57	ND	0	77.57	77.57
05/13/05	12.46	ND	0	77.68	77.68
05/20/05	12.59	ND	0	77.55	77.55
05/20/05	12.61	ND	0	77.53	77.53
05/27/05	12.22	ND	0	77.92	77.92
06/03/05	12.27	ND	0	77.87	77.87
06/09/05	12.31	ND	0	77.83	77.83
06/09/05	12.26	ND	0	77.88	77.88
06/23/05	12.68	ND	0	77.46	77.46
06/23/05	12.62	ND	0	77.52	77.52
07/25/05	12.97	ND	0	77.17	77.17
07/25/05	12.89	ND	0	77.25	77.25

Notes:

1) Reference Elevation for GW101 is 90.14.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	11.81	11.80	0.01	77.19	77.20
01/06/01	11.71	ND	0	77.29	77.29
01/06/01	11.41	ND	0	77.59	77.59
01/08/01	12.18	12.17	0.01	76.82	76.83
01/16/01	12.31	12.31	Trace	76.69	76.69
01/22/01	11.80	ND	0	77.20	77.20
01/22/01	11.81	ND	0	77.19	77.19
01/22/01	11.41	ND	0	77.59	77.59
01/26/01	12.82	12.82	Trace	76.18	76.18
01/31/01	11.76	ND	Trace	77.24	77.24
01/31/01	11.75	ND	Trace	77.25	77.25
01/31/01	11.77	ND	Trace	77.23	77.23
01/31/01	11.45	ND	Trace	77.55	77.55
01/31/01	11.86	ND	Trace	77.14	77.14
01/31/01	11.84	ND	Trace	77.16	77.16
01/31/01	11.81	ND	Trace	77.19	77.19
01/31/01	11.79	ND	Trace	77.21	77.21
01/31/01	11.77	ND	Trace	77.23	77.23
01/31/01	11.76	ND	Trace	77.24	77.24
01/31/01	11.61	ND	Trace	77.39	77.39
02/16/01	11.47	ND	Trace	77.53	77.53
02/16/01	11.52	ND	Trace	77.48	77.48
02/22/01	11.57	ND	0	77.43	77.43
02/22/01	11.51	11.51	Trace	77.49	77.49
03/14/01	11.27	11.27	Trace	77.73	77.73
03/14/01	11.33	11.33	Trace	77.67	77.67
03/26/01	10.19	ND	0	78.81	78.81
03/29/01	10.41	ND	0	78.59	78.59
04/06/01	10.42	10.42	Trace	78.58	78.58
04/13/01	11.71	ND	0	77.29	77.29
04/13/01	10.33	ND	0	78.67	78.67
04/20/01	10.78	10.78	Trace	78.22	78.22
04/27/01	11.09	11.09	Trace	77.91	77.91
05/18/01	11.39	ND	0	77.61	77.61
05/18/01	9.76	9.76	Trace	79.24	79.24
05/25/01	11.43	ND	0	77.57	77.57
05/25/01	11.40	ND	0	77.60	77.60
06/01/01	11.46	ND	0	77.54	77.54
06/01/01	11.42	ND	0	77.58	77.58
06/08/01	11.44	11.44	Trace	77.56	77.56
06/08/01	12.52	12.52	Trace	76.48	76.48
06/15/01	11.56	11.56	Trace	77.44	77.44
06/15/01	11.47	11.47	Trace	77.53	77.53
06/28/01	11.46	ND	0	77.54	77.54
06/28/01	11.39	ND	0	77.61	77.61
07/10/01	11.35	ND	0	77.65	77.65
07/10/01	11.31	ND	0	77.69	77.69
07/20/01	11.49	ND	0	77.51	77.51

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/20/01	11.43	ND	0	77.57	77.57
07/27/01	11.51	ND	0	77.49	77.49
07/27/01	12.44	ND	0	76.56	76.56
08/03/01	11.54	ND	0	77.46	77.46
08/03/01	11.54	ND	0	77.46	77.46
08/17/01	11.43	ND	0	77.57	77.57
08/17/01	11.35	ND	0	77.65	77.65
09/07/01	11.59	ND	0	77.41	77.41
09/07/01	11.54	ND	0	77.46	77.46
09/14/01	11.79	ND	0	77.21	77.21
09/14/01	11.73	ND	0	77.27	77.27
09/21/01	11.90	ND	0	77.10	77.10
09/21/01	11.87	ND	0	77.13	77.13
09/28/01	11.95	ND	0	77.05	77.05
09/28/01	11.91	ND	0	77.09	77.09
10/12/01	11.98	ND	0	77.02	77.02
10/12/01	11.95	ND	0	77.05	77.05
10/19/01	12.81	ND	0	76.19	76.19
10/26/01	12.77	ND	0	76.23	76.23
10/26/01	12.52	ND	0	76.48	76.48
11/01/01	12.51	ND	0	76.49	76.49
11/01/01	12.52	ND	0	76.48	76.48
11/19/01	12.51	ND	0	76.49	76.49
11/19/01	12.94	ND	0	76.06	76.06
11/28/01	12.94	ND	0	76.06	76.06
11/28/01	12.48	ND	0	76.52	76.52
12/07/01	12.48	ND	0	76.52	76.52
12/13/01	12.18	ND	0	76.82	76.82
12/21/01	11.83	ND	0	77.17	77.17
12/21/01	11.87	ND	0	77.13	77.13
12/28/01	12.33	ND	0	76.67	76.67
01/11/02	12.45	ND	0	76.55	76.55
01/11/02	12.45	ND	0	76.55	76.55
01/25/02	12.38	ND	0	76.62	76.62
02/08/02	12.74	ND	0	76.26	76.26
02/08/02	12.66	ND	0	76.34	76.34
02/15/02	12.16	ND	0	76.84	76.84
02/15/02	12.09	ND	0	76.91	76.91
02/22/02	12.02	12.02	Trace	76.98	76.98
02/22/02	12.09	12.09	Trace	76.91	76.91
03/01/02	11.82	11.82	Trace	77.18	77.18
03/01/02	11.64	11.64	Trace	77.36	77.36
03/08/02	11.81	11.81	Trace	77.19	77.19
03/08/02	11.90	11.90	0	77.10	77.10
03/15/02	11.91	ND	0	77.09	77.09
03/15/02	11.79	ND	0	77.21	77.21
03/22/02	11.40	ND	0	77.60	77.60
03/22/02	11.23	ND	0	77.77	77.77

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/29/02	11.27	ND	0	77.73	77.73
03/29/02	11.14	ND	0	77.86	77.86
04/05/02	11.34	ND	0	77.66	77.66
04/05/02	11.29	ND	0	77.71	77.71
04/12/02	11.52	ND	0	77.48	77.48
04/12/02	12.44	ND	0	76.56	76.56
04/19/02	11.55	ND	0	77.45	77.45
04/19/02	11.59	ND	0	77.41	77.41
04/26/02	11.36	ND	0	77.64	77.64
04/26/02	12.05	ND	0	76.95	76.95
05/03/02	11.37	11.36	0.01	77.63	77.64
05/03/02	11.42	11.41	0.01	77.58	77.59
05/10/02	11.50	ND	0	77.50	77.50
05/10/02	11.39	ND	0	77.61	77.61
05/17/02	11.08	ND	0	77.92	77.92
05/17/02	11.08	ND	0	77.92	77.92
05/24/02	11.90	ND	0	77.10	77.10
05/24/02	11.26	ND	0	77.74	77.74
05/31/02	11.24	11.23	0.01	77.76	77.77
05/31/02	11.21	11.20	0.01	77.79	77.80
06/06/02	11.32	11.31	0.01	77.68	77.69
06/06/02	11.22	11.21	0.01	77.78	77.79
06/14/02	11.04	11.01	0.03	77.96	77.99
06/14/02	11.15	11.13	0.02	77.85	77.87
06/21/02	11.38	11.36	0.02	77.62	77.64
06/21/02	11.33	11.31	0.02	77.67	77.69
06/28/02	11.48	11.46	0.02	77.52	77.54
06/28/02	11.41	11.37	0.04	77.59	77.63
07/03/02	11.55	11.53	0.02	77.45	77.47
07/03/02	11.40	11.38	0.02	77.60	77.62
07/12/02	11.43	11.42	0.01	77.57	77.58
07/12/02	11.51	11.49	0.02	77.49	77.51
07/19/02	11.36	11.34	0.02	77.64	77.66
07/26/02	11.33	11.32	0.01	77.67	77.68
08/02/02	11.25	ND	0	77.75	77.75
08/09/02	11.50	11.48	0.02	77.50	77.52
08/16/02	11.68	11.68	Trace	77.32	77.32
08/23/02	11.59	11.58	0.01	77.41	77.42
08/23/02	11.51	11.50	0.01	77.49	77.50
08/30/02	11.51	11.50	0.01	77.49	77.50
08/30/02	11.45	11.44	0.01	77.55	77.56
09/13/02	11.78	ND	0	77.22	77.22
09/13/02	11.71	ND	0	77.29	77.29
09/20/02	11.85	ND	0	77.15	77.15
09/20/02	12.76	ND	0	76.24	76.24
09/26/02	11.52	11.52	Trace	77.48	77.48
09/26/02	11.45	11.45	Trace	77.55	77.55
10/04/02	11.50	ND	0	77.50	77.50

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/04/02	11.51	ND	0	77.49	77.49
10/10/02	11.69	ND	0	77.31	77.31
10/18/02	11.41	ND	0	77.59	77.59
10/18/02	11.36	ND	0	77.64	77.64
10/25/02	12.64	ND	0	76.36	76.36
10/25/02	11.40	ND	0	77.60	77.60
10/30/02	11.06	ND	0	77.94	77.94
10/30/02	11.02	ND	0	77.98	77.98
11/07/02	11.32	ND	0	77.68	77.68
11/07/02	11.36	ND	0	77.64	77.64
11/14/02	11.03	ND	0	77.97	77.97
11/14/02	11.00	ND	0	78.00	78.00
11/21/02	11.85	11.84	0.01	77.15	77.16
11/21/02	11.91	11.90	0.01	77.09	77.10
11/26/02	10.67	ND	0	78.33	78.33
11/26/02	10.52	ND	0	78.48	78.48
12/06/02	10.32	ND	0	78.68	78.68
12/06/02	11.30	ND	0	77.70	77.70
12/09/02	10.85	ND	0	78.15	78.15
12/09/02	10.67	ND	0	78.33	78.33
12/20/02	10.56	ND	0	78.44	78.44
12/20/02	10.58	ND	0	78.42	78.42
12/27/02	10.44	ND	0	78.56	78.56
12/27/02	10.61	ND	0	78.39	78.39
01/03/03	10.38	ND	0	78.62	78.62
01/03/03	10.39	ND	0	78.61	78.61
01/10/03	11.21	ND	0	77.79	77.79
01/10/03	11.20	ND	0	77.80	77.80
01/17/03	10.51	ND	0	78.49	78.49
01/17/03	10.48	ND	0	78.52	78.52
01/24/03	11.27	ND	0	77.73	77.73
01/24/03	11.26	ND	0	77.74	77.74
01/31/03	11.09	ND	0	77.91	77.91
01/31/03	11.06	ND	0	77.94	77.94
02/10/03	10.89	ND	0	78.11	78.11
02/10/03	10.87	10.87	Trace	78.13	78.13
02/21/03	11.25	11.24	0.01	77.75	77.76
02/21/03	11.23	11.22	0.01	77.77	77.78
02/27/03	10.92	ND	0	78.08	78.08
02/27/03	11.00	ND	0	78.00	78.00
03/07/03	10.96	ND	0	78.04	78.04
03/14/03	10.93	ND	0	78.07	78.07
03/14/03	10.91	ND	0	78.09	78.09
03/21/03	10.69	ND	0	78.31	78.31
03/21/03	10.62	ND	0	78.38	78.38
03/28/03	10.87	ND	0	78.13	78.13
03/28/03	10.76	ND	0	78.24	78.24
04/02/03	10.45	10.45	Trace	78.55	78.55

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/02/03	10.45	10.45	Trace	78.55	78.55
04/11/03	10.66	ND	0	78.34	78.34
04/11/03	10.64	ND	0	78.36	78.36
04/18/03	11.22	11.22	Trace	77.78	77.78
04/18/03	11.17	ND	0	77.83	77.83
04/25/03	10.92	ND	0	78.08	78.08
04/25/03	10.85	ND	0	78.15	78.15
05/02/03	10.75	ND	0	78.25	78.25
05/09/03	10.85	ND	0	78.15	78.15
05/09/03	10.70	ND	0	78.30	78.30
05/15/03	11.45	11.45	Trace	77.55	77.55
05/15/03	11.30	11.30	Trace	77.70	77.70
05/23/03	10.95	ND	0	78.05	78.05
05/23/03	10.92	ND	0	78.08	78.08
05/30/03	10.77	ND	0	78.23	78.23
05/30/03	10.71	ND	0	78.29	78.29
06/06/03	10.45	ND	0	78.55	78.55
06/06/03	10.51	ND	0	78.49	78.49
06/12/03	11.56	ND	0	77.44	77.44
06/12/03	10.48	ND	0	78.52	78.52
06/20/03	10.82	ND	0	78.18	78.18
06/20/03	10.87	ND	0	78.13	78.13
06/30/03	10.79	ND	0	78.21	78.21
06/30/03	10.86	10.86	Trace	78.14	78.14
07/03/03	10.90	ND	0	78.10	78.10
07/03/03	10.86	ND	0	78.14	78.14
07/10/03	11.08	11.08	Trace	77.92	77.92
07/10/03	11.12	ND	0	77.88	77.88
07/18/03	11.11	ND	0	77.89	77.89
07/18/03	11.19	ND	0	77.81	77.81
07/24/03	11.02	ND	0	77.98	77.98
07/24/03	11.09	ND	0	77.91	77.91
08/01/03	10.20	ND	0	78.80	78.80
08/01/03	10.20	ND	0	78.80	78.80
08/06/03	11.02	11.02	Trace	77.98	77.98
08/06/03	11.06	11.06	Trace	77.94	77.94
08/15/03	11.12	ND	0	77.88	77.88
08/15/03	11.12	ND	0	77.88	77.88
08/21/03	11.19	11.18	0.01	77.81	77.82
08/21/03	11.28	11.27	0.01	77.72	77.73
08/29/03	12.32	12.32	Trace	76.68	76.68
08/29/03	12.32	12.32	Trace	76.68	76.68
09/04/03	11.66	ND	0	77.34	77.34
09/04/03	12.68	ND	0	76.32	76.32
09/11/03	11.80	ND	0	77.20	77.20
09/18/03	11.84	11.84	Trace	77.16	77.16
09/18/03	11.84	11.84	Trace	77.16	77.16
09/26/03	11.66	ND	0	77.34	77.34

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
09/26/03	11.66	ND	0	77.34	77.34
10/02/03	11.76	11.76	Trace	77.24	77.24
10/02/03	11.76	11.76	Trace	77.24	77.24
10/10/03	11.78	ND	0	77.22	77.22
10/10/03	11.88	ND	0	77.12	77.12
10/16/03	11.50	ND	0	77.50	77.50
10/16/03	11.51	ND	0	77.49	77.49
10/24/03	12.55	ND	0	76.45	76.45
11/03/03	12.62	ND	0	76.38	76.38
11/03/03	12.62	ND	0	76.38	76.38
11/07/03	12.66	ND	0	76.34	76.34
11/07/03	12.64	ND	0	76.36	76.36
11/13/03	11.67	ND	0	77.33	77.33
11/13/03	11.75	11.75	Trace	77.25	77.25
11/21/03	11.78	ND	0	77.22	77.22
11/21/03	11.74	ND	0	77.26	77.26
11/26/03	11.90	ND	0	77.10	77.10
11/26/03	11.91	ND	0	77.09	77.09
12/05/03	12.92	ND	0	76.08	76.08
12/05/03	12.90	ND	0	76.10	76.10
12/08/03	11.44	11.43	0.01	77.56	77.57
12/19/03	11.02	ND	0	77.98	77.98
12/19/03	11.02	ND	0	77.98	77.98
12/23/03	11.36	ND	0	77.64	77.64
12/23/03	11.29	ND	0	77.71	77.71
12/31/03	11.54	ND	0	77.46	77.46
12/31/03	11.50	ND	0	77.50	77.50
01/06/04	11.52	ND	0	77.48	77.48
01/06/04	11.61	ND	0	77.39	77.39
01/13/04	11.42	ND	0	77.58	77.58
01/13/04	11.42	ND	0	77.58	77.58
01/22/04	11.00	ND	0	78.00	78.00
01/22/04	11.59	ND	0	77.41	77.41
01/30/04	11.76	ND	0	77.24	77.24
01/30/04	11.78	ND	0	77.22	77.22
02/05/04	11.77	ND	0	77.23	77.23
02/05/04	11.76	ND	0	77.24	77.24
02/13/04	11.58	ND	0	77.42	77.42
02/13/04	11.55	ND	0	77.45	77.45
02/19/04	11.70	ND	0	77.30	77.30
02/19/04	11.71	ND	0	77.29	77.29
02/27/04	11.90	ND	0	77.10	77.10
02/27/04	11.90	ND	0	77.10	77.10
03/03/04	11.81	ND	0	77.19	77.19
03/03/04	11.92	ND	0	77.08	77.08
03/12/04	12.08	ND	0	76.92	76.92
03/12/04	12.18	ND	0	76.82	76.82
03/18/04	12.04	ND	0	76.96	76.96

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Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/18/04	12.09	ND	0	76.91	76.91
03/24/04	12.92	ND	0	76.08	76.08
03/24/04	12.04	ND	0	76.96	76.96
03/31/04	11.88	ND	0	77.12	77.12
03/31/04	12.02	ND	0	76.98	76.98
04/08/04	11.04	ND	0	77.96	77.96
04/08/04	11.15	ND	0	77.85	77.85
04/15/04	11.11	ND	0	77.89	77.89
04/15/04	11.11	ND	0	77.89	77.89
04/23/04	11.09	ND	0	77.91	77.91
04/23/04	11.25	ND	0	77.75	77.75
04/29/04	10.75	ND	0	78.25	78.25
04/29/04	10.81	ND	0	78.19	78.19
05/07/04	11.10	ND	0	77.90	77.90
05/07/04	11.24	ND	0	77.76	77.76
05/14/04	11.32	ND	0	77.68	77.68
05/14/04	11.44	ND	0	77.56	77.56
05/21/04	11.50	ND	0	77.50	77.50
05/21/04	11.65	ND	0	77.35	77.35
05/27/04	11.37	ND	0	77.63	77.63
05/27/04	11.51	ND	0	77.49	77.49
06/04/04	11.55	ND	0	77.45	77.45
06/04/04	11.62	ND	0	77.38	77.38
06/10/04	11.59	11.58	0	77.41	77.42
06/10/04	11.70	ND	0	77.30	77.30
06/18/04	11.56	ND	0	77.44	77.44
06/18/04	11.68	ND	0	77.32	77.32
06/24/04	11.52	11.51	0	77.48	77.49
06/24/04	11.66	ND	0	77.34	77.34
06/30/04	11.67	ND	0	77.33	77.33
06/30/04	11.71	ND	0	77.29	77.29
07/09/04	11.23	ND	0	77.77	77.77
07/09/04	11.52	ND	0	77.48	77.48
07/14/04	11.50	ND	0	77.50	77.50
08/27/04	11.31	ND	0	77.69	77.69
08/27/04	11.57	ND	0	77.43	77.43
09/03/04	11.80	ND	0	77.20	77.20
09/03/04	11.32	ND	0	77.68	77.68
09/17/04	11.74	ND	0	77.26	77.26
09/17/04	11.13	ND	0	77.87	77.87
09/24/04	11.21	ND	0	77.79	77.79
09/24/04	11.70	ND	0	77.30	77.30
10/01/04	11.60	ND	0	77.40	77.40
10/01/04	11.12	ND	0	77.88	77.88
10/08/04	11.77	ND	0	77.23	77.23
10/08/04	12.28	ND	0	76.72	76.72
10/15/04	11.51	ND	0	77.49	77.49
10/15/04	11.80	ND	0	77.20	77.20

Table A-12

Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
10/22/04	11.46	ND	0	77.54	77.54
10/22/04	12.74	ND	0	76.26	76.26
10/28/04	11.80	ND	0	77.20	77.20
10/28/04	11.58	ND	0	77.42	77.42
11/04/04	11.90	ND	0	77.10	77.10
11/04/04	11.90	ND	0	77.10	77.10
11/12/04	11.82	ND	0	77.18	77.18
11/12/04	12.03	ND	0	76.97	76.97
11/19/04	12.69	ND	0	76.31	76.31
11/24/04	12.07	ND	0	76.93	76.93
11/24/04	12.19	ND	0	76.81	76.81
12/03/04	11.78	ND	0	77.22	77.22
12/03/04	11.96	ND	0	77.04	77.04
12/08/04	11.84	ND	0	77.16	77.16
12/08/04	11.75	ND	0	77.25	77.25
12/08/04	11.54	11.53	0	77.46	77.46
12/08/04	11.69	ND	0	77.31	77.31
12/23/04	11.75	ND	0	77.25	77.25
12/23/04	11.89	ND	0	77.11	77.11
12/30/04	11.82	ND	0	77.18	77.18
12/30/04	11.90	ND	0	77.10	77.10
01/06/05	11.61	ND	0	77.39	77.39
01/06/05	11.75	ND	0	77.25	77.25
01/13/05	11.80	ND	0	77.20	77.20
01/13/05	11.97	ND	0	77.03	77.03
01/20/05	11.54	ND	0	77.46	77.46
01/20/05	11.68	ND	0	77.32	77.32
01/31/05	11.75	ND	0	77.25	77.25
01/31/05	11.91	ND	0	77.09	77.09
02/03/05	11.98	ND	0	77.02	77.02
02/03/05	11.89	ND	0	77.11	77.11
02/09/05	11.87	ND	0	77.13	77.13
02/09/05	11.99	ND	0	77.01	77.01
02/17/05	11.52	ND	0	77.48	77.48
02/17/05	11.60	ND	0	77.40	77.40
02/23/05	11.30	ND	Trace	77.70	77.70
02/23/05	11.41	ND	0	77.59	77.59
03/04/05	11.57	ND	0	77.43	77.43
03/04/05	11.48	ND	0	77.52	77.52
03/10/05	11.48	ND	0	77.52	77.52
03/10/05	11.56	ND	0	77.44	77.44
03/18/05	11.55	ND	0	77.45	77.45
03/18/05	11.42	ND	0	77.58	77.58
03/31/05	10.81	ND	0	78.19	78.19
03/31/05	10.86	ND	0	78.14	78.14
04/09/05	10.78	ND	0	78.22	78.22
04/09/05	10.87	ND	0	78.13	78.13
04/14/05	10.99	ND	0	78.01	78.01

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Groundwater Monitoring Data for Well GW-102

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/14/05	11.08	ND	0	77.92	77.92
04/21/05	11.20	ND	0	77.80	77.80
04/21/05	11.19	ND	0	77.81	77.81
04/29/05	11.17	ND	0	77.83	77.83
04/29/05	11.11	ND	0	77.89	77.89
05/05/05	11.13	ND	0	77.87	77.87
05/05/05	11.16	ND	0	77.84	77.84
05/13/05	11.22	ND	0	77.78	77.78
05/13/05	11.13	ND	0	77.87	77.87
05/20/05	11.25	ND	0	77.75	77.75
05/20/05	11.24	ND	0	77.76	77.76
05/27/05	10.88	ND	0	78.12	78.12
06/03/05	10.96	ND	0	78.04	78.04
06/03/05	10.99	ND	0	78.01	78.01
06/09/05	11.02	ND	0	77.98	77.98
06/09/05	10.97	ND	0	78.03	78.03
06/23/05	11.34	ND	0	77.66	77.66
06/23/05	11.32	ND	0	77.68	77.68
07/25/05	11.69	ND	0	77.31	77.31
07/25/05	11.63	ND	0	77.37	77.37

Notes:

1) Reference Elevation for GW102 is 89.00.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-13

Groundwater Monitoring Data for IW-1

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/22/01	13.53	ND	0	77.18	77.18
01/22/01	13.52	ND	0	77.19	77.19
01/22/01	13.32	ND	0	77.39	77.39
01/31/01	13.48	ND	Trace	77.23	77.23
01/31/01	13.47	ND	Trace	77.24	77.24
01/31/01	13.43	ND	Trace	77.28	77.28
01/31/01	13.43	ND	Trace	77.28	77.28
01/31/01	13.44	ND	Trace	77.27	77.27
01/31/01	13.45	ND	Trace	77.26	77.26
01/31/01	13.45	ND	Trace	77.26	77.26
01/31/01	13.46	ND	Trace	77.25	77.25
01/31/01	13.40	ND	Trace	77.31	77.31
01/31/01	13.34	ND	Trace	77.37	77.37
01/31/01	13.28	ND	Trace	77.43	77.43
01/31/01	13.24	ND	Trace	77.47	77.47
01/31/01	13.21	ND	Trace	77.50	77.50
01/31/01	13.21	ND	Trace	77.50	77.50
01/31/01	13.29	ND	Trace	77.42	77.42
01/31/01	13.36	ND	Trace	77.35	77.35
01/31/01	13.40	ND	Trace	77.31	77.31
02/06/01	13.43	ND	Trace	77.28	77.28
02/06/01	13.41	ND	0	77.30	77.30
02/06/01	13.48	ND	0	77.23	77.23
02/08/01	13.37	ND	0	77.34	77.34
02/16/01	13.51	ND	0	77.20	77.20
03/26/01	11.21	11.21	Trace	79.50	79.50
03/29/01	11.59	11.59	Trace	79.12	79.12
04/06/01	11.69	11.68	0.01	79.02	79.03
04/13/01	11.67	11.67	Trace	79.04	79.04
04/20/01	12.11	12.10	0.01	78.60	78.61
06/01/01	13.12	ND	0	77.59	77.59
12/07/01	14.26	ND	0	76.45	76.45
12/07/01	14.25	ND	0	76.46	76.46
12/13/01	13.94	ND	0	76.77	76.77
01/04/02	14.07	ND	0	76.64	76.64
02/15/02	13.89	13.89	Trace	76.82	76.82
02/15/02	13.89	13.89	Trace	76.82	76.82
03/08/02	13.42	13.42	Trace	77.29	77.29
03/08/02	13.43	13.43	0	77.28	77.28
04/05/02	12.79	12.77	0.02	77.92	77.94
04/05/02	12.76	12.75	0.01	77.95	77.96
05/03/02	12.98	12.97	0.01	77.73	77.74
05/03/02	13.00	12.99	0.01	77.71	77.72
05/31/02	12.76	12.75	0.01	77.95	77.96
05/31/02	12.73	12.72	0.01	77.98	77.99
06/21/02	12.84	ND	0	77.87	77.87
06/21/02	12.85	ND	0	77.86	77.86
06/28/02	12.97	12.96	0.01	77.74	77.75

Table A-13

Groundwater Monitoring Data for IW-1

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
06/28/02	12.96	12.95	0.01	77.75	77.76
07/19/02	12.90	ND	0	77.81	77.81
07/26/02	12.99	12.98	0.01	77.72	77.73
07/26/02	12.91	12.90	0.01	77.80	77.81
08/02/02	12.88	ND	0	77.83	77.83
08/23/02	13.19	13.18	0.01	77.52	77.53
08/23/02	13.19	13.18	0.01	77.52	77.53
09/20/02	13.57	13.57	Trace	77.14	77.14
09/20/02	13.57	ND	0	77.14	77.14
10/18/02	13.03	ND	0	77.68	77.68
10/18/02	13.03	ND	0	77.68	77.68
12/06/02	12.15	ND	0	78.56	78.56
12/06/02	12.04	ND	0	78.67	78.67
01/03/03	11.92	ND	0	78.79	78.79
01/03/03	11.83	ND	0	78.88	78.88
02/10/03	12.40	ND	0	78.31	78.31
03/07/03	12.61	ND	0	78.10	78.10
03/13/03	12.35	ND	0	78.36	78.36
03/26/03	12.15	ND	0	78.56	78.56
04/02/03	11.76	11.76	Trace	78.95	78.95
05/02/03	12.21	ND	0	78.50	78.50
05/15/03	12.29	ND	0	78.42	78.42
06/12/03	11.98	ND	0	78.73	78.73
08/06/03	12.60	ND	0	78.11	78.11
09/18/03	13.45	ND	0	77.26	77.26
11/03/03	13.09	ND	0	77.62	77.62
01/06/04	13.10	ND	0	77.61	77.61
01/22/04	13.12	ND	0	77.59	77.59
02/19/04	13.21	ND	0	77.50	77.50
03/31/04	13.62	ND	0	77.09	77.09
04/29/04	12.04	ND	0	78.67	78.67
05/27/04	12.87	ND	0	77.84	77.84
07/14/04	13.37	ND	0	77.34	77.34
09/24/04	13.06	ND	0	77.65	77.65
11/03/04	13.39	ND	0	77.32	77.32
11/04/04	13.39	ND	0	77.32	77.32
11/10/04	13.61	ND	0	77.10	77.10
11/17/04	13.62	ND	0	77.09	77.09
11/23/04	13.85	ND	0	76.86	76.86
12/02/04	13.56	ND	0	77.15	77.15
12/03/04	13.52	ND	0	77.19	77.19
12/08/04	13.35	ND	0	77.36	77.36
12/15/04	13.21	ND	0	77.50	77.50
12/22/04	13.32	ND	0	77.39	77.39
12/28/04	13.38	ND	0	77.33	77.33
01/04/05	13.39	ND	0	77.32	77.32
01/13/05	13.39	ND	0	77.32	77.32
01/19/05	12.99	ND	0	77.72	77.72

Table A-13

Groundwater Monitoring Data for IW-1

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/26/05	13.15	ND	0	77.56	77.56
02/01/05	13.45	ND	0	77.26	77.26
02/08/05	13.52	ND	0	77.19	77.19
02/15/05	13.28	ND	0	77.43	77.43
02/23/05	12.80	ND	0	77.91	77.91
02/23/05	12.85	ND	0	77.86	77.86
03/31/05	12.24	ND	0	78.47	78.47
04/21/05	12.64	ND	0	78.07	78.07
05/20/05	12.74	ND	0	77.97	77.97

Notes:

1) Reference Elevation for IW-1 is 90.17.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev. - (Depth to GW - (prod. thickness x 0.95)

Table A-14

Groundwater Monitoring Data for Well IW-2

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.60	13.51	0.09	76.93	77.02
01/06/01	12.35	12.23	0.12	78.18	78.29
01/06/01	13.83	13.81	0.02	76.70	76.72
01/06/01	13.56	13.50	0.06	76.97	77.03
01/06/01	13.13	13.12	0.01	77.40	77.41
01/06/01	13.56	13.52	0.04	76.97	77.01
01/08/01	13.62	13.56	0.06	76.91	76.97
01/16/01	12.51	12.43	0.08	78.02	78.10
01/22/01	13.60	13.51	0.09	76.93	77.02
01/22/01	12.35	12.23	0.12	78.18	78.29
01/22/01	13.83	13.81	0.02	76.70	76.72
01/26/01	13.54	13.52	0.02	76.99	77.01
01/31/01	13.90	13.35	0.55	76.63	77.15
01/31/01	13.57	13.45	0.12	76.96	77.07
01/31/01	13.38	13.37	0.01	77.15	77.16
01/31/01	13.46	13.46	Trace	77.07	77.07
04/06/01	11.66	11.66	Trace	78.87	78.87
04/13/01	11.53	11.53	Trace	79.00	79.00
04/20/01	12.11	12.10	0.01	78.42	78.43
06/01/01	13.03		0	77.50	77.50
12/07/01	14.47	14.10	0.37	76.06	76.41
12/07/01	14.56	14.08	0.48	75.97	76.43
12/13/01	14.30	13.70	0.6	76.23	76.80
01/04/02	14.05	13.99	0.06	76.48	76.54
01/04/02	14.03	13.89	0.14	76.50	76.63
02/15/02	13.96	13.79	0.17	76.57	76.73
02/15/02	13.94	13.80	0.14	76.59	76.72
03/08/02	13.43	13.42	0.01	77.10	77.11
03/08/02	13.41	13.41	0	77.12	77.12
04/05/02	12.79	12.77	0.02	77.74	77.76
04/05/02	12.81	12.79	0.02	77.72	77.74
05/03/02	12.95	12.94	0.01	77.58	77.59
05/03/02	12.94	12.93	0.01	77.59	77.60
05/31/02	12.72	12.70	0.02	77.81	77.83
05/31/02	12.68	12.67	0.01	77.85	77.86
06/21/02	12.79	12.78	0.01	77.74	77.75
06/21/02	12.79	12.78	0.01	77.74	77.75
06/28/02	12.95	12.94	0.01	77.58	77.59
06/28/02	12.94	12.93	0.01	77.59	77.60
07/26/02	12.80	12.79	0.01	77.73	77.74
07/26/02	13.19	13.18	0.01	77.34	77.35
08/23/02	13.13	13.06	0.07	77.40	77.47
08/23/02	13.07	13.06	0.01	77.46	77.47
09/20/02	13.42	13.41	0.01	77.11	77.12
09/20/02	13.46	13.45	0.01	77.07	77.08
10/18/02	13.00	12.92	0.08	77.53	77.61
10/18/02	12.98	12.92	0.06	77.55	77.61
12/06/02	12.10	ND	0	78.43	78.43

Table A-14

Groundwater Monitoring Data for Well IW-2

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/06/02	12.02	ND	0	78.51	78.51
01/03/03	11.85	ND	0	78.68	78.68
01/03/03	11.76	ND	0	78.77	78.77
02/10/03	12.16	ND	0	78.37	78.37
03/07/03	12.45	ND	0	78.08	78.08
03/13/03	12.12	ND	0	78.41	78.41
03/26/03	11.97	ND	0	78.56	78.56
04/02/03	11.66	ND	0	78.87	78.87
05/02/03	12.04	ND	0	78.49	78.49
05/15/03	12.09	ND	0	78.44	78.44
06/12/03	11.78	ND	0	78.75	78.75
08/06/03	12.52	ND	0	78.01	78.01
09/18/03	13.34	13.34	Trace	77.19	77.19
11/03/03	13.01	ND	0	77.52	77.52
01/06/04	13.03	ND	0	77.50	77.50
01/22/04	13.16	13.14	0.02	77.37	77.39
02/19/04	13.20	13.19	0.01	77.33	77.34
03/31/04	13.52	13.51	0.01	77.01	77.02
04/29/04	11.90	ND	0.00	78.63	78.63
05/27/04	12.89	ND	0.00	77.64	77.64
07/14/04	13.50	ND	0.00	77.03	77.03
09/24/04	13.27	ND	0.00	77.26	77.26
11/03/04	13.47	ND	0.00	77.06	77.06
11/04/04	13.30	ND	0.00	77.23	77.23
11/10/04	13.57	ND	0.00	76.96	76.96
11/17/04	13.41	ND	0.00	77.12	77.12
11/23/04	13.71	ND	Trace	76.82	76.82
12/02/04	13.45	13.44	0.00	77.08	77.08
12/03/04	13.41	ND	Trace	77.12	77.12
12/08/04	13.29	13.28	0.00	77.24	77.24
12/15/04	13.07	15.06	0.00	77.46	77.46
12/22/04	13.27	13.26	0.00	77.26	77.26
12/28/04	13.24	Sheen	0.00	77.29	77.29
01/04/05	13.35	13.34	0.00	77.18	77.18
01/13/05	13.38	ND	0.00	77.15	77.15
01/19/05	12.98	12.97	0.00	77.55	77.55
01/26/05	13.17	13.16	0.00	77.36	77.36
02/01/05	13.36	13.35	0.00	77.17	77.17
02/08/05	13.52	13.51	0.00	77.01	77.01
02/15/05	13.29	13.28	0.00	77.24	77.24
02/23/05	12.78	12.77	0.00	77.75	77.75
02/23/05	12.80	ND	Trace	77.73	77.73
03/31/05	12.18	ND	0.00	78.35	78.35
04/21/05	12.59	ND	0.00	77.94	77.94
05/20/05	12.75	ND	0.00	77.78	77.78

Notes:

Table A-14

Groundwater Monitoring Data for Well IW-2

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation

1) Reference Elevation for IW2 is 90.53.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-15

Groundwater Monitoring Data for Well IW-3

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.59	13.54	0.05	77.12	77.22
01/06/01	13.52	13.49	0.03	77.19	77.27
01/06/01	13.56	13.55	0.01	77.15	77.21
01/06/01	13.62	13.61	0.01	77.09	77.15
01/06/01	13.29	13.28	0.01	77.42	77.48
01/08/01	13.62	13.61	0.01	77.09	77.15
01/10/01	13.40	13.38	0.02	77.31	77.38
01/16/01	13.53	13.50	0.03	77.18	77.26
01/22/01	13.59	13.54	0.05	77.12	77.22
01/22/01	13.52	13.49	0.03	77.19	77.27
01/22/01	12.96	ND	0	77.75	77.80
01/26/01	13.59	13.58	0.01	77.12	77.18
01/31/01	13.53	ND	0	77.18	77.23
01/31/01	12.90	ND	0	77.81	77.86
01/31/01	13.63	ND	0	77.08	77.13
01/31/01	13.67	ND	0	77.04	77.09
01/31/01	13.65	ND	0	77.06	77.11
01/31/01	13.44	ND	0	77.27	77.32
01/31/01	13.60	ND	0	77.11	77.16
03/26/01	11.10	11.09	0.01	79.61	79.67
03/29/01	11.47	11.47	Trace	79.24	79.29
04/06/01	11.64	11.64	Trace	79.07	79.12
04/13/01	11.15	11.15	Trace	79.56	79.61
04/20/01	12.17	12.16	0.01	78.54	78.60
06/01/01	13.11	13.11	Trace	77.65	77.65
12/07/01	14.18	14.18	Trace	76.58	76.58
12/07/01	14.18	14.18	Trace	76.58	76.58
12/13/01	13.65	ND	0	77.11	77.11
01/04/02	13.89	TOO MUCH OIL BUBBLING IN WELL	-	76.87	-
02/15/02	13.86	13.85	0.01	76.90	76.91
02/15/02	13.85	13.84	0.01	76.91	76.92
03/08/02	13.72	13.72	Trace	77.04	77.04
03/08/02	13.46	13.46	Trace	77.30	77.30
04/05/02	12.82	12.81	0.01	77.94	77.95
04/05/02	12.83	12.82	0.01	77.93	77.94
05/03/02	13.03	13.03	Trace	77.73	77.73
05/03/02	13.04	13.03	0.01	77.72	77.73
05/31/02	12.67	12.66	0.01	78.09	78.10
05/31/02	12.65	12.64	0.01	78.11	78.12
06/21/02	12.76	Trace	Trace	78.00	78.00
06/21/02	12.76	Trace	Trace	78.00	78.00
06/28/02	12.99	12.98	0.01	77.77	77.78
06/28/02	12.98	12.97	0.01	77.78	77.79
07/19/02	12.57	12.56	0.01	78.19	78.20
07/26/02	12.82	12.81	0.01	77.94	77.95
07/26/02	12.58	12.57	0.01	78.18	78.19
08/02/02	13.02	ND	0	77.74	77.74
08/23/02	13.08	13.07	0.01	77.68	77.69

Table A-15

Groundwater Monitoring Data for Well IW-3

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
08/23/02	13.10	13.09	0.01	77.66	77.67
09/20/02	13.61	13.60	0.01	77.15	77.16
09/20/02	13.64	13.63	0.01	77.12	77.13
10/18/02	13.07	13.07	Trace	77.69	77.69
10/18/02	13.08	13.07	0.01	77.68	77.69
12/06/02	12.27	12.25	0.02	78.49	78.51
12/06/02	12.26	12.25	0.01	78.50	78.51
01/03/03	11.90	11.88	0.01	78.86	78.87
01/03/03	11.89	11.87	0.01	78.87	78.88
02/10/03	12.07	ND	0	78.69	78.69
03/07/03	12.49	12.49	Trace	78.27	78.27
03/13/03	12.14	ND	0	78.62	78.62
03/26/03	12.05	ND	0	78.71	78.71
04/02/03	11.74	11.73	0.01	79.02	79.03
05/02/03	12.06	ND	0	78.70	78.70
05/15/03	11.99	ND	0	78.77	78.77
06/12/03	11.89	ND	0	78.87	78.87
08/06/03	12.55	12.55	Trace	78.21	78.21
09/18/03	13.45	13.45	Trace	77.31	77.31
11/03/03	12.86	ND	0	77.90	77.90
01/06/04	13.06	13.06	Trace	77.70	77.70
01/22/04	13.17	ND	0	77.59	77.59
02/19/04	13.23	ND	0	77.53	77.53
03/31/04	13.28	ND	0	77.48	77.48
04/29/04	11.92	ND	0	78.84	78.84
05/27/04	12.60	ND	0	78.16	78.16
07/14/04	13.48	ND	0	77.28	77.28
09/24/04	13.02	ND	0	77.74	77.74
11/03/04	13.31	ND	0	77.45	77.45
11/04/04	13.20	ND	0	77.56	77.56
11/10/04	13.61	ND	0	77.15	77.15
11/17/04/	13.68	ND	0	77.08	77.08
11/23/04	13.90	ND	0	76.86	76.86
12/02/04	13.49	ND	0	77.27	77.27
12/03/04	13.50	ND	0	77.26	77.26
12/08/04	13.33	ND	0	77.43	77.43
12/15/04	13.08	ND	0	77.68	77.68
12/22/04	13.18	ND	0	77.58	77.58
12/28/04	13.32	ND	0	77.44	77.44
01/04/05	13.31	ND	0	77.45	77.45
01/13/05	13.40	ND	0	77.36	77.36
01/19/05	12.98	ND	0	77.78	77.78
01/26/05	13.21	ND	0	77.55	77.55
02/01/05	13.53	ND	0	77.23	77.23
02/08/05	13.66	ND	0	77.10	77.10
02/15/05	13.36	ND	0	77.40	77.40
02/23/05	12.77	ND	0	77.99	77.99
02/23/05	12.80	ND	0	77.96	77.96

Table A-15

Groundwater Monitoring Data for Well IW-3

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
03/31/05	12.12	ND	0	78.64	78.64
04/21/05	12.44	ND	0	78.32	78.32
05/20/05	12.77	ND	0	77.99	77.99

Notes:

1) Reference Elevation for IW3 is 90.76.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-16

Groundwater Monitoring Data for Well IW-6

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/16/01	11.86	ND	0	77.29	77.29
02/22/01	11.86	ND	0	77.29	77.29
04/06/01	10.83	10.83	Trace	78.32	78.32
04/13/01	10.66	10.66	Trace	78.49	78.49
04/13/01	10.66	ND	0	78.49	78.49
04/20/01	11.25	11.25	Trace	77.90	77.90
05/25/01	11.80	ND	0	77.35	77.35
05/25/01	11.80	ND	0	77.35	77.35
06/08/01	12.86	ND	0	77.85	76.29
06/08/01	12.86	ND	0	77.85	76.29
12/07/01	12.59	ND	0	78.12	76.56
12/21/01	12.08	ND	0	78.63	77.07
12/21/01	12.10	ND	0	78.61	77.05
01/11/02	12.15	12.15	Trace	78.56	77.00
01/11/02	12.11	12.11	Trace	78.60	77.04
01/25/02	12.34	ND	0	78.37	78.37
01/25/02	12.37	ND	0	78.34	78.34
02/08/02	12.29	ND	0	78.42	78.42
02/08/02	12.29	ND	0	78.42	78.42
02/22/02	13.20	ND	0	77.51	77.51
02/22/02	13.24	ND	0	77.47	77.47
03/08/02	12.06	ND	0	78.65	78.65
03/08/02	12.05	ND	0	78.66	78.66
03/22/02	12.78	ND	0	77.93	77.93
03/22/02	11.80	ND	0	78.91	78.91
04/05/02	11.54	ND	0	79.17	79.17
04/05/02	11.54	ND	0	79.17	79.17
04/19/02	11.84	ND	0	78.87	78.87
04/19/02	11.84	ND	0	78.87	78.87
05/03/02	11.72	ND	0	78.99	78.99
05/03/02	11.72	ND	0	78.99	78.99
05/17/02	11.42	ND	0	79.29	79.29
05/17/02	11.43	ND	0	79.28	79.28
05/31/02	11.46	ND	0	79.25	79.25
05/31/02	11.46	ND	0	79.25	79.25
06/14/02	11.13	ND	0	79.58	79.58
06/14/02	11.13	ND	0	79.58	79.58
06/28/02	11.68	ND	0	79.03	79.03
06/28/02	11.67	ND	0	79.04	79.04
07/03/02	11.75	ND	0	78.96	78.96
07/03/02	11.75	ND	0	78.96	78.96
07/12/02	11.79	ND	0	78.92	78.92
07/12/02	11.80	ND	0	78.91	78.91
07/19/02	11.56	ND	0	79.15	79.15
07/26/02	11.64	ND	0	79.07	79.07
07/26/02	11.61	ND	0	79.10	79.10
08/09/02	11.95	ND	0	78.76	78.76
08/23/02	12.02	ND	0	78.69	78.69

Table A-16

Groundwater Monitoring Data for Well IW-6

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
08/23/02	12.04	ND	0	78.67	78.67
09/20/02	12.29	ND	0	78.42	78.42
09/20/02	12.30	ND	0	78.41	78.41
10/04/02	12.05	ND	0	78.66	78.66
10/04/02	12.06	ND	0	78.65	78.65
10/18/02	11.88	ND	0	78.83	78.83
10/18/02	11.89	ND	0	78.82	78.82
10/30/02	11.57	ND	0	79.14	79.14
10/30/02	11.58	ND	0	79.13	79.13
11/07/02	11.83	ND	0	78.88	78.88
11/07/02	11.87	ND	0	78.84	78.84
11/14/02	11.49	ND	0	79.22	79.22
11/26/02	11.16	11.17	0.01	79.55	79.56
12/09/02	11.37	ND	0	79.34	79.34
12/27/02	10.98	ND	0	79.73	79.73
01/10/03	11.04	ND	Trace	79.67	79.67
01/24/03	11.12	ND	0	79.59	79.59
02/10/03	11.13	ND	0	79.58	79.58
02/21/03	11.52	11.52	Trace	79.19	79.19
03/07/03	11.30	ND	0	79.41	79.41
03/21/03	11.02	ND	0	79.69	79.69
04/02/03	10.88	10.88	Trace	79.83	79.83
04/18/03	11.02	11.02	Trace	79.69	79.69
05/02/03	11.09	ND	0	79.62	79.62
05/15/03	11.15	11.15	Trace	79.56	79.56
05/30/03	11.07	ND	0	79.64	79.64
06/12/03	10.99	ND	0	79.72	79.72
06/30/03	11.19	ND	0	79.52	79.52
07/10/03	11.38	11.38	Trace	79.33	79.33
08/06/03	11.21	11.21	Trace	79.50	79.50
08/21/03	11.45	ND	0	79.26	79.26
09/04/03	12.02	ND	0	78.69	78.69
09/18/03	12.22	12.22	Trace	78.49	78.49
10/02/03	12.20	12.20	Trace	78.51	78.51
10/16/03	11.86	ND	0	78.85	78.85
11/03/03	11.80	ND	0	78.91	78.91
11/13/03	12.00	ND	0	78.71	78.71
11/26/03	12.05	ND	0	78.66	78.66
12/23/03	11.58	ND	0	79.13	79.13
01/06/04	11.81	ND	0	78.90	78.90
01/22/04	11.90	ND	0	78.81	78.81
02/05/04	12.00	ND	0	78.71	78.71
02/19/04	11.99	ND	0	78.72	78.72
03/03/04	12.16	ND	0	78.55	78.55
03/18/04	12.10	ND	0	78.61	78.61
03/31/04	12.08	ND	0	78.63	78.63
04/15/04	11.15	ND	0	79.56	79.56
04/29/04	11.26	ND	0	79.45	79.45

Table A-16

Groundwater Monitoring Data for Well IW-6

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
05/14/04	11.61	ND	0	79.10	79.10
05/27/04	11.92	ND	0	78.79	78.79
06/10/04	12.02	ND	0	78.69	78.69
06/24/04	12.07	ND	0	78.64	78.64
07/14/04	12.14	ND	0	78.57	78.57
08/27/04	12.10	ND	0	78.61	78.61
09/24/04	11.97	ND	0	78.74	78.74
10/08/04	11.95	ND	0	78.76	78.76
10/22/04	11.93	ND	0	78.78	78.78
11/04/04	12.06	ND	0	78.65	78.65
11/19/04	12.55	ND	0	78.16	78.16
12/03/04	12.35	ND	0	78.36	78.36
12/08/04	12.03	ND	0	78.68	78.68
12/30/04	12.20	ND	0	78.51	78.51
01/13/05	12.17	ND	0	78.54	78.54
01/31/05	12.22	ND	0	78.49	78.49
02/09/05	12.28	ND	0	78.43	78.43
02/09/05	12.28	ND	0	78.43	78.43
02/23/05	11.80	ND	0	78.91	78.91
03/10/05	11.90	ND	0	78.81	78.81
03/31/05	11.12	ND	0	79.59	79.59
04/09/05	11.08	ND	0	79.63	79.63
04/21/05	11.68	ND	0	79.03	79.03
05/05/05	11.61	ND	0	79.10	79.10
05/20/05	11.58	ND	0	79.13	79.13
06/03/05	11.24	ND	0	79.47	79.47

Notes:

1) Reference Elevation for IW6 is 89.15.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-17

Groundwater Monitoring Data for Well IW-7

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.17	ND	0	76.93	76.93
01/06/01	13.26	ND	0	76.84	76.84
01/08/01	13.02	ND	0	77.08	77.08
01/16/01	13.14	ND	0	76.96	76.96
01/22/01	13.17	ND	0	76.93	76.93
01/22/01	12.76	ND	0	77.34	77.34
01/22/01	13.26	ND	0	76.84	76.84
01/31/01	13.15	ND	0	76.95	76.95
01/31/01	13.13	ND	0	76.97	76.97
01/31/01	13.15	ND	0	76.95	76.95
01/31/01	13.14	ND	0	76.96	76.96
01/31/01	12.91	ND	0	77.19	77.19
01/31/01	12.92	ND	0	77.18	77.18
01/31/01	13.23	ND	0	76.87	76.87
01/31/01	13.19	ND	0	76.91	76.91
01/31/01	13.14	ND	0	76.96	76.96
01/31/01	13.15	ND	0	76.95	76.95
01/31/01	13.07	ND	0	77.03	77.03
02/22/01	12.99	ND	0	77.11	77.11
02/22/01	12.97	ND	0	77.13	77.13
04/06/01	11.84	11.84	Trace	78.26	78.26
04/13/01	11.66	ND	0	78.44	78.44
04/13/01	11.67	11.67	Trace	78.43	78.43
04/20/01	12.33	12.33	Trace	77.77	77.77
04/20/01	12.32	ND	0	77.78	77.78
05/25/01	12.87	ND	0	77.23	77.23
05/25/01	12.88	ND	0	77.22	77.22
06/08/01	12.95	12.95	Trace	77.15	77.15
06/08/01	12.95	12.95	Trace	77.15	77.15
12/07/01	13.65	13.65	Trace	76.45	76.45
12/07/01	13.67	ND	0	76.43	76.43
12/21/01	13.13	13.13	Trace	76.97	76.97
12/21/01	13.26	ND	0	76.84	76.84
01/11/02	13.41	ND	0	76.69	76.69
01/11/02	13.62	ND	0	76.48	76.48
01/25/02	13.76	ND	0	76.34	76.34
01/25/02	13.77	ND	0	76.33	76.33
02/08/02	13.53	ND	0	76.57	76.57
02/08/02	13.52	ND	0	76.58	76.58
02/22/02	13.44	ND	0	76.66	76.66
02/22/02	13.46	ND	0	76.64	76.64
03/08/02	13.25	ND	0	76.85	76.85
03/08/02	13.21	ND	0	76.89	76.89
03/22/02	12.81	ND	0	77.29	77.29
03/22/02	12.89	ND	0	77.21	77.21
04/05/02	12.64	ND	0	77.46	77.46
04/05/02	12.66	ND	0	77.44	77.44
04/19/02	12.98	ND	0	77.12	77.12

Table A-17

Groundwater Monitoring Data for Well IW-7

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
04/19/02	12.96	ND	0	77.14	77.14
05/03/02	12.84	ND	0	77.26	77.26
05/03/02	12.86	ND	0	77.24	77.24
05/17/02	12.52	ND	0	77.58	77.58
05/17/02	12.51	ND	0	77.59	77.59
05/31/02	12.55	ND	0	77.55	77.55
05/31/02	12.56	ND	0	77.54	77.54
06/14/02	12.27	ND	0	77.83	77.83
06/14/02	12.27	ND	0	77.83	77.83
06/28/02	12.78	ND	0	77.32	77.32
06/28/02	12.78	ND	0	77.32	77.32
07/03/02	12.81	ND	0	77.29	77.29
07/03/02	12.79	ND	0	77.31	77.31
07/12/02	12.85	ND	0	77.25	77.25
07/12/02	12.85	ND	0	77.25	77.25
07/19/02	12.56	ND	0	77.54	77.54
07/26/02	12.62	ND	0	77.48	77.48
07/26/02	12.61	ND	0	77.49	77.49
08/09/02	13.00	ND	0	77.10	77.10
08/23/02	13.09	ND	0	77.01	77.01
08/23/02	13.09	ND	0	77.01	77.01
09/20/02	13.36	ND	0	76.74	76.74
09/20/02	13.38	ND	0	76.72	76.72
10/04/02	13.07	ND	0	77.03	77.03
10/04/02	13.07	ND	0	77.03	77.03
10/18/02	12.94	ND	0	77.16	77.16
10/18/02	12.91	ND	0	77.19	77.19
10/30/02	12.56	ND	0	77.54	77.54
10/30/02	12.58	ND	0	77.52	77.52
11/07/02	12.88	ND	0	77.22	77.22
11/07/02	12.92	ND	0	77.18	77.18
11/14/02	12.47	ND	0	77.63	77.63
11/26/02	12.15	ND	0	77.95	77.95
12/09/02	12.37	ND	0	77.73	77.73
12/27/02	11.96	ND	0	78.14	78.14
01/10/03	12.02	ND	0	78.08	78.08
01/24/03	12.17	ND	0	77.93	77.93
02/10/03	12.20	ND	0	77.90	77.90
02/21/03	12.65	ND	0	77.45	77.45
03/07/03	12.40	ND	0	77.70	77.70
03/13/03	12.28	12.27	0.01	77.82	77.83
03/21/03	12.13	ND	0	77.97	77.97
04/02/03	11.92	11.92	Trace	78.18	78.18
04/18/03	12.10	12.10	Trace	78.00	78.00
05/02/03	12.13	ND	0	77.97	77.97
05/15/03	12.22	12.22	Trace	77.88	77.88
05/30/03	12.14	12.14	Trace	77.96	77.96
06/12/03	12.02	ND	0	78.08	78.08

Table A-17

Groundwater Monitoring Data for Well IW-7

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
06/30/03	12.24	12.24	Trace	77.86	77.86
07/10/03	12.47	ND	0	77.63	77.63
07/24/03	12.42	ND	0	77.68	77.68
08/06/03	12.25	ND	0	77.85	77.85
08/21/03	12.46	ND	0	77.64	77.64
09/04/03	13.59	ND	0	76.51	76.51
09/18/03	13.27	13.26	0.01	76.83	76.84
10/02/03	13.13	ND	0	76.97	76.97
10/16/03	12.86	ND	0	77.24	77.24
11/03/03	12.86	ND	0	77.24	77.24
11/13/03	13.07	ND	0	77.03	77.03
11/26/03	13.13	ND	0	76.97	76.97
12/08/03	12.75	12.75	Trace	77.35	77.35
12/23/03	12.68	ND	0	77.42	77.42
01/06/04	12.92	ND	0	77.18	77.18
01/22/04	13.01	ND	0	77.09	77.09
02/06/04	13.10	ND	0	77.00	77.00
02/19/04	13.06	ND	0	77.04	77.04
03/03/04	13.27	ND	0	76.83	76.83
03/18/04	13.27	ND	0	76.83	76.83
03/31/04	13.14	ND	0	76.96	76.96
04/15/04	12.21	ND	0	77.89	77.89
04/29/04	12.20	ND	0	77.90	77.90
05/14/04	12.70	ND	0	77.40	77.40
05/27/04	12.98	ND	0	77.12	77.12
06/10/04	13.18	ND	0	76.92	76.92
06/24/04	13.20	ND	0	76.90	76.90
07/14/04	13.44	ND	0	76.66	76.66
08/27/04	13.18	ND	0	76.92	76.92
09/24/04	13.03	ND	0	77.07	77.07
10/08/04	13.07	ND	0	77.03	77.03
10/22/04	13.03	ND	0	77.07	77.07
11/04/04	13.11	ND	0	76.99	76.99
11/19/04	13.83	ND	0	76.27	76.27
12/03/04	13.61	ND	0	76.49	76.49
12/08/04	13.29	ND	0	76.81	76.81
12/30/04	13.48	ND	0	76.62	76.62
01/13/05	13.50	ND	0	76.60	76.60
01/31/05	13.47	ND	0	76.63	76.63
02/09/05	13.52	Sheen	0	76.58	76.58
02/09/05	13.54	Sheen	0	76.56	76.56
02/23/05	12.98	ND	0	77.12	77.12
03/10/05	13.03	ND	0	77.07	77.07
03/31/05	12.32	ND	0	77.78	77.78
04/09/05	12.14	ND	0	77.96	77.96
04/21/05	12.85	ND	0	77.25	77.25
05/05/05	12.76	ND	0	77.34	77.34
05/20/05	12.70	ND	0	77.40	77.40

Table A-17

Groundwater Monitoring Data for Well IW-7

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
06/03/05	12.33	ND	0	77.77	77.77

Notes:

1) Reference Elevation for IW7 is 90.1.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-18

Groundwater Monitoring Data for Well IW-8

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.96	12.95	0.01	76.98	76.99
01/06/01	12.51	12.50	0.01	77.43	77.44
01/06/01	12.98	12.97	0.01	76.96	76.97
01/08/01	12.81	ND	0	77.13	77.13
01/16/01	12.93	ND	0	77.01	77.01
01/22/01	12.96	12.95	0.01	76.98	76.99
01/22/01	12.51	12.50	0.01	77.43	77.44
01/22/01	13.01	ND	0	76.93	76.93
01/26/01	13.00	13.00	Trace	76.94	76.94
02/22/01	12.74	ND	0	77.20	77.20
02/22/01	12.73	ND	0	77.21	77.21
03/26/01	11.24	11.24	Trace	78.70	78.70
03/29/01	11.56	11.56	Trace	78.38	78.38
04/06/01	11.57	ND	0	78.37	78.37
04/13/01	11.48	11.48	Trace	78.46	78.46
04/13/01	11.47	11.47	Trace	78.47	78.47
04/20/01	11.97	11.97	Trace	77.97	77.97
04/20/01	11.95	11.94	0.01	77.99	78.00
05/25/01	12.57	12.57	Trace	77.37	78.14
05/25/01	12.56	12.56	Trace	77.38	77.38
06/08/01	12.64	ND	0	77.30	78.07
06/08/01	12.64	12.64	Trace	77.30	78.07
12/07/01	13.44	13.44	Trace	76.50	77.27
12/07/01	13.44	13.44	Trace	76.50	77.27
12/21/01	12.79	ND	0	77.15	77.92
12/21/01	13.10	13.10	Trace	76.84	77.61
01/11/02	13.49	13.49	Trace	76.45	77.22
01/11/02	13.54	13.54	Trace	76.40	77.17
01/25/02	13.53	13.52	0.01	76.41	77.19
01/25/02	13.53	13.52	0.01	76.41	77.19
02/08/02	13.35	13.35	Trace	76.59	76.59
02/08/02	13.35	13.35	Trace	76.59	76.59
02/22/02	13.30	13.28	0.02	76.64	76.66
02/22/02	13.28	13.26	0.02	76.66	76.68
03/08/02	13.07	13.07	Trace	76.87	76.87
03/08/02	13.03	13.03	Trace	76.91	76.91
03/22/02	12.61	12.60	0.01	77.33	77.34
03/22/02	12.62	12.61	0.01	77.32	77.33
04/05/02	12.46	12.45	0.01	77.48	77.49
04/05/02	12.46	12.45	0.01	77.48	77.49
04/19/02	12.75	12.74	0.01	77.19	77.20
04/19/02	12.76	12.75	0.01	77.18	77.19
05/03/02	12.58	12.57	0.01	77.36	77.37
05/03/02	12.59	12.58	0.01	77.35	77.36
05/17/02	12.26	12.25	0.01	77.68	77.69
05/17/02	12.26	12.25	0.01	77.68	77.69
05/31/02	12.35	12.34	0.01	77.59	77.60
05/31/02	12.34	12.33	0.01	77.60	77.61

Table A-18

Groundwater Monitoring Data for Well IW-8

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
06/14/02	12.12	12.11	0.01	77.82	77.83
06/14/02	12.15	12.14	0.01	77.79	77.80
06/28/02	12.56	12.55	0.01	77.38	77.39
06/28/02	12.57	12.56	0.01	77.37	77.38
07/03/02	12.61	12.59	0.02	77.33	77.35
07/03/02	12.78	12.77	0.01	77.16	77.17
07/12/02	12.60	12.59	0.01	77.34	77.35
07/12/02	12.60	12.59	0.01	77.34	77.35
07/19/02	12.21	12.21	Trace	77.73	77.73
07/26/02	12.42	12.41	0.01	77.52	77.53
07/26/02	12.32	12.31	0.01	77.62	77.63
08/09/02	12.59	12.58	0.01	77.35	77.36
08/23/02	12.68	12.67	0.01	77.26	77.27
08/23/02	12.67	12.66	0.01	77.27	77.28
09/20/02	13.00	12.99	0.01	76.94	76.95
09/20/02	12.99	12.98	0.01	76.95	76.96
10/04/02	12.63	12.62	0.01	77.31	77.32
10/04/02	12.64	12.63	0.01	77.30	77.31
10/18/02	12.52	12.51	0.01	77.42	77.43
10/18/02	12.50	12.49	0.01	77.44	77.45
10/30/02	12.12	ND	Trace	77.82	77.82
10/30/02	12.13	ND	Trace	77.81	77.81
11/07/02	12.46	ND	Trace	77.48	77.48
11/07/02	12.50	ND	0	77.44	77.44
11/14/02	12.12	ND	0	77.82	77.82
11/26/02	11.75	ND	0	78.19	78.19
12/09/02	11.99	ND	0	77.95	77.95
12/27/02	11.65	ND	0	78.29	78.29
01/10/03	11.70	ND	0	78.24	78.24
01/24/03	11.82	ND	0	78.12	78.12
12/13/02	15.99	ND	4	73.95	77.75
02/10/03	11.95	ND	0	77.99	77.99
02/21/03	12.40	ND	0	77.54	77.54
03/07/03	12.11	ND	0	77.83	77.83
03/13/03	11.99	11.99	Trace	77.95	77.95
03/21/03	11.85	ND	0	78.09	78.09
04/02/03	11.60	ND	0	78.34	78.34
04/18/03	11.80	11.80	Trace	78.14	78.14
05/02/03	11.53	ND	0	78.41	78.41
05/15/03	11.91	ND	0	78.03	78.03
05/30/03	11.80	ND	0	78.14	78.14
06/12/03	11.67	ND	0	78.27	78.27
06/30/03	11.99	ND	0	77.95	77.95
07/10/03	12.21	ND	0	77.73	77.73
07/24/03	12.21	ND	0	77.73	77.73
08/06/03	11.12	ND	0	78.82	78.82
08/21/03	12.33	ND	0	77.61	77.61
09/04/03	12.87	ND	0	77.07	77.07

Table A-18

Groundwater Monitoring Data for Well IW-8

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
09/18/03	12.66	ND	0	77.28	77.28
10/02/03	12.88	12.87	0.01	77.06	77.07
10/16/03	12.56	ND	0	77.38	77.38
11/03/03	12.72	ND	0	77.22	77.22
11/13/03	12.90	ND	0	77.04	77.04
11/26/03	13.05	ND	0	76.89	76.89
12/08/03	12.63	12.63	Trace	77.31	77.31
12/23/03	12.53	ND	0	77.41	77.41
01/06/04	12.81	ND	0	77.13	77.13
01/22/04	12.89	ND	0	77.05	77.05
02/05/04	13.00	ND	0	76.94	76.94
02/19/04	12.93	ND	0	77.01	77.01
03/03/04	13.16	ND	0	76.78	76.78
03/18/04	13.25	ND	0	76.69	76.69
03/31/04	13.13	ND	0	76.81	76.81
04/15/04	12.16	ND	0	77.78	77.78
04/29/04	11.77	ND	0	78.17	78.17
05/14/04	12.58	ND	0	77.36	77.36
05/27/04	12.72	ND	0	77.22	77.22
06/10/04	12.90	ND	0	77.04	77.04
06/24/04	12.84	ND	0	77.10	77.10
07/14/04	13.22	ND	0	76.72	76.72
08/27/04	12.76	ND	0	77.18	77.18
09/24/04	13.00	ND	0	76.94	76.94
10/08/04	12.95	ND	0	76.99	76.99
10/22/04	12.94	ND	0	77.00	77.00
11/04/04	13.03	ND	0	76.91	76.91
11/19/04	13.80	13.80	Trace	76.14	76.14
12/03/04	13.28	ND	Trace	76.66	76.66
12/08/04	12.99	ND	0	76.95	76.95
12/30/04	13.19	ND	0	76.75	76.75
01/13/05	13.37	ND	0	76.57	76.57
01/31/05	13.30	ND	0	76.64	76.64
02/09/05	13.35	13.34	0	76.59	76.59
02/09/05	13.39	13.38	0	76.55	76.55
02/23/05	12.70	ND	0	77.24	77.24
03/10/05	12.80	ND	0	77.14	77.14
03/31/05	12.08	ND	0	77.86	77.86
04/09/05	12.04	ND	0	77.90	77.90
04/21/05	12.54	ND	0	77.40	77.40
05/05/05	12.50	ND	0	77.44	77.44
05/20/05	12.58	ND	0	77.36	77.36
06/03/05	12.23	ND	0	77.71	77.71

Notes:

1) Reference Elevation for IW8 is 89.94.

2) Measurements taken from top of PVC or casing.

Table A-18

Groundwater Monitoring Data for Well IW-8

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-19

Groundwater Monitoring Data for Well IW-9

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.64	ND	0	76.14	76.14
01/06/01	12.17	ND	0	77.61	77.61
01/06/01	12.69	ND	0	77.09	77.09
01/08/01	12.48	ND	0	77.30	77.30
01/16/01	12.60	ND	0	77.18	77.18
01/22/01	13.64	ND	0	76.14	76.14
01/22/01	12.17	ND	0	77.61	77.61
01/22/01	12.69	ND	0	77.09	77.09
01/26/01	12.67	ND	0	77.11	77.11
01/31/01	12.58	ND	0	77.20	77.20
01/31/01	12.51	ND	0	77.27	77.27
01/31/01	12.62	ND	0	77.16	77.16
01/31/01	12.63	ND	0	77.15	77.15
02/22/01	12.41	ND	0	77.37	77.37
02/22/01	12.37	ND	0	77.41	77.41
04/06/01	11.17	11.17	Trace	78.61	78.61
04/13/01	11.17	ND	0	78.61	78.61
04/13/01	11.15	ND	0	78.63	78.63
04/20/01	11.48	11.48	Trace	78.30	78.30
04/20/01	11.53	11.53	Trace	78.25	78.25
05/25/01	12.24	ND	0	77.54	77.54
05/25/01	12.22	ND	0	77.56	77.56
06/08/01	12.33	ND	0	77.45	77.45
06/08/01	12.33	ND	0	77.45	77.45
12/07/01	13.39	ND	0	76.39	76.39
12/07/01	13.37	ND	0	76.41	76.41
12/21/01	12.70	0.00	0	77.08	77.08
12/21/01	12.93	0.00	0	76.85	76.85
01/11/02	13.35	ND	0	76.43	76.43
01/11/02	13.55	ND	0	76.23	76.23
01/25/02	13.26	ND	0	76.52	76.52
01/25/02	13.26	ND	0	76.52	76.52
02/08/02	13.08	ND	0	76.70	76.70
02/08/02	13.08	ND	0	76.70	76.70
02/22/02	12.98	ND	0	76.80	76.80
02/22/02	12.98	ND	0	76.80	76.80
03/08/02	13.78	ND	0	76.00	76.00
03/08/02	12.69	ND	0	77.09	77.09
03/22/02	12.21	ND	0	77.57	77.57
03/22/02	12.24	ND	0	77.54	77.54
04/05/02	12.14	ND	0	77.64	77.64
04/05/02	12.21	ND	0	77.57	77.57
04/19/02	12.46	ND	0	77.32	77.32
04/19/02	12.42	ND	0	77.36	77.36
05/03/02	12.23	ND	0	77.55	77.55
05/03/02	12.27	ND	0	77.51	77.51
05/17/02	11.93	ND	0	77.85	77.85
05/17/02	11.91	ND	0	77.87	77.87

Table A-19

Groundwater Monitoring Data for Well IW-9

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
05/31/02	12.06	ND	0	77.72	77.72
05/31/02	12.09	ND	0	77.69	77.69
06/14/02	11.95	ND	0	77.83	77.83
06/14/02	11.95	ND	0	77.83	77.83
06/28/02	12.31	ND	0	77.47	77.47
06/28/02	12.28	ND	0	77.50	77.50
07/03/02	12.37	ND	0	77.41	77.41
07/03/02	12.36	ND	0	77.42	77.42
07/12/02	12.35	ND	0	77.43	77.43
07/12/02	12.33	ND	0	77.45	77.45
07/19/02	12.57	ND	0	77.21	77.21
07/26/02	12.62	ND	0	77.16	77.16
07/26/02	12.11	ND	0	77.67	77.67
08/09/02	12.32	ND	0	77.46	77.46
08/23/02	12.40	ND	0	77.38	77.38
08/23/02	12.42	ND	0	77.36	77.36
09/20/02	12.71	ND	0	77.07	77.07
09/20/02	12.76	ND	0	77.02	77.02
10/04/02	12.38	ND	0	77.40	77.40
10/04/02	12.31	ND	0	77.47	77.47
10/18/02	12.22	ND	0	77.56	77.56
10/18/02	12.22	ND	0	77.56	77.56
10/30/02	11.79	ND	0	77.99	77.99
10/30/02	11.88	ND	0	77.90	77.90
11/07/02	12.19	ND	0	77.59	77.59
11/07/02	12.18	ND	0	77.60	77.60
11/14/02	11.83	ND	0	77.95	77.95
11/26/02	11.39	ND	0	78.39	78.39
12/09/02	11.65	ND	0	78.13	78.13
12/27/02	11.33	ND	0	78.45	78.45
01/10/03	11.40	ND	0	78.38	78.38
01/24/03	11.53	ND	0	78.25	78.25
02/10/03	11.75	ND	0	78.03	78.03
02/21/03	12.18	ND	0	77.60	77.60
03/07/03	11.84	ND	0	77.94	77.94
03/13/03	11.71	ND	0	78.07	78.07
03/21/03	11.59	ND	0	78.19	78.19
04/02/03	11.22	ND	0	78.56	78.56
04/18/03	11.48	ND	0	78.30	78.30
05/02/03	11.53	ND	0	78.25	78.25
05/15/03	11.69	ND	0	78.09	78.09
05/30/03	11.56	ND	0	78.22	78.22
06/12/03	11.30	ND	0	78.48	78.48
06/30/03	11.66	ND	Trace	78.12	78.12
07/10/03	11.93	ND	0	77.85	77.85
07/24/03	11.89	ND	0	77.89	77.89
08/06/03	11.87	ND	0	77.91	77.91
08/21/03	12.10	ND	0	77.68	77.68

Table A-19

Groundwater Monitoring Data for Well IW-9

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
09/04/03	12.57	ND	0	77.21	77.21
09/18/03	12.66	ND	0	77.12	77.12
10/02/03	12.58	ND	0	77.20	77.20
10/16/03	12.31	ND	0	77.47	77.47
11/03/03	12.44	ND	0	77.34	77.34
11/13/03	12.58	ND	0	77.20	77.20
11/26/03	12.76	12.76	Trace	77.02	77.02
12/08/03	12.30	ND	0	77.48	77.48
12/23/03	12.58	ND	0	77.20	77.20
01/06/04	12.45	ND	0	77.33	77.33
01/22/04	12.49	ND	0	77.29	77.29
02/05/04	12.60	ND	0	77.18	77.18
02/19/04	12.51	ND	0	77.27	77.27
03/03/04	12.76	ND	0	77.02	77.02
03/18/04	12.99	ND	0	76.79	76.79
03/31/04	12.81	ND	0	76.97	76.97
04/15/04	11.88	ND	0	77.90	77.90
04/29/04	11.56	ND	0	78.22	78.22
05/14/04	12.25	ND	0	77.53	77.53
05/27/04	12.31	ND	0	77.47	77.47
06/10/04	12.56	ND	0	77.22	77.22
06/24/04	12.51	ND	0	77.27	77.27
07/14/04	12.71	ND	0	77.07	77.07
08/27/04	12.35	ND	0	77.43	77.43
09/24/04	12.57	ND	0	77.21	77.21
10/08/04	12.60	ND	0	77.18	77.18
10/22/04	12.60	ND	0	77.18	77.18
11/04/04	12.76	ND	0	77.02	77.02
11/19/04	13.08	ND	0	76.70	76.70
12/03/04	12.86	ND	0	76.92	76.92
12/08/04	12.61	ND	0	77.17	77.17
12/30/04	12.82	ND	0	76.96	76.96
01/13/05	12.70	ND	0	77.08	77.08
01/31/05	12.80	ND	0	76.98	76.98
02/09/05	12.84	ND	0	76.94	76.94
02/09/05	12.90	ND	0	76.88	76.88
02/23/05	12.29	ND	0	77.49	77.49
03/10/05	12.44	ND	0	77.34	77.34
03/31/05	11.73	ND	0	78.05	78.05
04/09/05	11.69	ND	0	78.09	78.09
04/21/05	12.09	ND	0	77.69	77.69
05/05/05	12.06	ND	0	77.72	77.72
05/20/05	12.19	ND	0	77.59	77.59
06/03/05	11.85	ND	0	77.93	77.93

Notes:

1) Reference Elevation for IW9 is 89.78.

Table A-19

Groundwater Monitoring Data for Well IW-9

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-20

Groundwater Monitoring Data for Well IW-10

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	12.89	12.88	0.01	77.54	77.55
01/06/01	12.88	ND	0	77.55	77.55
01/06/01	12.73	ND	0	77.70	77.70
01/06/01	12.90	ND	0	77.53	77.53
01/08/01	12.76	ND	0	77.67	77.67
01/10/01	12.80	ND	0	77.63	77.63
01/16/01	12.88	ND	0	77.55	77.55
01/22/01	12.90	ND	0	77.53	77.53
01/22/01	12.73	ND	0	77.70	77.70
01/31/01	12.84	12.84	Trace	77.59	77.59
01/31/01	12.84	12.84	Trace	77.59	77.59
01/31/01	12.74	12.74	Trace	77.69	77.69
01/31/01	12.80	12.80	Trace	77.63	77.63
01/31/01	12.86	12.86	Trace	77.57	77.57
01/31/01	12.84	12.84	Trace	77.59	77.59
02/22/01	12.70	ND	0	77.73	77.73
02/22/01	12.68	ND	0	77.75	77.75
03/26/01	11.39	ND	0	79.04	79.04
03/29/01	11.63	ND	0	78.80	78.80
04/06/01	11.68	ND	0	78.75	78.75
04/13/01	11.74	ND	0	78.69	78.69
04/13/01	11.72	ND	0	78.71	78.71
04/20/01	12.00	12.00	Trace	78.43	78.43
04/20/01	12.02	ND	0	78.41	78.41
05/25/01	12.62	ND	0	77.81	77.81
05/25/01	12.62	ND	0	77.81	77.81
06/08/01	12.68	ND	0	77.75	77.75
06/08/01	12.69	ND	0	77.74	77.74
12/07/01	13.57	ND	0	76.86	76.86
12/07/01	13.56	ND	0	76.87	76.87
12/21/01	13.01	ND	0	77.42	77.42
12/21/01	13.02	ND	0	77.41	77.41
01/11/02	13.35	ND	0	77.08	77.08
01/11/02	13.60	ND	0	76.83	76.83
01/25/02	13.22	ND	0	77.21	77.21
01/25/02	13.23	ND	0	77.20	77.20
02/08/02	13.10	ND	0	77.33	77.33
02/08/02	13.10	ND	0	77.33	77.33
02/22/02	13.05	ND	0	77.38	77.38
02/22/02	13.05	ND	0	77.38	77.38
03/08/02	12.91	ND	0	77.52	77.52
03/08/02	12.87	ND	0	77.56	77.56
03/22/02	12.57	ND	0	77.86	77.86
03/22/02	12.56	ND	0	77.87	77.87
04/05/02	12.46	ND	0	77.97	77.97
04/05/02	12.49	ND	0	77.94	77.94
04/19/02	12.71	ND	0	77.72	77.72
04/19/02	12.68	ND	0	77.75	77.75

Table A-20

Groundwater Monitoring Data for Well IW-10

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
05/03/02	12.56	ND	0	77.87	77.87
05/03/02	12.55	ND	0	77.88	77.88
05/17/02	12.28	ND	0	78.15	78.15
05/17/02	12.25	ND	0	78.18	78.18
05/31/02	12.37	ND	0	78.06	78.06
05/31/02	12.38	ND	0	78.05	78.05
06/14/02	12.39	ND	0	78.04	78.04
06/14/02	12.38	ND	0	78.05	78.05
06/28/02	12.61	ND	0	77.82	77.82
06/28/02	12.63	ND	0	77.80	77.80
07/03/02	12.68	ND	0	77.75	77.75
07/03/02	12.68	ND	0	77.75	77.75
07/12/02	12.74	ND	0	77.69	77.69
07/12/02	12.70	ND	0	77.73	77.73
07/19/02	12.60	ND	0	77.83	77.83
07/26/02	12.18	ND	0	78.25	78.25
07/26/02	12.61	ND	0	77.82	77.82
08/09/02	12.79	ND	0	77.64	77.64
08/23/02	12.89	ND	0	77.54	77.54
08/23/02	12.91	ND	0	77.52	77.52
09/20/02	13.12	ND	0	77.31	77.31
09/20/02	13.15	ND	0	77.28	77.28
10/04/02	12.84	ND	0	77.59	77.59
10/04/02	12.80	ND	0	77.63	77.63
10/18/02	12.68	ND	0	77.75	77.75
10/18/02	12.68	ND	0	77.75	77.75
10/30/02	12.39	ND	0	78.04	78.04
10/30/02	12.42	ND	0	78.01	78.01
11/07/02	12.60	ND	0	77.83	77.83
11/07/02	12.60	ND	0	77.83	77.83
11/14/02	12.30	ND	0	78.13	78.13
11/26/02	11.95	ND	0	78.48	78.48
12/09/02	12.18	ND	0	78.25	78.25
12/27/02	11.87	ND	0	78.56	78.56
01/10/03	11.93	ND	0	78.50	78.50
01/24/03	12.00	ND	0	78.43	78.43
02/10/03	12.24	ND	0	78.19	78.19
02/21/03	12.50	ND	0	77.93	77.93
03/07/03	12.20	ND	0	78.23	78.23
03/13/03	12.14	ND	0	78.29	78.29
03/21/03	11.98	ND	0	78.45	78.45
04/02/03	11.75	11.75	Trace	78.68	78.68
04/18/03	11.95	11.95	Trace	78.48	78.48
05/02/03	12.02	ND	0	78.41	78.41
05/15/03	11.18	ND	0	79.25	79.25
05/30/03	12.06	ND	0	78.37	78.37
06/12/03	11.87	ND	0	78.56	78.56
06/30/03	12.14	ND	0	78.29	78.29

Table A-20

Groundwater Monitoring Data for Well IW-10

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/10/03	12.35	ND	0	78.08	78.08
07/24/03	12.32	ND	0	78.11	78.11
08/06/03	12.31	ND	0	78.12	78.12
08/21/03	12.50	ND	0	77.93	77.93
09/04/03	12.93	ND	0	77.50	77.50
09/18/03	13.09	ND	0	77.34	77.34
10/02/03	13.05	ND	0	77.38	77.38
10/16/03	12.76	ND	0	77.67	77.67
11/03/03	12.88	ND	0	77.55	77.55
11/13/03	12.90	ND	0	77.53	77.53
11/26/03	13.06	13.06	Trace	77.37	77.37
12/08/03	12.55	ND	0	77.88	77.88
12/23/03	12.20	ND	0	78.23	78.23
01/06/04	12.71	ND	0	77.72	77.72
01/22/04	12.84	12.84	Trace	77.59	77.59
02/05/04	12.92	ND	0	77.51	77.51
02/19/04	12.90	ND	0	77.53	77.53
03/03/04	13.09	ND	0	77.34	77.34
03/18/04	13.20	ND	0	77.23	77.23
03/31/04	13.08	ND	0	77.35	77.35
04/15/04	12.30	ND	0	78.13	78.13
04/29/04	12.20	ND	0	78.23	78.23
05/14/04	12.66	ND	0	77.77	77.77
05/27/04	12.69	ND	0	77.74	77.74
06/10/04	12.90	ND	0	77.53	77.53
06/24/04	12.90	ND	0	77.53	77.53
07/14/04	12.97	ND	0	77.46	77.46
08/27/04	12.70	ND	0	77.73	77.73
09/24/04	12.81	ND	0	77.62	77.62
10/08/04	12.83	ND	0	77.60	77.60
10/22/04	12.87	ND	0	77.56	77.56
11/04/04	12.99	ND	0	77.44	77.44
11/19/04	13.14	ND	0	77.29	77.29
12/03/04	12.98	ND	0	77.45	77.45
12/08/04	12.79	ND	0	77.64	77.64
12/30/04	12.96	ND	0	77.47	77.47
01/13/05	12.87	ND	0	77.56	77.56
01/31/05	12.95	ND	0	77.48	77.48
02/09/05	13.02	ND	0	77.41	77.41
02/09/05	13.04	ND	0	77.39	77.39
02/23/05	12.59	ND	0	77.84	77.84
03/10/05	12.72	ND	0	77.71	77.71
03/31/05	12.09	ND	0	78.34	78.34
04/09/05	12.12	ND	0	78.31	78.31
04/21/05	12.44	ND	0	77.99	77.99
05/05/05	12.41	ND	0	78.02	78.02
05/20/05	12.51	ND	0	77.92	77.92
06/03/05	12.24	ND	0	78.19	78.19

Table A-20

Groundwater Monitoring Data for Well IW-10

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation

Notes:

1) Reference Elevation for IW10 is 90.43.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-24

Groundwater Monitoring Data for Well PID

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.80	13.54	0.26	76.17	76.42
01/06/01	13.92	13.65	0.27	76.05	76.31
01/06/01	13.82	13.55	0.27	76.15	76.41
01/08/01	13.89	13.64	0.25	76.08	76.32
01/16/01	13.72	13.50	0.22	76.25	76.46
01/22/01	13.80	13.54	0.26	76.17	76.42
01/22/01	13.92	13.65	0.27	76.05	76.31
01/31/01	14.00	ND	0	75.97	75.97
01/31/01	13.67	ND	0	76.30	76.30
01/31/01	13.64	ND	0	76.33	76.33
01/31/01	13.89	ND	0	76.08	76.08
01/31/01	13.65	ND	0	76.32	76.32
01/31/01	13.83	ND	0	76.14	76.14
01/31/01	13.85	ND	0	76.12	76.12
01/31/01	13.65	ND	0	76.32	76.32
01/31/01	13.73	ND	0	76.24	76.24
01/31/01	13.88	ND	0	76.09	76.09
01/31/01	13.87	ND	0	76.10	76.10
01/31/01	13.21	ND	0	76.76	76.76
01/31/01	13.22	ND	0	76.75	76.75
01/31/01	13.28	ND	0	76.69	76.69
01/31/01	13.58	ND	0	76.39	76.39
01/31/01	13.69	ND	0	76.28	76.28
01/31/01	13.68	ND	0	76.29	76.29
01/31/01	13.72	ND	0	76.25	76.25
01/31/01	12.78	ND	0	77.19	77.19
01/31/01	13.75	ND	0	76.22	76.22
01/31/01	13.75	ND	0	76.22	76.22
01/31/01	13.32	ND	0	76.65	76.65
01/31/01	13.50	ND	0	76.47	76.47
01/31/01	13.55	ND	0	76.42	76.42
01/31/01	13.52	ND	0	76.45	76.45
01/31/01	13.53	ND	0	76.44	76.44
04/06/01	11.94	11.94	Trace	78.03	78.03
04/13/01	11.82	11.72	0.1	78.15	78.25
04/20/01	12.43	12.43	Trace	77.54	77.54
04/20/01	12.55	ND	0	77.42	77.42
05/25/01	13.17	13.17	Trace	76.80	76.80
05/25/01	13.13	13.13	Trace	76.84	76.84
06/08/01	13.21	13.21	Trace	76.76	76.76
06/08/01	13.15	13.15	Trace	76.82	76.82
12/07/01	14.07	13.90	0.17	75.90	76.06
12/07/01	14.11	13.92	0.19	75.86	76.04
12/13/01	13.77	13.56	0.21	76.20	76.40
12/21/01	13.43	13.28	0.15	76.54	76.68
12/21/01	13.62	13.47	0.15	76.35	76.49
02/08/02	14.02	13.83	0.19	75.95	76.13
02/08/02	13.95	13.79	0.16	76.02	76.17

Table A-24

Groundwater Monitoring Data for Well PID

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
07/03/02	12.96	ND	0	77.01	77.01
07/26/02	12.62	12.61	0.01	77.35	77.36
02/21/03	12.66	ND	0	77.31	77.31
03/07/03	12.36	ND	0	77.61	77.61
03/13/03	12.25	ND	0	77.72	77.72
03/21/03	12.07	ND	0	77.90	77.90
04/02/03	11.86	ND	0	78.11	78.11
05/02/03	12.05	ND	0	77.92	77.92
05/30/03	12.05	ND	0	77.92	77.92
06/12/03	11.92	ND	0	78.05	78.05
06/30/03	12.20	ND	0	77.77	77.77
07/10/03	12.45	ND	0	77.52	77.52
07/24/03	12.43	ND	0	77.54	77.54
08/06/03	12.28	ND	0	77.69	77.69
08/21/03	12.48	ND	0	77.49	77.49
09/18/03	13.21	13.21	Trace	76.76	76.76
11/03/03	12.88	ND	0	77.09	77.09
01/06/04	12.92	12.92	Trace	77.05	77.05
01/22/04	13.03	ND	0	76.94	76.94
02/19/04	13.07	ND	0	76.90	76.90
03/31/04	13.25	ND	0	76.72	76.72
04/29/04	11.99	ND	0	77.98	77.98
05/27/04	13.24	ND	0	76.73	76.73
07/14/04	13.49	ND	0	76.48	76.48
09/24/04	13.19	ND	0	76.78	76.78
11/04/04	13.19	ND	0	76.78	76.78
12/03/04	13.66	ND	0	76.31	76.31
01/13/05	13.60	13.59	0	76.37	76.37
02/23/05	12.92	ND	0	77.05	77.05
03/31/05	12.16	ND	0	77.81	77.81
04/21/05	12.76	ND	0	77.21	77.21
05/20/05	12.69	ND	0	77.28	77.28

Notes:

1) Reference Elevation for PID is 89.97.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

Table A-25

Groundwater Monitoring Data for Well P-5

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
01/06/01	13.63	13.44	0.19	76.82	77.00
01/06/01	13.95	13.92	0.03	76.50	76.53
01/06/01	13.53	13.16	0.37	76.92	77.27
01/06/01	13.55	13.52	0.03	76.90	76.93
01/06/01	13.51	13.49	0.02	76.94	76.96
01/08/01	12.29	12.26	0.03	78.16	78.19
01/16/01	13.43	13.41	0.02	77.02	77.04
01/22/01	13.63	13.44	0.19	76.82	77.00
01/22/01	11.92	ND	0	78.53	78.53
01/22/01	13.95	13.92	0.03	76.50	76.53
01/31/01	13.56	ND	0	76.89	76.89
01/31/01	13.19	ND	0	77.26	77.26
01/31/01	13.66	ND	0	76.79	76.79
01/31/01	13.55	ND	0	76.90	76.90
01/31/01	12.82	ND	0	77.63	77.63
01/31/01	13.53	ND	0	76.92	76.92
01/31/01	13.59	ND	0	76.86	76.86
01/31/01	13.50	ND	0	76.95	76.95
04/06/01	11.62	11.62	Trace	78.83	78.83
04/13/01	11.41	11.41	Trace	79.04	79.04
04/20/01	12.10	12.09	0.01	78.35	78.36
06/01/01	13.01	ND	0	77.44	77.44
12/07/01	14.03	14.03	Trace	76.42	76.42
12/07/01	14.05	14.05	Trace	76.40	76.40
01/04/02	14.36	13.91	0.45	76.09	76.52
01/04/02	13.84	TOO MUCH OIL BUBBLING IN WELL	-	76.61	-
02/15/02	13.78	13.78	Trace	76.67	76.67
02/15/02	13.50	13.50	Trace	76.95	76.95
03/08/02	13.30	13.30	Trace	77.15	77.15
03/08/02	13.50	13.48	0.02	76.95	76.97
04/05/02	12.79	12.77	0.02	77.66	77.68
04/05/02	12.64	12.63	0.01	77.81	77.82
05/03/02	12.92	12.89	0.03	77.53	77.56
05/03/02	12.99	12.95	0.04	77.46	77.50
05/31/02	12.62	12.60	0.02	77.83	77.85
05/31/02	12.59	12.58	0.01	77.86	77.87
06/21/02	12.71	12.70	0.01	77.74	77.75
06/21/02	12.72	12.71	0.01	77.73	77.74
06/28/02	12.90	12.88	0.02	77.55	77.57
06/28/02	12.90	12.89	0.01	77.55	77.56
07/26/02	13.80	13.78	0.02	76.65	76.67
08/23/02	12.99	12.98	0.01	77.46	77.47
08/23/02	13.01	13.00	0.01	77.44	77.45
09/20/02	13.45	13.44	0.01	77.00	77.01
09/20/02	13.42	13.41	0.01	77.03	77.04
10/18/02	12.94	12.92	0.02	77.51	77.53
10/18/02	12.87	12.85	0.02	77.58	77.60
12/06/02	12.04	12.02	0.02	78.41	78.43

Table A-25

Groundwater Monitoring Data for Well P-5

Olin Chemical Corporation - Wilmington, MA

Date	Depth to Water (feet BGS)	Depth to Product (feet BGS)	Product Thickness (feet)	Groundwater Elevation	Corrected GW Elevation
12/06/02	12.05	12.03	0.02	78.40	78.42
01/03/03	11.73	11.72	0.01	78.72	78.73
01/03/03	11.74	11.73	0.01	78.71	78.72
02/10/03	12.03	ND	0	78.42	78.42
03/07/03	12.35	ND	0	78.10	78.10
03/13/03	12.13	ND	0	78.32	78.32
03/26/03	11.84	ND	0	78.61	78.61
04/02/03	11.64	ND	0	78.81	78.81
05/02/03	11.97	ND	0	78.48	78.48
06/12/03	11.76	ND	0	78.69	78.69
08/06/03	12.48	ND	0	77.97	77.97
09/18/03	13.30	13.28	0.02	77.15	77.17
11/03/03	12.97	12.97	Trace	77.48	77.48
01/06/04	12.01	12.01	Trace	78.44	78.44
01/22/04	13.21	13.11	0.10	77.24	77.34
02/19/04	13.15	13.14	0.01	77.30	77.31
03/31/04	13.41	ND	0.00	77.04	77.04
04/29/04	11.82	ND	0.00	78.63	78.63
05/27/04	12.86	ND	0.00	77.59	77.59
07/14/04	13.58	13.52	0.06	76.87	76.93
09/24/04	13.30	13.26	0.04	77.15	77.19
11/04/04	13.44	13.44	Trace	77.01	77.01
12/05/04	13.53	ND	Trace	76.92	76.92
01/13/05	13.82	13.78	0.04	76.63	76.63
02/23/05	13.30	12.84	0.46	77.15	77.15
03/31/05	12.14	ND	0.00	78.31	78.31
04/21/05	12.83	12.66	0.17	77.62	77.62
05/20/05	12.79	12.78	0.01	77.66	77.66

Notes:

1) Reference Elevation for P-5 is 90.45.

2) Measurements taken from top of PVC or casing.

3) Corrected GW = Ref. Elev.-(Depth to GW-(prod. thickness x 0.95)

TABLE B-1

SVE-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-1						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:15	0.0	132.0	4.0	17.0	0.0	OFF
16-Dec-00	D	14:30	9.7	NM	NM	NM	NM	OFF
18-Dec-00	D	12:04	12.5	171.0	NM	NM	NM	OFF
29-Dec-00	D	14:00	10.5	NM	NM	NM	NM	OFF
04-Jan-01	D	10:34	11.7	93.0	NM	NM	NM	OFF
04-Jan-01	D	11:58	NM	114.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:20	NM	92.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:58	NM	2.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	13:24	NM	142.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	14:11	NM	91.0	0.0	21.1	0.1	AS-3/ON
04-Jan-01	D	14:29	NM	93.0	ND	20.9	0.1	AS-4/ON
04-Jan-01	D	15:04	NM	88.0	ND	20.9	0.1	AS-4/ON
05-Jan-01	D	8:55	11.8	NM	NM	NM	NM	OFF
05-Jan-01	D	10:16	11.1	102.0	0.0	21.3	0.1	AS-5/ON
05-Jan-01	D	10:46	NM	123.0	ND	20.9	0.1	AS-5/ON
05-Jan-01	D	11:13	11.2	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:31	NM	270.0	0.0	20.8	0.0	AS-1/ON
05-Jan-01	D	12:48	11.2	234.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:29	NM	114.0	0.0	20.5	0.0	ON
08-Feb-01	D	9:59	NM	144.0	0.0	20.4	0.0	ON
08-Feb-01	D	14:15	8.1	NM	NM	NM	NM	OFF
14-Feb-01	D	-	NM	23.0	ND	20.9	ND	ON
14-Feb-01	D	-	NM	23.0	ND	20.8	ND	OFF
14-Mar-01	D	-	NM	23.0	ND	20.8	ND	OFF
14-Mar-01	D	-	NM	23.0	ND	20.9	ND	ON
18-May-01	D	12:10	6.0	75.0	0.1	20.6	ND	OFF
25-May-01	D	13:45	6.0	32.0	NM	NM	NM	OFF
25-May-01	D	14:48	NM	36.0	NM	NM	NM	ON
08-Jun-01	D	13:39	2.0	189.0	NM	NM	NM	ON
22-Jun-01	D	11:40	NM	252.0	NM	NM	NM	OFF
22-Jun-01	D	12:40	NM	32.0	NM	NM	NM	ON
10-Jul-01	D	11:23	NM	259.0	NM	NM	NM	ON
10-Jul-01	D	13:47	1.8	197.0	NM	NM	NM	OFF
20-Jul-01	D	13:05	5.1	143.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	117.0	NM	NM	NM	ON
03-Aug-01	D	12:58	5.1	126.0	NM	NM	NM	OFF
03-Aug-01	D	14:02	NM	109.0	NM	NM	NM	ON
17-Aug-01	D	12:35	5.0	78.0	NM	NM	NM	OFF
17-Aug-01	D	13:52	NM	70.0	NM	NM	NM	ON
23-Aug-01	D	11:40	5.0	102.0	NM	NM	NM	OFF
23-Aug-01	D	15:17	6.2	97.0	NM	NM	NM	OFF
07-Sep-01	D	12:55	6.1	213.0	NM	NM	NM	OFF
28-Sep-01	D	12:17	8.0	101.0	NM	NM	NM	OFF
28-Sep-01	D	14:37	NM	85.0	NM	NM	NM	ON
12-Oct-01	D	12:16	7.5	94.0	NM	NM	NM	OFF
19-Oct-01	D	11:57	6.8	161.0	NM	NM	NM	OFF
19-Oct-01	D	13:46	NM	144.0	NM	NM	NM	ON
09-Nov-01	D	15:04	5.8	95.0	NM	NM	NM	OFF
13-Dec-01	D	14:30	6.0	81.0	NM	NM	NM	-
11-Jan-02	D	12:53	6.0	105.0	NM	NM	NM	OFF
25-Jan-02	D	14:03	6.1	120.0	NM	NM	NM	OFF
08-Feb-02	D	11:49	NM	6.0	NM	NM	NM	ON
21-Feb-02	D	13:48	6.2	16.3	NM	NM	NM	ON
07-Mar-02	D	11:14	6.0	14.6	NM	NM	NM	ON
21-Mar-02	D	11:08	6.5	14.1	NM	NM	NM	ON
04-Apr-02	D	11:25	6.5	8.9	NM	NM	NM	ON
18-Apr-02	D	11:24	6.0	71.7	NM	NM	NM	ON
02-May-02	Not Noted	11:03	6.0	10.6	NM	NM	NM	ON
16-May-02	D	11:01	7.0	30.3	NM	NM	NM	ON
30-May-02	D	11:11	7.0	6.6	NM	NM	NM	ON
13-Jun-02	D	11:17	7.0	33.8	NM	NM	NM	ON
27-Jun-02	D	10:25	6.0	3.4	NM	NM	NM	OFF

TABLE B-1

SVE-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-1						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Jul-02	D	11:05	7.0	29.0	NM	NM	NM	ON
11-Jul-02	D	10:43	5.0	64.8	NM	NM	NM	OFF
19-Jul-02	D	11:33	5.0	45.0	NM	NM	NM	ON
25-Jul-02	S	11:00	5.0	8.8	NM	NM	NM	ON
08-Aug-02	D	10:55	5.0	21.2	NM	NM	NM	OFF
22-Aug-02	D	11:44	4.0	61.4	NM	NM	NM	ON
19-Sep-02	D	10:54	4.0	54.9	NM	NM	NM	OFF
03-Oct-02	D	11:29	4.0	74.8	NM	NM	NM	ON
17-Oct-02	D	11:19	5.0	142.7	NM	NM	NM	ON
01-Nov-02	D	15:37	4.5	24.0	NM	NM	NM	ON
14-Nov-02	D	13:36	4.5	78.0	NM	NM	NM	ON
18-Nov-02	S	13:22	0.0	49.0	NM	NM	NM	ON
26-Nov-02	D	13:21	5.6	230.0	NM	NM	NM	ON
09-Dec-02	D	13:22	6.0	58.0	NM	NM	NM	ON
27-Dec-02	D	10:26	5.0	64.0	NM	NM	NM	OFF
10-Jan-03	D	13:15	6.0	12.5	NM	NM	NM	ON
24-Jan-03	D	14:24	7.0	2.8	NM	NM	NM	OFF
10-Feb-03	D	13:40	5.0	3.0	NM	NM	NM	ON
21-Feb-03	D	13:02	5.0	7.0	NM	NM	NM	ON
07-Mar-03	D	11:25	7.0	2.0	NM	NM	NM	ON
21-Mar-03	D	11:40	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:21	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:40	6.0	ND	NM	NM	NM	ON
02-May-03	D	15:25	6.5	ND	NM	NM	NM	ON
15-May-03	D	14:09	5.5	ND	NM	NM	NM	OFF
30-May-03	D	13:17	5.0	ND	NM	NM	NM	ON
12-Jun-03	D	14:10	5.5	1.0	NM	NM	NM	OFF
30-Jun-03	D	11:37	5.0	4.8	NM	NM	NM	ON
10-Jul-03	D	11:52	5.0	7.0	NM	NM	NM	ON
24-Jul-03	D	11:04	5.0	3.6	NM	NM	NM	ON
06-Aug-03	D	10:44	5.0	0.5	NM	NM	NM	OFF
21-Aug-03	D	11:49	5.0	1.6	NM	NM	NM	ON
04-Sep-03	D	12:28	5.0	9.3	NM	NM	NM	ON
18-Sep-03	D	11:50	5.0	6.0	NM	NM	NM	ON
02-Oct-03	D	10:30	4.5	2.0	NM	NM	NM	OFF
16-Oct-03	D	11:10	5.0	1.8	NM	NM	NM	ON
03-Nov-03	D	12:02	5.0	1.9	NM	NM	NM	ON
13-Nov-03	D	10:42	5.0	1.9	NM	NM	NM	OFF
26-Nov-03	D	11:14	5.0	1.3	NM	NM	NM	ON
08-Dec-03	D	12:26	5.0	7.2	NM	NM	NM	OFF
23-Dec-03	D	11:48	6.0	7.6	NM	NM	NM	OFF
06-Jan-04	D	11:34	5.5	75.0	NM	NM	NM	ON
22-Jan-04	S	NM	0.0	NM	NM	NM	NM	NM
05-Feb-04	D	11:18	6.0	52.3	NM	NM	NM	OFF
19-Feb-04	D	13:20	5.5	18.1	NM	NM	NM	OFF
03-Mar-04	D	11:21	4.5	1.5	NM	NM	NM	ON
18-Mar-04	D	11:16	4.0	11.7	NM	NM	NM	OFF
31-Mar-04	D	13:18	4.0	12.9	NM	NM	NM	OFF
15-Apr-04	D	12:48	7.0	6.0	NM	NM	NM	OFF
29-Apr-04	D	13:17	6.5	4.1	NM	NM	NM	OFF
14-May-04	D	11:18	5.5	2.3	NM	NM	NM	OFF
27-May-04	D	12:01	5.0	3.0	NM	NM	NM	ON
10-Jun-04	D	11:17	5.0	5.4	NM	NM	NM	OFF
24-Jun-04	D	11:28	5.0	2.9	NM	NM	NM	OFF
15-Jul-04	D	8:51	4.0	3.0	NM	NM	NM	ON
27-Aug-04	D	11:28	5.0	1.3	NM	NM	NM	ON
24-Sep-04	D	11:39	5.0	1.5	NM	NM	NM	ON
08-Oct-04	D	10:58	5.0	1.9	NM	NM	NM	OFF
22-Oct-04	D	10:57	5.0	ND	NM	NM	NM	OFF
04-Nov-04	D	11:19	5.0	2.2	NM	NM	NM	ON
19-Nov-04	D	10:14	4.0	1.0	NM	NM	NM	OFF
16-Dec-04	D	12:08	5.0	ND	NM	NM	NM	OFF

TABLE B-1

SVE-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-1						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
30-Dec-04	D	10:47	-5.0	ND	NM	NM	NM	OFF
13-Jan-05	D	11:47	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:30	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	11:45	5.0	ND	NM	NM	NM	OFF
23-Feb-05	D	11:35	-5.5	0.6	NM	NM	NM	ON
10-Mar-05	D	10:27	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:38	-5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		5.5	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	OFF
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.9	NM	NM	NM	ON

TABLE B-1

SVE-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-1						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.
NM Not measured.
ON/OFF Well(s) valved on/off from system
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-2

SVE-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-2						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:09	0.0	24.0	5.6	15.1	0.0	OFF
16-Dec-00	D	14:30	10.5	NM	NM	NM	NM	OFF
18-Dec-00	D	12:04	13.9	192.0	NM	NM	NM	OFF
29-Dec-00	D	13:52	11.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:23	0.0	10.0	NM	NM	NM	OFF
04-Jan-01	D	11:56	NM	31.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:21	NM	354.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	13:07	NM	3.0	NM	NM	NM	AS-3/0N
04-Jan-01	D	13:22	NM	165.0	NM	NM	NM	AS-3/0N
04-Jan-01	D	14:07	NM	268.0	0.0	20.9	0.5	AS-3/0N
05-Jan-01	D	8:55	12.2	NM	NM	NM	NM	OFF
05-Jan-01	D	-	12.2	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	12.0	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:33	NM	162.0	0.0	20.8	0.4	AS-1/ON
05-Jan-01	D	12:41	12.1	398.0	ND	20.5	ND	AS-1/ON
16-Jan-01	D	12:57	NM	356.0	0.0	20.5	0.0	ON
08-Feb-01	D	9:06	NM	727.0	0.0	20.6	1.0	OFF
08-Feb-01	D	9:46	NM	885.0	0.1	20.2	0.9	ON
08-Feb-01	D	14:15	9.0	NM	NM	NM	NM	OFF
14-Feb-01	D	-	NM	479.0	0.3	20.6	1.1	ON
14-Feb-01	D	-	NM	432.0	0.3	20.6	0.9	OFF
14-Mar-01	D	-	NM	432.0	0.3	20.6	0.9	OFF
14-Mar-01	D	-	NM	479.0	0.3	20.6	1.1	ON
25-May-01	D	13:47	6.1	122.0	NM	NM	NM	OFF
25-May-01	D	14:47	NM	152.0	NM	NM	NM	ON
08-Jun-01	D	13:41	2.0	117.0	NM	NM	NM	ON
22-Jun-01	D	11:41	NM	119.0	NM	NM	NM	OFF
22-Jun-01	D	12:42	NM	194.0	NM	NM	NM	ON
10-Jul-01	D	11:37	NM	254.0	NM	NM	NM	ON
10-Jul-01	D	13:43	1.8	149.0	NM	NM	NM	OFF
20-Jul-01	D	13:00	5.1	200.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	157.0	NM	NM	NM	ON
03-Aug-01	D	12:59	5.1	213.0	NM	NM	NM	OFF
03-Aug-01	D	14:02	NM	158.0	NM	NM	NM	ON
17-Aug-01	D	12:37	5.1	180.0	NM	NM	NM	OFF
17-Aug-01	D	13:46	NM	195.0	NM	NM	NM	ON
23-Aug-01	D	11:39	5.0	176.0	NM	NM	NM	OFF
23-Aug-01	D	15:15	6.2	230.0	NM	NM	NM	OFF
28-Sep-01	D	12:11	8.0	246.0	NM	NM	NM	OFF
28-Sep-01	D	14:40	NM	160.0	NM	NM	NM	ON
12-Oct-01	D	12:19	7.6	197.0	NM	NM	NM	OFF
19-Oct-01	D	11:55	7.1	328.0	NM	NM	NM	OFF
19-Oct-01	D	13:52	NM	252.0	NM	NM	NM	ON
09-Nov-01	D	14:56	5.9	182.0	NM	NM	NM	OFF
13-Dec-01	D	14:07	6.0	245.0	NM	NM	NM	-
11-Jan-02	D	12:55	6.0	152.0	NM	NM	NM	OFF
25-Jan-02	D	14:07	5.9	137.0	NM	NM	NM	OFF
08-Feb-02	D	11:45	NM	72.0	NM	NM	NM	ON
21-Feb-02	D	13:34	6.5	71.5	NM	NM	NM	ON
07-Mar-02	D	11:16	6.0	38.7	NM	NM	NM	ON
21-Mar-02	D	11:05	7.0	35.2	NM	NM	NM	ON
04-Apr-02	D	11:27	6.8	18.7	NM	NM	NM	ON
18-Apr-02	D	11:26	6.0	31.7	NM	NM	NM	ON
02-May-02	Not Noted	11:12	6.0	19.6	NM	NM	NM	ON
16-May-02	D	11:12	7.0	23.4	NM	NM	NM	ON
30-May-02	D	11:13	7.0	7.6	NM	NM	NM	ON
13-Jun-02	D	11:20	7.0	22.8	NM	NM	NM	ON
27-Jun-02	D	10:22	6.0	2.3	NM	NM	NM	OFF
03-Jul-02	D	11:07	7.0	24.0	NM	NM	NM	ON
11-Jul-02	D	10:40	5.0	54.6	NM	NM	NM	OFF
19-Jul-02	D	11:35	4.9	19.0	NM	NM	NM	ON

TABLE B-2

SVE-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-2						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
25-Jul-02	S	11:00	5.0	2.4	NM	NM	NM	ON
08-Aug-02	D	10:52	5.0	15.1	NM	NM	NM	OFF
22-Aug-02	D	11:42	4.0	32.3	NM	NM	NM	ON
19-Sep-02	D	10:52	4.0	39.1	NM	NM	NM	OFF
03-Oct-02	D	11:26	4.0	58.6	NM	NM	NM	ON
17-Oct-02	D	11:03	5.0	30.7	NM	NM	NM	ON
01-Nov-02	D	15:21	4.6	5.0	NM	NM	NM	ON
14-Nov-02	D	13:15	4.8	2.0	NM	NM	NM	ON
18-Nov-02	S	13:05	0.0	1.0	NM	NM	NM	ON
26-Nov-02	D	13:04	5.2	28.0	NM	NM	NM	ON
09-Dec-02	D	13:10	3.5	6.0	NM	NM	NM	ON
27-Dec-02	D	10:36	6.0	4.0	NM	NM	NM	OFF
10-Jan-03	D	13:01	6.0	ND	NM	NM	NM	ON
24-Jan-03	D	14:13	2.0	0.4	NM	NM	NM	OFF
10-Feb-03	D	13:54	5.0	3.0	NM	NM	NM	ON
21-Feb-03	D	13:12	6.0	2.0	NM	NM	NM	ON
07-Mar-03	D	11:10	7.0	5.0	NM	NM	NM	ON
21-Mar-03	D	11:30	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:07	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	10:55	6.0	ND	NM	NM	NM	OFF
02-May-03	D	15:11	6.0	ND	NM	NM	NM	ON
15-May-03	D	13:36	5.5	ND	NM	NM	NM	ON
30-May-02	D	11:56	5.0	7.5	NM	NM	NM	ON
12-Jun-03	D	13:49	5.5	3.2	NM	NM	NM	ON
30-Jun-03	D	11:19	5.0	4.8	NM	NM	NM	ON
10-Jul-03	D	10:35	5.0	4.7	NM	NM	NM	OFF
24-Jul-03	D	10:39	5.0	0.3	NM	NM	NM	OFF
06-Aug-03	D	10:27	5.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:30	5.0	3.1	NM	NM	NM	ON
04-Sep-03	D	12:03	5.0	9.0	NM	NM	NM	ON
18-Sep-03	D	11:57	5.0	9.0	NM	NM	NM	ON
02-Oct-03	D	10:33	4.5	8.0	NM	NM	NM	OFF
16-Oct-03	D	10:55	5.0	5.0	NM	NM	NM	OFF
03-Nov-03	D	11:45	5.0	1.9	NM	NM	NM	ON
13-Nov-03	D	10:07	5.0	2.8	NM	NM	NM	OFF
26-Nov-03	D	11:00	5.0	2.3	NM	NM	NM	ON
08-Dec-03	D	12:10	5.0	1.9	NM	NM	NM	OFF
23-Dec-03	D	11:50	6.0	0.5	NM	NM	NM	OFF
06-Jan-04	D	11:16	5.0	4.0	NM	NM	NM	OFF
22-Jan-04	S	NM	0.0	NM	NM	NM	NM	NM
05-Feb-04	D	11:03	6.0	10.6	NM	NM	NM	OFF
19-Feb-04	D	11:54	5.5	15.6	NM	NM	NM	ON
03-Mar-04	D	11:02	4.5	9.7	NM	NM	NM	ON
18-Mar-04	D	10:50	4.0	3.7	NM	NM	NM	OFF
31-Mar-04	D	13:20	4.0	4.9	NM	NM	NM	OFF
15-Apr-04	D	13:11	7.0	1.0	NM	NM	NM	OFF
29-Apr-04	D	11:48	6.5	ND	NM	NM	NM	ON
14-May-04	D	10:39	5.5	ND	NM	NM	NM	OFF
27-May-04	D	11:47	5.0	ND	NM	NM	NM	ON
10-Jun-04	D	10:46	5.0	2.0	NM	NM	NM	OFF
24-Jun-04	D	11:12	5.0	1.4	NM	NM	NM	OFF
15-Jul-04	D	8:59	5.0	2.0	NM	NM	NM	ON
27-Aug-04	D	11:13	5.0	0.8	NM	NM	NM	ON
24-Sep-04	D	11:20	5.0	0.9	NM	NM	NM	ON
08-Oct-04	D	10:27	5.0	0.7	NM	NM	NM	OFF
22-Oct-04	D	10:44	5.0	1.3	NM	NM	NM	OFF
04-Nov-04	D	11:00	5.0	0.7	NM	NM	NM	OFF
16-Dec-04	D	11:51	-5.0	ND	NM	NM	NM	ON
30-Dec-04	D	10:31	-5.0	ND	NM	NM	NM	OFF
13-Jan-05	D	11:31	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:11	-5.0	ND	NM	NM	NM	ON

TABLE B-2

SVE-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-2						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
09-Feb-05	D	12:12	5.0	1.8	NM	NM	NM	OFF
23-Feb-05	D	11:13	-5.5	1.0	NM	NM	NM	ON
10-Mar-05	D	10:04	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:40	-5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		5.5	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.0	NM	NM	NM	ON

TABLE B-2

SVE-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-2						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.
NM Not measured.
ON/OFF Well(s) valved on/off from system
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-3

SVE-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-3						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:19	0.0	197.0	3.8	16.7	0.0	OFF
16-Dec-00	D	14:30	10.5	NM	NM	NM	NM	OFF
18-Dec-00	D	12:04	13.2	143.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	10.1	NM	NM	NM	NM	OFF
04-Jan-01	D	10:54	12.1	66.0	NM	NM	NM	OFF
04-Jan-01	D	11:56	NM	62.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:20	NM	60.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	13:02	NM	2.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	13:17	NM	85.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	13:52	NM	91.0	0.1	20.9	ND	AS-3/ON
04-Jan-01	D	14:26	NM	182.0	0.1	20.5	0.2	AS-4/ON
04-Jan-01	D	15:04	NM	107.0	0.1	20.5	0.2	AS-4/ON
05-Jan-01	D	8:55	12.2	NM	NM	NM	NM	OFF
05-Jan-01	D	-	12.2	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	12.2	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:36	NM	86.0	0.0	20.8	0.0	AS-1/ON
05-Jan-01	D	12:38	12.2	91.0	ND	20.5	0.1	AS-1/ON
16-Jan-01	D	12:59	NM	114.0	0.0	20.4	0.0	ON
08-Feb-01	D	9:11	NM	349.0	0.2	20.3	0.1	OFF
08-Feb-01	D	9:43	NM	331.0	0.2	20.1	0.1	ON
08-Feb-01	D	14:15	8.9	NM	NM	NM	NM	OFF
14-Feb-01	D	-	NM	185.0	0.3	20.5	0.3	ON
14-Feb-01	D	-	NM	176.0	0.3	20.6	0.3	OFF
14-Mar-01	D	-	NM	176.0	0.3	20.6	0.3	OFF
14-Mar-01	D	-	NM	185.0	0.3	20.5	0.3	ON
18-May-01	D	12:14	6.5	38.0	0.2	20.4	ND	OFF
25-May-01	D	14:02	6.3	28.0	NM	NM	NM	OFF
25-May-01	D	14:16	NM	28.0	NM	NM	NM	ON
08-Jun-01	D	13:40	2.0	18.0	NM	NM	NM	ON
22-Jun-01	D	11:42	NM	52.0	NM	NM	NM	OFF
10-Jul-01	D	11:17	NM	38.0	NM	NM	NM	ON
10-Jul-01	D	13:52	1.8	35.0	NM	NM	NM	OFF
20-Jul-01	D	12:58	5.2	48.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	34.0	NM	NM	NM	ON
03-Aug-01	D	12:54	5.1	53.0	NM	NM	NM	OFF
03-Aug-01	D	14:02	NM	44.0	NM	NM	NM	ON
17-Aug-01	D	12:34	5.2	60.0	NM	NM	NM	OFF
17-Aug-01	D	13:45	NM	58.0	NM	NM	NM	OFF
23-Aug-01	D	11:38	5.1	48.0	NM	NM	NM	OFF
23-Aug-01	D	15:14	2.0	56.0	NM	NM	NM	OFF
07-Sep-01	D	12:45	1.9	47.0	NM	NM	NM	OFF
28-Sep-01	D	12:07	1.9	74.0	NM	NM	NM	OFF
28-Sep-01	D	14:42	NM	60.0	NM	NM	NM	ON
12-Oct-01	D	12:23	2.0	40.0	NM	NM	NM	OFF
19-Oct-01	D	11:49	2.0	83.0	NM	NM	NM	OFF
19-Oct-01	D	12:23	2.0	63.0	NM	NM	NM	ON
19-Oct-01	D	14:05	6.5	Readjustment of vacuum				OFF
09-Nov-01	D	14:57	5.9	77.0	NM	NM	NM	OFF
13-Dec-01	D	14:45	6.0	73.0	NM	NM	NM	-
11-Jan-02	D	12:59	6.0	65.0	NM	NM	NM	OFF
25-Jan-02	D	15:03	6.0	45.0	NM	NM	NM	ON
08-Feb-02	D	11:47	NM	7.0	NM	NM	NM	ON
21-Feb-02	D	13:53	6.2	12.7	NM	NM	NM	ON
07-Mar-02	D	11:18	6.0	14.8	NM	NM	NM	ON
21-Mar-02	D	11:11	7.0	10.9	NM	NM	NM	ON
04-Apr-02	D	-	6.8	5.3	NM	NM	NM	OFF
18-Apr-02	D	11:22	6.0	18.9	NM	NM	NM	ON
02-May-02	Not Noted	11:10	6.0	8.8	NM	NM	NM	ON
16-May-02	D	11:10	7.0	20.3	NM	NM	NM	ON
30-May-02	D	11:08	7.0	6.0	NM	NM	NM	ON
13-Jun-02	D	11:22	7.0	21.7	NM	NM	NM	ON
27-Jun-02	D	10:35	6.0	1.9	NM	NM	NM	OFF

TABLE B-3

SVE-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-3						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Jul-02	D	11:09	7.0	18.0	NM	NM	NM	ON
11-Jul-02	D	10:55	5.0	37.1	NM	NM	NM	OFF
19-Jul-02	D	11:38	4.9	16.0	NM	NM	NM	ON
25-Jul-02	S	11:00	5.0	2.8	NM	NM	NM	ON
08-Aug-02	D	11:03	5.0	21.6	NM	NM	NM	ON
22-Aug-02	D	11:51	4.0	37.6	NM	NM	NM	ON
19-Sep-02	D	11:03	4.0	23.6	NM	NM	NM	ON
03-Oct-02	D	11:36	5.0	40.9	NM	NM	NM	ON
17-Oct-02	D	11:05	5.0	14.1	NM	NM	NM	ON
01-Nov-02	D	15:30	4.6	8.0	NM	NM	NM	ON
14-Nov-02	D	13:21	4.8	2.0	NM	NM	NM	ON
18-Nov-02	S	13:12	0.0	ND	NM	NM	NM	ON
26-Nov-02	D	13:10	5.0	3.0	NM	NM	NM	ON
09-Dec-02	D	13:14	3.5	ND	NM	NM	NM	ON
27-Dec-02	D	10:32	5.5	ND	NM	NM	NM	OFF
10-Jan-03	D	13:40	6.0	ND	NM	NM	NM	ON
24-Jan-03	D	14:07	7.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:30	5.0	ND	NM	NM	NM	ON
21-Feb-03	D	13:08	5.5	ND	NM	NM	NM	ON
07-Mar-03	D	11:40	7.0	ND	NM	NM	NM	ON
21-Mar-03	D	11:52	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:12	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:02	6.0	ND	NM	NM	NM	ON
02-May-03	D	15:32	6.5	ND	NM	NM	NM	ON
15-May-03	D	13:46	5.0	ND	NM	NM	NM	ON
30-May-03	D	12:04	5.0	4.2	NM	NM	NM	OFF
12-Jun-03	D	13:55	6.0	1.0	NM	NM	NM	ON
30-Jun-03	D	11;27	5.0	4.8	NM	NM	NM	ON
10-Jul-03	D	11:14	5.0	5.8	NM	NM	NM	ON
24-Jul-03	D	10:45	5.0	0.6	NM	NM	NM	OFF
06-Aug-03	D	10:33	5.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:36	5.0	2.8	NM	NM	NM	ON
04-Sep-03	D	12:17	5.0	6.5	NM	NM	NM	ON
18-Sep-03	D	11:53	5.0	4.0	NM	NM	NM	ON
02-Oct-03	D	10:32	4.5	3.0	NM	NM	NM	OFF
16-Oct-03	D	11:01	5.0	2.4	NM	NM	NM	ON
03-Nov-03	D	11:51	5.0	3.1	NM	NM	NM	ON
13-Nov-03	D	10:29	5.0	1.5	NM	NM	NM	OFF
26-Nov-03	D	11:07	5.0	1.5	NM	NM	NM	ON
08-Dec-03	D	12:14	5.0	1.6	NM	NM	NM	OFF
23-Dec-03	D	11:42	7.0	1.7	NM	NM	NM	OFF
06-Jan-04	D	11:23	5.5	9.9	NM	NM	NM	OFF
22-Jan-04	D	12:58	5.0	10.9	NM	NM	NM	OFF
05-Feb-04	D	11:07	6.0	20.1	NM	NM	NM	OFF
19-Feb-04	D	12:00	5.5	11.3	NM	NM	NM	ON
03-Mar-04	D	11:09	4.5	1.2	NM	NM	NM	ON
18-Mar-04	D	11:02	4.0	0.8	NM	NM	NM	OFF
31-Mar-04	D	13:21	4.0	2.6	NM	NM	NM	OFF
15-Apr-04	D	13:04	7.0	1.0	NM	NM	NM	OFF
29-Apr-04	D	11:57	6.5	ND	NM	NM	NM	ON
14-May-04	D	10:46	5.5	ND	NM	NM	NM	OFF
27-May-04	D	11:52	5.0	ND	NM	NM	NM	ON
10-Jun-04	D	11:03	5.0	1.3	NM	NM	NM	OFF
24-Jun-04	D	11:18	5.0	1.4	NM	NM	NM	OFF
15-Jul-04	D	9:06	4.0	2.0	NM	NM	NM	ON
27-Aug-04	D	11:18	5.0	0.8	NM	NM	NM	ON
24-Sep-04	D	11:27	5.0	1.5	NM	NM	NM	ON
08-Oct-04	D	10:48	5.0	2.2	NM	NM	NM	OFF
22-Oct-04	D	10:50	5.0	0.6	NM	NM	NM	OFF
04-Nov-04	D	11:06	5.0	1.5	NM	NM	NM	ON
19-Nov-04	D	10:10	4.0	1.7	NM	NM	NM	OFF
16-Dec-04	D	11:57	5.0	ND	NM	NM	NM	ON

TABLE B-3

SVE-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-3						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
30-Dec-04	D	10:37	-5.0	ND	NM	NM	NM	ON
13-Jan-05	D	11:37	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:14	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	11:27	-5.0	ND	NM	NM	NM	OFF
23-Feb-05	D	11:21	-5.5	1.0	NM	NM	NM	ON
10-Mar-05	D	10:11	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:36	-5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		5.5	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.7	NM	NM	NM	ON

TABLE B-3

SVE-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-3						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.
NM Not measured.
ON/OFF Well(s) valved on/off from system
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-4

SVE-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-4						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:21	0.0	258.0	6.1	14.5	0.0	OFF
06-Dec-00	D	14:30	8.9	NM	NM	NM	NM	OFF
18-Dec-00	D	12:04	11.5	314.0	NM	NM	NM	OFF
29-Dec-00	D	13:54	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:56	0.0	85.0	NM	NM	NM	OFF
04-Jan-01	D	12:59	NM	90.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	13:21	NM	91.0	NM	NM	NM	AS-3/ON
04-Jan-01	D	14:09	NM	10.0	0.0	21.1	0.0	AS-3/ON
04-Jan-01	D	14:34	NM	73.0	NM	NM	NM	AS-4/ON
04-Jan-01	D	15:12	NM	103.0	NM	NM	NM	AS-4/ON
05-Jan-01	D	8:55	10.8	NM	NM	NM	NM	OFF
05-Jan-01	D	10:06	10.8	42.0	0.0	21.1	0.1	AS-5/ON
05-Jan-01	D	10:44	NM	80.0	ND	20.9	0.1	AS-5/ON
05-Jan-01	D	11:13	10.5	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:40	NM	48.0	0.0	20.8	0.0	AS-1/ON
05-Jan-01	D	12:43	10.1	90.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:28	NM	231.0	0.0	20.5	0.0	ON
08-Feb-01	D	9:57	NM	350.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	7.9	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	46.0	0.1	20.8	ND	OFF
14-Mar-01	D	-	NM	54.0	0.1	20.8	ND	ON
25-May-01	D	14:03	5.9	74.0	NM	NM	NM	OFF
25-May-01	D	14:44	NM	75.0	NM	NM	NM	ON
08-Jun-01	D	13:41	1.9	83.0	NM	NM	NM	ON
22-Jun-01	D	11:43	NM	88.0	NM	NM	NM	OFF
22-Jun-01	D	12:50	NM	69.0	NM	NM	NM	ON
10-Jul-01	D	11:18	NM	132.0	NM	NM	NM	ON
10-Jul-01	D	13:50	1.8	103.0	NM	NM	NM	OFF
20-Jul-01	D	13:06	4.9	116.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	87.0	NM	NM	NM	ON
03-Aug-01	D	13:02	4.8	107.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	89.0	NM	NM	NM	ON
17-Aug-01	D	12:38	5.0	66.0	NM	NM	NM	OFF
17-Aug-01	D	13:51	NM	70.0	NM	NM	NM	ON
23-Aug-01	D	11:43	4.9	81.0	NM	NM	NM	OFF
23-Aug-01	D	15:16	2.0	81.0	NM	NM	NM	OFF
28-Sep-01	D	12:21	1.3	543.0	NM	NM	NM	OFF
28-Sep-01	D	14:49	NM	504.0	NM	NM	NM	OFF
12-Oct-01	D	12:07	1.9	491.0	NM	NM	NM	OFF
12-Oct-01	D	12:45	6.1	READJUSTED VACUUM DUE TO REBOUND				OFF
19-Oct-01	D	11:45	6.0	293.0	NM	NM	NM	OFF
19-Oct-01	D	13:44	NM	260.0	NM	NM	NM	ON
09-Nov-01	D	15:02	5.2	157.0	NM	NM	NM	OFF
13-Dec-01	D	14:37	5.4	140.0	NM	NM	NM	-
11-Jan-02	D	13:07	5.3	167.0	NM	NM	NM	ON
25-Jan-02	D	15:07	5.7	192.0	NM	NM	NM	ON
08-Feb-02	D	11:50	NM	9.0	NM	NM	NM	ON
21-Feb-02	D	13:56	6.0	13.8	NM	NM	NM	ON
07-Mar-02	D	11:21	6.0	16.4	NM	NM	NM	ON
21-Mar-02	D	11:13	6.0	10.6	NM	NM	NM	ON
04-Apr-02	D	11:23	6.5	5.3	NM	NM	NM	ON
18-Apr-02	D	11:20	6.0	24.2	NM	NM	NM	ON
02-May-02	Not Noted	11:05	6.0	7.2	NM	NM	NM	ON
16-May-02	D	11:06	6.0	21.2	NM	NM	NM	ON
30-May-02	D	11:03	7.0	51.3	NM	NM	NM	ON
13-Jun-02	D	11:24	6.0	24.6	NM	NM	NM	ON
27-Jun-02	D	10:29	6.0	3.4	NM	NM	NM	OFF
03-Jul-02	D	11:10	6.0	34.0	NM	NM	NM	ON
11-Jul-02	D	10:50	5.0	51.6	NM	NM	NM	OFF
19-Jul-02	D	11:50	4.5	25.0	NM	NM	NM	ON
25-Jul-02	S	11:00	5.0	2.8	NM	NM	NM	ON

TABLE B-4

SVE-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-4						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
08-Aug-02	D	11:01	5.0	21.8	NM	NM	NM	ON
22-Aug-02	D	11:49	4.0	33.5	NM	NM	NM	ON
19-Sep-02	D	10:59	4.0	37.9	NM	NM	NM	OFF
03-Oct-02	D	11:35	4.0	46.3	NM	NM	NM	ON
17-Oct-02	D	11:08	5.0	37.1	NM	NM	NM	ON
01-Nov-02	D	15:51	4.3	7.0	NM	NM	NM	ON
14-Nov-02	D	13:49	4.5	36.0	NM	NM	NM	ON
18-Nov-02	S	13:34	0.0	4.0	NM	NM	NM	ON
26-Nov-02	D	13:15	5.0	121.0	NM	NM	NM	ON
09-Dec-02	D	13:19	5.5	36.0	NM	NM	NM	ON
27-Dec-02	D	10:28	5.5	28.0	NM	NM	NM	OFF
10-Jan-03	D	13:35	6.0	6.2	NM	NM	NM	ON
24-Jan-03	D	14:43	7.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:34	4.6	1.0	NM	NM	NM	ON
21-Feb-03	D	13:04	5.5	3.0	NM	NM	NM	ON
07-Mar-03	D	11:32	7.0	ND	NM	NM	NM	ON
21-Mar-03	D	11:48	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:18	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:52	6.0	ND	NM	NM	NM	ON
02-May-03	D	15:28	6.0	ND	NM	NM	NM	ON
15-May-03	D	14:15	5.0	ND	NM	NM	NM	OFF
30-May-03	D	12:08	5.0	ND	NM	NM	NM	OFF
12-Jun-03	D	14:05	5.5	1.0	NM	NM	NM	OFF
30-Jun-03	D	11:33	5.0	4.8	NM	NM	NM	ON
10-Jul-03	D	11:24	5.0	2.3	NM	NM	NM	ON
24-Jul-03	D	10:59	5.0	1.2	NM	NM	NM	OFF
06-Aug-03	D	10:36	5.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:44	5.0	1.6	NM	NM	NM	ON
04-Sep-03	D	12:24	5.0	9.9	NM	NM	NM	ON
18-Sep-03	D	12:10	4.5	6.0	NM	NM	NM	OFF
02-Oct-03	D	10:35	4.0	5.0	NM	NM	NM	OFF
16-Oct-03	D	11:07	5.0	2.0	NM	NM	NM	ON
03-Nov-03	D	11:58	5.0	2.7	NM	NM	NM	ON
13-Nov-03	D	10:36	5.0	1.7	NM	NM	NM	OFF
26-Nov-03	D	11:10	5.0	2.2	NM	NM	NM	ON
08-Dec-03	D	12:22	5.0	5.4	NM	NM	NM	OFF
23-Dec-03	D	11:44	6.0	71.3	NM	NM	NM	OFF
06-Jan-04	D	11:30	5.0	22.0	NM	NM	NM	ON
22-Jan-04	D	13:06	5.0	30.9	NM	NM	NM	OFF
05-Feb-04	D	11:14	6.0	49.0	NM	NM	NM	OFF
19-Feb-04	D	12:05	5.5	22.6	NM	NM	NM	ON
05-Mar-04	D	11:16	4.5	1.8	NM	NM	NM	ON
18-Mar-04	D	11:14	4.0	5.7	NM	NM	NM	OFF
31-Mar-04	D	13:22	4.0	0.5	NM	NM	NM	OFF
15-Apr-04	D	12:58	7.0	4.0	NM	NM	NM	OFF
29-Apr-04	D	13:14	6.5	1.5	NM	NM	NM	OFF
14-May-04	D	11:15	5.5	ND	NM	NM	NM	OFF
27-May-04	D	11:58	5.0	ND	NM	NM	NM	ON
10-Jun-04	D	11:13	5.0	2.4	NM	NM	NM	OFF
24-Jun-04	D	11:24	5.0	1.4	NM	NM	NM	OFF
15-Jul-04	D	9:14	4.0	3.0	NM	NM	NM	ON
27-Aug-04	D	11:26	5.0	1.8	NM	NM	NM	ON
24-Sep-04	D	11:35	5.0	3.3	NM	NM	NM	ON
08-Oct-04	D	10:54	5.0	1.9	NM	NM	NM	OFF
22-Oct-04	D	11:00	5.0	ND	NM	NM	NM	ON
04-Nov-04	D	11:14	5.0	2.4	NM	NM	NM	ON
16-Dec-04	D	12:05	-5.0	ND	NM	NM	NM	OFF
30-Dec-04	D	10:44	-5.0	1.5	NM	NM	NM	OFF
13-Jan-05	D	11:44	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:25	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	11:32	5.0	ND	NM	NM	NM	OFF

TABLE B-4

SVE-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-4						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
23-Feb-05	D	11:30	-5.5	1.0	NM	NM	NM	ON
10-Mar-05	D	10:19	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:30	-5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		5.5	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.1	NM	NM	NM	ON

TABLE B-4

SVE-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-4						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.
NM Not measured.
ON/OFF Well(s) valved on/off from system
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-5

SVE-5 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-5						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	$A.S_i$ (on/off)
05-Dec-00	S	10:23	0.0	68.0	2.8	18.0	0.0	OFF
06-Dec-00	D	14:30	9.2	NM	NM	NM	NM	OFF
18-Dec-00	D	12:15	12.0	66.0	NM	NM	NM	OFF
29-Dec-00	D	13:52	10.1	NM	NM	NM	NM	OFF
04-Jan-01	D	10:53	11.0	8.0	NM	NM	NM	OFF
04-Jan-01	D	14:40	NM	14.0	ND	20.9	ND	AS-4/ON
04-Jan-01	D	15:15	NM	6.0	0.0	21.2	0.0	AS-4/ON
05-Jan-01	D	8:55	11.5	NM	NM	NM	NM	OFF
05-Jan-01	D	10:05	11.1	327.0	0.0	20.9	0.7	AS-5/ON
05-Jan-01	D	10:52	NM	139.0	ND	21.0	ND	AS-5/ON
05-Jan-01	D	11:13	11.1	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:42	NM	127.0	0.0	20.9	0.2	AS-1/ON
05-Jan-01	D	12:42	11.0	100.0	ND	20.8	0.1	AS-1/ON
16-Jan-01	D	12:32	NM	359.0	0.1	20.5	0.0	ON
08-Feb-01	D	10:02	NM	334.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	8.0	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	66.0	0.1	20.7	ND	OFF
14-Mar-01	D	-	NM	69.0	0.1	20.9	0.1	ON
18-May-01	D	12:16	6.0	38.0	0.1	20.6	ND	OFF
25-May-01	D	13:46	5.9	15.0	NM	NM	NM	OFF
25-May-01	D	14:49	NM	16.0	NM	NM	NM	ON
08-Jun-01	D	13:38	2.0	25.0	NM	NM	NM	ON
22-Jun-01	D	11:44	NM	25.0	NM	NM	NM	OFF
22-Jun-01	D	12:46	NM	41.0	NM	NM	NM	ON
10-Jul-01	D	11:22	NM	58.0	NM	NM	NM	ON
10-Jul-01	D	13:45	1.8	46.0	NM	NM	NM	OFF
20-Jul-01	D	12:57	5.1	23.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	17.0	NM	NM	NM	ON
03-Aug-01	D	12:49	4.9	21.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	21.0	NM	NM	NM	ON
17-Aug-01	D	12:44	5.0	19.0	NM	NM	NM	OFF
17-Aug-01	D	13:59	NM	30.0	NM	NM	NM	ON
23-Aug-01	D	11:41	4.9	17.0	NM	NM	NM	OFF
23-Aug-01	D	15:21	2.1	17.0	NM	NM,	NM	OFF
28-Sep-01	D	12:14	1.8	167.0	NM	NM	NM	OFF
28-Sep-01	D	14:47	NM	141.0	NM	NM	NM	ON
12-Oct-01	D	12:14	2.0	200.0	NM	NM	NM	OFF
12-Oct-01	D	12:46	6.1	READJUSTED VACUUM DUE TO REBOUND				OFF
19-Oct-01	D	11:51	6.2	172.0	NM	NM	NM	OFF
19-Oct-01	D	13:48	NM	176.0	NM	NM	NM	ON
09-Nov-01	D	14:59	5.3	142.0	NM	NM	NM	OFF
13-Dec-01	D	14:48	5.4	211.0	NM	NM	NM	-
11-Jan-02	D	12:49	5.5	149.0	NM	NM	NM	OFF
25-Jan-02	D	15:09	5.6	170.0	NM	NM	NM	ON
08-Feb-02	D	11:54	NM	3.0	NM	NM	NM	ON
21-Feb-02	D	13:50	6.1	2.3	NM	NM	NM	ON
07-Mar-02	D	11:12	6.0	7.8	NM	NM	NM	ON
21-Mar-02	D	11:05	6.0	4.5	NM	NM	NM	ON
04-Apr-02	D	11:21	6.5	3.1	NM	NM	NM	ON
18-Apr-02	D	11:17	6.0	9.9	NM	NM	NM	ON
02-May-02	Not Noted	11:14	6.0	5.4	NM	NM	NM	ON
16-May-02	D	11:04	6.0	16.7	NM	NM	NM	ON
30-May-02	D	11:01	7.0	6.4	NM	NM	NM	ON
13-Jun-02	D	11:15	6.0	18.9	NM	NM	NM	ON
27-Jun-02	D	10:27	6.0	2.7	NM	NM	NM	OFF
03-Jul-02	D	11:13	7.0	15.0	NM	NM	NM	ON
11-Jul-02	D	10:45	5.0	33.5	NM	NM	NM	OFF
19-Jul-02	D	11:52	4.7	12.0	NM	NM	NM	ON
25-Jul-02	S	11:00	5.0	0.7	NM	NM	NM	ON
08-Aug-02	D	10:59	4.0	8.9	NM	NM	NM	OFF
22-Aug-02	D	11:46	4.0	20.2	NM	NM	NM	ON
19-Sep-02	D	10:57	4.0	25.1	NM	NM	NM	OFF

TABLE B-5

SVE-5 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-5						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Oct-02	D	11:32	4.0	28.8	NM	NM	NM	ON
17-Oct-02	D	11:11	5.0	21.6	NM	NM	NM	ON
01-Nov-02	D	15:48	4.3	ND	NM	NM	NM	ON
14-Nov-02	D	13:56	4.6	2.0	NM	NM	NM	ON
18-Nov-02	S	13:51	0.0	4.0	NM	NM	NM	ON
26-Nov-02	D	13:17	5.0	21.0	NM	NM	NM	ON
09-Dec-02	D	13:33	5.0	9.0	NM	NM	NM	ON
27-Dec-02	D	10:24	6.0	6.0	NM	NM	NM	OFF
10-Jan-03	D	13:45	6.0	3.5	NM	NM	NM	ON
24-Jan-03	D	14:40	7.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:36	4.8	ND	NM	NM	NM	ON
21-Feb-03	D	13:00	6.0	2.0	NM	NM	NM	ON
07-Mar-03	D	11:30	7.0	ND	NM	NM	NM	ON
21-Mar-03	D	11:44	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:40	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:56	6.0	ND	NM	NM	NM	ON
02-May-03	D	15:24	6.0	ND	NM	NM	NM	ON
15-May-03	D	14:18	5.0	ND	NM	NM	NM	OFF
30-May-03	D	13:35	5.0	ND	NM	NM	NM	ON
12-Jun-03	D	14:42	5.5	ND	NM	NM	NM	OFF
30-Jun-03	S	NM	0.0	-	NM	NM	NM	-
10-Jul-03	D	11:47	5.0	2.3	NM	NM	NM	ON
24-Jul-03	D	11:31	5.0	2.1	NM	NM	NM	ON
06-Aug-03	D	11:14	5.0	1.3	NM	NM	NM	ON
21-Aug-03	D	12:18	5.0	0.6	NM	NM	NM	OFF
04-Sep-03	D	12:50	5.0	3.2	NM	NM	NM	ON
18-Sep-03	D	12:15	4.5	4.0	NM	NM	NM	OFF
02-Oct-03	D	10:40	4.0	4.0	NM	NM	NM	OFF
16-Oct-03	D	11:33	5.0	1.3	NM	NM	NM	ON
03-Nov-03	D	13:15	5.0	0.8	NM	NM	NM	ON
13-Nov-03	D	11:15	5.0	0.8	NM	NM	NM	ON
26-Nov-03	D	11:42	5.0	0.8	NM	NM	NM	ON
08-Dec-03	D	13:37	5.0	1.3	NM	NM	NM	OFF
23-Dec-03	D	11:46	6.0	6.8	NM	NM	NM	OFF
06-Jan-04	D	11:53	5.0	18.9	NM	NM	NM	ON
22-Jan-04	D	13:26	5.0	12.7	NM	NM	NM	OFF
05-Feb-04	D	11:36	6.0	25.6	NM	NM	NM	ON
19-Feb-04	D	13:39	5.5	1.2	NM	NM	NM	ON
03-Mar-04	D	11:46	4.5	2.1	NM	NM	NM	OFF
18-Mar-04	D	11:39	4.0	2.4	NM	NM	NM	ON
31-Mar-04	D	13:23	4.0	7.4	NM	NM	NM	OFF
15-Apr-04	D	12:54	7.0	2.0	NM	NM	NM	OFF
29-Apr-04	D	13:33	6.5	ND	NM	NM	NM	ON
14-May-04	D	11:45	5.5	0.7	NM	NM	NM	ON
27-May-04	D	13:43	5.0	1.2	NM	NM	NM	ON
10-Jun-04	D	11:37	5.0	1.6	NM	NM	NM	ON
24-Jun-04	D	11:45	5.0	1.4	NM	NM	NM	ON
15-Jul-04	D	8:47	4.0	2.0	NM	NM	NM	ON
27-Aug-04	D	11:56	5.0	1.3	NM	NM	NM	ON
24-Sep-04	D	13:18	5.0	4.0	NM	NM	NM	ON
08-Oct-04	D	11:23	5.0	2.2	NM	NM	NM	OFF
22-Oct-04	D	11:21	5.0	ND	NM	NM	NM	ON
04-Nov-04	D	11:46	5.0	1.0	NM	NM	NM	ON
19-Nov-04	D	10:20	4.0	1.0	NM	NM	NM	ON
16-Dec-04	D	13:47	-5.0	ND	NM	NM	NM	ON
30-Dec-04	D	11:04	-5.0	1.5	NM	NM	NM	OFF
13-Jan-05	D	13:10	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:53	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	11:39	5.0	ND	NM	NM	NM	OFF
23-Feb-05	D	11:48	-5.5	ND	NM	NM	NM	ON
10-Mar-05	D	10:53	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:29	-5.0	2.1	NM	NM	NM	OFF

TABLE B-5

SVE-5 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-5						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
09-Apr-05	D		5.5	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.2	NM	NM	NM	ON

TABLE B-5

SVE-5 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-5						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.

NM Not measured.

ON/OFF *Well(s) valved on/off from system*

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

SVE-6 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-6						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:25	0.0	57.0	3.5	17.5	0.0	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	12:15	12.0	39.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:34	11.1	10.0	NM	NM	NM	OFF
05-Jan-01	D	8:55	10.8	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.1	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	10.8	NM	NM	NM	NM	AS-1/0N
05-Jan-01	D	12:12	NM	20.0	ND	20.9	ND	AS-1/ON
05-Jan-01	D	12:47	10.1	23.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	11:48	NM	34.0	0.0	20.1	0.0	ON
08-Feb-01	D	9:58	NM	80.0	0.0	20.4	0.0	ON
08-Feb-01	D	14:15	7.9	NM	NM	NM	NM	OFF
25-May-01	D	13:21	5.8	13.0	NM	NM	NM	OFF
25-May-01	D	15:03	NM	13.0	NM	NM	NM	ON
08-Jun-01	D	13:37	1.9	7.0	NM	NM	NM	ON
22-Jun-01	D	11:45	NM	32.0	NM	NM	NM	OFF
10-Jul-01	D	11:38	NM	40.0	NM	NM	NM	ON
10-Jul-01	D	13:45	1.8	33.0	NM	NM	NM	OFF
03-Aug-01	D	12:48	4.8	62.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	53.0	NM	NM	NM	ON
17-Aug-01	D	12:36	5.0	37.0	NM	NM	NM	OFF
17-Aug-01	D	13:53	NM	44.0	NM	NM	NM	ON
23-Aug-01	D	11:42	4.8	33.0	NM	NM	NM	OFF
23-Aug-01	D	15:19	6.1	34.0	NM	NM	NM	OFF
28-Sep-01	D	12:34	7.9	145.0	NM	NM	NM	OFF
28-Sep-01	D	14:17	NM	141.0	NM	NM	NM	ON
12-Oct-01	D	12:04	7.1	166.0	NM	NM	NM	OFF
19-Oct-01	D	11:53	6.2	264.0	NM	NM	NM	OFF
19-Oct-01	D	13:42	7.1	283.0	NM	NM	NM	ON
01-Nov-01	D	13:09	NM	182.0	NM	NM	NM	OFF
09-Nov-01	D	14:58	5.5	178.0	NM	NM	NM	OFF
19-Nov-01	D	14:18	5.1	235.0	NM	NM	NM	--
13-Dec-01	D	14:22	5.5	236.0	NM	NM	NM	-
11-Jan-02	D	13:07	5.5	202.0	NM	NM	NM	ON
25-Jan-02	D	14:53	5.7	237.0	NM	NM	NM	OFF
08-Feb-02	D	11:52	NM	4.0	NM	NM	NM	ON
10-May-02	D	12:35	5.2	6.0	NM	NM	NM	OFF
03-Jul-02	D	11:15	6.0	12.0	NM	NM	NM	ON
13-Sep-02	D	14:34	4.0	30.0	NM	NM	NM	OFF
14-Nov-02	D	13:35	4.5	2.0	NM	NM	NM	ON
18-Nov-02	S	13:45	0.0	6.0	NM	NM	NM	ON
09-Dec-02	D	13:27	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	13:29	6.0	ND	NM	NM	NM	ON
14-Feb-03	D	14:34	6.0	ND	NM	NM	NM	OFF
13-Mar-03	D	13:22	8.0	ND	NM	NM	NM	ON
10-Apr-03	D	13:50	7.0	0.6	NM	NM	NM	ON
08-May-03	D	13:16	6.0	4.4	NM	NM	NM	ON
05-Jun-03	D	14:42	6.0	3.9	NM	NM	NM	OFF
12-Jun-03	D	14:35	5.5	ND	NM	NM	NM	OFF
30-Jun-03	D	11:50	5.0	6.4	NM	NM	NM	ON
06-Aug-03	D	11:06	5.0	3.2	NM	NM	NM	ON
28-Aug-03	D	11:31	5.0	4.9	NM	NM	NM	OFF
18-Sep-03	D	11:52	4.0	6.0	NM	NM	NM	ON
25-Sep-03	D	11:54	4.0	11.9	NM	NM	NM	ON
02-Oct-03	D	10:45	4.0	7.0	NM	NM	NM	OFF
23-Oct-03	D	13:56	5.0	5.9	NM	NM	NM	ON
20-Nov-03	D	14:47	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:32	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	14:01	6.0	ND	NM	NM	NM	OFF
13-Feb-04	D	14:00	6.0	0.4	NM	NM	NM	OFF
11-Mar-04	D	NM	NM	5.8	NM	NM	NM	OFF

SVE-6 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-6						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
08-Apr-04	D	14:32	NM	1.8	NM	NM	NM	OFF
06-May-04	D	14:51	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:00	5.0	2.5	NM	NM	NM	OFF
01-Jul-04	D	15:10	4.0	13.4	NM	NM	NM	ON
16-Sep-04	D	16:00	4.0	ND	NM	NM	NM	OFF
15-Oct-04	D	14:40	5.0	10.6	NM	NM	NM	OFF
09-Dec-04	D	14:49	5.0	1.9	NM	NM	NM	OFF
05-Jan-05	D	14:29	NM	<1	NM	NM	NM	OFF
03-Feb-05	D	11:40	5.0	0.5	NM	NM	NM	OFF
03-Mar-05	D	12:02	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:56	6.0	0.4	NM	NM	NM	OFF
28-Apr-05	D	12:05	5.0	0.1	NM	NM	NM	OFF
05-May-05	D		5.0	0.0	NM	NM	NM	ON
26-May-05	D	12:34	6.0	3.5	NM	NM	NM	OFF
22-Jun-05	D	14:36	5.0	4.2	NM	NM	NM	OFF
25-Jul-05	D	14:50		7.0	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Well(s) valved on/off from system
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-7

SVE-7 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-7						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	10:30	0.0	914.0	13.7	2.3	60.7	OFF
06-Dec-00	D	14:30	10.0	NM	NM	NM	NM	OFF
18-Dec-00	D	12:15	12.9	638.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	11.3	NM	NM	NM	NM	OFF
04-Jan-01	D	10:34	0.0	ND	NM	NM	NM	OFF
04-Jan-01	D	11:58	NM	403.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:24	NM	447.0	NM	NM	NM	AS-2/ON
05-Jan-01	D	8:55	12.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	12.2	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	11.9	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	11:46	NM	424.0	0.0	20.9	0.0	AS-1/ON
05-Jan-01	D	12:40	12.0	417.0	ND	20.8	0.8	AS-1/ON
16-Jan-01	D	11:47	NM	230.0	0.0	20.3	0.0	ON
08-Feb-01	D	9:40	NM	243.0	0.0	20.4	0.0	OFF
08-Feb-01	D	9:53	NM	287.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	8.5	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	78.0	ND	20.9	ND	OFF
14-Mar-01	D	-	NM	78.0	ND	20.8	0.0-0.1	ON
18-May-01	D	12:17	6.2	172.0	0.3	20.3	0.1	OFF
25-May-01	D	13:22	6.0	99.0	NM	NM	NM	OFF
25-May-01	D	15:04	NM	100.0	NM	NM	NM	ON
08-Jun-01	D	13:42	2.0	64.0	NM	NM	NM	ON
22-Jun-01	D	11:46	NM	166.0	NM	NM	NM	OFF
22-Jun-01	D	12:38	NM	37.0	NM	NM	NM	ON
10-Jul-01	D	11:45	NM	208.0	NM	NM	NM	ON
10-Jul-01	D	13:49	1.8	142.0	NM	NM	NM	OFF
20-Jul-01	D	12:54	5.2	159.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	116.0	NM	NM	NM	ON
03-Aug-01	D	12:46	4.9	124.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	109.0	NM	NM	NM	ON
17-Aug-01	D	12:40	5.2	133.0	NM	NM	NM	OFF
17-Aug-01	D	13:49	NM	142.0	NM	NM	NM	ON
23-Aug-01	D	11:37	5.0	133.0	NM	NM	NM	OFF
23-Aug-01	D	15:23	6.6	111.0	NM	NM	NM	OFF
07-Sep-01	D	12:46	6.3	150.0	NM	NM	NM	OFF
28-Sep-01	D	12:31	8.1	113.0	NM	NM	NM	OFF
28-Sep-01	D	14:20	NM	117.0	NM	NM	NM	ON
12-Oct-01	D	12:25	7.5	109.0	NM	NM	NM	OFF
19-Oct-01	D	12:25	7.5	109.0	NM	NM	NM	OFF
19-Oct-01	D	12:25	7.5	109.0	NM	NM	NM	OFF
09-Nov-01	D	15:04	6.0	89.0	NM	NM	NM	OFF
13-Dec-01	D	14:14	6.0	105.0	NM	NM	NM	-
11-Jan-02	D	13:01	6.1	95.0	NM	NM	NM	ON
25-Jan-02	D	14:50	2.1	14.0	NM	NM	NM	OFF
08-Feb-02	D	12:02	NM	17.0	NM	NM	NM	OFF
21-Feb-02	D	13:40	6.5	12.3	NM	NM	NM	ON
07-Mar-02	D	11:10	6.2	14.7	NM	NM	NM	ON
21-Mar-02	D	11:02	7.0	11.7	NM	NM	NM	ON
04-Apr-02	D	11:17	7.0	5.2	NM	NM	NM	ON
18-Apr-02	D	11:09	6.0	31.7	NM	NM	NM	ON
02-May-02	Not Noted	10:58	6.0	10.7	NM	NM	NM	OFF
16-May-02	D	10:57	7.0	53.6	NM	NM	NM	OFF
30-May-02	D	10:56	7.0	32.1	NM	NM	NM	OFF
13-Jun-02	D	11:10	7.0	30.8	NM	NM	NM	ON
27-Jun-02	D	10:19	6.0	5.1	NM	NM	NM	OFF
03-Jul-02	D	11:22	7.0	26.0	NM	NM	NM	ON
11-Jul-02	D	10:35	5.0	69.1	NM	NM	NM	OFF
19-Jul-02	D	12:04	5.0	35.0	NM	NM	NM	OFF
25-Jul-02	S	11:00	5.0	4.6	NM	NM	NM	ON
08-Aug-02	D	11:07	5.0	30.4	NM	NM	NM	ON
22-Aug-02	D	11:38	4.0	67.0	NM	NM	NM	ON
19-Sep-02	D	10:47	4.0	44.9	NM	NM	NM	OFF

TABLE B-7

SVE-7 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-7						
		TIME	VAC ("H2O)	CONC. (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Oct-02	D	11:22	4.0	75.7	NM	NM	NM	ON
17-Oct-02	D	11:20	5.0	43.9	NM	NM	NM	ON
01-Nov-02	D	15:55	4.6	12.0	NM	NM	NM	ON
14-Nov-02	D	13:27	4.7	8.0	NM	NM	NM	ON
18-Nov-02	S	13:20	0.0	3.0	NM	NM	NM	ON
26-Nov-02	D	13:30	5.1	23.0	NM	NM	NM	ON
09-Dec-02	D	13:06	6.0	11.5	NM	NM	NM	ON
27-Dec-02	D	10:10	6.0	2.0	NM	NM	NM	OFF
10-Jan-03	D	13:10	6.0	5.3	NM	NM	NM	ON
24-Jan-03	D	14:19	7.0	2.3	NM	NM	NM	OFF
10-Feb-03	D	13:45	5.0	4.0	NM	NM	NM	ON
21-Feb-03	D	12:52	6.0	7.0	NM	NM	NM	OFF
07-Mar-03	D	11:17	6.5	ND	NM	NM	NM	ON
21-Mar-03	D	11:34	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:27	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:13	6.5	2.5	NM	NM	NM	ON
02-May-03	D	15:15	6.5	3.0	NM	NM	NM	ON
15-May-03	D	13:51	5.0	ND	NM	NM	NM	ON
30-May-03	D	13:24	5.0	7.5	NM	NM	NM	OFF
12-Jun-03	D	14:17	5.5	12.0	NM	NM	NM	OFF
30-Jun-03	D	11:43	5.0	14.5	NM	NM	NM	ON
10-Jul-03	D	11:33	5.0	7.0	NM	NM	NM	ON
24-Jul-03	D	11:10	5.0	13.8	NM	NM	NM	ON
06-Aug-03	D	10:54	5.0	3.2	NM	NM	NM	OFF
21-Aug-03	D	11:57	5.0	1.2	NM	NM	NM	ON
04-Sep-03	D	12:35	5.0	23.8	NM	NM	NM	ON
18-Sep-03	D	12:01	4.5	19.0	NM	NM	NM	OFF
02-Oct-03	D	10:47	4.5	11.0	NM	NM	NM	OFF
16-Oct-03	D	11:17	5.0	2.2	NM	NM	NM	ON
03-Nov-03	D	12:08	5.0	7.4	NM	NM	NM	OFF
13-Nov-03	D	10:51	5.0	2.6	NM	NM	NM	OFF
26-Nov-03	D	11:21	5.0	3.1	NM	NM	NM	ON
08-Dec-03	D	13:22	5.0	3.4	NM	NM	NM	ON
23-Dec-03	D	11:53	6.0	0.3	NM	NM	NM	OFF
06-Jan-04	D	11:41	5.0	12.6	NM	NM	NM	ON
22-Jan-04	D	13:13	5.0	14.2	NM	NM	NM	OFF
05-Feb-04	D	11:24	6.0	35.4	NM	NM	NM	OFF
19-Feb-04	D	13:26	5.5	9.9	NM	NM	NM	OFF
03-Mar-04	D	11:30	4.5	6.9	NM	NM	NM	ON
18-Mar-04	D	11:26	4.0	15.0	NM	NM	NM	OFF
31-Mar-04	D	13:25	4.0	16.6	NM	NM	NM	OFF
15-Apr-04	D	13:19	7.0	3.0	NM	NM	NM	OFF
29-Apr-04	D	13:22	6.5	3.3	NM	NM	NM	OFF
14-May-04	D	11:27	5.5	1.5	NM	NM	NM	OFF
27-May-04	D	13:31	5.0	6.8	NM	NM	NM	ON
10-Jun-04	D	11:24	5.0	10.9	NM	NM	NM	OFF
24-Jun-04	D	11:34	5.0	6.4	NM	NM	NM	ON
15-Jul-04	D	8:30	5.0	10.0	NM	NM	NM	ON
27-Aug-04	D	11:38	5.0	4.5	NM	NM	NM	ON
24-Sep-04	D	11:48	5.0	5.8	NM	NM	NM	ON
22-Oct-04	D	11:06	5.0	1.9	NM	NM	NM	ON
04-Nov-04	D	11:27	5.0	4.5	NM	NM	NM	ON
19-Nov-04	D	10:17	4.0	1.7	NM	NM	NM	OFF
16-Dec-04	D	13:33	-5.0	ND	NM	NM	NM	ON
30-Dec-04	D	10:55	-5.0	ND	NM	NM	NM	OFF
13-Jan-05	D	12:59	-5.0	ND	NM	NM	NM	OFF
31-Jan-05	D	11:37	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	12:01	5.0	3.0	NM	NM	NM	OFF
23-Feb-05	D	11:42	-5.5	ND	NM	NM	NM	ON
10-Mar-05	D	10:38	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:16	-5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		6.0	0.0	NM	NM	NM	ON

TABLE B-7

SVE-7 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-7						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
21-Apr-05	D		5.5	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	
03-Jun-05	D		5.0	0.0	NM	NM	NM	ON
					NM	NM	NM	OFF

NOTES:	Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-8

SVE-8 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-8						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:11	0.0	52.0	0.9	20.2	0.0	OFF
06-Dec-00	D	14:30	8.9	NM	NM	NM	NM	OFF
18-Dec-00	D	12:15	12.0	53.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	11:09	10.4	50.0	NM	NM	NM	OFF
05-Jan-01	D	8:55	11.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.8	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	10.2	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	13:13	10.1	NM	NM	NM	NM	AS-1/ON
16-Jan-01	D	11:52	NM	7.0	0.0	20.9	0.0	ON
08-Feb-01	D	9:37	NM	19.0	0.0	20.5	0.0	OFF
08-Feb-01	D	9:52	NM	20.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	7.9	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	8.0	ND	20.9	ND	OFF
14-Mar-01	D	-	NM	8.0	ND	20.9	ND	ON
25-May-01	D	13:20	5.5	10.0	NM	NM	NM	OFF
25-May-01	D	15:03	NM	11.0	NM	NM	NM	ON
08-Jun-01	D	13:43	1.9	11.0	NM	NM	NM	ON
22-Jun-01	D	11:47	NM	41.0	NM	NM	NM	OFF
10-Jul-01	D	11:41	NM	60.0	NM	NM	NM	ON
10-Jul-01	D	13:46	1.8	43.0	NM	NM	NM	OFF
20-Jul-01	D	12:56	5.0	40.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	23.0	NM	NM	NM	ON
03-Aug-01	D	12:44	4.8	17.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	19.0	NM	NM	NM	ON
17-Aug-01	D	12:42	5.0	38.0	NM	NM	NM	OFF
17-Aug-01	D	13:54	NM	36.0	NM	NM	NM	ON
23-Aug-01	D	11:45	4.8	33.0	NM	NM	NM	OFF
23-Aug-01	D	15:25	2.2	38.0	NM	NM	NM	OFF
28-Sep-01	D	12:28	2.1	36.0	NM	NM	NM	OFF
28-Sep-01	D	14:16	NM	39.0	NM	NM	NM	ON
12-Oct-01	D	12:03	2.0	25.0	NM	NM	NM	OFF
19-Oct-01	D	11:43	2.0	41.0	NM	NM	NM	OFF
19-Oct-01	D	13:40	NM	43.0	NM	NM	NM	ON
09-Nov-01	D	15:00	2.0	8.0	NM	NM	NM	OFF
13-Dec-01	D	14:26	1.9	16.0	NM	NM	NM	-
11-Jan-02	D	13:09	2.0	12.0	NM	NM	NM	ON
25-Jan-02	D	14:42	2.1	7.0	NM	NM	NM	OFF
08-Feb-02	D	11:56	NM	5.0	NM	NM	NM	ON
21-Feb-02	D	13:45	2.8	4.4	NM	NM	NM	ON
07-Mar-02	D	11:24	2.1	11.1	NM	NM	NM	ON
21-Mar-02	D	11:03	3.0	4.7	NM	NM	NM	ON
04-Apr-02	D	11:19	3.0	3.2	NM	NM	NM	ON
18-Apr-02	D	11:14	3.0	16.0	NM	NM	NM	ON
02-May-02	Not Noted	11:01	3.0	7.2	NM	NM	NM	ON
16-May-02	D	10:59	3.0	46.1	NM	NM	NM	OFF
30-May-02	D	10:58	3.0	36.2	NM	NM	NM	OFF
13-Jun-02	D	11:13	3.0	23.7	NM	NM	NM	ON
27-Jun-02	D	10:20	3.0	5.2	NM	NM	NM	OFF
03-Jul-02	D	11:23	3.0	20.0	NM	NM	NM	ON
11-Jul-02	D	10:37	2.0	53.1	NM	NM	NM	OFF
19-Jul-02	D	12:01	2.1	23.0	NM	NM	NM	OFF
25-Jul-02	S	11:00	3.0	3.9	NM	NM	NM	ON
08-Aug-02	D	11:04	2.0	20.8	NM	NM	NM	ON
22-Aug-02	D	11:30	2.0	16.7	NM	NM	NM	ON
19-Sep-02	D	10:45	2.0	18.6	NM	NM	NM	OFF
03-Oct-02	D	11:14	1.3	15.9	NM	NM	NM	ON
17-Oct-02	D	11:23	2.0	41.3	NM	NM	NM	ON
01-Nov-02	D	15:43	1.7	9.0	NM	NM	NM	ON
14-Nov-02	D	13:30	1.8	4.0	NM	NM	NM	ON
18-Nov-02	S	13:41	0.0	2.0	NM	NM	NM	ON
26-Nov-02	D	13:27	2.0	3.0	NM	NM	NM	ON

TABLE B-8

SVE-8 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-8						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
09-Dec-02	D	13:29	3.0	ND	NM	NM	NM	ON
27-Dec-02	D	10:13	3.0	ND	NM	NM	NM	OFF
10-Jan-03	D	13:25	3.9	ND	NM	NM	NM	ON
24-Jan-03	S	14:32	0.5	ND	NM	NM	NM	OFF
10-Feb-03	D	13:49	2.5	ND	NM	NM	NM	ON
21-Feb-03	D	12:55	3.0	2.0	NM	NM	NM	OFF
07-Mar-03	D	11:23	4.0	ND	NM	NM	NM	ON
21-Mar-03	D	11:37	4.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:33	4.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:21	3.5	2.5	NM	NM	NM	ON
02-May-03	D	15:20	4.0	ND	NM	NM	NM	ON
15-May-03	D	13:57	3.0	ND	NM	NM	NM	ON
30-May-03	D	13:29	3.0	4.2	NM	NM	NM	ON
12-Jun-03	D	14:29	3.0	ND	NM	NM	NM	OFF
30-Jun-03	S	NM	0.0	-	NM	NM	NM	-
10-Jul-03	S	NM	0.0	-	NM	NM	NM	-
24-Jul-03	S	NM	0.0	-	NM	NM	NM	-
06-Aug-03	D	11:01	3.0	0.5	NM	NM	NM	ON
21-Aug-03	D	12:08	3.0	1.2	NM	NM	NM	OFF
04-Sep-03	D	12:43	3.0	10.8	NM	NM	NM	ON
18-Sep-03	D	12:20	3.0	6.0	NM	NM	NM	OFF
02-Oct-03	D	10:55	3.0	5.0	NM	NM	NM	OFF
16-Oct-03	D	11:23	5.0	1.1	NM	NM	NM	ON
03-Nov-03	D	13:07	3.0	0.4	NM	NM	NM	ON
13-Nov-03	D	11:04	3.0	1.7	NM	NM	NM	ON
26-Nov-03	D	11:29	3.0	2.2	NM	NM	NM	ON
08-Dec-03	D	13:29	5.0	1.6	NM	NM	NM	ON
23-Dec-03	D	11:55	3.0	0.1	NM	NM	NM	OFF
06-Jan-04	D	11:47	3.0	1.5	NM	NM	NM	ON
22-Jan-04	D	13:19	3.0	2.0	NM	NM	NM	OFF
05-Feb-04	D	11:29	3.0	2.1	NM	NM	NM	OFF
19-Feb-04	D	13:32	3.0	0.4	NM	NM	NM	ON
03-Mar-04	D	11:37	2.5	0.9	NM	NM	NM	OFF
18-Mar-04	D	11:32	2.0	0.4	NM	NM	NM	ON
31-Mar-04	D	13:27	2.0	1.3	NM	NM	NM	OFF
15-Apr-04	D	13:29	4.0	1.0	NM	NM	NM	OFF
29-Apr-04	D	13:28	4.0	ND	NM	NM	NM	OFF
14-May-04	D	11:40	3.5	0.7	NM	NM	NM	ON
27-May-04	D	13:37	3.0	1.8	NM	NM	NM	ON
10-Jun-04	D	11:31	3.0	2.7	NM	NM	NM	OFF
24-Jun-04	D	11:39	3.0	1.8	NM	NM	NM	ON
15-Jul-04	D	8:35	3.0	9.0	NM	NM	NM	ON
27-Aug-04	D	11:48	3.0	2.4	NM	NM	NM	ON
24-Sep-04	D	11:56	3.0	5.2	NM	NM	NM	ON
22-Oct-04	D	11:14	3.0	1.3	NM	NM	NM	ON
04-Nov-04	D	11:36	3.0	1.4	NM	NM	NM	ON
16-Dec-04	D	13:43	-3.0	ND	NM	NM	NM	ON
30-Dec-04	D	11:01	-2.5	ND	NM	NM	NM	OFF
13-Jan-05	D	13:05	-3.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:46	-3.0	ND	NM	NM	NM	ON
09-Feb-05	D	12:08	3.0	3.0	NM	NM	NM	ON
23-Feb-05	D	11:56	-3.0	ND	NM	NM	NM	ON
10-Mar-05	D	10:45	-3.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:18	5.0	ND	NM	NM	NM	OFF
09-Apr-05	D		4.0	0.0	NM	NM	NM	ON
21-Apr-05	D		2.5	0.0	NM	NM	NM	ON
05-May-05	D		3.5	0.0	NM	NM	NM	ON
20-May-05			2.8	0.0	NM	NM	NM	
03-Jun-05	D		4.0	0.4	NM	NM	NM	ON

TABLE B-8

SVE-8 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-8						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected.
NM Not measured.
ON/OFF Well(s) valved on/off from system
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-9

SVE-9 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-9						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:15	0.0	272.0	7.1	12.3	0.0	OFF
06-Dec-00	D	14:30	10.0	NM	NM	NM	NM	OFF
18-Dec-00	D	12:42	13.0	202.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	11.3	NM	NM	NM	NM	OFF
04-Jan-01	D	10:23	12.1	77.0	NM	NM	NM	OFF
04-Jan-01	D	11:58	NM	51.0	NM	NM	NM	AS-2/ON
04-Jan-01	D	12:18	NM	72.0	NM	NM	NM	AS-2/ON
05-Jan-01	D	8:55	12.2	NM	NM	NM	NM	OFF
05-Jan-01	D	-	12.0	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	11.9	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	13:12	12.0	NM	NM	NM	NM	AS-1/ON
16-Jan-01	D	11:53	NM	29.0	0.0	20.8	0.0	ON
08-Feb-01	D	9:39	NM	58.0	0.0	20.5	0.0	OFF
08-Feb-01	D	9:50	NM	63.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	8.5	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	11.9	ND	20.8	ND	OFF
14-Mar-01	D	-	NM	11.0	ND	20.9	ND	ON
25-May-01	D	13:24	6.1	25.0	NM	NM	NM	OFF
25-May-01	D	15:02	NM	24.0	NM	NM	NM	ON
08-Jun-01	D	13:44	2.0	20.0	NM	NM	NM	ON
22-Jun-01	D	11:48	NM	50.0	NM	NM	NM	OFF
22-Jun-01	D	12:51	NM	38.0	NM	NM	NM	ON
10-Jul-01	D	11:19	NM	66.0	NM	NM	NM	ON
10-Jul-01	D	13:48	1.8	45.0	NM	NM	NM	OFF
20-Jul-01	D	12:53	5.2	45.0	NM	NM	NM	OFF
20-Jul-01	D	13:46	NM	33.0	NM	NM	NM	ON
03-Aug-01	D	12:42	4.8	49.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	40.0	NM	NM	NM	ON
17-Aug-01	D	12:39	5.2	53.0	NM	NM	NM	OFF
17-Aug-01	D	13:57	NM	49.0	NM	NM	NM	ON
23-Aug-01	D	11:44	5.0	33.0	NM	NM	NM	OFF
23-Aug-01	D	15:22	2.0	34.0	NM	NM	NM	OFF
28-Sep-01	D	12:25	1.9	39.0	NM	NM	NM	OFF
28-Sep-01	D	14:14	NM	36.0	NM	NM	NM	ON
12-Oct-01	D	12:01	2.1	22.0	NM	NM	NM	OFF
19-Oct-01	D	11:47	2.0	44.0	NM	NM	NM	OFF
19-Oct-01	D	13:30	NM	42.0	NM	NM	NM	ON
09-Nov-01	D	15:03	2.0	9.0	NM	NM	NM	-
13-Dec-01	D	14:03	1.9	16.0	NM	NM	NM	-
11-Jan-02	D	13:12	2.0	8.0	NM	NM	NM	ON
25-Jan-02	D	14:12	2.0	3.0	NM	NM	NM	OFF
08-Feb-02	D	12:00	NM	6.0	NM	NM	NM	OFF
21-Feb-02	D	13:37	6.2	3.4	NM	NM	NM	ON
07-Mar-02	D	11:05	6.0	5.1	NM	NM	NM	ON
21-Mar-02	D	10:59	6.5	1.5	NM	NM	NM	OFF
04-Apr-02	D	11:15	6.5	1.1	NM	NM	NM	ON
18-Apr-02	D	11:05	6.0	23.5	NM	NM	NM	ON
02-May-02	Not Noted	10:56	6.0	4.2	NM	NM	NM	OFF
16-May-02	D	10:54	6.0	37.6	NM	NM	NM	OFF
30-May-02	D	10:54	7.0	19.6	NM	NM	NM	OFF
13-Jun-02	D	11:08	6.0	15.1	NM	NM	NM	ON
27-Jun-02	D	10:16	NM	2.7	NM	NM	NM	OFF
03-Jul-02	D	11:25	6.0	18.0	NM	NM	NM	ON
11-Jul-02	D	10:33	5.0	30.8	NM	NM	NM	OFF
19-Jul-02	D	11:55	5.0	16.0	NM	NM	NM	ON
25-Jul-02	S	11:00	5.0	4.2	NM	NM	NM	ON
08-Aug-02	D	11:08	5.0	31.0	NM	NM	NM	ON
22-Aug-02	D	11:33	4.0	45.7	NM	NM	NM	ON
19-Sep-02	D	10:50	4.0	36.3	NM	NM	NM	OFF
03-Oct-02	D	11:24	4.0	57.6	NM	NM	NM	ON
17-Oct-02	D	11:15	5.0	24.7	NM	NM	NM	ON
01-Nov-02	D	15:20	4.4	11.0	NM	NM	NM	ON

TABLE B-9

SVE-9 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-9						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
14-Nov-02	D	13:10	4.5	ND	NM	NM	NM	ON
18-Nov-02	S	13:02	0.0	ND	NM	NM	NM	ON
26-Nov-02	D	13:02	5.0	1.0	NM	NM	NM	ON
09-Dec-02	D	13:03	3.3	ND	NM	NM	NM	ON
27-Dec-02	D	10:09	5.0	ND	NM	NM	NM	OFF
10-Jan-03	D	13:07	6.0	ND	NM	NM	NM	ON
24-Jan-03	D	14:16	6.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:51	4.5	ND	NM	NM	NM	ON
21-Feb-03	D	12:50	6.0	2.0	NM	NM	NM	OFF
07-Mar-03	D	11:07	6.9	ND	NM	NM	NM	ON
21-Mar-03	D	11:31	7.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:04	7.0	ND	NM	NM	NM	ON
18-Apr-03	D	10:52	6.0	ND	NM	NM	NM	OFF
02-May-03	D	15:10	5.0	ND	NM	NM	NM	ON
15-May-03	D	13:33	5.0	ND	NM	NM	NM	ON
30-May-03	D	11:49	5.0	5.9	NM	NM	NM	ON
12-Jun-03	D	13:45	5.5	ND	NM	NM	NM	ON
30-Jun-03	D	11:17	5.0	6.4	NM	NM	NM	ON
10-Jul-03	D	10:29	5.0	3.5	NM	NM	NM	OFF
24-Jul-03	D	10:37	5.0	1.5	NM	NM	NM	OFF
06-Aug-03	D	10:24	5.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:27	5.0	3.9	NM	NM	NM	ON
04-Sep-03	D	11:58	5.0	4.4	NM	NM	NM	OFF
18-Sep-03	D	12:25	5.0	5.0	NM	NM	NM	OFF
02-Oct-03	D	11:00	4.0	7.0	NM	NM	NM	ON
16-Oct-03	D	10:51	5.0	1.1	NM	NM	NM	OFF
03-Nov-03	D	11:40	5.0	1.9	NM	NM	NM	ON
13-Nov-03	D	10:04	5.0	1.3	NM	NM	NM	OFF
26-Nov-03	D	10:57	5.0	0.5	NM	NM	NM	ON
08-Dec-03	D	12:07	4.0	ND	NM	NM	NM	OFF
23-Dec-03	D	11:57	6.0	0.2	NM	NM	NM	OFF
06-Jan-04	D	11:12	5.0	0.8	NM	NM	NM	OFF
22-Jan-04	D	11:58	5.0	2.4	NM	NM	NM	ON
05-Feb-04	D	11:00	5.5	3.2	NM	NM	NM	OFF
19-Feb-04	D	11:51	5.5	2.6	NM	NM	NM	ON
03-Mar-04	D	10:59	4.5	2.1	NM	NM	NM	ON
18-Mar-04	D	10:46	4.0	0.8	NM	NM	NM	OFF
31-Mar-04	D	13:28	4.0	5.4	NM	NM	NM	OFF
15-Apr-04	D	13:22	7.0	2.0	NM	NM	NM	OFF
29-Apr-04	D	11:45	6.5	0.7	NM	NM	NM	ON
14-May-04	D	10:36	5.5	ND	NM	NM	NM	OFF
27-May-04	D	11:44	5.0	ND	NM	NM	NM	ON
10-Jun-04	D	10:43	5.0	1.9	NM	NM	NM	OFF
24-Jun-04	D	11:08	5.0	0.9	NM	NM	NM	OFF
15-Jul-04	D	8:25	4.0	2.0	NM	NM	NM	ON
27-Aug-04	D	11:10	5.0	0.5	NM	NM	NM	ON
24-Sep-04	D	11:17	5.0	0.9	NM	NM	NM	ON
22-Oct-04	D	10:40	5.0	ND	NM	NM	NM	OFF
04-Nov-04	D	10:57	5.0	ND	NM	NM	NM	OFF
19-Nov-04	D	10:08	1.0	ND	NM	NM	NM	OFF
16-Dec-04	D	11:46	5.0	ND	NM	NM	NM	ON
30-Dec-04	D	10:26	-5.0	ND	NM	NM	NM	OFF
13-Jan-05	D	11:24	-5.0	ND	NM	NM	NM	ON
31-Jan-05	D	11:07	-5.0	ND	NM	NM	NM	ON
09-Feb-05	D	11:53	5.0	0.9	NM	NM	NM	OFF
23-Feb-05	D	11:10	-5.5	ND	NM	NM	NM	ON
10-Mar-05	D	10:01	-5.0	ND	NM	NM	NM	OFF
31-Mar-05	D	10:13	-5.0	1.2	NM	NM	NM	OFF
09-Apr-05	D		6.0	0.0	NM	NM	NM	ON
21-Apr-05	D		5.0	0.0	NM	NM	NM	ON
05-May-05	D		5.0	0.0	NM	NM	NM	ON
20-May-05			5.0	0.0	NM	NM	NM	

TABLE B-9

SVE-9 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-9						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S, (on/off)
03-Jun-05	D		5.0	0.1	NM	NM	NM	ON

NOTES:	Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-10

SVE-11 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-11						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:17	0.0	61.0	1.6	19.1	0.0	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	12:42	11.9	19.0	NM	NM	NM	OFF
29-Dec-00	D	13:59	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	11:03	10.8	10.0	NM	NM	NM	OFF
04-Jan-01	D	14:34	NM	11.0	ND	20.9	ND	AS-4/ON
04-Jan-01	D	15:14	NM	5.0	0.0	21.2	0.0	AS-4/ON
05-Jan-01	D	9:02	11.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.9	NM	NM	NM	NM	AS-5/ON
05-Jan-01	D	11:13	10.5	NM	NM	NM	NM	AS-1/ON
05-Jan-01	D	13:14	10.8	NM	NM	NM	NM	AS-1/ON
16-Jan-01	D	12:26	NM	5.0	0.0	20.6	0.0	ON
08-Feb-01	D	10:03	NM	19.0	0.0	20.4	0.0	ON
08-Feb-01	D	14:15	8.0	NM	NM	NM	NM	OFF
08-Jun-01	D	13:07	1.9	3.8	NM	NM	NM	ON
10-Jul-01	D	12:26	NM	17.0	NM	NM	NM	ON
10-Jul-01	D	14:22	1.8	12.0	NM	NM	NM	OFF
03-Aug-01	D	11:54	4.8	17.0	NM	NM	NM	OFF
03-Aug-01	D	14:05	NM	17.0	NM	NM	NM	ON
23-Aug-01	D	12:31	4.9	25.0	NM	NM	NM	OFF
23-Aug-01	D	14:38	2.0	15.0	NM	NM	NM	OFF
07-Sep-01	D	12:44	1.8	23.0	NM	NM	NM	OFF
*14-Sep-01	D	11:49	1.9	ND	NM	NM	NM	OFF
28-Sep-01	D	12:09	1.9	24.0	NM	NM	NM	OFF
28-Sep-01	D	14:44	NM	19.0	NM	NM	NM	ON
01-Nov-01	D	14:36	NM	23.0	NM	NM	NM	OFF
19-Nov-01	D	14:05	2.5	5.0	NM	NM	NM	--
07-Dec-01	D	11:56	2.0	5.0	NM	NM	NM	ON
11-Jan-02	D	13:12	2.0	7.0	NM	NM	NM	ON
15-Feb-02	D	11:54	NM	2.0	NM	NM	NM	ON
15-Feb-02	D	15:12	2.1	NM	NM	NM	NM	ON
15-Mar-02	D	11:44	2.0	1.0	NM	NM	NM	ON
12-Apr-02	D	12:20	2.0	1.0	NM	NM	NM	OFF
18-Apr-02	D	11:28	3.0	8.9	NM	NM	NM	ON
02-May-02	Not Noted	11:09	3.0	4.7	NM	NM	NM	ON
10-May-02	D	12:35	2.4	3.8	NM	NM	NM	OFF
16-May-02	D	11:08	4.0	20.6	NM	NM	NM	ON
30-May-02	D	11:05	4.0	29.8	NM	NM	NM	ON
03-Jul-02	D	12:50	2.7	6.0	NM	NM	NM	OFF
13-Sep-02	D	14:39	2.0	13.0	NM	NM	NM	OFF
14-Nov-02	S	13:45	0.0	1.0	NM	NM	NM	ON
18-Nov-02	S	13:28	0.0	ND	NM	NM	NM	ON
09-Dec-02	S	13:17	0.0	ND	NM	NM	NM	ON
10-Jan-03	S	14:28	1.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:30	0.1	ND	NM	NM	NM	OFF
13-Mar-03	D	13:30	1.0	ND	NM	NM	NM	ON
10-Apr-03	D	11:26	5.0	0.9	NM	NM	NM	ON
08-May-03	D	13:51	5.0	ND	NM	NM	NM	ON
05-Jun-03	D	14:24	5.0	ND	NM	NM	NM	OFF
03-Jul-03	D	10:40	5.0	3.5	NM	NM	NM	OFF
01-Aug-03	D	10:35	3.0	0.6	NM	NM	NM	OFF
28-Aug-03	D	11:05	3.0	0.4	NM	NM	NM	OFF
25-Sep-03	D	11:23	2.0	4.3	NM	NM	NM	OFF
23-Oct-03	D	13:35	2.0	2.1	NM	NM	NM	ON
20-Nov-03	D	14:14	1.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:18	4.0	ND	NM	NM	NM	OFF
13-Jan-04	S	13:39	0.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:36	3.0	ND	NM	NM	NM	OFF
11-Mar-04	D	NM	2.0	0.6	NM	NM	NM	OFF
08-Apr-04	D	14:09	5.0	1.6	NM	NM	NM	OFF
06-May-04	D	14:29	5.0	0.2	NM	NM	NM	OFF
03-Jun-04	D	14:51	3.0	2.8	NM	NM	NM	OFF

TABLE B-10

SVE-11 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-11						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
01-Jul-04	D	13:38	3.0	1.4	NM	NM	NM	OFF
16-Sep-04	D	15:08	3.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:15	4.0	12.1	NM	NM	NM	OFF
12-Nov-04	D	11:08	3.0	ND	NM	NM	NM	OFF
09-Dec-04	D	14:21	3.0	1.9	NM	NM	NM	OFF
05-Jan-05	D	13:53	3.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:17	3.0	ND	NM	NM	NM	OFF
03-Mar-05	S	ND	ND	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:23	5.0	ND	NM	NM	NM	OFF
28-Apr-05	D	11:44	5.0	0.1	NM	NM	NM	OFF
26-May-05	D	12:01	5.0	0.8	NM	NM	NM	OFF
22-Jun-05	D	13:54	4.0	1.3	NM	NM	NM	OFF
25-Jul-05	D	14:40		4.1	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

* Data is unreliable due to moisture in samples and sample equipment.

ND Not detected.

NM Not measured.

ON/OFF Well(s) valved on/off from system

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-11

SVE-12 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-12						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:19	0.0	348.0	2.8	17.9	0.2	OFF
06-Dec-00	D	14:30	9.6	NM	NM	NM	NM	OFF
18-Dec-00	D	12:42	11.9	42.0	NM	NM	NM	OFF
29-Dec-00	D	13:55	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	10:36	11.0	36.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.1	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.9	NM	NM	NM	NM	AS-5/0N
08-Feb-01	D	10:08	NM	328.0	0.0	20.3	0.0	ON
08-Feb-01	D	14:15	7.8	NM	NM	NM	NM	OFF
08-Jun-01	D	13:16	2.0	25.0	NM	NM	NM	ON
10-Jul-01	D	12:21	NM	76.0	NM	NM	NM	ON
10-Jul-01	D	14:26	1.8	56.0	NM	NM	NM	OFF
03-Aug-01	D	11:52	4.8	209.0	NM	NM	NM	OFF
23-Aug-01	D	12:30	4.8	121.0	NM	NM	NM	OFF
23-Aug-01	D	14:40	6.1	107.0	NM	NM	NM	OFF
*14-Sep-01	D	11:46	7.7	628.0	NM	NM	NM	OFF
28-Sep-01	D	13:46	7.8	510.0	NM	NM	NM	OFF
01-Nov-01	D	14:04	NM	424.0	NM	NM	NM	OFF
19-Nov-01	D	15:17	5.0	440.0	NM	NM	NM	--
07-Dec-01	D	11:50	4.7	649.0	NM	NM	NM	ON
11-Jan-02	D	14:02	4.5	580.0	NM	NM	NM	OFF
15-Feb-02	D	11:45	NM	4.0	NM	NM	NM	ON
15-Feb-02	D	15:13	6.4	NM	NM	NM	NM	ON
15-Mar-02	D	11:37	5.3	2.0	NM	NM	NM	ON
12-Apr-02	D	12:22	5.2	4.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.0	8.7	NM	NM	NM	OFF
03-Jul-02	D	12:53	5.2	4.0	NM	NM	NM	OFF
13-Sep-02	D	14:36	4.0	25.0	NM	NM	NM	OFF
14-Nov-02	D	14:04	4.6	1.0	NM	NM	NM	OFF
18-Nov-02	S	13:57	0.0	2.0	NM	NM	NM	ON
09-Dec-02	D	13:20	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	13:55	6.0	ND	NM	NM	NM	ON
14-Feb-03	D	14:49	6.0	ND	NM	NM	NM	OFF
13-Mar-03	D	13:38	8.0	0.5	NM	NM	NM	ON
10-Apr-03	D	13:54	7.0	2.1	NM	NM	NM	ON
08-May-03	D	13:51	5.0	ND	NM	NM	NM	ON
05-Jun-03	D	14:30	6.0	0.4	NM	NM	NM	OFF
03-Jul-03	D	10:44	6.0	6.8	NM	NM	NM	OFF
01-Aug-03	D	10:55	5.0	7.4	NM	NM	NM	OFF
28-Aug-03	D	11:09	5.0	0.7	NM	NM	NM	OFF
25-Sep-03	D	11:29	5.0	10.1	NM	NM	NM	ON
23-Oct-03	D	13:37	5.0	3.9	NM	NM	NM	ON
20-Nov-03	D	14:22	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:20	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:42	6.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:58	6.0	0.4	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	2.9	NM	NM	NM	OFF
08-Apr-04	D	14:14	7.0	1.9	NM	NM	NM	OFF
06-May-04	D	14:39	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:47	5.0	5.1	NM	NM	NM	OFF
01-Jul-04	D	15:04	4.0	15.5	NM	NM	NM	ON
16-Sep-04	D	15:14	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	15:03	5.0	6.3	NM	NM	NM	OFF
12-Nov-04	D	11:14	4.0	ND	NM	NM	NM	OFF
09-Dec-04	D	14:34	5.0		NM	NM	NM	OFF
05-Jan-05	D	13:59	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:27	5.0	ND	NM	NM	NM	OFF
03-Mar-05	D	11:47	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:29	6.0	1.1	NM	NM	NM	OFF
28-Apr-05	D	11:48	5.0	0.0	NM	NM	NM	OFF
26-May-05	D	12:12	6.0	1.2	NM	NM	NM	OFF
22-Jun-05	D	13:59	5.0	2.7	NM	NM	NM	OFF

TABLE B-11

SVE-12 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-12						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
25-Jul-05	D	14:58		16.5	NM	NM	NM	OFF

TABLE B-11

SVE-12 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-12						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-12

SVE-13 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-13						
			VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:22	0.0	134.0	1.5	19.7	0.0	OFF
06-Dec-00	D	14:30	8.9	NM	NM	NM	NM	OFF
18-Dec-00	D	12:42	11.8	71.0	NM	NM	NM	OFF
29-Dec-00	D	13:56	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:36	9.5	14.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	7.9	NM	NM	NM	NM	OFF
05-Jan-01	D	-	7.9	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	10:15	NM	115.0	0.0	20.4	0.0	ON
08-Feb-01	D	14:15	7.1	NM	NM	NM	NM	OFF
08-Jun-01	D	13:08	1.0	14.0	NM	NM	NM	ON
10-Jul-01	D	12:22	NM	56.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	38.0	NM	NM	NM	OFF
03-Aug-01	D	11:58	4.8	81.0	NM	NM	NM	OFF
23-Aug-01	D	12:29	4.8	58.0	NM	NM	NM	OFF
23-Aug-01	D	14:51	6.1	52.0	NM	NM	NM	OFF
*14-Sep-01	D	11:47	7.2	257.0	NM	NM	NM	OFF
28-Sep-01	D	13:40	7.1	207.0	NM	NM	NM	OFF
01-Nov-01	D	13:59	NM	264.0	NM	NM	NM	OFF
19-Nov-01	D	15:12	5.0	280.0	NM	NM	NM	--
07-Dec-01	D	11:54	4.3	250.0	NM	NM	NM	ON
11-Jan-02	D	13:58	4.5	240.0	NM	NM	NM	ON
15-Feb-02	D	11:43	NM	4.0	NM	NM	NM	ON
15-Feb-02	D	15:14	6.1	NM	NM	NM	NM	ON
15-Mar-02	D	11:39	5.3	4.0	NM	NM	NM	ON
12-Apr-02	D	12:30	5.2	2.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.4	9.1	NM	NM	NM	OFF
03-Jul-02	D	12:52	5.4	12.0	NM	NM	NM	OFF
13-Sep-02	D	14:38	4.0	24.0	NM	NM	NM	OFF
14-Nov-02	D	14:07	4.5	2.0	NM	NM	NM	OFF
18-Nov-02	S	14:00	0.0	1.0	NM	NM	NM	OFF
10-Jan-03	D	13:59	6.0	ND	NM	NM	NM	ON
14-Feb-03	S	14:46	0.1	ND	NM	NM	NM	OFF
13-Mar-03	D	13:41	7.0	1.1	NM	NM	NM	ON
10-Apr-03	D	13:58	7.0	1.7	NM	NM	NM	ON
08-May-03	D	13:58	6.0	1.7	NM	NM	NM	ON
05-Jun-03	D	14:33	6.0	2.8	NM	NM	NM	OFF
06-Jun-03	D	10:49	6.0	9.8	NM	NM	NM	OFF
01-Aug-03	D	10:43	5.0	8.1	NM	NM	NM	OFF
28-Aug-03	D	11:13	5.0	2.9	NM	NM	NM	OFF
25-Sep-03	D	11:31	4.0	9.8	NM	NM	NM	ON
23-Oct-03	D	13:39	5.0	3.5	NM	NM	NM	ON
20-Nov-03	D	14:24	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:22	6.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:44	5.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:56	6.0	0.2	NM	NM	NM	OFF
11-Mar-04	D	0:00	2.9	0.2	NM	NM	NM	OFF
08-Apr-04	D	14:16	7.0	2.9	NM	NM	NM	OFF
06-May-04	D	14:33	6.0	0.1	NM	NM	NM	OFF
03-Jun-04	D	14:41	5.0	5.8	NM	NM	NM	OFF
01-Jul-04	D	14:59	4.0	12.2	NM	NM	NM	ON
16-Sep-04	D	15:20	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	15:00	5.0	6.7	NM	NM	NM	OFF
12-Nov-04	D	11:18	4.0	ND	NM	NM	NM	OFF
09-Dec-04	D	14:30	4.0	1.3	NM	NM	NM	OFF
05-Jan-05	D	14:03	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:53	1.0	ND	NM	NM	NM	OFF
03-Mar-05	S	ND	0.0	ND	NM	NM	NM	OFF
01-Apr-05	D	11:33	6.0	ND	NM	NM	NM	OFF
28-Apr-05	D	11:50	5.0	0.1	NM	NM	NM	OFF
26-May-05	D	12:16	6.0	2.1	NM	NM	NM	OFF
22-Jun-05	D	14:02	5.0	3.8	NM	NM	NM	OFF
25-Jul-05	D	14:56		11.6	NM	NM	NM	OFF

TABLE B-12

SVE-13 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-13						
			VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

TABLE B-12

SVE-13 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-13						
			VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-13

SVE-14 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-14						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:23	0.0	139.0	1.1	20.0	0.0	OFF
06-Dec-00	D	14:30	8.9	NM	NM	NM	NM	OFF
18-Dec-00	D	13:00	11.3	36.0	NM	NM	NM	OFF
29-Dec-00	D	13:53	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:36	0.1	10.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	0.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	0.0	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	12:58	NM	60.0	0.0	20.5	0.0	OFF
08-Feb-01	D	10:16	NM	63.0	0.0	20.5	0.0	ON
08-Feb-01	D	14:15	7.2	NM	NM	NM	NM	OFF
18-May-01	D	12:18	6.0	34.0	0.1	20.6	ND	OFF
08-Jun-01	D	13:09	1.9	20.0	NM	NM	NM	ON
10-Jul-01	D	12:25	NM	81.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	73.0	NM	NM	NM	OFF
03-Aug-01	D	11:49	4.8	91.0	NM	NM	NM	OFF
23-Aug-01	D	12:27	4.8	69.0	NM	NM	NM	OFF
23-Aug-01	D	14:52	6.1	47.0	NM	NM	NM	OFF
*14-Sep-01	D	11:53	7.2	207.0	NM	NM	NM	OFF
28-Sep-01	D	13:46	7.1	167.0	NM	NM	NM	OFF
01-Nov-01	D	13:55	NM	235.0	NM	NM	NM	OFF
19-Nov-01	D	15:08	5.0	181.0	NM	NM	NM	--
07-Dec-01	D	11:53	4.3	211.0	NM	NM	NM	ON
11-Jan-01	D	13:57	4.3	183.0	NM	NM	NM	ON
15-Feb-02	D	11:41	NM	26.0	NM	NM	NM	ON
15-Feb-02	D	15:15	6.1	NM	NM	NM	NM	ON
15-Mar-02	D	11:46	5.1	6.0	NM	NM	NM	ON
12-Apr-02	D	12:35	5.1	7.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.2	8.7	NM	NM	NM	OFF
03-Jul-02	D	12:55	4.8	11.0	NM	NM	NM	OFF
13-Sep-02	D	14:40	4.0	39.0	NM	NM	NM	OFF
14-Nov-02	D	14:14	4.5	2.0	NM	NM	NM	OFF
18-Nov-02	S	14:07	0.0	3.0	NM	NM	NM	OFF
10-Jan-03	S	14:04	1.0	ND	NM	NM	NM	OFF
14-Feb-03	S	14:41	0.1	ND	NM	NM	NM	OFF
13-Mar-03	D	13:47	8.0	ND	NM	NM	NM	ON
02-Apr-03	D	14:00	7.0	1.3	NM	NM	NM	OFF
08-May-03	D	14:01	6.0	2.9	NM	NM	NM	OFF
05-Jun-03	D	14:36	6.0	3.2	NM	NM	NM	OFF
03-Jul-03	D	10:54	6.0	7.2	NM	NM	NM	OFF
01-Aug-03	D	11:02	4.0	7.2	NM	NM	NM	ON
28-Aug-03	D	11:16	5.0	3.4	NM	NM	NM	OFF
25-Sep-03	D	11:36	4.0	4.1	NM	NM	NM	ON
23-Oct-03	D	13:41	4.0	2.7	NM	NM	NM	ON
20-Nov-03	D	14:26	4.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:28	7.0	ND	NM	NM	NM	OFF
13-Jan-04	S	13:47	0.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:55	2.0	0.6	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	1.6	NM	NM	NM	OFF
08-Apr-04	D	14:20	7.0	2.2	NM	NM	NM	OFF
06-May-04	D	14:35	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:38	5.0	5.0	NM	NM	NM	OFF
01-Jul-04	D	14:54	4.0	10.4	NM	NM	NM	ON
16-Sep-04	D	15:27	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:55	5.0	11.9	NM	NM	NM	OFF
12-Nov-04	D	11:22	4.0	ND	NM	NM	NM	OFF
09-Dec-04	D	14:27	4.0	1.4	NM	NM	NM	OFF
05-Jan-05	D	14:08	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D			0.0	NM	NM	NM	OFF
03-Mar-05	S	12:04	0.0	ND	NM	NM	NM	OFF
01-Apr-05	D	11:36	6.0	ND	NM	NM	NM	OFF
28-Apr-05	D	11:52	5.0	0.1	NM	NM	NM	OFF
26-May-05	D	12:22	6.0	1.7	NM	NM	NM	OFF

TABLE B-13

SVE-14 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-14						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
22-Jun-05	D	14:04	5.0	4.0	NM	NM	NM	OFF
25-Jul-05	D	14:54		14.6	NM	NM	NM	OFF

TABLE B-13

SVE-14 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-14						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-14

SVE-15 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-15						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:27	0.0	59.0	1.5	19.4	0.0	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	13:00	11.5	30.0	NM	NM	NM	OFF
29-Dec-00	D	13:56	9.9	NM	NM	NM	NM	OFF
04-Jan-01	D	10:51	0.0	10.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	0.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	0.0	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	12:59	NM	44.0	0.0	20.5	0.0	OFF
08-Feb-01	D	10:14	NM	48.0	0.0	20.4	0.0	ON
08-Feb-01	D	14:15	7.1	NM	NM	NM	NM	OFF
08-Jun-01	D	13:11	1.9	17.0	NM	NM	NM	ON
10-Jul-01	D	12:23	NM	63.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	58.0	NM	NM	NM	OFF
03-Aug-01	D	11:47	4.8	49.0	NM	NM	NM	OFF
23-Aug-01	D	12:28	4.8	51.0	NM	NM	NM	OFF
23-Aug-01	D	14:55	6.1	31.0	NM	NM	NM	OFF
*14-Sep-01	D	11:53	7.2	90.0	NM	NM	NM	OFF
28-Sep-01	D	13:49	7.2	88.0	NM	NM	NM	OFF
01-Nov-01	D	13:15	NM	87.0	NM	NM	NM	OFF
19-Nov-01	D	15:03	5.0	90.0	NM	NM	NM	--
07-Dec-01	D	11:52	4.5	86.0	NM	NM	NM	ON
11-Jan-02	D	14:00	4.3	74.0	NM	NM	NM	OFF
15-Feb-02	D	11:50	NM	9.0	NM	NM	NM	ON
15-Feb-02	D	15:16	6.0	NM	NM	NM	NM	ON
15-Mar-02	D	11:42	5.1	5.0	NM	NM	NM	ON
12-Apr-02	D	12:37	5.1	7.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.1	8.3	NM	NM	NM	OFF
03-Jul-02	D	13:05	5.1	8.0	NM	NM	NM	ON
13-Sep-02	D	14:41	3.0	27.0	NM	NM	NM	OFF
14-Nov-02	D	14:15	4.5	2.0	NM	NM	NM	OFF
18-Nov-02	S	14:10	0.0	1.0	NM	NM	NM	OFF
10-Jan-03	S	14:07	0.0	ND	NM	NM	NM	OFF
14-Feb-03	S	14:55	0.1	ND	NM	NM	NM	OFF
13-Mar-03	D	13:46	7.0	2.9	NM	NM	NM	ON
10-Apr-03	D	14:02	7.0	0.7	NM	NM	NM	OFF
08-May-03	D	14:03	6.0	2.6	NM	NM	NM	OFF
05-Jun-03	D	14:39	6.0	1.5	NM	NM	NM	OFF
03-Jul-03	D	10:54	6.0	7.2	NM	NM	NM	OFF
01-Aug-03	D	11:05	5.0	6.4	NM	NM	NM	ON
28-Aug-03	D	11:19	5.0	3.2	NM	NM	NM	OFF
25-Sep-03	D	11:39	4.0	8.8	NM	NM	NM	ON
23-Oct-03	D	13:43	4.0	4.6	NM	NM	NM	ON
20-Nov-03	D	14:29	4.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:30	6.0	ND	NM	NM	NM	OFF
13-Jan-04	S	13:48	0.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:50	1.0	0.9	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	4.9	NM	NM	NM	OFF
08-Apr-04	D	14:22	7.0	2.8	NM	NM	NM	OFF
06-May-04	D	14:38	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:30	5.0	6.0	NM	NM	NM	OFF
01-Jul-04	D	14:50	4.0	9.1	NM	NM	NM	ON
16-Sep-04	D	15:31	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:28	5.0	6.4	NM	NM	NM	OFF
12-Nov-04	D	11:26	4.0	1.2	NM	NM	NM	OFF
09-Dec-04	D	14:33	5.0	1.3	NM	NM	NM	OFF
05-Jan-05	D	14:12	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D			0.0	NM	NM	NM	OFF
03-Mar-05	S	12:07	0.0	ND	NM	NM	NM	OFF
01-Apr-05	D	11:40	6.0	ND	NM	NM	NM	OFF
28-Apr-05	D	11:54	5.0	0.0	NM	NM	NM	OFF
26-May-05	D	12:28	6.0	1.8	NM	NM	NM	OFF
22-Jun-05	D	14:32	5.0	2.7	NM	NM	NM	OFF

TABLE B-14

SVE-15 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-15						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
25-Jul-05	D	14:52		10.9	NM	NM	NM	OFF

TABLE B-14

SVE-15 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-15						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

* Data is unreliable due to moisture in samples and sample equipment.

ND Not detected.

NM Not measured.

ON/OFF *Well(s) valved on/off from system*

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-15

SVE-16 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-16						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:44	0.0	639.0	1.0	19.0	0.7	OFF
06-Dec-00	D	14:30	9.1	NM	NM	NM	NM	OFF
18-Dec-00	D	13:00	11.9	20.0	NM	NM	NM	OFF
29-Dec-00	D	13:59	10.1	NM	NM	NM	NM	OFF
04-Jan-01	D	10:36	11.1	3.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.5	NM	NM	NM	NM	OFF
05-Jan-01	D	10:12	11.0	2.0	0.0	21.1	0.0	AS-5/ON
05-Jan-01	D	10:50	NM	16.0	ND	21.0	ND	AS-5/ON
16-Jan-01	D	11:49	NM	119.0	0.0	21.0	0.0	ON
08-Feb-01	D	10:09	NM	418.0	0.0	20.3	0.0	ON
08-Feb-01	D	14:15	7.9	NM	NM	NM	NM	OFF
08-Jun-01	D	13:15	2.0	4.0	NM	NM	NM	ON
10-Jul-01	D	12:24	NM	22.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	15.0	NM	NM	NM	OFF
03-Aug-01	D	11:43	4.8	181.0	NM	NM	NM	OFF
23-Aug-01	D	12:20	4.9	21.0	NM	NM	NM	OFF
23-Aug-01	D	14:53	6.3	21.0	NM	NM	NM	OFF
*14-Sep-01	D	11:52	7.7	>2,000	NM	NM	NM	OFF
28-Sep-01	D	13:37	7.8	1056.0	NM	NM	NM	OFF
28-Sep-01	D	14:52	NM	970.0	NM	NM	NM	ON
01-Nov-01	D	14:08	NM	616.0	NM	NM	NM	OFF
19-Nov-01	D	14:08	5.1	1900.0	NM	NM	NM	--
07-Dec-01	D	11:55	4.7	1670.0	NM	NM	NM	ON
21-Dec-01	D	13:15	6.0	256.0	NM	NM	NM	ON
11-Jan-02	D	14:09	4.5	1780.0	NM	NM	NM	OFF
15-Feb-02	D	11:47	NM	23.0	NM	NM	NM	ON
15-Feb-02	D	14:30	6.4	15.0	NM	NM	NM	OFF
15-Mar-02	D	11:35	5.3	0.5	NM	NM	NM	ON
12-Apr-02	D	12:40	5.3	6.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.4	4.1	NM	NM	NM	OFF
03-Jul-02	D	13:06	5.0	3.0	NM	NM	NM	ON
13-Sep-02	D	14:37	4.0	137.0	NM	NM	NM	OFF
14-Nov-02	D	14:00	4.6	5.0	NM	NM	NM	OFF
18-Nov-02	S	13:54	0.0	5.0	NM	NM	NM	ON
09-Dec-02	D	13:35	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	13:50	6.0	ND	NM	NM	NM	ON
14-Feb-03	D	14:52	6.0	ND	NM	NM	NM	OFF
13-Mar-03	D	13:34	8.0	0.9	NM	NM	NM	ON
10-Apr-03	D	13:56	7.0	0.9	NM	NM	NM	ON
08-May-03	D	13:53	6.0	0.5	NM	NM	NM	ON
05-Jun-03	D	14:26	6.0	ND	NM	NM	NM	OFF
03-Jul-03	D	10:43	6.0	5.7	NM	NM	NM	OFF
01-Aug-03	D	10:37	5.0	2.6	NM	NM	NM	OFF
28-Aug-03	D	11:07	5.0	0.2	NM	NM	NM	OFF
25-Sep-03	D	11:26	4.0	8.8	NM	NM	NM	ON
23-Oct-03	D	13:45	5.0	3.9	NM	NM	NM	ON
20-Nov-03	D	14:19	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:50	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:50	5.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:38	6.0	1.3	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	11.6	NM	NM	NM	OFF
08-Apr-04	D	14:12	7.0	2.1	NM	NM	NM	OFF
06-May-04	D	14:41	6.0	0.7	NM	NM	NM	OFF
03-Jun-04	D	14:23	5.0	7.1	NM	NM	NM	OFF
01-Jul-04	D	13:43	4.0	2.6	NM	NM	NM	ON
16-Sep-04	D	15:56	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:20	5.0	7.8	NM	NM	NM	OFF
12-Nov-04	D	11:32	4.0	ND	NM	NM	NM	OFF
09-Dec-04	D	14:24	5.0	1.5	NM	NM	NM	OFF
05-Jan-05	D	13:57	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:22	5.0	ND	NM	NM	NM	OFF
03-Mar-05	D	11:43	5.0	0.0	NM	NM	NM	OFF

TABLE B-15

SVE-16 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-16						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
01-Apr-05	D	11:26	6.0	0.4	NM	NM	NM	OFF
28-Apr-05	D	11:46	5.0	0.0	NM	NM	NM	OFF
26-May-05	D	12:06	6.0	0.8	NM	NM	NM	OFF
22-Jun-05	D	13:56	5.0	2.6	NM	NM	NM	OFF
25-Jul-05	D	14:43		5.7	NM	NM	NM	OFF

TABLE B-15

SVE-16 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-16						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-16

SVE-17 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-17						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:46	0.0	914.0	6.4	1.4	34.4	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	13:00	11.8	778.0	NM	NM	NM	OFF
29-Dec-00	D	13:57	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	11:12	11.0	576.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.2	NM	NM	NM	NM	OFF
05-Jan-01	D	10:13	11.0	479.0	0.1	20.9	1.4	AS-5/ON
05-Jan-01	D	10:51	NM	538.0	0.1	20.8	1.3	AS-5/ON
16-Jan-01	D	11:50	NM	502.0	0.2	20.9	0.5	ON
08-Feb-01	D	12:47	NM	501.0	0.0	20.5	0.0	OFF
08-Feb-01	D	11:23	NM	454.0	0.0	20.3	0.0	ON
08-Feb-01	D	14:15	7.8	NM	NM	NM	NM	OFF
08-Jun-01	D	13:13	2.2	135.0	NM	NM	NM	ON
22-Jun-01	D	12:14	NM	242.0	NM	NM	NM	OFF
22-Jun-01	D	12:30	NM	166.0	NM	NM	NM	ON
10-Jul-01	D	12:13	NM	239.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	152.0	NM	NM	NM	OFF
03-Aug-01	D	11:43	4.8	271.0	NM	NM	NM	OFF
23-Aug-01	D	12:21	4.8	208.0	NM	NM	NM	OFF
23-Aug-01	D	14:41	6.1	137.0	NM	NM	NM	OFF
07-Sep-01	D	12:58	6.0	388.0	NM	NM	NM	OFF
*14-Sep-01	D	11:57	7.7	948.0	NM	NM	NM	OFF
28-Sep-01	D	13:55	7.8	457.0	NM	NM	NM	OFF
01-Nov-01	D	14:13	NM	580.0	NM	NM	NM	OFF
19-Nov-01	D	14:12	5.1	1400.0	NM	NM	NM	--
07-Dec-01	D	11:47	4.5	1182.0	NM	NM	NM	ON
21-Dec-01	D	13:16	6.0	114.0	NM	NM	NM	ON
11-Jan-02	D	14;08	4.5	1054.0	NM	NM	NM	OFF
15-Feb-02	D	11:35	NM	10.0	NM	NM	NM	ON
15-Feb-02	D	14:30	6.2	4.0	NM	NM	NM	OFF
15-Mar-02	D	11:48	5.3	11.0	NM	NM	NM	ON
12-Apr-02	D	12:39	5.3	8.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.2	10.2	NM	NM	NM	OFF
03-Jul-02	D	13:08	5.4	15.0	NM	NM	NM	ON
13-Sep-02	D	14:30	4.0	148.0	NM	NM	NM	OFF
14-Nov-02	D	14:34	4.6	1.0	NM	NM	NM	OFF
18-Nov-02	S	14:25	0.0	2.0	NM	NM	NM	OFF
09-Dec-02	D	13:46	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	14:19	6.0	ND	NM	NM	NM	OFF
14-Feb-03	S	14:39	0.9	ND	NM	NM	NM	OFF
13-Mar-03	D	13:57	8.0	0.3	NM	NM	NM	ON
10-Apr-03	D	14:04	7.0	1.3	NM	NM	NM	OFF
08-May-03	D	14:06	6.0	3.1	NM	NM	NM	OFF
05-Jun-03	D	14:44	6.0	3.2	NM	NM	NM	OFF
03-Jul-03	D	10:05	6.0	5.8	NM	NM	NM	OFF
01-Aug-03	D	10:55	5.0	6.1	NM	NM	NM	OFF
28-Aug-03	D	11:24	5.0	10.9	NM	NM	NM	OFF
25-Sep-03	D	11:46	4.0	176.2	NM	NM	NM	ON
23-Oct-03	D	13:47	5.0	54.1	NM	NM	NM	ON
20-Nov-03	D	14:30	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:42	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:52	6.0	0.2	NM	NM	NM	OFF
13-Feb-04	D	13:41	6.0	13.9	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	98.7	NM	NM	NM	OFF
08-Apr-04	D	14:24	7.0	2.1	NM	NM	NM	OFF
06-May-04	D	14:43	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:15	5.0	5.2	NM	NM	NM	OFF
01-Jul-04	D	13:48	4.0	11.1	NM	NM	NM	ON
27-Aug-04	D	13:08	NM	1.3	NM	NM	NM	ON
16-Sep-04	D	15:45	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:22	5.0	3.8	NM	NM	NM	OFF
12-Nov-04	D	11:35	4.0	10.5	NM	NM	NM	OFF

TABLE B-16

SVE-17 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-17						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
09-Dec-04	D	14:36	5.0	1.7	NM	NM	NM	OFF
05-Jan-05	D	14:18	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:43	5.0	0.8	NM	NM	NM	OFF
03-Mar-05	D	11:50	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:53	6.0	0.5	NM	NM	NM	OFF
28-Apr-05	D	11:56	5.0	0.3	NM	NM	NM	OFF
26-May-05	D	12:38	6.0	2.5	NM	NM	NM	OFF
22-Jun-05	D	14:45	5.0	4.7	NM	NM	NM	OFF
25-Jul-05	D	14:44		11.7	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

* *Data is unreliable due to moisture in samples and sample equipment.*

ND Not detected.

NM Not measured.

ON/OFF Well(s) valved on/off from system

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-17

SVE-18 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-18						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	11:51	0.0	491.0	2.2	2.0	61.4	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	13:19	11.9	824.0	NM	NM	NM	OFF
29-Dec-00	D	13:54	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	10:36	11.0	291.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.5	NM	NM	NM	NM	OFF
05-Jan-01	D	-	11.0	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	12:54	NM	935.0	0.0	20.4	0.0	OFF
08-Feb-01	D	11:20	NM	988.0	0.0	20.3	0.0	ON
08-Feb-01	D	14:15	7.8	NM	NM	NM	NM	OFF
18-May-01	D	12:19	6.0	216.0	0.4	20.2	ND	OFF
08-Jun-01	D	13:14	2.0	298.0	NM	NM	NM	ON
22-Jun-01	D	12:15	NM	302.0	NM	NM	NM	OFF
22-Jun-01	D	12:34	NM	263.0	NM	NM	NM	ON
10-Jul-01	D	12:14	NM	494.0	NM	NM	NM	ON
10-Jul-01	D	14:29	1.8	282.0	NM	NM	NM	OFF
03-Aug-01	D	11:43	4.8	632.0	NM	NM	NM	OFF
23-Aug-01	D	12:24	4.8	588.0	NM	NM	NM	OFF
23-Aug-01	D	14:45	6.1	462.0	NM	NM	NM	OFF
30-Aug-01	D	16:22	NM	460.0	1.6	18.1	1.1	ON
*14-Sep-01	D	11:59	7.7	1643.0	NM	NM	NM	OFF
28-Sep-01	D	13:52	7.2	830.0	NM	NM	NM	OFF
01-Nov-01	D	14:20	NM	595.0	NM	NM	NM	OFF
19-Nov-01	D	14:55	5.0	1270.0	NM	NM	NM	--
07-Dec-01	D	11:49	4.7	1354.0	NM	NM	NM	ON
21-Dec-01	D	13:19	6.0	1522.0	NM	NM	NM	ON
11-Jan-02	D	14:40	4.7	1230.0	NM	NM	NM	OFF
15-Feb-02	D	11:39	NM	129.0	NM	NM	NM	ON
15-Feb-02	D	13:52	6.3	80.0	NM	NM	NM	ON
15-Mar-02	D	11:52	5.3	93.0	NM	NM	NM	ON
12-Apr-02	D	12:45	5.3	10.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.6	14.2	NM	NM	NM	OFF
03-Jul-02	D	13:20	5.6	19.0	NM	NM	NM	ON
13-Sep-02	D	14:29	4.0	276.0	NM	NM	NM	OFF
14-Nov-02	D	14:30	4.7	5.0	NM	NM	NM	OFF
18-Nov-02	S	14:22	0.0	3.0	NM	NM	NM	OFF
09-Dec-02	D	13:44	5.0	4.0	NM	NM	NM	ON
10-Jan-03	D	14:15	6.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:57	6.0	12.7	NM	NM	NM	OFF
13-Mar-03	D	13:55	8.0	2.9	NM	NM	NM	ON
10-Apr-03	D	14:06	7.0	1.7	NM	NM	NM	ON
08-May-03	D	14:07	6.0	4.9	NM	NM	NM	OFF
05-Jun-03	D	14:47	6.0	2.6	NM	NM	NM	OFF
03-Jul-03	D	11:09	6.0	5.5	NM	NM	NM	ON
01-Aug-03	D	10:41	5.0	7.8	NM	NM	NM	OFF
28-Aug-03	D	11:26	5.0	0.2	NM	NM	NM	OFF
25-Sep-03	D	11:49	4.0	14.8	NM	NM	NM	ON
23-Oct-03	D	13:49	5.0	4.1	NM	NM	NM	ON
20-Nov-03	D	14:34	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:44	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:55	6.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:43	6.0	1.0	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	38.5	NM	NM	NM	OFF
08-Apr-04	D	14:26	7.0	2.7	NM	NM	NM	OFF
06-May-04	D	14:45	6.0	0.1	NM	NM	NM	OFF
03-Jun-04	D	14:19	5.0	5.6	NM	NM	NM	OFF
01-Jul-04	D	14:37	4.0	4.3	NM	NM	NM	OFF
16-Sep-04	D	15:50	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:25	5.0	11.2	NM	NM	NM	OFF
12-Nov-04	D	11:38	4.0	0.2	NM	NM	NM	OFF
09-Dec-04	D	14:40	5.0	1.8	NM	NM	NM	OFF
05-Jan-05	D	14:25	5.0	<1	NM	NM	NM	OFF

TABLE B-17

SVE-18 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-18						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Feb-05	D	11:33	5.0	0.4	NM	NM	NM	OFF
03-Mar-05	D	12:00	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:50	6.0	0.8	NM	NM	NM	OFF
28-Apr-05	D	11:58	5.0	0.1	NM	NM	NM	OFF
26-May-05	D	12:45	6.0	1.7	NM	NM	NM	OFF
22-Jun-05	D	14:38	5.0	5.0	NM	NM	NM	OFF
25-Jul-05	D	14:46		8.2	NM	NM	NM	OFF

TABLE B-17

SVE-18 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-18						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

* Data is unreliable due to moisture in samples and sample equipment.

ND Not detected.

NM Not measured.

ON/OFF Well(s) valved on/off from system

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-18

SVE-19 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		SVE-19						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	$A.S._{x}$ (on/off)
05-Dec-00	S	12:00	0.0	1643.0	4.6	2.9	14.6	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	13:19	11.8	857.0	NM	NM	NM	OFF
29-Dec-00	D	13:55	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	11:11	11.0	403.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.2	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.9	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	12:48	NM	355.0	0.0	20.4	0.0	OFF
08-Feb-01	D	10:28	NM	1115.0	0.0	20.4	0.1	ON
08-Feb-01	D	14:15	7.8	NM	NM	NM	NM	OFF
08-Jun-01	D	13:10	2.0	86.0	NM	NM	NM	ON
22-Jun-01	D	12:16	NM	187.0	NM	NM	NM	OFF
22-Jun-01	D	12:31	NM	152.0	NM	NM	NM	ON
10-Jul-01	D	12:15	NM	205.0	NM	NM	NM	ON
10-Jul-01	D	14:20	1.8	137.0	NM	NM	NM	OFF
03-Aug-01	D	11:36	4.8	179.0	NM	NM	NM	OFF
23-Aug-01	D	12:26	4.8	174.0	NM	NM	NM	OFF
23-Aug-01	D	14:43	6.1	130.0	NM	NM	NM	OFF
*14-Sep-01	D	12:03	7.7	277.0	NM	NM	NM	OFF
28-Sep-01	D	14:01	7.2	149.0	NM	NM	NM	OFF
01-Nov-01	D	14:25	NM	210.0	NM	NM	NM	OFF
19-Nov-01	D	14:50	5.0	310.0	NM	NM	NM	--
07-Dec-01	D	11:51	4.5	348.0	NM	NM	NM	ON
21-Dec-01	D	13:21	6.0	140.0	NM	NM	NM	ON
11-Jan-02	D	14:15	4.3	390.0	NM	NM	NM	OFF
15-Feb-02	D	11:37	NM	9.0	NM	NM	NM	ON
15-Feb-02	D	14:32	6.3	5.0	NM	NM	NM	OFF
15-Mar-02	D	11:54	5.3	9.0	NM	NM	NM	ON
12-Apr-02	D	12:56	5.3	5.0	NM	NM	NM	OFF
10-May-02	D	12:35	5.4	6.4	NM	NM	NM	OFF
03-Jul-02	D	13:21	5.4	4.0	NM	NM	NM	ON
13-Sep-02	D	14:31	4.0	39.0	NM	NM	NM	OFF
13-Sep-02	D	14:48	NM	32.0	NM	NM	NM	OFF
14-Nov-02	D	14:25	4.7	2.0	NM	NM	NM	OFF
18-Nov-02	S	14:17	0.0	3.0	NM	NM	NM	OFF
09-Dec-02	D	13:42	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	14:22	6.0	ND	NM	NM	NM	ON
14-Feb-03	D	14:37	6.0	ND	NM	NM	NM	OFF
13-Mar-03	D	14:00	8.0	0.3	NM	NM	NM	OFF
10-Apr-03	D	14:08	7.0	0.9	NM	NM	NM	OFF
08-May-03	D	14:11	6.0	4.9	NM	NM	NM	OFF
05-Jun-03	D	14:52	6.0	0.9	NM	NM	NM	OFF
03-Jul-03	D	11:00	6.0	5.6	NM	NM	NM	ON
01-Aug-03	D	10:49	5.0	7.1	NM	NM	NM	OFF
28-Aug-03	D	11:28	5.0	3.6	NM	NM	NM	OFF
25-Sep-03	D	11:43	4.0	8.3	NM	NM	NM	ON
23-Oct-03	D	13:51	5.0	2.9	NM	NM	NM	ON
20-Nov-03	D	14:39	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:46	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:58	6.0	0.6	NM	NM	NM	OFF
13-Feb-04	D	13:47	6.0	0.4	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	3.1	NM	NM	NM	OFF
08-Apr-04	D	14:28	7.0	2.9	NM	NM	NM	OFF
06-May-04	D	14:47	6.0	0.1	NM	NM	NM	OFF
03-Jun-04	D	14:10	5.0	3.5	NM	NM	NM	OFF
01-Jul-04	D	14:41	4.0	6.2	NM	NM	NM	ON
16-Sep-04	D	15:40	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:30	5.0	2.0	NM	NM	NM	OFF
12-Nov-04	D	14:43	4.0	3.2	NM	NM	NM	OFF
09-Dec-04	D	14:43	5.0	1.5	NM	NM	NM	OFF
05-Jan-05	D	14:21	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:36	5.0	ND	NM	NM	NM	OFF

TABLE B-18

SVE-19 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-19						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Mar-05	D	11:57	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:43	6.0	0.3	NM	NM	NM	OFF
28-Apr-05	D	12:00	5.0	0.3	NM	NM	NM	OFF
26-May-05	D	12:49	6.0	1.3	NM	NM	NM	OFF
22-Jun-05	D	14:40	5.0	5.7	NM	NM	NM	OFF
25-Jul-05	D	14:48		8.4				

TABLE B-18

SVE-19 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-19						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-19

SVE-20 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-20						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
05-Dec-00	S	12:04	0.0	12.0	7.5	4.5	12.9	OFF
06-Dec-00	D	14:30	9.0	NM	NM	NM	NM	OFF
18-Dec-00	D	13:19	11.8	349.0	NM	NM	NM	OFF
29-Dec-00	D	13:56	10.0	NM	NM	NM	NM	OFF
04-Jan-01	D	10:51	11.2	71.0	NM	NM	NM	OFF
05-Jan-01	D	9:02	11.0	NM	NM	NM	NM	OFF
05-Jan-01	D	-	10.9	NM	NM	NM	NM	AS-5/ON
08-Feb-01	D	12:53	NM	64.0	0.0	20.5	0.0	OFF
08-Feb-01	D	10:27	NM	94.0	0.0	20.3	0.0	ON
08-Feb-01	D	14:15	7.2	NM	NM	NM	NM	OFF
08-Jun-01	D	13:12	1.9	27.0	NM	NM	NM	ON
22-Jun-01	D	12:17	NM	46.0	NM	NM	NM	OFF
10-Jul-01	D	12:20	NM	53.0	NM	NM	NM	ON
10-Jul-01	D	14:19	1.8	42.0	NM	NM	NM	OFF
03-Aug-01	D	11:39	4.8	104.0	NM	NM	NM	OFF
23-Aug-01	D	12:25	4.8	100.0	NM	NM	NM	OFF
23-Aug-01	D	14:42	6.1	70.0	NM	NM	NM	OFF
07-Sep-01	D	12:48	6.0	214.0	NM	NM	NM	OFF
30-Aug-01	D	16:25	NM	94.0	0.4	20.0	ND	ON
*14-Sep-01	D	12:01	7.7	177.0	NM	NM	NM	OFF
28-Sep-01	D	13:58	7.4	135.0	NM	NM	NM	OFF
01-Nov-01	D	14:29	NM	306.0	NM	NM	NM	OFF
19-Nov-01	D	14:58	5.0	520.0	NM	NM	NM	–
07-Dec-01	D	11:48	4.5	537.0	NM	NM	NM	ON
21-Dec-01	D	13:25	6.0	42.0	NM	NM	NM	ON
11-Jan-02	D	14:17	4.3	485.0	NM	NM	NM	OFF
15-Feb-02	D	11:33	NM	7.0	NM	NM	NM	ON
15-Feb-02	D	13:54	6.3	7.0	NM	NM	NM	ON
15-Mar-02	D	11:57	5.3	7.0	NM	NM	NM	ON
12-Apr-02	D	12:50	5.3	2.0	NM	NM	NM	OFF
10-May-02	D	13:30	5.4	4.2	NM	NM	NM	ON
03-Jul-02	D	13:21	5.5	5.0	NM	NM	NM	ON
13-Sep-02	D	14:32	4.0	159.0	NM	NM	NM	OFF
14-Nov-02	D	14:20	4.7	1.0	NM	NM	NM	OFF
18-Nov-02	S	14:13	0.0	3.0	NM	NM	NM	OFF
09-Dec-02	D	13:40	5.0	ND	NM	NM	NM	ON
10-Jan-03	D	14:12	6.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:59	6.0	1.7	NM	NM	NM	OFF
13-Mar-03	D	13:52	8.0	0.5	NM	NM	NM	ON
10-Apr-03	D	14:10	7.0	1.7	NM	NM	NM	OFF
08-May-03	D	14:13	6.0	4.4	NM	NM	NM	OFF
05-Jun-03	D	14:50	6.0	2.1	NM	NM	NM	OFF
03-Jul-03	D	11:12	6.0	4.3	NM	NM	NM	ON
01-Aug-03	D	10:51	5.0	6.8	NM	NM	NM	OFF
28-Aug-03	D	11:21	5.0	2.1	NM	NM	NM	OFF
25-Sep-03	D	11:40	4.0	9.2	NM	NM	NM	ON
23-Oct-03	D	13:53	5.0	6.2	NM	NM	NM	ON
20-Nov-03	D	14:42	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:48	7.0	ND	NM	NM	NM	OFF
13-Jan-04	D	14:00	6.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:49	6.0	0.2	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	28.7	NM	NM	NM	OFF
08-Apr-04	D	14:30	7.0	2.1	NM	NM	NM	OFF
06-May-04	D	14:49	6.0	ND	NM	NM	NM	OFF
03-Jun-04	D	14:06	5.0	2.8	NM	NM	NM	OFF
01-Jul-04	D	14:46	4.0	6.2	NM	NM	NM	ON
16-Sep-04	D	15:35	4.0	ND	NM	NM	NM	ON
15-Oct-04	D	14:33	5.0	0.0	NM	NM	NM	OFF
12-Nov-04	D	11:46	4.0	3.3	NM	NM	NM	OFF
09-Dec-04	D	14:46	5.0	2.2	NM	NM	NM	OFF
05-Jan-05	D	14:15	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:45	5.0	0.6	NM	NM	NM	OFF

TABLE B-19

SVE-20 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-20						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)
03-Mar-05	D	11:54	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:46	6.0	ND	NM	NM	NM	OFF
28-Apr-05	D	12:03	5.0	0.3	NM	NM	NM	OFF
26-May-05	D	12:54	6.0	1.0	NM	NM	NM	OFF
22-Jun-05	D	14:42	5.0	3.5	NM	NM	NM	OFF
25-Jul-05	D	14:49		8.0	NM	NM	NM	OFF

TABLE B-19

SVE-20 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	SVE-20						
		TIME	VAC ("H2O)	CONC (ppmv)	CO2 (%)	O2 (%)	CH4 (%)	A.S. (on/off)

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

*	Data is unreliable due to moisture in samples and sample equipment.
ND	Not detected.
NM	Not measured.
ON/OFF	Well(s) valved on/off from system
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-20

VP-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-1 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
6-Dec-00	S	10:23	0.0	26.0	7.6	10.8	0.0	OFF
21-Dec-00	D	14:35	2.5	ND	NM	NM	NM	OFF
29-Dec-00	D	14:02	2.2	NM	NM	NM	NM	OFF
4-Jan-01	D	11:15	2.2	7	NM	NM	NM	OFF
4-Jan-01	D	11:58	2.0	19	NM	NM	NM	AS-2/ON
4-Jan-01	D	12:23	2.2	13.0	NM	NM	NM	AS-2/ON
5-Jan-01	D	9:06	2.2	NM	NM	NM	NM	OFF
5-Jan-01	D	-	2.6	NM	NM	NM	NM	AS-5/ON
5-Jan-01	D	11:13	2.5	NM	NM	NM	NM	AS-1/ON
5-Jan-01	D	11:44	NM	8.0	0.0	20.9	0.0	AS-1/ON
5-Jan-01	D	13:05	2.5	6.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	13:01	NM	3.0	0.0	20.4	0.0	ON
8-Feb-01	D	11:41	NM	2.3	0	20.4	0	ON
8-Feb-01	D	14:15	3.1	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	2.0	ND	20.9	ND	OFF
14-Mar-01	D	-	NM	ND	ND	20.9	ND	ON
25-May-01	D	13:47	1.1	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:04	0.9	2.0	NM	NM	NM	ON
22-Jun-01	D	11:58	NM	1.9	NM	NM	NM	OFF
10-Jul-01	D	11:21	NM	2.4	NM	NM	NM	ON
10-Jul-01	D	13:37	0.3	4.1	NM	NM	NM	OFF
20-Jul-01	D	12:59	1.1	3.0	NM	NM	NM	OFF
20-Jul-01	D	13:47	NM	3.0	NM	NM	NM	ON
3-Aug-01	D	12:50	1.0	2.0	NM	NM	NM	OFF
3-Aug-01	D	14:02	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:47	1.0	3.0	NM	NM	NM	OFF
17-Aug-01	D	13:56	NM	4.0	NM	NM	NM	ON
23-Aug-01	D	12:52	1.0	NM	NM	NM	NM	OFF
23-Aug-01	D	14:54	1.0	NM	NM	NM	NM	OFF
28-Sep-01	D	11:54	1.0	NM	NM	NM	NM	OFF
12-Oct-01	D	12:35	1.1	NM	NM	NM	NM	OFF
19-Oct-01	D	14:00	1.1	NM	NM	NM	NM	OFF
13-Dec-01	D	14:11	1.0	ND	NM	NM	NM	-
11-Jan-02	D	11:55	1.0	NM	NM	NM	NM	OFF
25-Jan-02	D	-	1.3	NM	NM	NM	NM	-
21-Feb-02	D	13:02	1.3	1.1	NM	NM	NM	ON
7-Mar-02	D	11:33	1.1	1.2	NM	NM	NM	ON
21-Mar-02	D	11:20	2.2	1.0	NM	NM	NM	ON
4-Apr-02	D	11:39	1.3	0.4	NM	NM	NM	ON
12-Apr-02	D	12:00	0.9	ND	NM	NM	NM	OFF
18-Apr-02	D	11:38	1.0	1.0	NM	NM	NM	ON
02-May-02	Not Noted	11:27	1.3	0.3	NM	NM	NM	ON
16-May-02	D	11:15	1.2	4.7	NM	NM	NM	ON
30-May-02	D	11:16	1.3	3.3	NM	NM	NM	ON
13-Jun-02	D	11:24	1.0	4.0	NM	NM	NM	ON
27-Jun-02	D	10:40	0.8	1.1	NM	NM	NM	OFF
03-Jul-02	D	11:30	1.0	4.0	NM	NM	NM	ON
11-Jul-02	D	11:08	0.7	0.9	NM	NM	NM	ON
19-Jul-02	D	11:15	0.7	11.0	NM	NM	NM	ON
25-Jul-02	S	11:40	0.8	3.9	NM	NM	NM	ON
08-Aug-02	D	11:12	0.7	9.1	NM	NM	NM	ON
22-Aug-02	D	12:00	0.6	0.4	NM	NM	NM	OFF
19-Sep-02	D	11:14	0.6	3.2	NM	NM	NM	ON
03-Oct-02	D	11:48	0.7	5.4	NM	NM	NM	ON
17-Oct-02	D	11:29	0.9	6.7	NM	NM	NM	ON
01-Nov-02	D	15:25	0.8	ND	NM	NM	NM	ON
14-Nov-02	D	13:25	1.0	1.0	NM	NM	NM	ON
18-Nov-02	S	13:15	0.0	ND	NM	NM	NM	ON
26-Nov-02	D	13:32	1.0	ND	NM	NM	NM	ON
09-Dec-02	D	13:07	0.8	ND	NM	NM	NM	ON
27-Dec-02	D	10:20	1.0	ND	NM	NM	NM	OFF
10-Jan-03	D	14:36	2.0	ND	NM	NM	NM	OFF

TABLE B-20

VP-1 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-1						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
24-Jan-03	D	14:21	1.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:43	1.0	ND	NM	NM	NM	ON
21-Feb-03	D	13:10	1.5	ND	NM	NM	NM	ON
07-Mar-03	D	11:13	3.2	ND	NM	NM	NM	ON
21-Mar-03	D	11:32	2.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:24	1.5	ND	NM	NM	NM	ON
18-Apr-03	D	11:10	1.0	ND	NM	NM	NM	ON
02-May-03	D	15:15	1.0	ND	NM	NM	NM	ON
15-May-03	D	13:49	0.5	ND	NM	NM	NM	ON
30-May-03	D	13:22	1.5	ND	NM	NM	NM	ON
12-Jun-03	D	14:13	1.0	ND	NM	NM	NM	OFF
30-Jun-03	D	11:40	0.5	3.2	NM	NM	NM	ON
10-Jul-03	D	11:28	0.5	1.1	NM	NM	NM	ON
24-Jul-03	D	11:07	1.0	1.5	NM	NM	NM	ON
06-Aug-03	D	10:47	1.5	ND	NM	NM	NM	OFF
21-Aug-03	D	11:53	1.0	0.1	NM	NM	NM	ON
04-Sep-03	D	12:32	1.0	ND	NM	NM	NM	ON
18-Sep-03	D	NM	0.6	ND	NM	NM	NM	-
02-Oct-03	D	10:00	0.6	1.0	NM	NM	NM	OFF
16-Oct-03	D	11:13	1.0	0.6	NM	NM	NM	ON
03-Nov-03	D	12:05	1.0	0.8	NM	NM	NM	OFF
13-Nov-03	D	10:47	1.0	1.0	NM	NM	NM	OFF
26-Nov-03	D	11:17	1.0	1.5	NM	NM	NM	ON
08-Dec-03	D	13:20	0.5	0.3	NM	NM	NM	ON
23-Dec-03	D	12:00	1.4	ND	NM	NM	NM	OFF
06-Jan-04	D	11:38	1.0	ND	NM	NM	NM	ON
22-Jan-04	D	13:10	1.0	1.6	NM	NM	NM	OFF
05-Feb-04	D	11:21	2.5	2.1	NM	NM	NM	OFF
19-Feb-04	D	13:23	2.0	0.4	NM	NM	NM	OFF
03-Mar-04	D	11:26	1.0	0.6	NM	NM	NM	ON
18-Mar-04	D	11:24	1.0	ND	NM	NM	NM	OFF
31-Mar-04	D	13:33	0.8	1.9	NM	NM	NM	OFF
15-Apr-04	D	13:16	NM	ND	NM	NM	NM	OFF
29-Apr-04	D	13:19	1.5	1.1	NM	NM	NM	OFF
14-May-04	D	11:22	0.5	0.7	NM	NM	NM	OFF
27-May-04	D	13:24	0.5	1.2	NM	NM	NM	OFF
10-Jun-04	D	11:21	0.5	1.3	NM	NM	NM	OFF
24-Jun-04	D	11:31	1.0	1.9	NM	NM	NM	ON
15-Jul-04	D	8:55	NM	1.0	NM	NM	NM	ON
27-Aug-04	D	11:34	0.5	1.8	NM	NM	NM	ON
24-Sep-04	D	11:42	0.5	2.7	NM	NM	NM	ON
08-Oct-04	D	11:02	1.0	1.5	NM	NM	NM	OFF
22-Oct-04	D	11:03	0.5	ND	NM	NM	NM	ON
04-Nov-04	D	11:23	1.1	0.5	NM	NM	NM	ON
09-Feb-05	D	11:50	1.0	ND	NM	NM	NM	ON

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-21

VP-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-2 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
6-Dec-00	S	10:25	0.0	11.0	2.1	18.9	0.0	OFF
21-Dec-00	D	14:35	1.5	ND	NM	NM	NM	OFF
29-Dec-00	D	13:59	1.4	NM	NM	NM	NM	OFF
4-Jan-01	D	10:54	1.5	2	NM	NM	NM	OFF
4-Jan-01	D	11:58	1.8	NM	NM	NM	NM	AS-2/ON
4-Jan-01	D	12:23	1.8	NM	NM	NM	NM	AS-2/ON
4-Jan-01	D	13:00	NM	162.0	NM	NM	NM	AS-3/ON
4-Jan-01	D	13:20	NM	40.0	NM	NM	NM	AS-3/ON
4-Jan-01	D	14:08	NM	19.0	0.0	21.1	0.0	AS-3/ON
4-Jan-01	D	14:26	NM	ND	ND	20.9	ND	AS-4/ON
4-Jan-01	D	15:04	NM	88.0	ND	21	ND	AS-4/ON
5-Jan-01	D	9:06	1.8	NM	NM	NM	NM	OFF
5-Jan-01	D	-	1.8	NM	NM	NM	NM	AS-5/ON
5-Jan-01	D	11:13	1.7	NM	NM	NM	NM	AS-1/ON
5-Jan-01	D	11:44	NM	8.0	0.0	20.8	0.0	AS-1/ON
5-Jan-01	D	13:01	1.7	5.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:30	NM	16.0	0.0	20.6	0.0	ON
8-Feb-01	D	11:45	NM	1.3	0.0	20.4	0.0	ON
8-Feb-01	D	14:15	3.0	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	ON
25-May-01	D	14:04	0.9	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:03	0.5	2.0	NM	NM	NM	ON
22-Jun-01	D	11:56	NM	4.5	NM	NM	NM	OFF
10-Jul-01	D	11:24	NM	2.4	NM	NM	NM	ON
10-Jul-01	D	13:38	0.2	2.4	NM	NM	NM	OFF
20-Jul-01	D	13:03	0.6	6.0	NM	NM	NM	OFF
20-Jul-01	D	13:48	NM	3.0	NM	NM	NM	ON
3-Aug-01	D	13:01	0.9	2.0	NM	NM	NM	OFF
3-Aug-01	D	14:03	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:46	0.7	3.0	NM	NM	NM	OFF
17-Aug-01	D	13:47	NM	4.0	NM	NM	NM	ON
23-Aug-01	D	12:46	0.7	NM	NM	NM	NM	OFF
23-Aug-01	D	14:52	0.6	NM	NM	NM	NM	OFF
28-Sep-01	D	11:58	0.3	NM	NM	NM	NM	OFF
12-Oct-01	D	12:34	0.6	NM	NM	NM	NM	OFF
19-Oct-01	D	14:00	0.7	NM	NM	NM	NM	OFF
13-Dec-01	D	14:41	0.5	ND-2.0	NM	NM	NM	-
11-Jan-02	D	11:50	0.4	NM	NM	NM	NM	ON
25-Jan-02	D	-	0.9	NM	NM	NM	NM	OFF
21-Feb-02	D	13:59	0.9	0.6	NM	NM	NM	ON
7-Mar-02	D	11:37	0.7	1.1	NM	NM	NM	ON
21-Mar-02	D	11:22	1.4	0.8	NM	NM	NM	ON
4-Apr-02	D	11:33	0.8	1.5	NM	NM	NM	ON
12-Apr-02	D	13:03	0.6	ND	NM	NM	NM	ON
18-Apr-02	D	11:32	0.6	2.8	NM	NM	NM	ON
02-May-02	Not Noted	11:19	0.8	1.4	NM	NM	NM	ON
16-May-02	D	11:22	0.6	1.1	NM	NM	NM	ON
30-May-02	D	11:25	0.7	3.3	NM	NM	NM	ON
13-Jun-02	D	11:31	0.6	5.3	NM	NM	NM	ON
27-Jun-02	D	10:47	0.5	0.3	NM	NM	NM	OFF
03-Jul-02	D	11:32	0.6	3.0	NM	NM	NM	ON
11-Jul-02	D	11:00	0.5	10.0	NM	NM	NM	ON
19-Jul-02	D	11:16	0.5	7.0	NM	NM	NM	ON
25-Jul-02	S	11:40	0.5	0.7	NM	NM	NM	ON
08-Aug-02	D	11:20	0.4	3.4	NM	NM	NM	ON
22-Aug-02	D	11:55	0.4	3.1	NM	NM	NM	ON
19-Sep-02	D	11:07	0.5	7.7	NM	NM	NM	ON
03-Oct-02	D	11:39	0.5	23.9	NM	NM	NM	ON
17-Oct-02	D	11:33	0.7	3.1	NM	NM	NM	ON
01-Nov-02	D	15:33	0.5	ND	NM	NM	NM	ON
14-Nov-02	D	13:41	0.4	1.0	NM	NM	NM	ON

TABLE B-21

VP-2 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-2 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
18-Nov-02	S	13:25	0.0	1.0	NM	NM	NM	ON
26-Nov-02	D	13:11	0.5	ND	NM	NM	NM	ON
09-Dec-02	D	13:15	0.4	ND	NM	NM	NM	ON
27-Dec-02	D	10:30	0.2	ND	NM	NM	NM	OFF
10-Jan-03	D	14:40	1.0	ND	NM	NM	NM	OFF
24-Jan-03	D	14:49	1.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:32	0.6	ND	NM	NM	NM	ON
21-Feb-03	D	13:06	1.0	2.0	NM	NM	NM	ON
07-Mar-03	D	11:36	2.6	ND	NM	NM	NM	ON
21-Mar-03	D	11:50	1.0	ND	NM	NM	NM	ON
02-Apr-03	D	11:15	1.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:49	0.5	ND	NM	NM	NM	ON
02-May-03	D	15:29	0.4	ND	NM	NM	NM	ON
15-May-03	D	14:11	0.5	ND	NM	NM	NM	OFF
30-May-03	D	13:20	0.5	ND	NM	NM	NM	ON
12-Jun-03	D	14:00	0.5	ND	NM	NM	NM	OFF
30-Jun-03	D	11:29	0.5	3.2	NM	NM	NM	ON
10-Jul-03	D	11:18	0.5	2.3	NM	NM	NM	ON
24-Jul-03	D	10:56	1.0	1.2	NM	NM	NM	OFF
06-Aug-03	D	10:40	1.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:40	1.0	0.5	NM	NM	NM	ON
04-Sep-03	D	12:21	1.0	ND	NM	NM	NM	ON
18-Sep-03	D	NM	0.4	ND	NM	NM	NM	-
02-Oct-03	D	10:04	0.4	ND	NM	NM	NM	OFF
16-Oct-03	D	11:03	1.0	0.6	NM	NM	NM	ON
03-Nov-03	D	11:55	1.0	1.0	NM	NM	NM	ON
13-Nov-03	D	10:33	1.0	1.3	NM	NM	NM	OFF
26-Nov-03	D	NM	NM	NM	NM	NM	NM	-
08-Dec-03	D	12:18	0.5	0.8	NM	NM	NM	OFF
23-Dec-03	D	12:06	0.8	ND	NM	NM	NM	OFF
06-Jan-04	D	11:27	1.0	ND	NM	NM	NM	OFF
22-Jan-04	D	13:01	1.0	1.6	NM	NM	NM	OFF
05-Feb-04	D	11:11	2.0	1.8	NM	NM	NM	OFF
19-Feb-04	D	12:03	2.0	0.9	NM	NM	NM	ON
03-Mar-04	D	11:12	1.0	0.9	NM	NM	NM	ON
18-Mar-04	D	11:09	1.0	ND	NM	NM	NM	OFF
31-Mar-04	D	13:35	0.5	1.7	NM	NM	NM	OFF
15-Apr-04	D	13:01	NM	ND	NM	NM	NM	OFF
29-Apr-04	D	12:00	1.0	0.7	NM	NM	NM	OFF
14-May-04	D	11:08	0.5	ND	NM	NM	NM	OFF
27-May-04	D	11:55	0.5	ND	NM	NM	NM	ON
10-Jun-04	D	11:10	0.5	0.5	NM	NM	NM	OFF
24-Jun-04	D	11:21	1.0	1.9	NM	NM	NM	OFF
15-Jul-04	D	9:10	NM	ND	NM	NM	NM	ON
27-Aug-04	D	11:22	0.5	0.8	NM	NM	NM	ON
24-Sep-04	D	11:31	0.5	3.3	NM	NM	NM	ON
08-Oct-04	D	10:52	1.0	1.9	NM	NM	NM	OFF
22-Oct-04	D	10:53	0.5	ND	NM	NM	NM	OFF
04-Nov-04	D	11:10	0.5	ND	NM	NM	NM	OFF
09-Feb-05	D	11:29	0.8	ND	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-22

VP-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-3 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
6-Dec-00	S	10:27	0.0	28.0	3.0	17.6	0.0	OFF
21-Dec-00	D	14:35	0.1	1.0	NM	NM	NM	OFF
29-Dec-00	D	13:59	0.9	NM	NM	NM	NM	OFF
4-Jan-01	D	10:50	1.2	4.0	NM	NM	NM	OFF
4-Jan-01	D	14:40	NM	8.0	NM	NM	NM	AS-4/ON
5-Jan-01	D	9:06	1.0	NM	NM	NM	NM	OFF
5-Jan-01	D	10:09	1.1	5.0	0.0	21.2	0.1	AS-5/ON
5-Jan-01	D	10:55	NM	25	ND	21.0	ND	AS-5/ON
5-Jan-01	D	11:13	1.2	NM	NM	NM	NM	AS-1/ON
5-Jan-01	D	12:00	NM	2.0	ND	20.9	ND	AS-1/ON
5-Jan-01	D	13:08	1.2	3.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:33	NM	5.0	0.0	20.6	0.0	ON
8-Feb-01	D	11:48	NM	1.3	0.0	20.4	0.0	ON
8-Feb-01	D	14:15	2.2	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	ON
25-May-01	D	13:46	0.5	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:05	0.5	2.0	NM	NM	NM	ON
22-Jun-01	D	11:55	NM	3.0	NM	NM	NM	OFF
10-Jul-01	D	11:40	NM	4.1	NM	NM	NM	ON
10-Jul-01	D	13:42	0.2	4.1	NM	NM	NM	OFF
20-Jul-01	D	12:55	0.9	3.0	NM	NM	NM	OFF
20-Jul-01	D	13:42	NM	3.0	NM	NM	NM	ON
3-Aug-01	D	12:53	0.9	2.0	NM	NM	NM	OFF
3-Aug-01	D	14:12	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:43	0.7	4.0	NM	NM	NM	OFF
17-Aug-01	D	13:55	NM	3.0	NM	NM	NM	ON
23-Aug-01	D	12:48	0.5	NM	NM	NM	NM	OFF
23-Aug-01	D	14:49	0.5	NM	NM	NM	NM	OFF
28-Sep-01	D	12:02	0.5	NM	NM	NM	NM	OFF
12-Oct-01	D	12:31	0.7	NM	NM	NM	NM	OFF
19-Oct-01	D	14:00	0.5	NM	NM	NM	NM	OFF
13-Dec-01	D	14:33	0.3	ND	NM	NM	NM	-
11-Jan-02	D	11:52	0.6	NM	NM	NM	NM	ON
25-Jan-02	D	-	0.5	NM	NM	NM	NM	OFF
21-Feb-02	D	14:05	0.6	0.3	NM	NM	NM	OFF
7-Mar-02	D	11:35	0.4	0.8	NM	NM	NM	ON
21-Mar-02	D	11:20	0.8	0.7	NM	NM	NM	ON
4-Apr-02	D	11:36	0.5	0.7	NM	NM	NM	ON
12-Apr-02	D	12:05	0.3	ND	NM	NM	NM	OFF
18-Apr-02	D	11:32	0.6	1.7	NM	NM	NM	ON
02-May-02	Not Noted	11:21	0.5	0.8	NM	NM	NM	ON
16-May-02	D	11:19	0.4	2.0	NM	NM	NM	ON
30-May-02	D	11:20	0.5	1.4	NM	NM	NM	ON
13-Jun-02	D	11:36	0.4	2.4	NM	NM	NM	ON
27-Jun-02	D	10:43	0.3	1.1	NM	NM	NM	OFF
03-Jul-02	D	11:33	0.4	4.0	NM	NM	NM	ON
11-Jul-02	D	11:04	0.3	1.7	NM	NM	NM	ON
19-Jul-02	D	11:17	0.3	6.0	NM	NM	NM	ON
25-Jul-02	S	11:40	0.3	1.4	NM	NM	NM	ON
08-Aug-02	D	11:15	0.3	4.2	NM	NM	NM	ON
22-Aug-02	D	11:59	0.2	0.8	NM	NM	NM	ON
19-Sep-02	D	11:12	0.3	3.4	NM	NM	NM	ON
03-Oct-02	D	11:45	0.3	4.5	NM	NM	NM	ON
17-Oct-02	D	11:31	0.3	3.7	NM	NM	NM	ON
01-Nov-02	D	15:45	0.4	ND	NM	NM	NM	ON
14-Nov-02	D	13:53	0.4	1.0	NM	NM	NM	ON
18-Nov-02	S	13:47	0.0	219.0	NM	NM	NM	ON
26-Nov-02	D	13:19	0.5	ND	NM	NM	NM	ON
09-Dec-02	D	13:24	0.3	ND	NM	NM	NM	ON
27-Dec-02	D	10:22	0.3	ND	NM	NM	NM	OFF
10-Jan-03	D	14:43	1.0	ND	NM	NM	NM	OFF

TABLE B-22

VP-3 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

		VP-3						
DATE	SYSTEM STATUS (S/D)	TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
24-Jan-03	D	14:37	1.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:38	0.5	ND	NM	NM	NM	ON
21-Feb-03	D	12:57	0.8	2.0	NM	NM	NM	OFF
07-Mar-03	D	11:28	2.4	ND	NM	NM	NM	ON
21-Mar-03	D	11:42	0.7	ND	NM	NM	NM	ON
02-Apr-03	D	11:36	0.5	1.8	NM	NM	NM	ON
18-Apr-03	D	11:59	0.5	ND	NM	NM	NM	ON
02-May-03	D	15:21	0.4	ND	NM	NM	NM	ON
15-May-03	D	14:21	0.5	ND	NM	NM	NM	OFF
30-May-03	D	13:32	0.5	ND	NM	NM	NM	ON
12-Jun-03	D	14:39	0.5	ND	NM	NM	NM	OFF
30-Jun-03	D	11:52	0.5	3.2	NM	NM	NM	ON
10-Jul-03	D	11:42	0.5	2.3	NM	NM	NM	ON
24-Jul-03	D	11:28	1.0	ND	NM	NM	NM	ON
06-Aug-03	D	11:10	1.0	1.7	NM	NM	NM	ON
21-Aug-03	D	12:11	1.0	1.2	NM	NM	NM	OFF
04-Sep-03	D	12:47	1.0	ND	NM	NM	NM	ON
18-Sep-03	D	NM	0.2	1.0	NM	NM	NM	-
02-Oct-03	D	10:06	0.2	1.0	NM	NM	NM	OFF
16-Oct-03	D	11:29	1.0	0.6	NM	NM	NM	ON
03-Nov-03	D	13:11	1.0	1.0	NM	NM	NM	ON
13-Nov-03	D	11:10	1.0	1.0	NM	NM	NM	ON
26-Nov-03	D	11:33	0.5	2.4	NM	NM	NM	ON
08-Dec-03	D	13:33	0.5	1.6	NM	NM	NM	OFF
23-Dec-03	D	12:02	0.5	ND	NM	NM	NM	OFF
06-Jan-04	D	11:00	1.0	ND	NM	NM	NM	OFF
22-Jan-04	D	13:22	0.5	1.6	NM	NM	NM	OFF
05-Feb-04	D	11:33	1.5	1.4	NM	NM	NM	ON
19-Feb-04	D	13:35	1.0	0.1	NM	NM	NM	ON
03-Mar-04	D	11:41	1.0	0.6	NM	NM	NM	OFF
18-Mar-04	D	11:35	0.5	ND	NM	NM	NM	ON
31-Mar-04	D	13:38	0.4	2.2	NM	NM	NM	OFF
15-Apr-04	D	13:33	NM	1.0	NM	NM	NM	ON
29-Apr-04	D	13:30	1.0	1.5	NM	NM	NM	ON
14-May-04	D	11:41	0.5	ND	NM	NM	NM	ON
27-May-04	D	13:39	0.5	2.1	NM	NM	NM	ON
10-Jun-04	D	11:34	0.5	2.0	NM	NM	NM	ON
24-Jun-04	D	11:42	1.0	3.4	NM	NM	NM	ON
15-Jul-04	D	8:45	NM	2.0	NM	NM	NM	ON
27-Aug-04	D	11:52	0.5	3.4	NM	NM	NM	ON
24-Sep-04	D	12:01	0.5	4.0	NM	NM	NM	ON
08-Oct-04	D	11:19	1.0	2.6	NM	NM	NM	OFF
22-Oct-04	D	11:17	0.5	ND	NM	NM	NM	ON
04-Nov-04	D	11:41	0.5	1.0	NM	NM	NM	ON
09-Feb-05	D	11:42	0.5	ND	NM	NM	NM	ON

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.

NM — Not measured.

ON/OFF — Air Sparging System operation

D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-23

VP-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-4 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
5-Dec-00	S	10:28	0.0	109.0	7.4	9.7	0.0	OFF
6-Dec-00	D	-	NM	NM	NM	NM	NM	OFF
21-Dec-00	D	14:35	1.6	2.0	NM	NM	NM	OFF
29-Dec-00	D	13:59	1.5	NM	NM	NM	NM	OFF
4-Jan-01	D	11:07	1.5	ND	NM	NM	NM	OFF
4-Jan-01	D	11:58	1.5	2.0	NM	NM	NM	AS-2/ON
4-Jan-01	D	12:22	1.5	3.0	NM	NM	NM	AS-2/ON
4-Jan-01	D	13:04	NM	11.0	NM	NM	NM	AS-3/ON
4-Jan-01	D	13:17	NM	2.0	NM	NM	NM	AS-3/ON
4-Jan-01	D	13:51	NM	ND	ND	20.9	ND	AS-3/ON
5-Jan-01	D	9:10	1.5	NM	NM	NM	NM	OFF
5-Jan-01	D	-	1.7	NM	NM	NM	NM	AS-5/ON
5-Jan-01	D	11:13	1.7	NM	NM	NM	NM	AS-1/ON
5-Jan-01	D	12:01	NM	2.0	ND	20.9	ND	AS-1/ON
5-Jan-01	D	12:58	1.7	3.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:56	NM	3.0	0.0	20.6	0.0	ON
8-Feb-01	D	11:42	NM	1.8	0.0	20.4	0.0	ON
8-Feb-01	D	14:15	2.2	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	2.0	ND	20.9	ND	OFF
14-Mar-01	D	-	NM	5.0	ND	20.9	ND	ON
25-May-01	D	14:00	0.9	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:02	0.5	2.0	NM	NM	NM	ON
22-Jun-01	D	11:54	NM	4.5	NM	NM	NM	OFF
10-Jul-01	D	11:16	NM	2.4	NM	NM	NM	ON
10-Jul-01	D	13:39	0.3	2.4	NM	NM	NM	OFF
20-Jul-01	D	13:02	0.9	5.3	NM	NM	NM	OFF
20-Jul-01	D	13:43	NM	3.0	NM	NM	NM	ON
3-Aug-01	D	12:55	0.9	2.0	NM	NM	NM	OFF
3-Aug-01	D	13:59	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:39	1.0	6.0	NM	NM	NM	OFF
17-Aug-01	D	13:50	NM	6.0	NM	NM	NM	ON
23-Aug-01	D	12:53	0.9	NM	NM	NM	NM	OFF
23-Aug-01	D	14:56	0.9	NM	NM	NM	NM	OFF
28-Sep-01	D	11:52	0.9	NM	NM	NM	NM	OFF
13-Dec-01	D	15:02	0.9	4.0	NM	NM	NM	-
11-Jan-02	D	11:48	1.0	NM	NM	NM	NM	ON
25-Jan-02	D	-	1.0	NM	NM	NM	NM	OFF
21-Feb-02	D	14:10	1.0	0.4	NM	NM	NM	OFF
7-Mar-02	D	11:39	0.4	0.5	NM	NM	NM	ON
21-Mar-02	D	11:28	1.7	1.7	NM	NM	NM	ON
4-Apr-02	D	11:41	1.0	0.3	NM	NM	NM	ON
12-Apr-02	D	12:10	0.6	ND	NM	NM	NM	OFF
18-Apr-02	D	11:41	0.6	1.4	NM	NM	NM	ON
02-May-02	Not Noted	11:27	0.9	0.1	NM	NM	NM	ON
16-May-02	D	11:24	0.9	0.7	NM	NM	NM	ON
30-May-02	D	11:26	0.9	3.0	NM	NM	NM	ON
13-Jun-02	D	11:32	0.7	3.9	NM	NM	NM	ON
27-Jun-02	D	10:37	0.6	2.7	NM	NM	NM	OFF
03-Jul-02	D	11:35	0.8	1.0	NM	NM	NM	ON
11-Jul-02	D	10:58	0.6	5.5	NM	NM	NM	OFF
19-Jul-02	D	11:18	0.6	9.0	NM	NM	NM	ON
25-Jul-02	S	11:40	0.6	0.7	NM	NM	NM	ON
08-Aug-02	D	11:23	0.5	3.3	NM	NM	NM	ON
22-Aug-02	D	11:53	0.5	6.7	NM	NM	NM	ON
19-Sep-02	D	11:04	0.5	11.8	NM	NM	NM	ON
03-Oct-02	D	11:42	0.5	10.5	NM	NM	NM	ON
17-Oct-02	D	11:37	0.8	1.2	NM	NM	NM	ON
01-Nov-02	D	15:27	0.6	ND	NM	NM	NM	ON
14-Nov-02	D	14:44	0.8	ND	NM	NM	NM	OFF
18-Nov-02	S	13:08	0.0	ND	NM	NM	NM	ON
26-Nov-02	D	13:06	0.7	ND	NM	NM	NM	ON
09-Dec-02	D	13:11	0.5	ND	NM	NM	NM	ON

TABLE B-23

VP-4 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-4 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
27-Dec-02	D	10:34	0.6	ND	NM	NM	NM	OFF
10-Jan-03	D	14:51	1.0	ND	NM	NM	NM	OFF
24-Jan-03	D	14:10	1.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:28	0.7	ND	NM	NM	NM	ON
07-Mar-03	D	11:41	2.3	ND	NM	NM	NM	ON
21-Mar-03	D	11:54	1.6	ND	NM	NM	NM	ON
02-Apr-03	D	11:09	1.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:05	1.0	ND	NM	NM	NM	ON
02-May-03	D	15:34	0.6	ND	NM	NM	NM	ON
15-May-03	D	13:38	0.5	ND	NM	NM	NM	ON
30-May-03	D	12:01	0.5	ND	NM	NM	NM	OFF
12-Jun-03	D	13:51	1.0	ND	NM	NM	NM	ON
30-Jun-03	D	11:22	0.5	3.2	NM	NM	NM	ON
10-Jul-03	D	12:22	0.5	2.3	NM	NM	NM	ON
24-Jul-03	D	10:42	1.0	ND	NM	NM	NM	OFF
06-Aug-03	D	10:30	1.0	ND	NM	NM	NM	OFF
21-Aug-03	D	11:33	1.0	ND	NM	NM	NM	ON
04-Sep-03	D	12:07	1.0	ND	NM	NM	NM	ON
18-Sep-03	D	NM	0.5	ND	NM	NM	NM	-
02-Oct-03	D	10:02	0.5	ND	NM	NM	NM	OFF
16-Oct-03	D	10:58	1.0	0.6	NM	NM	NM	OFF
03-Nov-03	D	11:48	1.0	1.2	NM	NM	NM	ON
13-Nov-03	D	10:10	1.0	1.5	NM	NM	NM	OFF
26-Nov-03	D	11:04	1.0	ND	NM	NM	NM	ON
23-Dec-03	D	12:04	0.8	ND	NM	NM	NM	OFF
06-Jan-04	D	11:19	1.0	ND	NM	NM	NM	OFF
22-Jan-04	D	12:01	1.0	1.2	NM	NM	NM	OFF
05-Feb-04	D	11:05	2.0	1.8	NM	NM	NM	OFF
19-Feb-04	D	11:57	2.0	1.2	NM	NM	NM	ON
03-Mar-04	D	11:05	1.0	0.9	NM	NM	NM	ON
18-Mar-04	D	10:56	1.0	0.4	NM	NM	NM	OFF
31-Mar-04	D	13:41	0.7	3.5	NM	NM	NM	OFF
15-Apr-04	D	13:07	NM	ND	NM	NM	NM	OFF
29-Apr-04	D	11:54	1.0	0.7	NM	NM	NM	ON
14-May-04	D	10:43	0.5	ND	NM	NM	NM	OFF
27-May-04	D	11:49	0.5	ND	NM	NM	NM	ON
10-Jun-04	D	10:48	1.0	0.5	NM	NM	NM	OFF
24-Jun-04	D	11:15	1.0	2.9	NM	NM	NM	OFF
15-Jul-04	D	9:03	NM	ND	NM	NM	NM	ON
27-Aug-04	D	11:15	0.5	1.3	NM	NM	NM	ON
24-Sep-04	D	11:23	0.5	0.9	NM	NM	NM	ON
08-Oct-04	D	10:45	1.0	0.3	NM	NM	NM	OFF
22-Oct-04	D	10:47	0.5	0.6	NM	NM	NM	OFF
04-Nov-04	D	11:04	0.5	ND	NM	NM	NM	OFF
09-Feb-05	D	12:15	0.8	1.4	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.

NM — Not measured.

ON/OFF — Air Sparging System operation

D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE B-24

VP-5 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-5 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
5-Dec-00	S	10:30	0.0	14.0	0.4	20.7	0.0	OFF
6-Dec-00	D	-	NM	NM	NM	NM	NM	OFF
4-Jan-01	D	11:03	NM	6.0	NM	NM	NM	OFF
4-Jan-01	D	14:35	NM	10.0	ND	20.9	ND	AS-4/ON
4-Jan-01	D	15:17	NM	3.8	0.0	21	0.0	AS-4/ON
5-Jan-01	D	10:09	NM	2.0	0.0	21.2	0.0	AS-5/ON
5-Jan-01	D	10:49	NM	8.0	ND	21.0	ND	AS-5/ON
16-Jan-01	D	12:34	NM	17.0	0.0	20.6	0.0	ON
8-Feb-01	D	11:49	NM	1.3	0.0	20.6	0.0	ON
8-Feb-01	D	14:15	2.1	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	2.0	ND	20.9	ND	OFF
14-Mar-01	D	-	NM	ND	ND	20.9	ND	ON
25-May-01	D	14:01	0.5	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:07	0.5	2.0	NM	NM	NM	ON
22-Jun-01	D	11:51	NM	4.5	NM	NM	NM	OFF
10-Jul-01	D	11:20	NM	2.4	NM	NM	NM	ON
10-Jul-01	D	13:41	0.2	2.4	NM	NM	NM	OFF
20-Jul-01	D	13:04	0.3	2.0	NM	NM	NM	OFF
20-Jul-01	D	13:37	NM	2.0	NM	NM	NM	ON
3-Aug-01	D	12:52	0.8	2.0	NM	NM	NM	OFF
3-Aug-01	D	14:10	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:45	0.2	2.0	NM	NM	NM	OFF
17-Aug-01	D	13:48	NM	3.0	NM	NM	NM	ON
23-Aug-01	D	12:45	0.2	NM	NM	NM	NM	OFF
23-Aug-01	D	14:58	0.2	NM	NM	NM	NM	OFF
28-Sep-01	D	11:50	0.1	NM	NM	NM	NM	ON
10-Oct-01	D	12:33	0.2	NM	NM	NM	NM	OFF
19-Oct-01	D	14:00	0.2	NM	NM	NM	NM	OFF
11-Jan-02	D	11:58	0.1	NM	NM	NM	NM	ON
25-Jan-02	D	-	0.4	NM	NM	NM	NM	OFF
21-Feb-02	D	14:07	0.5	1.1	NM	NM	NM	OFF
7-Mar-02	D	11:41	0.4	0.6	NM	NM	NM	ON
21-Mar-02	D	11:17	0.7	0.7	NM	NM	NM	ON
4-Apr-02	D	11:35	0.3	0.6	NM	NM	NM	ON
12-Apr-02	D	12:13	0.4	ND	NM	NM	NM	OFF
18-Apr-02	D	11:30	0.3	3.5	NM	NM	NM	ON
02-May-02	Not Noted	11:17	0.4	2.1	NM	NM	NM	ON
16-May-02	D	11:20	0.3	0.9	NM	NM	NM	ON
30-May-02	D	11:23	0.3	5.5	NM	NM	NM	ON
13-Jun-02	D	11:29	0.3	4.7	NM	NM	NM	ON
27-Jun-02	D	10:40	0.2	1.3	NM	NM	NM	OFF
03-Jul-02	D	11:36	0.2	2.0	NM	NM	NM	ON
11-Jul-02	D	11:03	0.2	2.5	NM	NM	NM	ON
19-Jul-02	D	11:25	0.2	5.0	NM	NM	NM	ON
25-Jul-02	S	11:40	0.2	1.0	NM	NM	NM	ON
08-Aug-02	D	11:17	0.1	2.2	NM	NM	NM	ON
22-Aug-02	D	11:57	0.2	1.6	NM	NM	NM	ON
19-Sep-02	D	11:09	0.1	3.1	NM	NM	NM	ON
03-Oct-02	D	11:44	0.1	5.2	NM	NM	NM	ON
17-Oct-02	D	11:35	0.2	1.4	NM	NM	NM	ON
09-Feb-05	D	11:36	0.3	ND	NM	NM	NM	ON

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE B-25

VP-6 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-6 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
5-Dec-00	S	10:31	0.0	61.0	5.4	14.5	0.0	OFF
6-Dec-00	D	14:30	1.1	NM	NM	NM	NM	OFF
21-Dec-00	D	-	NM	NM	NM	NM	NM	OFF
29-Dec-00	D	13:59	1.5	NM	NM	NM	NM	OFF
4-Jan-01	D	11:10	1.3	4.0	NM	NM	NM	OFF
5-Jan-01	D	9:10	1.8	NM	NM	NM	NM	OFF
5-Jan-01	D	-	1.8	NM	NM	NM	NM	AS-5/ON
5-Jan-01	D	11:13	1.8	NM	NM	NM	NM	AS-1/ON
5-Jan-01	D	12:05	NM	2.0	ND	20.8	ND	AS-1/ON
5-Jan-01	D	13:03	1.8	2.0	ND	20.8	ND	AS-1/ON
16-Jan-01	D	12:10	NM	35.0	0.0	20.9	0.0	ON
8-Feb-01	D	11:38	NM	3.0	0.0	20.4	0.0	ON
8-Feb-01	D	14:15	2.1	NM	NM	NM	NM	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	OFF
14-Mar-01	D	-	NM	5	ND	21	ND	ON
25-May-01	D	13:44	0.9	2.0	NM	NM	NM	OFF
8-Jun-01	D	14:06	0.2	2.0	NM	NM	NM	ON
22-Jun-01	D	11:50	NM	4.5	NM	NM	NM	OFF
10-Jul-01	D	11:39	NM	9.0	NM	NM	NM	ON
10-Jul-01	D	13:40	0.5	7.4	NM	NM	NM	OFF
20-Jul-01	D	13:01	1.0	5.3	NM	NM	NM	OFF
20-Jul-01	D	13:39	NM	3.0	NM	NM	NM	ON
3-Aug-01	D	12:41	1.0	2.0	NM	NM	NM	OFF
3-Aug-01	D	14:11	NM	2.0	NM	NM	NM	ON
17-Aug-01	D	12:49	1.0	5.0	NM	NM	NM	OFF
17-Aug-01	D	13:58	NM	10.0	NM	NM	NM	ON
23-Aug-01	D	12:47	0.9	NM	NM	NM	NM	OFF
23-Aug-01	D	14:57	1.0	NM	NM	NM	NM	OFF
28-Sep-01	D	11:48	1.0	NM	NM	NM	NM	ON
12-Oct-01	D	12:30	1.0	NM	NM	NM	NM	OFF
19-Oct-01	D	14:00	0.9	NM	NM	NM	NM	OFF
11-Jan-02	D	12:02	1.0	NM	NM	NM	NM	OFF
25-Jan-02	D	-	0.6	NM	NM	NM	NM	OFF
21-Feb-02	D	14:02	0.8	1.2	NM	NM	NM	OFF
7-Mar-02	D	11:30	0.7	2.1	NM	NM	NM	ON
21-Mar-02	D	11:24	1.2	1.3	NM	NM	NM	ON
4-Apr-02	D	11:38	0.8	0.5	NM	NM	NM	ON
12-Apr-02	D	12:16	0.6	ND	NM	NM	NM	OFF
18-Apr-02	D	11:36	0.6	0.7	NM	NM	NM	ON
02-May-02	Not Noted	11:33	0.8	0.4	NM	NM	NM	ON
16-May-02	D	11:17	0.8	3.3	NM	NM	NM	ON
30-May-02	D	11:18	0.7	2.1	NM	NM	NM	ON
13-Jun-02	D	11:39	0.7	1.6	NM	NM	NM	ON
27-Jun-02	D	10:45	0.6	0.3	NM	NM	NM	OFF
03-Jul-02	D	11:38	0.6	1.0	NM	NM	NM	ON
11-Jul-02	D	11:06	0.1	2.0	NM	NM	NM	ON
19-Jul-02	D	11:28	0.5	1.2	NM	NM	NM	ON
25-Jul-02	S	11:40	0.5	2.1	NM	NM	NM	ON
08-Aug-02	D	11:11	0.5	16.9	NM	NM	NM	ON
22-Aug-02	D	12:02	0.5	ND	NM	NM	NM	OFF
19-Sep-02	D	11:16	0.5	2.7	NM	NM	NM	ON
03-Oct-02	D	11:50	0.5	6.7	NM	NM	NM	ON
17-Oct-02	D	11:26	0.6	13.7	NM	NM	NM	ON
01-Nov-02	D	15:40	0.6	ND	NM	NM	NM	ON
14-Nov-02	D	14:38	0.7	1.0	NM	NM	NM	OFF
18-Nov-02	S	13:37	0.0	2.0	NM	NM	NM	ON
26-Nov-02	D	13:25	0.5	ND	NM	NM	NM	ON
09-Dec-02	D	13:30	0.6	ND	NM	NM	NM	ON
27-Dec-02	D	10:15	0.7	ND	NM	NM	NM	OFF
10-Jan-03	D	14:48	1.0	ND	NM	NM	NM	OFF
24-Jan-03	D	14:29	1.0	ND	NM	NM	NM	OFF
10-Feb-03	D	13:47	0.8	ND	NM	NM	NM	ON

TABLE B-25

VP-6 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	VP-6 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
21-Feb-03	D	12:54	-1.0	2.0	NM	NM	NM	OFF
07-Mar-03	D	11:20	2.0	2.0	NM	NM	NM	ON
21-Mar-03	D	11:35	1.1	ND	NM	NM	NM	ON
02-Apr-03	D	11:30	1.0	ND	NM	NM	NM	ON
18-Apr-03	D	11:16	1.0	ND	NM	NM	NM	ON
02-May-03	D	15:17	0.6	1.0	NM	NM	NM	ON
15-May-03	D	13:54	0.5	ND	NM	NM	NM	ON
30-May-03	D	13:27	0.5	ND	NM	NM	NM	ON
12-Jun-03	D	14:21	0.5	ND	NM	NM	NM	OFF
30-Jun-03	D	11:47	0.5	3.2	NM	NM	NM	ON
10-Jul-03	D	11:37	0.5	2.3	NM	NM	NM	ON
24-Jul-03	D	11:13	1.5	4.2	NM	NM	NM	ON
06-Aug-03	D	10:57	1.0	ND	NM	NM	NM	OFF
21-Aug-03	D	12:03	1.0	0.9	NM	NM	NM	OFF
04-Sep-03	D	12:39	1.0	3.5	NM	NM	NM	ON
18-Sep-03	D	NM	0.5	ND	NM	NM	NM	-
02-Oct-03	D	10:20	0.5	ND	NM	NM	NM	OFF
16-Oct-03	D	11:20	1.0	0.9	NM	NM	NM	ON
03-Nov-03	D	13:05	1.0	1.0	NM	NM	NM	ON
13-Nov-03	D	11:00	1.0	1.0	NM	NM	NM	ON
26-Nov-03	D	11:24	1.0	3.9	NM	NM	NM	ON
08-Dec-03	D	13:26	0.5	1.6	NM	NM	NM	ON
23-Dec-03	D	12:10	0.7	ND	NM	NM	NM	OFF
06-Jan-04	D	11:44	1.0	1.5	NM	NM	NM	ON
22-Jan-04	D	13:16	1.0	2.0	NM	NM	NM	OFF
05-Feb-04	D	11:26	1.5	2.1	NM	NM	NM	OFF
19-Feb-04	D	13:29	1.0	0.1	NM	NM	NM	OFF
03-Mar-04	D	11:34	1.0	0.6	NM	NM	NM	OFF
18-Mar-04	D	11:29	1.0	0.4	NM	NM	NM	OFF
31-Mar-04	D	13:45	0.6	1.5	NM	NM	NM	OFF
15-Apr-04	D	13:26	NM	1.0	NM	NM	NM	OFF
29-Apr-04	D	13:22	1.0	2.6	NM	NM	NM	OFF
14-May-04	D	11:34	0.5	0.7	NM	NM	NM	ON
27-May-04	D	13:34	0.5	3.4	NM	NM	NM	ON
10-Jun-04	D	11:27	0.5	2.4	NM	NM	NM	OFF
24-Jun-04	D	11:36	1.0	4.9	NM	NM	NM	ON
15-Jul-04	D	8:40	NM	4.0	NM	NM	NM	ON
27-Aug-04	D	11:43	0.5	4.5	NM	NM	NM	ON
24-Sep-04	D	11:52	0.5	5.2	NM	NM	NM	ON
08-Oct-04	D	11:10	1.0	4.9	NM	NM	NM	OFF
22-Oct-04	D	11:10	0.5	1.3	NM	NM	NM	ON
04-Nov-04	D	11:32	0.5	1.4	NM	NM	NM	ON
09-Feb-05	D	12:05	0.8	2.0	NM	NM	NM	ON

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE C-1

MPE-21 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-21						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
05-Dec-00	S	13:00	0.0	828.0	5.9	13.1	1.2	OFF
16-Jan-01	S	13:27	NM	745.0	8.5	8.8	1.1	OFF
16-Jan-01	D	14:21	8.9	285.0	2.2	17.3	0.2	OFF
16-Jan-01	D	15:20	11.0	NM	NM	NM	NM	OFF
08-Feb-01	D	12:29	NM	387.0	0.0	20.1	0.1	ON
08-Feb-01	D	14:08	2.7	NM	NM	NM	NM	OFF
22-Feb-01	D	12:59	4.6	195.0	0.1	20.7	0.1	OFF
14-Mar-01	D	13:10	NM	89.0	0.1	20.5	0.1	OFF
14-Mar-01	D	14:20	NM	89.0	0.1	20.7	0.1	ON
06-Apr-01	D	12:40	NM	7.9	0.1	20.2	0.0	OFF
13-Apr-01	D	13:38	5.3	13.0	0.2	20.7	ND	OFF
20-Apr-01	D	-	NM	2.0	NM	NM	NM	OFF
18-May-01	D	11:29	3.2	26.0	0.2	20.4	ND	OFF
18-May-01	D	12:21	NM	52.0	0.2	20.6	ND	ON
01-Jun-01	D	11:39	2.0	176.0	NM	NM	NM	OFF
01-Jun-01	D	11:50	NM	166.0	NM	NM	NM	OFF
01-Jun-01	D	12:21	NM	193.0	NM	NM	NM	ON
15-Jun-01	D	13:39	0.2	3.0	NM	NM	NM	OFF
28-Jun-01	D	11:30	2.0	14.0	NM	NM	NM	OFF
27-Jul-01	D	11:13	5.5	43.0	NM	NM	NM	OFF
27-Jul-01	D	12:33	NM	66.0	NM	NM	NM	ON
17-Aug-01	D	11:35	6.0	68.0	NM	NM	NM	OFF
17-Aug-01	D	12:30	NM	45.0	NM	NM	NM	ON
07-Sep-01	D	11:52	6.5	81.0	NM	NM	NM	OFF
07-Sep-01	D	12:28	NM	100.0	NM	NM	NM	ON
28-Sep-01	D	13:32	8.0	105.0	NM	NM	NM	OFF
28-Sep-01	D	14:27	NM	92.0	NM	NM	NM	ON
26-Oct-01	D	12:16	6.4	141.0	NM	NM	NM	--
26-Oct-01	D	12:21	NM	130.0	NM	NM	NM	--
01-Nov-01	D	12:21	NM	118.0	NM	NM	NM	OFF
19-Nov-01	D	14:33	6.0	174.0	NM	NM	NM	--
28-Nov-01	D	14:33	3.6	209.0	NM	NM	NM	OFF
21-Dec-01	D	11:12	6.8	106.0	NM	NM	NM	OFF
15-Feb-02	D	15:06	7.1	54.0	NM	NM	NM	OFF
01-Mar-02	D	11:40	7.1	22.0	NM	NM	NM	OFF
15-Mar-02	D	12:50	6.0	37.0	NM	NM	NM	OFF
29-Mar-02	D	12:13	NM	7.0	NM	NM	NM	OFF
29-Mar-02	D	12:22	NM	6.0	NM	NM	NM	ON
12-Apr-02	D	11:25	6.1	18.0	NM	NM	NM	OFF
26-Apr-02	D	12:45	6.0	14.0	NM	NM	NM	OFF
10-May-02	D	11:03	6.0	7.2	NM	NM	NM	OFF
10-May-02	D	14:26	NM	8.3	NM	NM	NM	ON
24-May-02	D	11:59	6.8	1.2	NM	NM	NM	OFF
24-May-02	D	12:21	NM	1.2	NM	NM	NM	ON
06-Jun-02	D	13:28	6.9	9.0	NM	NM	NM	OFF
16-Aug-02	D	12:28	5.0	10.0	NM	NM	NM	OFF
30-Aug-02	D	10:42	4.4	46.0	NM	NM	NM	OFF
13-Sep-02	D	14:54	4.5	34.0	NM	NM	NM	OFF
26-Sep-02	D	13:01	4.2	25.0	NM	NM	NM	OFF
10-Oct-02	D	13:22	5.6	44.0	NM	NM	NM	OFF
07-Nov-02	D	11:02	5.0	10.9	NM	NM	NM	OFF
21-Nov-02	D	10:55	5.0	3.0	NM	NM	NM	OFF
05-Dec-02	D	11:44	NM	NM	NM	NM	NM	OFF
19-Dec-02	D	14:31	5.0	2.1	NM	NM	NM	OFF
02-Jan-03	D	13:50	5.0	0.9	NM	NM	NM	OFF
16-Jan-03	D	13:42	5.0	0.8	NM	NM	NM	OFF
30-Jan-03	D	14:06	3.0	8.2	NM	NM	NM	OFF
14-Feb-03	D	14:20	3.0	ND	NM	NM	NM	ON
27-Feb-03	D	13:57	5.0	2.8	NM	NM	NM	OFF
07-Mar-03	D	13:19	7.0	ND	NM	NM	NM	OFF
27-Mar-03	D	10:56	7.0	0.6	NM	NM	NM	OFF
10-Apr-03	D	11:19	7.0	1.1	NM	NM	NM	OFF

TABLE C-1

MPE-21 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-21						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
24-Apr-03	D	11:02	6.0	ND	NM	NM	NM	OFF
08-May-03	D	13:44	6.0	ND	NM	NM	NM	OFF
22-May-03	D	13:44	6.0	1.7	NM	NM	NM	OFF
05-Jun-03	D	14:10	6.0	1.2	NM	NM	NM	OFF
20-Jun-03	D	13:49	6.0	0.5	NM	NM	NM	OFF
03-Jul-03	D	10:35	6.0	1.8	NM	NM	NM	OFF
17-Jul-03	D	10:55	5.0	1.1	NM	NM	NM	OFF
14-Aug-03	D	15:11	6.0	ND	NM	NM	NM	OFF
28-Aug-03	D	10:50	5.0	ND	NM	NM	NM	OFF
11-Sep-03	S	11:25	0.0	5.6	NM	NM	NM	OFF
25-Sep-03	D	11:18	5.0	14.8	NM	NM	NM	OFF
09-Oct-03	D	11:47	4.0	16.0	NM	NM	NM	OFF
23-Oct-03	D	13:29	5.0	27.8	NM	NM	NM	OFF
06-Nov-03	D	13:54	5.0	9.1	NM	NM	NM	OFF
20-Nov-03	D	14:50	5.0	ND	NM	NM	NM	OFF
04-Dec-03	D	13:50	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:59	6.0	0.3	NM	NM	NM	OFF
30-Dec-03	D	13:38	5.0	3.6	NM	NM	NM	OFF
13-Jan-04	D	13:34	5.0	9.5	NM	NM	NM	OFF
30-Jan-04	D	14:05	5.0	12.0	NM	NM	NM	OFF
13-Feb-04	D	13:28	5.0	1.3	NM	NM	NM	OFF
26-Feb-04	D	NM	5.0	11.3	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	21.1	NM	NM	NM	OFF
24-Mar-04	D	13:44	4.0	16.6	NM	NM	NM	OFF
08-Apr-04	D	14:02	7.0	3.9	NM	NM	NM	OFF
22-Apr-04	D	13:57	6.0	1.8	NM	NM	NM	OFF
06-May-04	D	14:25	6.0	1.8	NM	NM	NM	OFF
20-May-04	D	11:14	5.0	10.5	NM	NM	NM	OFF
03-Jun-04	D	13:42	5.0	9.0	NM	NM	NM	OFF
17-Jun-04	D	11:29	5.0	3.6	NM	NM	NM	OFF
01-Jul-04	D	15:30	5.0	19.1	NM	NM	NM	OFF
08-Jul-04	D	15:05	5.0	25.0	NM	NM	NM	OFF
02-Sep-04	D	14:36	5.0	6.6	NM	NM	NM	OFF
16-Sep-04	D	14:58	5.0	5.4	NM	NM	NM	OFF
30-Sep-04	D	15:36	5.0	25.0	NM	NM	NM	OFF
15-Oct-04	D	14:05	5.0	38.6	NM	NM	NM	OFF
28-Oct-04	D	11:54	5.0	31.5	NM	NM	NM	OFF
12-Nov-04	D	11:51	4.0	30.5	NM	NM	NM	OFF
24-Nov-04	D	11:23	4.0	53.5	NM	NM	NM	OFF
09-Dec-04	D	14:00	5.0	12.2	NM	NM	NM	OFF
23-Dec-04	D	11:02	4.0	12.2	NM	NM	NM	OFF
05-Jan-05	D	13:43	5.0	2.2	NM	NM	NM	OFF
20-Jan-05	D	14:56	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:07	5.0	1.8	NM	NM	NM	OFF
03-Mar-05	D	11:38	5.0	0.2	NM	NM	NM	OFF
17-Mar-05	S	11:40	5.0	1.3	NM	NM	NM	OFF
01-Apr-05	D	11:15	6.0	1.1	NM	NM	NM	OFF
14-Apr-05	D	11:13	6.0	1.3	NM	NM	NM	OFF
28-Apr-05	D	11:41	6.0	0.5	NM	NM	NM	OFF
12-May-05	D	NM	5.0	2.3	NM	NM	NM	OFF
26-May-05	D	11:53	6.0	3.7	NM	NM	NM	OFF
09-Jun-05	D	11:01	6.0	0.5	NM	NM	NM	OFF
22-Jun-05	D	13:48	5.0	2.3	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10 6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv) CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected
NM — Not measured.
ON/OFF — *Air Sparging System operation*
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE C-2

MPE-22 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-22						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
05-Dec-00	S	13:02	0.0	1042.0	9.4	9.5	2.0	OFF
16-Jan-01	S	13:30	NM	692.0	5.0	13.9	0.8	OFF
16-Jan-01	D	14:21	8.9	443.0	3.4	16.1	0.4	OFF
16-Jan-01	D	15:20	9.9	NM	NM	NM	NM	OFF
22-Feb-01	D	13:01	7.1	120.0	0.2	20.7	0.1	OFF
14-Mar-01	D	13:10	NM	66.0	0.2	20.5	0.1	OFF
14-Mar-01	D	14:21	NM	54.0	0.2	20.8	ND	OFF
06-Apr-01	D	12:40	NM	10.0	0.4	19.7	0.0	OFF
13-Apr-01	D	13:42	13.7	12.4	0.1	20.9	ND	OFF
20-Apr-01	D	-	NM	5.0	NM	NM	NM	OFF
18-May-01	D	11:30	6.3	47.0	0.3	20.3	ND	OFF
18-May-01	D	12:22	NM	86.0	0.3	20.4	ND	ON
01-Jun-01	D	11:40	1.9	199.0	NM	NM	NM	OFF
01-Jun-01	D	11:51	NM	203.0	NM	NM	NM	OFF
01-Jun-01	D	12:22	NM	230.0	NM	NM	NM	ON
15-Jun-01	D	13:36	2.0	11.0	NM	NM	NM	OFF
28-Jun-01	D	11:29	1.8	78.0	NM	NM	NM	OFF
27-Jul-01	D	11:12	5.9	60.0	NM	NM	NM	OFF
27-Jul-01	D	12:31	NM	102.0	NM	NM	NM	ON
07-Sep-01	D	11:53	6.7	50.0	NM	NM	NM	OFF
07-Sep-01	D	12:30	NM	56.0	NM	NM	NM	ON
28-Sep-01	D	13:36	8.4	124.0	NM	NM	NM	OFF
28-Sep-01	D	14:35	NM	117.0	NM	NM	NM	ON
26-Oct-01	D	12:12	6.8	150.0	NM	NM	NM	--
26-Oct-01	D	12:22	NM	187.0	NM	NM	NM	--
01-Nov-01	D	12:16	NM	127.0	NM	NM	NM	OFF
19-Nov-01	D	14:30	6.2	122.0	NM	NM	NM	--
28-Nov-01	D	14:35	5.7	129.0	NM	NM	NM	OFF
21-Dec-01	D	11:11	7.0	54.0	NM	NM	NM	OFF
15-Feb-02	D	15:02	7.2	24.0	NM	NM	NM	OFF
01-Mar-02	D	12:00	7.2	11.0	NM	NM	NM	OFF
15-Mar-02	D	12:53	6.1	27.0	NM	NM	NM	OFF
29-Mar-02	D	12:10	NM	4.0	NM	NM	NM	OFF
29-Mar-02	D	12:21	NM	4.0	NM	NM	NM	ON
12-Apr-02	D	11:27	6.1	14.0	NM	NM	NM	OFF
26-Apr-02	D	12:41	6.0	17.0	NM	NM	NM	OFF
10-May-02	D	11:00	6.1	4.5	NM	NM	NM	OFF
10-May-02	D	14:21	NM	9.1	NM	NM	NM	ON
24-May-02	D	11:57	6.9	3.2	NM	NM	NM	OFF
24-May-02	D	12:22	NM	2.7	NM	NM	NM	ON
06-Jun-02	D	13:22	6.9	5.0	NM	NM	NM	OFF
16-Aug-02	D	12:26	5.0	13.0	NM	NM	NM	OFF
30-Aug-02	D	10:43	4.5	29.0	NM	NM	NM	OFF
13-Sep-02	D	14:53	4.5	24.0	NM	NM	NM	OFF
26-Sep-02	D	12:58	4.5	19.0	NM	NM	NM	OFF
10-Oct-02	D	13:18	5.8	21.0	NM	NM	NM	OFF
07-Nov-02	D	11:05	5.0	8.7	NM	NM	NM	OFF
21-Nov-02	D	10:51	5.0	8.1	NM	NM	NM	OFF
05-Dec-02	D	11:48	NM	NM	NM	NM	NM	OFF
19-Dec-02	D	14:33	5.0	4.1	NM	NM	NM	OFF
02-Jan-03	D	13:50	5.0	8.5	NM	NM	NM	OFF
16-Jan-03	D	13:40	5.0	10.5	NM	NM	NM	OFF
30-Jan-03	D	14:03	4.0	7.5	NM	NM	NM	OFF
14-Feb-03	D	14:18	3.0	15.2	NM	NM	NM	OFF
27-Feb-03	D	13:54	5.0	7.7	NM	NM	NM	OFF
07-Mar-03	D	13:17	7.0	3.8	NM	NM	NM	OFF
27-Mar-03	D	10:54	7.0	3.2	NM	NM	NM	OFF
10-Apr-03	D	11:08	7.0	2.6	NM	NM	NM	OFF
24-Apr-03	D	10:59	6.0	3.3	NM	NM	NM	OFF
08-May-03	D	13:41	6.0	3.7	NM	NM	NM	OFF
22-May-03	D	13:41	6.0	11.5	NM	NM	NM	OFF
05-Jun-03	D	14:08	7.0	4.4	NM	NM	NM	OFF

TABLE C-2

MPE-22 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-22						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
20-Jun-03	D	13:45	6.0	2.0	NM	NM	NM	OFF
03-Jul-03	D	10:33	6.0	6.1	NM	NM	NM	OFF
17-Jul-03	D	10:53	5.0	3.8	NM	NM	NM	OFF
14-Aug-03	D	15:09	6.0	ND	NM	NM	NM	OFF
28-Aug-03	D	10:46	5.0	0.9	NM	NM	NM	OFF
11-Sep-03	S	11:22	0.0	15.0	NM	NM	NM	OFF
25-Sep-03	D	11:16	5.0	15.2	NM	NM	NM	OFF
09-Oct-03	D	11:43	4.0	21.0	NM	NM	NM	OFF
23-Oct-03	D	13:27	4.0	21.0	NM	NM	NM	OFF
06-Nov-03	D	13:52	5.0	5.1	NM	NM	NM	OFF
20-Nov-03	D	14:47	5.0	ND	NM	NM	NM	OFF
04-Dec-03	D	13:43	5.0	10.0	NM	NM	NM	OFF
18-Dec-03	D	15:01	6.0	1.0	NM	NM	NM	OFF
30-Dec-03	D	13:40	5.0	2.6	NM	NM	NM	OFF
13-Jan-04	D	13:32	5.0	4.7	NM	NM	NM	OFF
30-Jan-04	D	14:10	5.0	11.0	NM	NM	NM	OFF
13-Feb-04	D	13:30	5.0	0.6	NM	NM	NM	OFF
26-Feb-04	D	14:30	5.0	8.4	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	16.1	NM	NM	NM	OFF
24-Mar-04	D	13:42	4.0	8.5	NM	NM	NM	OFF
08-Apr-04	D	14:05	7.0	2.1	NM	NM	NM	OFF
22-Apr-04	D	13:54	6.0	0.9	NM	NM	NM	OFF
06-May-04	D	14:25	6.0	0.8	NM	NM	NM	OFF
20-May-04	D	11:08	5.0	1.1	NM	NM	NM	OFF
03-Jun-04	D	13:46	5.0	3.2	NM	NM	NM	OFF
17-Jun-04	D	11:32	5.0	1.0	NM	NM	NM	OFF
01-Jul-04	D	15:26	5.0	31.3	NM	NM	NM	OFF
08-Jul-04	D	15:00	5.0	33.0	NM	NM	NM	OFF
02-Sep-04	D	14:32	5.0	41.3	NM	NM	NM	OFF
16-Sep-04	D	14:52	5.0	44.3	NM	NM	NM	OFF
30-Sep-04	D	15:32	5.0	35.0	NM	NM	NM	OFF
15-Oct-04	D	14:00	5.0	41.5	NM	NM	NM	OFF
28-Oct-04	D	11:50	5.0	29.3	NM	NM	NM	OFF
12-Nov-04	D	11:52	4.0	23.7	NM	NM	NM	OFF
24-Nov-04	D	11:18	4.0	36.6	NM	NM	NM	OFF
09-Dec-04	D	14:00	5.0	6.2	NM	NM	NM	OFF
23-Dec-04	D	10:58	5.0	7.5	NM	NM	NM	OFF
05-Jan-05	D	13:41	5.0	1.4	NM	NM	NM	OFF
20-Jan-05	D	14:53	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:04	5.0	4.0	NM	NM	NM	OFF
03-Mar-05	D	11:35	5.0	0.0	NM	NM	NM	OFF
17-Mar-05	D	11:36	5.0	0.2	NM	NM	NM	OFF
01-Apr-05	D	11:10	6.0	1.1	NM	NM	NM	OFF
14-Apr-05	D	11:10	6.0	1.4	NM	NM	NM	OFF
28-Apr-05	D	11:39	6.0	1.3	NM	NM	NM	OFF
12-May-05	D	NM	5.0	3.3	NM	NM	NM	OFF
26-May-05	D	11:47	6.0	4.4	NM	NM	NM	OFF
09-Jun-05	D	10:58	6.0	0.5	NM	NM	NM	OFF
22-Jun-05	D	13:45	5.0	1.4	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv)
CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE C-3

MPE-23 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-23						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	$A.S._1$ (on/off)
05-Dec-00	S	13:04	0.0	94.0	7.4	11.0	0.0	OFF
16-Jan-01	S	13:26	NM	82.0	4.0	20.4	0.0	OFF
16-Jan-01	D	14:20	8.8	16.0	2.8	16.6	0.0	OFF
16-Jan-01	D	15:20	12.5	NM	NM	NM	NM	OFF
08-Feb-01	D	12:27	NM	38.0	0.0	20.2	0.0	ON
08-Feb-01	D	14:08	6.5	NM	NM	NM	NM	OFF
22-Feb-01	D	13:03	7.5	28.0	0.2	20.7	ND	OFF
14-Mar-01	D	13:10	NM	17.0	0.1	20.5	ND	OFF
14-Mar-01	D	14:22	NM	14.0	0.1	20.8	ND	ON
06-Apr-01	D	12:40	NM	13.0	0.1	20.2	0.0	OFF
13-Apr-01	D	13:34	8.4	12.4	0.2	20.7	ND	OFF
20-Apr-01	D	-	NM	2.0	NM	NM	NM	OFF
18-May-01	D	11:31	5.1	14.0	0.4	20.2	ND	OFF
18-May-01	D	12:23	NM	34.0	0.4	20.3	ND	ON
01-Jun-01	D	11:41	1.9	9.0	NM	NM	NM	OFF
01-Jun-01	D	12:23	NM	10.0	NM	NM	NM	ON
15-Jun-01	D	13:37	1.9	5.0	NM	NM	NM	OFF
28-Jun-01	D	11:28	1.7	7.0	NM	NM	NM	OFF
27-Jul-01	D	11:14	5.2	11.0	NM	NM	NM	OFF
27-Jul-01	D	12:32	NM	19.0	NM	NM	NM	ON
17-Aug-01	D	11:37	6.0	9.0	NM	NM	NM	OFF
17-Aug-01	D	12:32	NM	6.0	NM	NM	NM	ON
07-Sep-01	D	11:51	6.5	10.0	NM	NM	NM	OFF
07-Sep-01	D	12:29	NM	10.0	NM	NM	NM	ON
28-Sep-01	D	13:34	7.8	28.0	NM	NM	NM	OFF
28-Sep-01	D	14:33	NM	27.0	NM	NM	NM	ON
26-Oct-01	D	12:08	6.3	24.0	NM	NM	NM	--
26-Oct-01	D	12:23	NM	26.0	NM	NM	NM	--
01-Nov-01	D	12:27	NM	10.0	NM	NM	NM	OFF
19-Nov-01	D	13:32	5.8	20.0	NM	NM	NM	--
28-Nov-01	D	14:32	5.5	23.0	NM	NM	NM	OFF
21-Dec-01	D	11:07	6.5	9.9	NM	NM	NM	OFF
15-Feb-02	D	15:10	6.8	3.0	NM	NM	NM	OFF
01-Mar-02	D	11:45	7.1	1.0	NM	NM	NM	OFF
15-Mar-02	D	12:48	6.1	4.0	NM	NM	NM	OFF
29-Mar-02	D	12:11	NM	0.6	NM	NM	NM	OFF
29-Mar-02	D	12:20	NM	0.6	NM	NM	NM	ON
12-Apr-02	D	11:37	6.0	4.0	NM	NM	NM	OFF
26-Apr-02	D	12:46	5.9	2.0	NM	NM	NM	OFF
10-May-02	D	10:56	6.0	ND	NM	NM	NM	OFF
10-May-02	D	14:21	NM	ND	NM	NM	NM	ON
24-May-02	D	11:55	6.6	ND	NM	NM	NM	OFF
24-May-02	D	12:23	NM	ND	NM	NM	NM	ON
06-Jun-02	D	13:33	6.9	ND	NM	NM	NM	OFF
16-Aug-02	D	12:24	5.0	2.0	NM	NM	NM	ON
30-Aug-02	D	10:44	4.2	3.0	NM	NM	NM	OFF
13-Sep-02	D	14:52	4.0	2.7	NM	NM	NM	OFF
26-Sep-02	D	12:55	4.0	1.1	NM	NM	NM	OFF
10-Oct-02	D	13:10	4.9	ND	NM	NM	NM	OFF
07-Nov-02	D	11:00	5.0	0.5	NM	NM	NM	OFF
21-Nov-02	D	10:57	5.0	0.3	NM	NM	NM	OFF
05-Dec-02	D	11:41	5.0	0.1	NM	NM	NM	OFF
19-Dec-02	D	14:29	5.0	ND	NM	NM	NM	OFF
02-Jan-03	D	13:52	6.0	ND	NM	NM	NM	OFF
16-Jan-03	D	13:42	5.0	ND	NM	NM	NM	OFF
30-Jan-03	D	14:08	5.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:22	3.0	ND	NM	NM	NM	ON
27-Feb-03	D	13:59	5.0	ND	NM	NM	NM	OFF
07-Mar-03	D	13:19	7.0	0.1	NM	NM	NM	OFF
27-Mar-03	D	10:58	7.0	ND	NM	NM	NM	OFF
10-Apr-03	D	11:11	7.0	0.6	NM	NM	NM	OFF
24-Apr-03	D	11:06	6.0	ND	NM	NM	NM	OFF

TABLE C-3

MPE-23 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-23						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
08-May-03	D	13:46	6.0	ND	NM	NM	NM	OFF
22-May-03	D	13:46	6.0	0.5	NM	NM	NM	OFF
05-Jun-03	D	14:11	6.0	0.3	NM	NM	NM	OFF
20-Jun-03	D	13:53	6.0	0.5	NM	NM	NM	OFF
03-Jul-03	D	10:37	6.0	1.2	NM	NM	NM	OFF
17-Jul-03	D	10:57	5.0	ND	NM	NM	NM	OFF
14-Aug-03	D	15:07	6.0	0.3	NM	NM	NM	OFF
28-Aug-03	D	10:48	5.0	ND	NM	NM	NM	OFF
11-Sep-03	S	11:21	0.0	5.7	NM	NM	NM	OFF
25-Sep-03	D	11:20	5.0	1.2	NM	NM	NM	OFF
09-Oct-03	D	11:50	4.0	<1.0	NM	NM	NM	OFF
23-Oct-03	D	13:31	5.0	1.8	NM	NM	NM	OFF
06-Nov-03	D	13:55	5.0	ND	NM	NM	NM	OFF
20-Nov-03	D	14:52	5.0	ND	NM	NM	NM	OFF
04-Dec-03	D	13:44	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	14:58	6.0	ND	NM	NM	NM	OFF
30-Dec-03	D	13:36	5.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:36	5.0	ND	NM	NM	NM	OFF
30-Jan-04	D	14:00	5.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:18	5.0	0.2	NM	NM	NM	OFF
26-Feb-04	D	NM	5.0	0.3	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	1.1	NM	NM	NM	OFF
24-Mar-04	D	13:46	4.0	1.7	NM	NM	NM	OFF
08-Apr-04	D	13:58	7.0	2.0	NM	NM	NM	OFF
22-Apr-04	D	13:59	6.0	0.4	NM	NM	NM	OFF
06-May-04	D	14:27	6.0	0.3	NM	NM	NM	OFF
20-May-04	D	11:18	5.0	ND	NM	NM	NM	OFF
03-Jun-04	D	13:38	5.0	1.3	NM	NM	NM	OFF
17-Jun-04	D	11:23	5.0	0.6	NM	NM	NM	OFF
01-Jul-04	D	15:34	5.0	0.7	NM	NM	NM	OFF
08-Jul-04	D	15:10	5.0	1.2	NM	NM	NM	OFF
02-Sep-04	D	14:40	5.0	ND	NM	NM	NM	OFF
16-Sep-04	D	15:03	5.0	ND	NM	NM	NM	OFF
30-Sep-04	D	15:42	5.0	2.0	NM	NM	NM	OFF
15-Oct-04	D	14:10	5.0	16.2	NM	NM	NM	OFF
28-Oct-04	D	12:00	5.0	1.4	NM	NM	NM	OFF
12-Nov-04	D	11:50	4.0	0.2	NM	NM	NM	OFF
24-Nov-04	D	11:26	4.0	1.8	NM	NM	NM	OFF
09-Dec-04	D	14:00	5.0	2.0	NM	NM	NM	OFF
23-Dec-04	D	11:08	4.0	1.2	NM	NM	NM	OFF
05-Jan-05	D	13:45	5.0	<1	NM	NM	NM	OFF
20-Jan-05	D	15:00	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	11:11	5.0	ND	NM	NM	NM	OFF
03-Mar-05	D	11:40	5.0	0.0	NM	NM	NM	OFF
17-Mar-05	D	11:43	5.0	0.2	NM	NM	NM	OFF
01-Apr-05	D	11:20	6.0	0.7	NM	NM	NM	OFF
14-Apr-05	D	11:16	6.0	0.6	NM	NM	NM	OFF
28-Apr-05	D	11:44	6.0	0.0	NM	NM	NM	OFF
12-May-05	D	NM	5.0	0.5	NM	NM	NM	OFF
26-May-05	D	11:56	6.0	1.0	NM	NM	NM	OFF
09-Jun-05	D	11:05	6.0	0.9	NM	NM	NM	OFF
22-Jun-05	D	13:50	5.0	0.9	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND Not detected

NM Not measured

ON/OFF Air Sparging System operation

D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE C-4

MPE-24 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-24 TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
05-Dec-00	S	13:06	0.0	289.0	7.0	12.3	0.2	OFF
16-Jan-01	S	13:29	NM	188.0	7.5	11.2	0.1	OFF
16-Jan-01	D	14:22	0.0	57.0	2.2	17.7	0.0	OFF
16-Jan-01	D	15:20	0.0	NM	NM	NM	NM	OFF
08-Feb-01	D	12:26	NM	135.0	0.0	20.2	0.0	ON
08-Feb-01	D	14:07	0.0	NM	NM	NM	NM	OFF
22-Feb-01	D	13:04	<0.1	36.0	0.4	20.5	ND	OFF
14-Mar-01	D	13:10	NM	28.0	0.1	20.7	ND	OFF
14-Mar-01	D	14:23	NM	20.0	0.1	20.8	ND	ON
06-Apr-01	D	12:40	NM	13.0	0.5	19.4	0.0	OFF
13-Apr-01	D	13:44	9.0	1.3	0.1	20.9	ND	OFF
20-Apr-01	D	-	NM	ND	NM	NM	NM	OFF
18-May-01	D	11:32	4.9	17.0	0.2	20.4	ND	OFF
18-May-01	D	12:24	NM	30.0	0.2	20.5	ND	ON
01-Jun-01	D	11:42	1.9	23.0	NM	NM	NM	OFF
01-Jun-01	D	12:24	NM	24.0	NM	NM	NM	ON
15-Jun-01	D	13:38	1.9	5.0	NM	NM	NM	OFF
28-Jun-01	D	11:32	1.8	21.0	NM	NM	NM	OFF
27-Jul-01	D	11:11	5.5	11.0	NM	NM	NM	OFF
27-Jul-01	D	12:29	NM	26.0	NM	NM	NM	ON
17-Aug-01	D	11:36	5.9	22.0	NM	NM	NM	OFF
17-Aug-01	D	12:29	NM	16.0	NM	NM	NM	ON
07-Sep-01	D	11:55	6.5	2.0	NM	NM	NM	OFF
07-Sep-01	D	12:32	NM	2.0	NM	NM	NM	ON
28-Sep-01	D	13:30	7.9	37.0	NM	NM	NM	OFF
28-Sep-01	D	14:30	NM	37.0	NM	NM	NM	ON
26-Oct-01	D	12:05	6.1	11.0	NM	NM	NM	--
26-Oct-01	D	12:24	NM	50.0	NM	NM	NM	--
01-Nov-01	D	12:10	NM	27.0	NM	NM	NM	OFF
19-Nov-01	D	13:12	5.5	27.0	NM	NM	NM	--
28-Nov-01	D	14:30	5.2	25.0	NM	NM	NM	--
21-Dec-01	D	11:10	6.2	10.0	NM	NM	NM	OFF
15-Feb-02	D	15:04	6.9	5.0	NM	NM	NM	OFF
01-Mar-02	D	11:55	6.9	0.9	NM	NM	NM	OFF
15-Mar-02	D	12:41	6.0	7.0	NM	NM	NM	OFF
29-Mar-02	D	12:09	NM	1.6	NM	NM	NM	OFF
29-Mar-02	D	12:23	NM	1.8	NM	NM	NM	ON
12-Apr-02	D	11:30	6.1	6.0	NM	NM	NM	OFF
26-Apr-02	D	12:44	5.8	5.0	NM	NM	NM	OFF
10-May-02	D	10:53	5.8	2.0	NM	NM	NM	OFF
10-May-02	D	14:21	NM	2.6	NM	NM	NM	ON
24-May-02	D	12:04	6.8	1.7	NM	NM	NM	OFF
24-May-02	D	12:24	NM	1.2	NM	NM	NM	ON
06-Jun-02	D	13:26	6.8	ND	NM	NM	NM	OFF
16-Aug-02	D	12:22	5.0	6.0	NM	NM	NM	ON
30-Aug-02	D	10:40	4.2	13.0	NM	NM	NM	OFF
13-Sep-02	D	14:55	4.2	16.0	NM	NM	NM	OFF
26-Sep-02	D	12:53	4.5	6.0	NM	NM	NM	OFF
10-Oct-02	D	13:28	4.2	7.0	NM	NM	NM	OFF
07-Nov-02	D	11:07	4.0	1.6	NM	NM	NM	OFF
21-Nov-02	D	10:48	5.0	1.2	NM	NM	NM	OFF
05-Dec-02	D	11:52	NM	NM	NM	NM	NM	OFF
19-Dec-02	D	14:35	5.0	ND	NM	NM	NM	OFF
02-Jan-03	D	13:46	5.0	ND	NM	NM	NM	OFF
16-Jan-03	D	13:38	5.0	ND	NM	NM	NM	OFF
30-Jan-03	D	14:01	5.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:16	3.0	ND	NM	NM	NM	OFF
27-Feb-03	D	13:51	5.0	4.9	NM	NM	NM	OFF
07-Mar-03	D	13:15	7.0	2.9	NM	NM	NM	OFF
27-Mar-03	D	10:52	7.0	1.0	NM	NM	NM	OFF
10-Apr-03	D	11:06	7.0	0.9	NM	NM	NM	OFF
24-Apr-03	D	10:54	6.0	ND	NM	NM	NM	OFF

TABLE C-4

MPE-24 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-24						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
08-May-03	D	13:39	6.0	0.2	NM	NM	NM	ON
22-May-03	D	13:39	6.0	2.8	NM	NM	NM	OFF
05-Jun-03	D	14:06	7.0	1.9	NM	NM	NM	OFF
20-Jun-03	D	13:40	6.0	0.6	NM	NM	NM	OFF
03-Jul-03	D	10:30	6.0	3.1	NM	NM	NM	OFF
17-Jul-03	D	10:51	5.0	1.1	NM	NM	NM	OFF
14-Aug-03	D	15:14	6.0	ND	NM	NM	NM	OFF
28-Aug-03	D	10:44	5.0	0.3	NM	NM	NM	OFF
11-Sep-03	S	11:28	0.0	13.2	NM	NM	NM	OFF
25-Sep-03	D	11:14	5.0	9.9	NM	NM	NM	OFF
09-Oct-03	D	11:40	4.0	9.0	NM	NM	NM	OFF
23-Oct-03	D	13:25	5.0	6.9	NM	NM	NM	OFF
06-Nov-03	D	13:49	5.0	ND	NM	NM	NM	OFF
20-Nov-03	D	14:11	5.0	ND	NM	NM	NM	OFF
04-Dec-03	D	13:40	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	15:09	6.0	ND	NM	NM	NM	OFF
30-Dec-03	D	13:40	6.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:30	5.0	1.2	NM	NM	NM	OFF
30-Jan-04	D	14:15	5.0	3.0	NM	NM	NM	ON
13-Feb-04	D	13:19	5.0	2.8	NM	NM	NM	OFF
26-Feb-04	D	NM	5.0	5.9	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	8.6	NM	NM	NM	OFF
24-Mar-04	D	13:41	4.0	1.9	NM	NM	NM	OFF
08-Apr-04	D	14:07	7.0	1.9	NM	NM	NM	OFF
22-Apr-04	D	13:52	6.0	0.9	NM	NM	NM	OFF
06-May-04	D	14:21	6.0	0.5	NM	NM	NM	OFF
24-May-04	D	11:04	5.0	4.2	NM	NM	NM	OFF
03-Jun-04	D	13:49	5.0	2.2	NM	NM	NM	OFF
17-Jun-04	D	11:37	5.0	3.5	NM	NM	NM	OFF
01-Jul-04	D	15:22	5.0	6.0	NM	NM	NM	OFF
08-Jul-04	D	14:55	5.0	4.3	NM	NM	NM	OFF
02-Sep-04	D	14:28	5.0	6.3	NM	NM	NM	OFF
03-Sep-04	D	14:49	5.0	ND	NM	NM	NM	OFF
30-Sep-04	D	15:27	5.0	5.0	NM	NM	NM	OFF
15-Oct-04	D	13:55	5.0	25.4	NM	NM	NM	OFF
28-Oct-04	D	11:46	5.0	3.6	NM	NM	NM	OFF
12-Nov-04	D	11:53	4.0	5.6	NM	NM	NM	OFF
24-Nov-04	D	11:12	4.0	12.8	NM	NM	NM	OFF
09-Dec-04	D	14:00	5.0	2.8	NM	NM	NM	NM
23-Dec-04	D	10:55	5.0	4.1	NM	NM	NM	NM
05-Jan-05	D	13:37	5.0	<1	NM	NM	NM	NM
20-Jan-05	D	14:48	5.0	<1	NM	NM	NM	NM
03-Feb-05	D	11:00	5.0	2.0	NM	NM	NM	NM
03-Mar-05	D	11:33	5.0	0.0	NM	NM	NM	NM
17-Mar-05	D	11:33	5.0	0.0	NM	NM	NM	NM
01-Apr-05	D	11:06	6.0	0.6	NM	NM	NM	NM
14-Apr-05	D	11:08	6.0	0.7	NM	NM	NM	NM
28-Apr-05	D	11:37	6.0	0.0	NM	NM	NM	NM
12-May-05	D	NM	5.0	2.4	NM	NM	NM	NM
26-May-05	D	11:43	6.0	1.3	NM	NM	NM	NM
09-Jun-05	D	10:55	6.0	1.3	NM	NM	NM	NM
22-Jun-05	D	13:43	5.0	1.3	NM	NM	NM	NM

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv)
CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE C-5

MPE-25 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-25						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
05-Dec-00	S	13:09	0.0	1346.0	11.8	7.7	8.4	OFF
16-Jan-01	S	13:37	NM	815.0	4.7	14.7	0.7	OFF
16-Jan-01	D	14:23	9.0	514.0	2.5	17.4	0.5	OFF
16-Jan-01	D	15:20	9.0	NM	NM	NM	NM	OFF
08-Feb-01	D	12:25	NM	216.0	0.1	20.0	0.0	ON
08-Feb-01	D	14:06	3.5	NM	NM	NM	NM	OFF
22-Feb-01	D	13:05	2.2	102.0	0.6	20.3	0.1	OFF
14-Mar-01	D	13:20	NM	136.0	0.7	19.9	0.2	OFF
14-Mar-01	D	14:25	NM	132.0	0.8	20.1	0.2	ON
06-Apr-01	D	12:40	NM	8.0	0.2	20.4	0.0	OFF
13-Apr-01	D	13:49	3.9	1.3	0.1	20.9	ND	OFF
20-Apr-01	D	-	NM	ND	NM	NM	NM	OFF
18-May-01	D	11:33	6.0	23.0	0.3	20.4	ND	OFF
18-May-01	D	12:25	NM	33.0	0.3	20.5	ND	ON
01-Jun-01	D	11:43	1.9	39.0	NM	NM	NM	OFF
01-Jun-01	D	12:25	NM	33.0	NM	NM	NM	ON
15-Jun-01	D	13:35	2.0	15.0	NM	NM	NM	OFF
28-Jun-01	D	11:31	1.9	22.0	NM	NM	NM	OFF
27-Jul-01	D	11:10	5.9	9.0	NM	NM	NM	OFF
27-Jul-01	D	12:30	NM	18.0	NM	NM	NM	ON
17-Aug-01	D	11:33	6.0	24.0	NM	NM	NM	OFF
17-Aug-01	D	12:28	NM	14.0	NM	NM	NM	ON
07-Sep-01	D	11:54	6.9	4.0	NM	NM	NM	OFF
07-Sep-01	D	12:31	NM	5.0	NM	NM	NM	ON
28-Sep-01	D	13:28	8.2	62.0	NM	NM	NM	OFF
28-Sep-01	D	14:25	NM	56.0	NM	NM	NM	ON
26-Oct-01	D	12:02	7.0	51.0	NM	NM	NM	--
26-Oct-01	D	12:25	NM	117.0	NM	NM	NM	--
01-Nov-01	D	12:05	NM	76 0	NM	NM	NM	OFF
19-Nov-01	D	14:26	6.2	96.0	NM	NM	NM	--
28-Nov-01	D	14:28	5.7	69.0	NM	NM	NM	OFF
21-Dec-01	D	11:09	7.0	22.0	NM	NM	NM	OFF
15-Feb-02	D	15:00	7.5	12.0	NM	NM	NM	OFF
01-Mar-02	D	11:50	7.3	1.0	NM	NM	NM	OFF
15-Mar-02	D	12:39	6.3	6.0	NM	NM	NM	OFF
29-Mar-02	D	12:12	NM	1.1	NM	NM	NM	OFF
29-Mar-02	D	12:24	NM	0.8	NM	NM	NM	ON
12-Apr-02	D	11:33	6.2	4.0	NM	NM	NM	OFF
26-Apr-02	D	12:42	6.1	2.0	NM	NM	NM	OFF
10-May-02	D	10:50	6.1	1.5	NM	NM	NM	OFF
10-May-02	D	14:21	NM	2.0	NM	NM	NM	ON
24-May-02	D	12:01	7.0	ND	NM	NM	NM	OFF
24-May-02	D	12:24	NM	1.2	NM	NM	NM	ON
06-Jun-02	D	13:30	7.0	ND	NM	NM	NM	OFF
16-Aug-02	D	12:20	5.1	6.0	NM	NM	NM	ON
30-Aug-02	D	10:37	4.6	13.0	NM	NM	NM	OFF
13-Sep-02	D	14:56	4.5	20.0	NM	NM	NM	OFF
26-Sep-02	D	12:52	4.5	5.0	NM	NM	NM	OFF
10-Oct-02	D	13:33	4.5	7.0	NM	NM	NM	OFF
07-Nov-02	D	11:09	5.0	0.6	NM	NM	NM	OFF
21-Nov-02	D	10:45	6.0	0.9	NM	NM	NM	OFF
05-Dec-02	D	11:55	5.0	0.1	NM	NM	NM	OFF
19-Dec-02	D	14:38	6.0	ND	NM	NM	NM	OFF
02-Jan-03	D	13:44	6.0	0.2	NM	NM	NM	OFF
16-Jan-03	D	13:36	6.0	ND	NM	NM	NM	OFF
30-Jan-03	D	13:59	6.0	ND	NM	NM	NM	OFF
14-Feb-03	D	14:14	6.0	ND	NM	NM	NM	OFF
28-Feb-03	D	13:49	6.0	3.4	NM	NM	NM	OFF
07-Mar-03	D	13:13	7.0	0.7	NM	NM	NM	OFF
27-Mar-03	D	10:50	7.0	0.5	NM	NM	NM	OFF
10-Apr-03	D	11:03	7.0	0.6	NM	NM	NM	OFF
24-Apr-03	D	10:55	6.0	ND	NM	NM	NM	OFF

TABLE C-5

MPE-25 AS/SVE Field Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	MPE-25						
		TIME	VAC ("H_2O)	CONC (ppmv)	CO_2 (%)	O_2 (%)	CH_4 (%)	A.S. (on/off)
08-May-03	D	13:17	6.0	0.1	NM	NM	NM	ON
22-May-03	D	13:35	6.0	1.7	NM	NM	NM	OFF
05-Jun-03	D	14:04	7.0	2.1	NM	NM	NM	OFF
20-Jun-03	D	13:36	6.0	1.8	NM	NM	NM	OFF
03-Jul-03	D	10:28	6.0	3.3	NM	NM	NM	OFF
17-Jul-03	D	10:44	5.0	3.5	NM	NM	NM	OFF
14-Aug-03	D	15:16	6.0	ND	NM	NM	NM	OFF
28-Aug-03	D	10:42	5.0	0.3	NM	NM	NM	OFF
11-Sep-03	S	11:32	0.0	6.9	NM	NM	NM	OFF
25-Sep-03	D	11:12	5.0	8.3	NM	NM	NM	OFF
09-Oct-03	D	11:35	4.0	7.0	NM	NM	NM	OFF
23-Oct-03	D	13:23	5.0	6.1	NM	NM	NM	OFF
06-Nov-03	D	13:47	5.0	ND	NM	NM	NM	OFF
20-Nov-03	D	14:07	5.0	ND	NM	NM	NM	OFF
04-Dec-03	D	13:40	5.0	ND	NM	NM	NM	OFF
18-Dec-03	D	15:12	6.0	ND	NM	NM	NM	OFF
30-Dec-03	D	13:35	6.0	ND	NM	NM	NM	OFF
13-Jan-04	D	13:28	6.0	0.4	NM	NM	NM	OFF
30-Jan-04	D	14:20	5.0	ND	NM	NM	NM	OFF
13-Feb-04	D	13:21	6.0	0.2	NM	NM	NM	OFF
26-Feb-04	D	NM	5.0	0.3	NM	NM	NM	OFF
11-Mar-04	D	NM	4.0	1.3	NM	NM	NM	OFF
24-Mar-04	D	13:38	5.0	1.9	NM	NM	NM	OFF
08-Apr-04	D	14:10	7.0	1.6	NM	NM	NM	OFF
22-Apr-04	D	13:48	6.0	1.3	NM	NM	NM	OFF
06-May-04	D	14:19	6.0	0.7	NM	NM	NM	OFF
20-May-04	D	10:58	5.0	ND	NM	NM	NM	OFF
03-Jun-04	D	13:53	5.0	1.5	NM	NM	NM	OFF
17-Jun-04	D	11:42	5.0	ND	NM	NM	NM	OFF
01-Jul-04	D	15:17	5.0	5.5	NM	NM	NM	OFF
08-Jul-04	D	14:50	5.0	3.2	NM	NM	NM	OFF
02-Sep-04	D	14:24	5.0	1.5	NM	NM	NM	OFF
16-Sep-04	D	14:44	5.0	ND	NM	NM	NM	OFF
30-Sep-04	D	15:22	5.0	6.0	NM	NM	NM	OFF
15-Oct-04	D	13:50	5.0	43.1	NM	NM	NM	OFF
28-Oct-04	D	11:43	5.0	1.4	NM	NM	NM	OFF
12-Nov-04	D	11:55	4.0	0.3	NM	NM	NM	OFF
24-Nov-04	D	11:08	3.0	2.2	NM	NM	NM	OFF
09-Dec-04	D	14:00	5.0	1.0	NM	NM	NM	OFF
23-Dec-04	D	10:52	5.0	2.5	NM	NM	NM	OFF
05-Jan-05	D	13:32	5.0	<1	NM	NM	NM	OFF
20-Jan-05	D	14:43	5.0	<1	NM	NM	NM	OFF
03-Feb-05	D	10:54	5.0	ND	NM	NM	NM	OFF
03-Mar-05	D	11:30	5.0	0.0	NM	NM	NM	OFF
17-Mar-05	D	11:30	5.0	0.0	NM	NM	NM	OFF
01-Apr-05	D	11:03	6.0	0.5	NM	NM	NM	OFF
14-Apr-05	D	11:04	6.0	1.7	NM	NM	NM	OFF
28-Apr-05	D	11:33	6.0	0.0	NM	NM	NM	OFF
12-May-05	D	NM	5.0	0.7	NM	NM	NM	OFF
26-May-05	D	11:40	6.0	1.2	NM	NM	NM	OFF
09-Jun-05	D	10:55	6.0	1.0	NM	NM	NM	OFF
23-Jun-05	D	13:42	5.0	1.5	NM	NM	NM	OFF

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10 6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv) CO2, O2 and CH4 measured with a Landtec GA-90 gas monitor

ND — Not detected.
NM — Not measured
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey

TABLE D-1

Combined SVE Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Combined Influent (C-1)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
06-Dec-00	S	11:43	1.7	321.0
06-Dec-00	S	11:45	1.7	NM
06-Dec-00	S	11:56	1.7	328.0
06-Dec-00	S	12:14	1.7	704.0
06-Dec-00	S	13:17	1.7	704.0
06-Dec-00	S	14:11	NM	675.0
06-Dec-00	S	15:24	NM	673.0
08-Dec-00	D	9:54	9.2	585.0
08-Dec-00	D	10:57	9.2	603.0
08-Dec-00	D	12:07	NM	624.0
14-Dec-00	D	12:36	9.2	710.0
14-Dec-00	D	13:23	NM	575.0
15-Dec-00	D	15:42	10.0	511.0
15-Dec-00	D	15:42	10.0	869.0
18-Dec-00	D	13:32	9.1	514.0
19-Dec-00	D	16:42	NM	339.0
20-Dec-00	D	14:59	9.1	390.0
21-Dec-00	D	14:47	9.1	314.0
22-Dec-00	D	14:55	9.5	269.0
27-Dec-00	D	12:40	9.0	267.0
28-Dec-00	D	15:45	9.2	238.0
29-Dec-00	D	14:08	9.0	NM
31-Dec-00	D	13:10	9.3	269.0
02-Jan-01	D	14:55	9.8	268.0
03-Jan-01	D	15:15	9.8	153.0
04-Jan-01	D	10:06	NM	237.0
04-Jan-01	D	11:50	NM	210.0
04-Jan-01	D	12:01	NM	230.0
04-Jan-01	D	12:08	NM	231.0
04-Jan-01	D	12:18	NM	216.0
04-Jan-01	D	12:25	NM	219.0
04-Jan-01	D	12:47	NM	230.0
04-Jan-01	D	13:06	NM	217.0
04-Jan-01	D	13:55	NM	225.0
04-Jan-01	D	14:17	NM	219.0
04-Jan-01	D	14:30	9.2	230.0
04-Jan-01	D	14:45	NM	230.0
04-Jan-01	D	14:56	NM	217.0
05-Jan-01	D	8:55	NM	174.0
05-Jan-01	D	9:56	NM	174.0
05-Jan-01	D	13:37	9.8	234.0
08-Jan-01	D	11:50	9.8	245.0
10-Jan-01	D	13:53	12.0	79.0
18-Jan-01	D	15:08	NM	519.0
16-Jan-01	D	11:20	NM	297.0
22-Jan-01	D	11:15	NM	395.0
24-Jan-01	D	14:57	8.0	314.0
26-Jan-01	D	--	8.0	433.0
13-Feb-01	D	11:35	NM	281.0
16-Feb-01	D	14:53	6.2	218.0
22-Feb-01	D	14:46	7.3	211.0
01-Mar-01	D	13:30	6.0	172.0

TABLE D-1

Combined SVE Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Combined Influent (C-1)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
03-Mar-01	D	12:14	6.9	200.0
14-Mar-01	D	12:32	NM	133.0
14-Mar-01	D	11:10	NM	240.0
16-Mar-01	D	11:35	NM	163.0
06-Apr-01	D	12:40	NM	45.0
13-Apr-01	D	13:28	0.6	14.6
20-Apr-01	D	10:20	NM	17.0
14-May-01	D	11:35	7.0	96.0
18-May-01	D	13:15	6.2	115.0
25-May-01	D	15:18	7.0	64.0
01-Jun-01	D	12:03	1.5	126.0
08-Jun-01	D	14:58	1.2	74.0
15-Jun-01	D	13:51	1.8	75.0
22-Jun-01	D	10:45	NM	116.0
28-Jun-01	D	10:50	1.3	73.0
10-Jul-01	D	14:41	1.3	78.0
20-Jul-01	D	11:05	7.0	94.0
27-Jul-01	D	11:36	6.2	126.0
03-Aug-01	D	14:42	6.2	89.0
17-Aug-01	D	13:01	6.2	95.0
23-Aug-01	D	13:16	6.5	131.0
30-Aug-01	D	16:04	0.5	118.0
07-Sep-01	D	13:15	3.0	193.0
14-Sep-01	D	12:45	3.2	247.0
21-Sep-01	D	10:40	4.0	171.0
28-Sep-01	D	10:35	4.2	192.0
05-Oct-01	D	14:45	4.3	207.0
12-Oct-01	D	11:19	4.3	188.0
19-Oct-01	D	11:04	4.4	298.0
01-Nov-01	D	14:50	NM	215.0
09-Nov-01	D	14:16	4.0	181.0
28-Nov-01	D	14:24	3.6	220.0
07-Dec-01	D	12:51	9.0	183.0
13-Dec-01	D	12:20	3.5	259.0
21-Dec-01	D	11:53	3.5	53.0
28-Dec-01	D	9:42	3.4	74.0
04-Jan-02	D	10:43	3.5	51.0
11-Jan-02	D	11:07	3.6	58.0
25-Jan-02	D	13:42	3.4	45.0
01-Feb-02	D	12:14	5.5	44.0
08-Feb-02	D	11:02	5.3	31.0
15-Feb-02	D	11:10	10.0	25.0
15-Feb-02	D	13:34	12.1	20.0
21-Feb-02	D	11:26	11.0	38.0
01-Mar-02	D	10:45	11.0	11.0
07-Mar-02	D	11:48	10.0	14.9
08-Mar-02	D	11:15	10.0	10.0
15-Mar-02	D	11:05	9.7	9.0
21-Mar-02	D	11:51	9.0	20.1
29-Mar-02	D	11:03	9.0	6.0
04-Apr-02	D	11:53	9.0	6.0
12-Apr-02	D	10:59	9.2	12.0

TABLE D-1

Combined SVE Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Combined Influent (C-1)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
18-Apr-02	D	11:50	9.0	27.1
26-Apr-02	D	11:05	8.8	17.0
10-May-02	D	11:10	NM	8.9
16-May-02	D	11:35	8.0	15.7
24-May-02	D	11:17	8.2	7.0
30-May-02	D	11:35	9.0	9.3
06-Jun-02	D	11:30	8.0	9.0
13-Jun-02	D	11:46	8.0	22.3
21-Jun-02	D	11:01	7.9	15.0
27-Jun-02	D	10:55	7.5	6.3
03-Jul-02	D	11:50	7.8	15.0
11-Jul-02	D	11:16	NM	56.1
15-Jul-02	D	11:30	7.1	25.0
19-Jul-02	D	11:10	7.1	20.0
25-Jul-02	D	14:30	NM	3.1
02-Aug-02	D	14:30	7.2	33.0
08-Aug-02	D	11:30	7.0	24.8
16-Aug-02	D	11:59	7.0	33.0
22-Aug-02	D	Not Noted	6.0	51.7
30-Aug-02	D	11:08	7.5	38.0
13-Sep-02	D	13:20	12.8	46.0
19-Sep-02	D	Not Noted	6.0	55.5
26-Sep-02	D	11:12	6.0	16.0
03-Oct-02	D	13:27	6.0	49.7
10-Oct-02	D	12:32	6.0	34.0
17-Oct-02	D	11:46	6.0	73.2
25-Oct-02	D	12:55	6.5	32.0
01-Nov-02	D	15:57	6.0	9.0
07-Nov-02	D	11:19	6.0	8.7
14-Nov-02	D	15:02	6.0	16.0
18-Nov-02	D	11:05	6.0	46.2
26-Nov-02	D	11:33	6.0	28.0
05-Dec-02	D	12:06	2.0	19.8
09-Dec-02	D	13:52	5.0	16.0
19-Dec-02	D	14:18	5.0	9.8
27-Dec-02	D	10:44	5.0	12.0
02-Jan-03	D	Not Noted	5.0	5.3
10-Jan-03	D	14:59	NM	4.4
16-Jan-03	D	13:31	5.0	3.1
24-Jan-03	D	14:52	NM	1.3
30-Jan-03	D	13:54	6.0	1.9
10-Feb-03	D	14:08	5.0	2.0
14-Feb-03	D	14:07	6.0	2.7
21-Feb-03	D	13:20	6.0	5.0
27-Feb-03	D	13:44	6.0	9.9
07-Mar-03	D	12:02	6.0	2.0
13-Mar-03	D	13:07	3.0	4.8
21-Mar-03	D	12:08	7.0	1.0
27-Mar-03	D	10:45	7.0	2.9
02-Apr-03	D	11:52	7.0	1.8
10-Apr-03	D	10:59	6.0	1.6
18-Apr-03	D	13:17	7.0	2.8

TABLE D-1

Combined SVE Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Combined Influent (C-1)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
24-Apr-03	D	10:47	6.0	1.1
02-May-03	D	15:37	6.5	3.0
08-May-03	D	13:33	6.0	1.2
15-May-03	D	14:24	7.0	ND
22-May-03	D	13:28	2.0	7.9
30-May-03	D	13:56	5.5	2.5
05-Jun-03	D	13:50	6.0	8.3
12-Jun-03	D	14:53	5.0	3.2
20-Jun-03	D	13:26	6.0	8.3
30-Jun-03	D	11:57	6.5	6.4
03-Jul-03	D	10:24	6.0	12.9
10-Jul-03	D	11:57	7.0	9.4
17-Jul-03	D	10:37	6.0	14.7
24-Jul-03	D	11:42	7.0	10.4
01-Aug-03	D	11:11	7.0	8.5
06-Aug-03	D	11:32	6.5	12.0
14-Aug-03	D	14:26	7.0	20.0
21-Aug-03	D	12:29	7.0	10.0
28-Aug-03	D	10:31	6.0	3.6
04-Sep-03	D	12:57	6.5	22.6
11-Sep-03	S	11:14	0.0	1.5
18-Sep-03	D	13:20	5.5	15.0
25-Sep-03	D	11:05	6.0	18.1
02-Oct-03	D	11:50	5.5	11.0
09-Oct-03	D	11:21	4.0	18.4
16-Oct-03	D	11:46	3.0	7.4
23-Oct-03	D	13:13	6.0	21.7
03-Nov-03	D	13:33	6.5	7.6
06-Nov-03	D	13:38	6.0	15.3
13-Nov-03	D	11:22	6.0	15.2
20-Nov-03	D	14:01	6.0	ND
26-Nov-03	D	11:59	6.0	7.4
04-Dec-03	D	13:31	6.0	8.1
08-Dec-03	D	13:47	6.0	10.7
18-Dec-03	D	14:00	6.0	3.2
23-Dec-03	D	11:34	6.0	13.3
30-Dec-03	D	13:25	6.0	22.0
06-Jan-04	D	13:24	6.0	24.8
13-Jan-04	D	13:20	6.0	20.4
22-Jan-04	D	13:38	6.0	27.2
30-Jan-04	D	13:35	6.0	17.0
05-Feb-04	D	11:50	6.0	34.0
13-Feb-04	D	13:06	6.0	16.7
19-Feb-04	D	13:52	6.0	15.3
26-Feb-04	D	NM	6.0	16.8
03-Mar-04	D	13:28	6.0	15.4
11-Mar-04	D	NM	6.0	17.7
18-Mar-04	D	13:30	6.0	16.6
24-Mar-04	D	13:30	6.0	5.7
31-Mar-04	D	13:08	6.0	12.4
08-Apr-04	D	13:47	6.0	2.1
15-Apr-04	D	NM	NM	NM

TABLE D-1

Combined SVE Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Combined Influent (C-1)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
29-Apr-04	D	13:44	5.0	3.3
06-May-04	D	14:10	5.0	3.4
14-May-04	D	11:57	5.0	3.1
20-May-04	D	10:33	5.0	1.1
27-May-04	D	13:57	5.0	6.4
03-Jun-04	D	15:05	6.0	6.5
10-Jun-04	D	11:57	5.0	5.7
17-Jun-04	D	11:52	5.0	10.5
24-Jun-04	D	11:57	5.0	10.4
01-Jul-04	D	15:48	5.0	8.2
08-Jul-04	D	14:20	5.0	16.6
15-Jul-04	D	9:20	5.0	8.0
27-Aug-04	D	13:23	5.0	5.6
02-Sep-04	D	14:12	5.0	15.0
16-Sep-04	D	14:16	5.0	12.5
24-Sep-04	D	13:32	5.0	10.1
30-Sep-04	D	15:05	5.0	20.0
08-Oct-04	D	11:38	5.0	7.2
15-Oct-04	D	13:19	5.0	56.7
22-Oct-04	D	11:33	5.0	4.5
28-Oct-04	D	11:33	4.0	12.2
04-Nov-04	D	13:22	5.0	12.0
12-Nov-04	D	11:00	5.0	8.0
19-Nov-04	D	10:25	5.0	5.3
24-Nov-04	D	11:00	5.0	12.8
09-Dec-04	D	NM	1.4	9.9
23-Dec-04	D	NM	5.0	3.8
05-Jan-05	D	11:58	5.0	5.0
20-Jan-05	D	14:33	5.0	1.5
03-Feb-05	D	10:46	5.0	2.7
09-Feb-05	D	11:10	5.0	5.0
03-Mar-05	D	NM	4.0	0.5
17-Mar-05	D	NM	4.0	1.8
01-Apr-05	D	NM	5.0	NM
14-Apr-05	D	10:48	4.0	34.0
28-Apr-05	D	11:23	5.0	2.3
12-May-05	D	NM	5.0	5.8
26-May-05	D	11:31	5.0	5.2
09-Jun-05	D	10:44	5.0	6.0
22-Jun-05	D	13:33	5.0	6.2

NOTES:	Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). Calibrated to isobutylene.
ND	Not detected.
NM	Not measured.
ON/OFF	Air Sparging System operation
D/S	Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE D-2

SVE System Effluent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Effluent (C-3)		
		TIME	PRESSURE ($^{"}H_2O$)	CONC (ppm)
05-Dec-00	S			
06-Dec-00	S	12:12	< 0.1	ND
06-Dec-00	S	13:21	< 0.1	ND
08-Dec-00	D	11:01	NM	ND
08-Dec-00	D	12:11	NM	ND
14-Dec-00	D	12:36	< 0.25	ND
14-Dec-00	D	13:23	NM	ND
15-Dec-00	D	15:42	< 0.1	ND
15-Dec-00	D	15:42	< 0.1	10.3
18-Dec-00	D	13:32	< 0.25	ND
19-Dec-00	D	16:42	NM	ND
21-Dec-00	D	14:47	1.6	< 0.25
20-Dec-00	D	14:59	< 0.25	ND
22-Dec-00	D	14:55	0.3	ND
27-Dec-00	D	12:40	NM	ND
28-Dec-00	D	15:45	0.1	ND
29-Dec-00	D	14:08	< 0.5	ND
31-Dec-00	D	13:10	0.1	ND
02-Jan-01	D	14:55	<0.05	ND
03-Jan-01	D	15:15	0.1	ND
04-Jan-01	D	14:33	0.2	ND
05-Jan-01	D	9:56	NM	ND
05-Jan-01	D	13:37	0.5	ND
08-Jan-01	D	11:50	0.2	ND
18-Jan-01	D	15:24	NM	ND
16-Jan-01	D	11:20	NM	ND
22-Jan-01	D	11:15	NM	ND
24-Jan-01	D	14:51	NM	ND
26-Jan-01	D		0.2	ND
13-Feb-01	D	11:35	NM	ND
16-Feb-01	D	14:55	0.3	ND
22-Feb-01	D	14:46	0.3	ND
01-Mar-01	D	13:30	0.1	ND
03-Mar-01	D	12:09	0.3	ND
14-Mar-01	D	12:32	NM	ND
14-Mar-01	D	11:10	NM	ND
16-Mar-01	D	11:35	NM	ND
06-Apr-01	D	12:40	NM	ND
13-Apr-01	D	13:28	0.3	ND
20-Apr-01	D	10:22	NM	ND
14-May-01	D	11:35	0.3	ND
18-May-01	D	13:15	0.2	ND
25-May-01	D	15:18	2.0	ND
01-Jun-01	D	12:03	1.5	ND
08-Jun-01	D	14:58	0.2	ND
15-Jun-01	D	13:51	0.1	ND
22-Jun-01	D	10:45	NM	ND
28-Jun-01	D	10:50	0.2	ND
10-Jul-01	D	14:42	0.2	ND
20-Jul-01	D	11:06	0.2	ND
27-Jul-01	D	11:39	0.1	ND
03-Aug-01	D	14:39	0.1	ND

TABLE D-2

SVE System Effluent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Effluent (C-3)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
17-Aug-01	D	13:08	0.2	7.0
23-Aug-01	D	13:22	0.1	22.0
30-Aug-01	D	NM	NM	NM
07-Sep-01	D	13:18	0.1	ND
14-Sep-01	D	12:48	0.1	ND
21-Sep-01	D	10:55	0.2	ND
28-Sep-01	D	10:25	0.3	3.5
05-Oct-01	D	14:55	0.2	2.5
12-Oct-01	D	11:14	0.3	37.0
19-Oct-01	D	10:58	0.3	187.0
01-Nov-01	D	14:55	NM	ND
09-Nov-01	D	14:12	0.2	ND
28-Nov-01	D	12:23	0.3	ND
07-Dec-01	D	13:02	0.2	ND
13-Dec-01	D	12:20	0.2	ND
21-Dec-01	D	11:50	< 0.25	2.0
28-Dec-01	D	9:40	0.3	1.5
04-Jan-02	D	10:40	0.2	< 1.0
11-Jan-02	D	11:13	0.2	< 1.0
25-Jan-02	D	13:39	0.2	ND
25-Feb-02	D	12:04	< 0.1	0.2
08-Feb-02	D	11:00	< 0.1	ND
15-Feb-02	D	11:00	0.2	ND
21-Feb-02	D	11:30	0.2	ND
01-Mar-02	D	10:39	1.5	ND
07-Mar-02	D	11:54	0.2	1.7
08-Mar-02	D	11:05	0.1	ND
15-Mar-02	D	11:10	0.1	ND
21-Mar-02	D	11:54	0.2	0.9
29-Mar-02	D	10:58	0.2	ND
04-Apr-02	D	11:59	0.1	ND
12-Apr-02	D	10:50	0.1	ND
18-Apr-02	D	11:54	0.0	<1
26-Apr-02	D	11:00	< 0.1	ND
02-May-02	Not Noted	11:40	0.1	ND
10-May-02	D	11:15	NM	ND
16-May-02	D	11:40	0.1	ND
24-May-02	D	11:10	ND	0.2
30-May-02	D	11:40	0.2	0.2
06-Jun-02	D	11:20	0.1	ND
13-Jun-02	D	11:50	0.1	3.1
21-Jun-02	D	10:52	0.1	ND
27-Jun-02	D	10:59	0.1	ND
03-Jul-02	D	11:54	0.1	ND
11-Jul-02	D	11:20	0.2	1.2
15-Jul-02	D	11:32	0.1	ND
19-Jul-02	D	11:13	0.1	ND
25-Jul-02	D	14:30	0.2	ND
02-Aug-02	D	13:38	0.1	0.4
08-Aug-02	D	11:30	0.2	2.7
16-Aug-02	D	11:45	0.1	1.3
22-Aug-02	D	Not Noted	0.1	ND

TABLE D-2

SVE System Effluent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Effluent (C-3)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
30-Aug-02	D	11:12	0.5	ND
13-Sep-02	D	13:05	0.1	0.3
19-Sep-02	D	Not Noted	0.1	2.2
26-Sep-02	D	11:24	0.1	0.4
03-Oct-02	D	13:20	0.1	2.1
10-Oct-02	D	12:30	0.1	ND
17-Oct-02	D	Not Noted	0.1	2.3
25-Oct-02	D	12:40	0.5	ND
01-Nov-02	D	16:05	0.2	ND
07-Nov-02	D	11:25	0.1	0.6
14-Nov-02	D	14:39	0.2	ND
21-Nov-02	D	11:10	0.1	0.3
26-Nov-02	D	11:41	0.1	ND
05-Dec-02	D	12:10	0.1	ND
09-Dec-02	D	13:58	0.1	ND
19-Dec-02	D	14:14	0.2	ND
27-Dec-02	D	10:47	0.1	ND
02-Jan-03	D	Not Noted	0.1	ND
10-Jan-03	D	15:07	NM	ND
16-Jan-03	D	13:23	0.5	ND
24-Jan-03	D	14:58	NM	ND
30-Jan-03	D	Not Noted	0.2	ND
10-Feb-03	D	14:20	0.1	ND
14-Feb-03	D	Not Noted	0.0	ND
21-Feb-03	D	13:17	0.0	ND
27-Feb-03	D	Not Noted	1.0	ND
07-Mar-03	D	12:05	0.2	ND
13-Mar-03	D	Not Noted	0.2	0.3
21-Mar-03	D	11:55	0.2	ND
27-Mar-03	D	Not Noted	0.2	ND
02-Apr-03	D	11:43	NM	ND
10-Apr-03	D	Not Noted	0.1	ND
18-Apr-03	D	13:23	NM	ND
24-Apr-03	D	Not Noted	0.1	ND
02-May-03	D	15:44	0.2	ND
08-May-03	D	Not Noted	0.2	ND
15-May-03	D	14:36	NM	ND
22-May-03	D	Not Noted	0.1	0.9
30-May-03	D	13:54	NM	ND
05-Jun-03	D	Not Noted	0.1	3.1
12-Jun-03	D	14:46	0.0	ND
20-Jun-03	D	Not Noted	0.2	ND
30-Jun-03	D	11:55	1.0	ND
03-Jul-03	D	Not Noted	0.1	2.5
10-Jul-03	D	12:03	1.0	ND
17-Jul-03	D	Not Noted	0.2	2.5
24-Jul-03	D	11:35	1.0	0.9
01-Aug-03	D	Not Noted	0.5	1.9
06-Aug-03	D	11:30	0.5	ND
14-Aug-03	D	Not Noted	0.2	3.2
21-Aug-03	D	12:25	1.0	0.6
28-Aug-03	D	Not Noted	0.1	ND

TABLE D-2

SVE System Effluent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Effluent (C-3)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
04-Sep-03	D	12:55	0.5	ND
11-Sep-03	S	Not Noted	0.0	1.9
18-Sep-03	D	13:30	0.1	ND
25-Sep-03	D	Not Noted	0.1	2.1
02-Oct-03	D	11:54	0.1	ND
09-Oct-03	D	11:17	0.5	0.5
16-Oct-03	D	11:37	0.5	0.6
23-Oct-03	D	13:10	0.1	0.1
03-Nov-03	D	13:30	0.5	1.0
06-Nov-03	D	Not Noted	NM	1.6
13-Nov-03	D	11:29	1.0	1.9
20-Nov-03	D	Not Noted	0.1	ND
26-Nov-03	D	11:53	0.5	1.8
04-Dec-03	D	Not Noted	0.1	ND
08-Dec-03	D	13:41	0.5	0.6
18-Dec-03	D	13:58	NM	ND
23-Dec-03	D	Not Noted	0.1	0.7
30-Dec-03	D	13:23	0.1	4.0
06-Jan-04	D	13:11	1.0	0.8
13-Jan-04	D	Not Noted	0.1	ND
22-Jan-04	D	13:36	0.5	1.2
30-Jan-04	D	13:45	0.1	ND
05-Feb-04	D	11:47	0.0	1.8
13-Feb-04	D	13:05	0.1	ND
19-Feb-04	D	13:50	0.0	0.4
26-Feb-04	D	Not Noted	0.1	0.2
03-Mar-04	D	13:25	0.0	0.6
11-Mar-04	D	Not Noted	0.0	0.2
18-Mar-04	D	11:49	0.5	ND
24-Mar-04	D	13:30	0.1	1.3
31-Mar-04	D	Not Noted	0.1	1.2
08-Apr-04	D	Not Noted	0.1	2.5
15-Apr-04	D	Not Noted	NM	NM
29-Apr-04	D	13:42	0.0	ND
06-May-04	D	Not Noted	0.1	0.5
14-May-04	D	11:55	0.5	ND
20-May-04	D	Not Noted	0.1	<1
27-May-04	D	13:55	0.0	ND
03-Jun-04	D	15:01	0.1	2.0
10-Jun-04	D	11:55	0.5	0.9
17-Jun-04	D	11:58	0.1	1.2
24-Jun-04	D	11:54	0.1	1.4
01-Jul-04	D	15:45	0.1	1.2
08-Jul-04	D	14:35	0.1	ND
15-Jul-04	D	9:22	NM	ND
27-Aug-04	D	13:21	0.1	ND
02-Sep-04	D	14:10	0.1	<1
16-Sep-04	D	14:12	0.0	ND
24-Sep-04	D	13:29	0.1	2.7
30-Sep-04	D	14:58	0.3	2.5
08-Oct-04	D	11:36	0.5	1.5
15-Oct-04	D	Not Noted	0.5	10.0

TABLE D-2

SVE System Effluent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	Effluent (C-3)		
		TIME	PRESSURE ("H_2O)	CONC (ppm)
22-Oct-04	D	11:31	0.1	ND
28-Oct-04	D	Not Noted	0.1	0.3
04-Nov-04	D	11:58	0.1	0.5
12-Nov-04	D	10:45	0.1	ND
19-Nov-04	D	10:23	0.1	ND
24-Nov-04	D	Not Noted	0.1	0.5
09-Dec-04	D	Not Noted	0.1	0.5
23-Dec-04	D	Not Noted	0.1	0.5
05-Jan-05	D	Not Noted	0.1	0.5
20-Jan-05	D	Not Noted	0.1	0.5
03-Feb-05	D	Not Noted	0.1	0.5
09-Feb-05	D	Not Noted	0.1	0.1
03-Mar-05	D	Not Noted	0.1	0.5
17-Mar-05	D	Not Noted	0.1	0.5
01-Apr-05	D	Not Noted	0.1	0.5
14-Apr-05	D	Not Noted	0.1	NM
28-Apr-05	D	Not Noted	0.1	0.5
12-May-05	D	Not Noted	0.1	0.1
26-May-05	D	Not Noted	0.1	0.5
09-Jun-05	D	Not Noted	0.1	0.1
22-Jun-05	D	Not Noted	0.1	0.5

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). Calibrated to isobutylene.

ND — Not detected.
NM — Not measured.
ON/OFF — Air Sparging System operation
D/S — Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE D-3

NAPL Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	NAPL Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
18-Jan-01	D	15:24	NM	740.0
22-Jan-01	D	11:15	NM	515.0
24-Jan-01	D	14:51	NM	529.0
13-Feb-01	D	11:35	NM	255.0
16-Feb-01	D	14:55	13.0	155.0
22-Feb-01	D	14:46	12.5	154.0
01-Mar-01	D	13:30	6.0	141.0
03-Mar-01	D	12:15	12.5	173.0
14-Mar-01	D	12:32	NM	98.0
14-Mar-01	D	11:10	NM	147.0
13-Apr-01	D	13:28	12.0	14.6
14-May-01	D	11:35	8.2	61.0
18-May-01	D	13:15	8.0	65.0
25-May-01	D	15:19	7.8	44.0
01-Jun-01	D	12:42	2.0	119.0
08-Jun-01	D	14:48	2.0	68.0
15-Jun-01	D	13:51	0.1	66.0
22-Jun-01	D	10:45	NM	24.0
28-Jun-01	D	10:50	2.1	42.0
10-Jul-01	D	14:49	2.1	50.0
20-Jul-01	D	11:15	7.0	90.0
27-Jul-01	D	11:48	6.3	76.0
03-Aug-01	D	14:49	6.3	44.0
17-Aug-01	D	12:57	6.9	62.0
23-Aug-01	D	13:12	6.3	104.0
30-Aug-01	D	16:10	2.0	120.0
07-Sep-01	D	13:04	7.9	86.0
14-Sep-01	D	12:39	10.2	132.0
21-Sep-01	D	10:47	10.2	104.0
28-Sep-01	D	10:43	10.2	200.0
05-Oct-01	D	14:48	9.2	213.0
12-Oct-01	D	11:24	10.0	195.0
19-Oct-01	D	11:10	9.7	308.0
01-Nov-01	D	14:42	NM	176.0
09-Nov-01	D	14:19	8.2	198.0
28-Nov-01	D	12:16	7.5	247.0
07-Dec-01	D	12:55	6.9	211.0
13-Dec-01	D	12:20	7.2	109.0
21-Dec-01	D	11:44	8.2	44.0
28-Dec-01	D	9:48	8.5	51.0
04-Jan-02	D	10:48	8.7	51.0
11-Jan-02	D	11:20	8.9	51.0
25-Jan-02	D	13:41	9.1	42.0
01-Feb-02	D	12:18	7.5	45.0
08-Feb-02	D	11:09	7.9	35.0
15-Feb-02	D	11:18	7.7	53.0
15-Feb-02	D	13:30	8.8	29.0
21-Feb-02	D	11:35	8.0	59.0
01-Mar-02	D	10:59	8.2	10.0
07-Mar-02	D	11:46	7.8	18.9
08-Mar-02	D	11:20	7.8	10.0
15-Mar-02	D	10:55	7.0	29.0

TABLE D-3

NAPL Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	NAPL Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
21-Mar-02	D	11:49	8.0	17.8
29-Mar-02	D	11:09	7.3	4.0
04-Apr-02	D	11:49	8.0	4.5
12-Apr-02	D	10:53	7.2	34.0
26-Apr-02	D	11:08	7.1	17.0
02-May-02	Not Noted	11:33	7.0	9.1
10-May-02	D	11:20	6.7	5.7
16-May-02	D	11:29	8.0	10.6
24-May-02	D	11:05	7.6	3.0
30-May-02	D	11:33	8.0	6.4
06-Jun-02	D	11:45	7.2	5.0
13-Jun-02	D	11:44	8.0	11.7
21-Jun-02	D	11:11	7.0	8.0
27-Jun-02	D	10:53	7.0	8.1
03-Jul-02	D	11:53	7.0	16.0
11-Jul-02	D	11:14	6.0	34.5
15-Jul-02	D	11:42	6.9	12.0
19-Jul-02	D	11:07	6.1	12.0
25-Jul-02	D	14:30	6.0	2.1
02-Aug-02	D	13:58	NM	10.0
16-Aug-02	D	11:51	5.1	19.0
22-Aug-02	D	Not Noted	5.0	22.5
30-Aug-02	D	11:26	6.0	22.0
13-Sep-02	D	13:28	4.8	34.0
19-Sep-02	D	Not Noted	5.0	49.1
26-Sep-02	D	11:15	5.2	11.0
03-Oct-02	D	13:25	5.0	37.3
10-Oct-02	D	12:42	5.2	28.0
17-Oct-02	D	11:44	6.0	34.8
25-Oct-02	D	12:52	5.5	10.0
01-Nov-02	D	16:12	6.0	3.0
07-Nov-02	D	11:13	6.0	4.9
14-Nov-02	D	15:10	6.0	4.0
18-Nov-02	D	14:36	6.0	2.0
21-Nov-02	D	11:02	0.6	3.0
26-Nov-02	D	11:50	6.0	3.0
05-Nov-02	D	12:04	0.2	1.3
09-Dec-02	D	14:05	6.5	1.0
19-Dec-02	D	14:25	6.0	2.1
27-Dec-02	D	10:41	6.0	2.0
02-Jan-03	D	Not Noted	7.0	2.6
10-Jan-03	D	15:32	6.0	2.6
16-Jan-03	D	13:28	7.0	ND
24-Jan-03	D	15:05	9.0	2.5
30-Jan-03	D	13:52	6.0	2.4
10-Feb-03	D	14:22	6.0	1.0
14-Feb-03	D	14:10	7.0	1.2
21-Feb-03	D	13:16	6.0	7.0
27-Feb-03	D	13:42	7.0	4.3
07-Mar-03	D	12:09	7.0	5.0
13-Mar-03	D	13:09	9.0	2.9
21-Mar-03	D	12:03	7.5	1.0

TABLE D-3

NAPL Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	NAPL Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
27-Mar-03	D	10:43	8.0	2.2
02-Apr-03	D	12:00	7.0	ND
10-Apr-03	D	10:56	8.0	2.5
18-Apr-03	D	13:30	7.0	2.8
24-Apr-03	D	10:52	7.0	1.0
02-May-03	D	15:47	6.5	ND
08-May-03	D	13:31	7.0	0.7
15-May-03	D	14:33	6.0	ND
22-May-03	D	13:17	6.0	5.8
30-May-03	D	13:52	6.0	ND
05-Jun-03	D	14:02	7.0	3.2
12-Jun-03	D	15:00	6.0	ND
20-Jun-03	D	13:23	7.0	4.4
30-Jun-03	D	12:06	6.0	3.2
03-Jul-03	D	10:22	7.0	6.5
10-Jul-03	D	12:09	5.0	2.3
17-Jul-03	D	10:41	6.0	8.9
24-Jul-03	D	11:49	5.5	4.2
01-Aug-03	D	11:25	5.0	3.0
06-Aug-03	D	11:40	5.5	2.8
14-Aug-03	D	14:32	6.0	8.4
21-Aug-03	D	12:54	6.0	2.2
28-Aug-03	D	10:38	6.0	1.5
04-Sep-03	D	13:07	5.5	19.3
11-Sep-03	S	NM	0.0	14.9
18-Sep-03	D	13:26	5.5	16.0
25-Sep-03	D	11:10	5.0	20.0
02-Oct-03	D	12:00	5.5	12.0
09-Oct-03	D	11:28	5.0	22.0
16-Oct-03	D	11:43	5.5	7.2
23-Oct-03	D	13:20	6.0	12.2
03-Nov-03	D	13:27	5.5	2.9
06-Nov-03	D	13:44	6.0	3.8
13-Nov-03	D	11:24	5.5	5.7
20-Nov-03	D	14:08	6.0	ND
26-Nov-03	D	11:46	6.5	2.2
04-Dec-03	D	13:39	7.0	1.2
08-Dec-03	D	13:50	6.0	10.5
18-Dec-03	D	14:10	8.0	0.6
23-Dec-03	D	13:40	8.0	2.7
30-Dec-03	D	13:32	7.0	3.0
06-Jan-04	D	13:18	6.5	6.0
13-Jan-04	D	15:23	7.0	18.7
22-Jan-04	D	13:33	6.0	7.9
30-Jan-04	D	13:55	6.0	<1.0
05-Feb-04	D	11:44	6.0	13.6
13-Feb-04	D	13:12	7.0	2.5
19-Feb-04	D	13:46	6.0	4.9
26-Feb-04	D	NM	6.0	9.4
03-Mar-04	D	13:22	5.0	13.6
11-Mar-04	D	NM	5.0	24.6
18-Mar-04	D	11:45	5.0	6.7

TABLE D-3

NAPL Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	NAPL Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
24-Mar-04	D	13:35	5.0	10.5
31-Mar-04	D	NM	5.0	13.8
08-Apr-04	D	13:49	7.0	3.2
15-Apr-04	D	NM	NM	NM
29-Apr-04	D	13:39	6.5	0.7
06-May-04	D	NM	7.0	1.1
14-May-04	D	11:52	6.0	0.7
20-May-04	D	10:52	6.0	8.5
27-May-04	D	13:45	5.5	6.0
03-Jun-04	D	14:59	6.0	6.2
10-Jun-04	D	11:52	5.5	8.0
17-Jun-04	D	11:46	5.0	8.0
24-Jun-04	D	11:52	5.0	14.3
01-Jul-04	D	15:40	5.0	9.6
08-Jul-04	D	14:45	5.0	13.0
15-Jul-04	NM	NM	NM	NM
27-Aug-04	D	13:16	6.0	7.2
02-Sep-04	D	14:20	5.0	35.0
16-Sep-04	D	14:39	5.0	12.1
24-Sep-04	D	13:26	6.0	12.0
30-Sep-04	D	15:13	6.0	24.0
08-Oct-04	D	11:33	6.5	12.9
15-Oct-04	D	13:45	6.0	68.8
22-Oct-04	D	11:27	6.0	4.5
28-Oct-04	D	11:40	6.0	7.8
04-Nov-04	D	11:54	5.0	5.4
12-Nov-04	D	10:55	6.0	17.0
19-Nov-04	NM	NM	NM	NM
24-Nov-04	D	10:55	5.0	21.6
09-Dec-05	D	NM	5.0	5.6
23-Dec-05	D	NM	5.0	5.1
05-Jan-05	D	11:54	6.0	2.0
20-Jan-05	D	14:31	1.0	<1
03-Feb-05	D	10:43	7.0	4.3
09-Feb-05	D	11:14	5.0	4.0
03-Mar-05	D	NM	6.0	0.2
17-Mar-05	D	NM	6.0	1.2
01-Apr-05	D	NM	7.0	NM
14-Apr-05	D	11:00	6.0	2.1
28-Apr-05	D	11:29	6.0	0.9
12-May-05	D	NM	6.0	1.6
26-May-05	D	11:27	7.0	2.7
09-Jun-05	D	11:14	6.0	2.8
22-Jun-05	D	13:39	5.0	1.9

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). Calibrated to isobutylene.

ND Not detected.
NM Not measured.
ON/OFF Air Sparging System operation
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

TABLE D-3

NAPL Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	NAPL Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)

NM	Not measured.
ON/OFF	Air Sparging System operation
D/S	*Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.*

TABLE D-4

EPH/VPH Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	EPH/VPH Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
18-Jan-01	D	15:24	NM	358.0
16-Jan-01	D	11:20	NM	297.0
22-Jan-01	D	11:15	NM	255.0
24-Jan-01	D	14:51	NM	315.0
13-Feb-01	D	11:35	NM	217.0
16-Feb-01	D	14:48	13.5	190.0
22-Feb-01	D	15:06	13.0	157.0
01-Mar-01	D	13:30	NM	177.0
03-Mar-01	D	12:19	13.0	192.0
14-Mar-01	D	12:32	NM	141.0
14-Mar-01	D	11:10	NM	196.0
14-May-01	D	11:35	8.5	120.0
18-May-01	D	13:15	8.2	111.0
25-May-01	D	15:20	8.0	64.0
01-Jun-01	D	12:46	2.0	132.0
08-Jun-01	D	14:48	2.0	65.0
15-Jun-01	D	13:51	0.1	67.0
22-Jun-01	D	10:52	NM	85.0
28-Jun-01	D	10:50	2.1	73.0
10-Jul-01	D	14:48	2.1	79.0
20-Jul-01	D	11:16	7.0	103.0
27-Jul-01	D	11:45	6.8	134.0
03-Aug-01	D	14:48	6.2	94.0
17-Aug-01	D	12:56	6.9	91.0
23-Aug-01	D	13:14	6.5	133.0
30-Aug-01	D	16:15	2.0	131.0
07-Sep-01	D	13:09	7.9	248.0
14-Sep-01	D	12:38	10.2	277.0
21-Sep-01	D	10:49	10.2	195.0
28-Sep-01	D	10:40	10.2	116.0
05-Oct-01	D	14:50	NM	96.0
12-Oct-01	D	11:27	9.5	115.0
19-Oct-01	D	11:12	9.2	120.0
01-Nov-01	D	14:45	NM	152.0
09-Nov-01	D	14:22	7.9	127.0
28-Nov-01	D	12:17	7.1	146.0
07-Dec-01	D	12:58	6.5	114.0
13-Dec-01	D	12:20	7.7	235.0
21-Dec-01	D	11:42	8.5	70.0
28-Dec-01	D	9:44	8.9	61.0
04-Jan-01	D	10:50	9.0	42.0
11-Jan-02	D	11:13	8.7	51.0
25-Jan-02	D	13:40	9.3	48.0
01-Feb-02	D	12:21	7.8	28.0
08-Feb-02	D	11:06	8.3	21.0
15-Feb-02	D	11:14	7.9	26.0
15-Feb-02	D	13:32	9.0	13.0
21-Feb-02	D	11:35	8.0	24.0
01-Mar-02	D	10:55	8.8	11.0
07-Mar-02	D	11:44	8.0	17.4
08-Mar-02	D	11:25	8.0	6.0
15-Mar-02	D	11:00	7.2	7.0

TABLE D-4

EPH/VPH Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	EPH/VPH Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
21-Mar-02	D	11:36	8.0	14.4
29-Mar-02	D	11:06	7.8	5.0
05-Apr-02	D	11:47	8.0	5.5
12-Apr-02	D	11:02	7.2	9.0
26-Apr-02	D	11:10	7.3	8.0
02-May-02	Not Noted	11:31	7.0	9.1
10-May-02	D	11:20	6.9	8.5
16-May-02	D	11:27	8.0	10.6
24-May-02	D	11:08	7.6	5.0
30-May-02	D	11:30	8.0	14.6
06-Jun-02	D	11:40	7.5	5.0
13-Jun-02	D	11:42	8.0	15.4
21-Jun-02	D	11:09	7.0	11.0
27-Jun-02	D	10:51	7.0	3.4
03-Jul-02	D	11:59	7.0	25.0
11-Jul-02	D	11:11	7.0	43.6
15-Jul-02	D	11:44	7.1	18.0
19-Jul-02	D	11:05	6.1	17.0
25-Jul-02	D	14:30	6.0	2.1
02-Aug-02	D	13:55	NM	26.0
16-Aug-02	D	11:50	5.2	30.0
22-Aug-02	D	Not Noted	6.0	48.8
30-Aug-02	D	11:24	5.0	27.0
13-Sep-02	D	13:27	4.8	35.0
19-Sep-02	D	Not Noted	5.0	46.3
26-Sep-02	D	11:14	5.2	11.0
03-Oct-02	D	13:23	5.0	34.4
10-Oct-02	D	12:38	5.2	21.0
17-Oct-02	D	11:41	6.0	64.4
25-Oct-02	D	12:50	6.0	30.0
01-Nov-02	D	16:08	6.0	8.0
07-Nov-02	D	11:11	6.0	6.6
14-Nov-02	D	15:08	6.0	15.0
18-Nov-02	D	14:30	7.0	15.0
21-Nov-02	D	11:00	0.7	47.2
26-Nov-02	D	11:43	6.5	40.0
05-Dec-02	D	11:59	0.5	25.6
09-Dec-02	D	14:00	7.0	16.0
19-Dec-02	D	14:22	7.0	10.4
27-Dec-02	D	10:38	7.0	10.0
02-Jan-03	D	Not Noted	7.0	4.8
10-Jan-03	D	15:30	7.0	1.7
16-Jan-03	D	13:25	7.0	1.1
24-Jan-03	D	15:02	9.0	1.6
30-Jan-03	D	13:52	6.0	2.4
10-Feb-03	D	14:21	6.0	0.8
14-Feb-03	D	14:12	7.0	1.0
21-Feb-03	D	13:14	7.0	3.0
27-Feb-03	D	13:40	7.0	4.9
07-Mar-03	D	12:07	8.0	2.0
13-Mar-03	D	13:02	6.0	2.5
21-Mar-03	D	11:58	8.5	ND

TABLE D-4

EPH/VPH Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	EPH/VPH Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
27-Mar-03	D	10:41	7.0	2.7
02-Apr-03	D	11:57	8.0	3.7
10-Apr-03	D	10:54	9.0	1.1
18-Apr-03	D	13:26	7.0	1.4
24-Apr-03	D	10:51	8.0	0.3
02-May-03	D	15:46	7.0	ND
08-May-03	D	13:28	7.0	0.4
15-May-03	D	14:31	7.0	ND
22-May-03	D	13:30	7.0	4.9
30-May-03	D	13:49	6.0	2.5
05-Jun-03	D	13:58	8.0	3.7
12-Jun-03	D	14:56	6.5	ND
20-Jun-03	D	13:19	7.0	7.4
30-Jun-03	D	12:03	6.0	6.4
03-Jul-03	D	10:19	7.0	8.3
10-Jul-03	D	12:06	5.5	7.0
17-Jul-03	D	10:39	6.0	9.1
24-Jul-03	D	11:46	6.0	5.8
01-Aug-03	D	11:17	6.0	4.3
06-Aug-03	D	11:35	6.5	4.0
14-Aug-03	D	14:30	7.0	14.8
21-Aug-03	D	12:32	6.0	2.4
28-Aug-03	D	10:36	6.0	1.3
04-Sep-03	D	13:04	6.0	9.3
11-Sep-03	S	NM	0.0	14.9
18-Sep-03	D	13:35	6.0	10.0
25-Sep-03	D	11:08	2.0	8.5
02-Oct-03	D	11:58	6.0	6.0
09-Oct-03	D	11:25	6.0	8.0
16-Oct-03	D	11:40	6.5	1.7
23-Oct-03	D	13:18	6.0	2.1
03-Nov-03	D	13:20	6.5	1.4
06-Nov-03	D	13:41	7.0	0.3
13-Nov-03	D	11:21	6.5	0.8
20-Nov-03	D	14:05	6.0	ND
26-Nov-03	D	11:49	6.0	9.3
04-Dec-03	D	13:37	7.0	ND
08-Dec-03	D	13:54	6.0	4.1
18-Dec-03	D	14:12	8.0	0.4
23-Dec-03	D	11:38	8.0	13.5
30-Dec-03	D	13:29	7.0	14.0
06-Jan-04	D	13:15	5.5	18.6
13-Jan-04	D	15:25	7.0	6.5
22-Jan-04	D	13:30	6.5	20.5
30-Jan-04	D	13:50	7.0	17.0
05-Feb-04	D	11:41	7.0	33.6
13-Feb-04	D	13:10	8.0	33.6
19-Feb-04	D	13:42	6.5	7.1
26-Feb-04	D	NM	7.0	12.7
03-Mar-04	D	13:11	5.5	10.3
11-Mar-04	D	NM	5.0	11.7
18-Mar-04	D	11:42	5.5	9.0

TABLE D-4

EPH/VPH Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	EPH/VPH Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)
24-Mar-04	D	13:35	6.0	7.6
31-Mar-04	D	NM	6.0	6.2
08-Apr-04	D	13:53	8.0	4.2
15-Apr-04	D	NM	NM	NM
29-Apr-04	D	13:36	7.5	0.7
06-May-04	D	NM	7.0	0.3
14-May-04	D	11:48	6.5	1.1
20-May-04	D	10:48	6.0	2.8
27-May-04	D	13:52	6.0	3.0
03-Jun-04	D	14:56	6.0	4.2
10-Jun-04	D	11:48	6.0	2.7
17-Jun-04	D	11:49	6.0	4.4
24-Jun-04	D	11:48	5.5	5.4
01-Jul-04	D	15:38	6.0	4.2
08-Jul-04	D	14:40	5.0	4.6
15-Jul-04	NM	NM	NM	NM
27-Aug-04	D	13:12	5.0	1.3
02-Sep-04	D	14:18	6.0	24.0
16-Sep-04	D	14:34	6.0	ND
24-Sep-04	D	13:22	6.0	3.3
30-Sep-04	D	15:10	7.0	7.0
08-Oct-04	D	11:28	6.0	3.0
15-Oct-04	D	13:39	6.0	13.9
22-Oct-04	D	11:24	6.5	0.6
28-Oct-04	D	11:38	6.0	1.1
04-Nov-04	D	11:50	6.5	0.9
12-Nov-04	D	10:50	7.0	0.3
19-Nov-04	NM	NM	NM	NM
24-Nov-04	D	10:50	6.0	1.7
09-Dec-04	D	NM	6.0	2.7
23-Dec-04	D	NM	7.0	2.0
05-Jan-05	D	11:50	6.0	<1
20-Jan-05	D	14:28	7.0	<1
03-Feb-05	D	10:37	7.0	ND
09-Feb-05	D	11:17	6.0	ND
03-Mar-05	D	NM	6.0	0.0
17-Mar-05	D	NM	7.0	0.0
01-Apr-05	D	NM	7.0	NM
14-Apr-05	D	10:56	6.0	2.3
28-Apr-05	D	11:27	6.0	0.3
12-May-05	D	NM	6.0	1.6
26-May-05	D	11:23	7.0	2.1
09-Jun-05	D	11:10	7.0	2.5
22-Jun-05	D	13:37	6.0	5.5

NOTES: Concentrations measured with a Thermo Environmental Model 580B Organic Vapor Meter (OVM), equipped with a photoionization detector (PID) utilizing a 10.6 eV lamp. Concentrations reported in parts-per-million by volume (ppmv). Calibrated to isobutylene.

ND Not detected.
NM Not measured.
ON/OFF Air Sparging System operation

TABLE D-4

EPH/VPH Area Influent Air Monitoring Data
Olin Chemical Corp. - Wilmington, MA

DATE	SYSTEM STATUS (S/D)	EPH/VPH Area Influent		
		TIME	VAC ("H_2O)	CONC (ppm)

Calibrated to isobutylene.

ND Not detected.
NM Not measured.
ON/OFF Air Sparging System operation
D/S Indicates dynamic (D) or static (S) soil gas condition during the soil gas survey.

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
6/28/2001	F	-2.1	0.14	96	46.78	90.08
	R	-2.1	0.12	96	43.31	
7/10/2001	F	-2.1	0.15	100	48.25	96.49
	R	-2.1	0.15	100	48.25	
7/20/2001	F	-7.0	0.72	84	106.58	169.38
	R	-7.0	0.25	84	62.80	
7/27/2001	F	-6.8	0.55	80	93.52	137.23
	R	-6.3	0.12	80	43.71	
8/3/2001	F	-6.2	0.61	100	96.79	144.78
	R	-6.2	0.15	100	48.00	
8/17/2001	F	-6.9	0.12	80	43.68	87.36
	R	-6.9	0.12	80	43.68	
8/23/2001	F	-6.5	0.73	88	106.99	238.37
	R	-6.3	1.10	88	131.37	
	F	-7.7	0.54	88	91.88	165.87
	R	-7.5	0.35	88	73.99	
8/30/2001	F	-2.0	0.10	82	40.05	67.76
	R	-16.0	0.05	86	27.71	
9/7/2001	F	-7.9	0.51	90	89.11	144.91
	R	-7.9	0.20	90	55.80	
9/14/2001	F	-10.2	0.75	65	110.28	178.85
	R	-10.2	0.29	65	68.57	
9/21/2001	F	-10.2	0.75	68	109.96	199.75
	R	-10.2	0.50	68	89.78	
9/28/2001	F	-10.2	0.28	68	67.19	134.38
	R	-10.2	0.28	68	67.19	
10/5/2001	F	-9.3	1.03	78	127.81	229.34
	R	-9.3	0.65	78	101.53	
10/12/2001	F	-10.0	0.83	73	115.17	187.83
	R	-9.5	0.33	73	72.66	
10/19/2001	F	-9.7	0.94	60	124.13	198.83
	R	-9.2	0.34	60	74.70	
10/26/2001	F	-8.9	0.85	66	117.48	179.95
	R	-8.4	0.24	66	62.47	
11/1/2001	F	-8.7	1.35	69	147.68	231.02
	R	-8.7	0.43	69	83.34	
11/9/2001	F	-8.2	0.63	61	101.72	171.94
	R	-7.9	0.30	61	70.22	
11/19/2001	F	-7.8	0.87	70	118.57	187.09
	R	-7.2	0.29	70	68.51	
11/28/2001	F	-7.5	0.74	69	109.50	173.18
	R	-7.1	0.25	69	63.68	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
12/7/2001	F	-6.9	0.65	66	103.00	162.95
	R	-6.5	0.22	66	59.95	
12/13/2001	F	-7.7	0.75	52	112.03	174.10
	R	-7.2	0.23	52	62.08	
12/21/2001	F	-8.5	0.80	52	115.58	180.22
	R	-8.2	0.25	52	64.64	
12/28/2001	F	-8.9	0.72	46	110.24	177.79
	R	-8.5	0.27	46	67.54	
1/4/2002	F	-9.0	0.75	47	112.39	178.59
	R	-8.7	0.26	47	66.20	
1/11/2002	F	-8.9	0.75	40	113.19	185.86
	R	-8.4	0.31	42	72.67	
1/25/2001	F	-9.3	0.62	55	101.35	160.35
	R	-9.1	0.21	55	59.00	
2/1/2002	F	-7.8	0.65	46	104.89	160.11
	R	-7.5	0.18	46	55.22	
2/8/2002	F	-8.3	0.56	53	96.63	148.31
	R	-7.9	0.16	53	51.68	
2/15/2002 11:21	F	-7.9	0.65	53	104.16	181.70
	R	-7.7	0.36	53	77.54	
2/15/2002 13:36	F	-9.0	0.88	55	120.79	198.07
	R	-8.8	0.36	55	77.28	
2/21/2002	F	-8.0	0.60	58	99.58	171.16
	R	-8.0	0.31	58	71.58	
3/1/2002	F	-8.8	0.67	55	105.43	158.57
	R	-8.2	0.17	55	53.15	
3/7/2002	F	-8.0	0.64	64	102.25	166.18
	R	-7.8	0.25	64	63.93	
3/8/2002	F	-8.0	0.60	53	100.06	157.85
	R	-7.8	0.20	53	57.79	
3/15/2002	F	-7.2	0.50	54	91.35	137.94
	R	-7.0	0.13	54	46.59	
3/21/2002	F	-8.0	0.56	61	95.93	153.25
	R	-8.0	0.20	61	57.33	
3/29/2002	F	-7.8	0.64	68	101.89	165.62
	R	-7.3	0.25	68	63.72	
4/4/2002	F	-8.0	0.50	59	90.82	155.03
	R	-8.0	0.25	59	64.22	
4/12/2002	F	-7.6	0.60	87	96.95	165.54
	R	-7.2	0.30	87	68.59	
4/19/2002	F	-8.0	0.60	83	97.26	153.41
	R	-8.0	0.20	83	56.15	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
4/26/2002	F	-7.3	0.93	65	123.26	214.55
	R	-7.1	0.51	65	91.30	
5/2/2002	F	-7.0	0.60	57	99.80	170.37
	R	-7.0	0.30	57	70.57	
5/10/2002	F	-6.9	0.52	80	90.92	165.54
	R	-6.7	0.35	80	74.61	
5/16/2002	F	-8.0	0.55	70	94.25	143.48
	R	-8.0	0.15	70	49.22	
5/24/2002	F	-7.6	0.58	86	95.41	151.44
	R	-7.6	0.20	86	56.03	
5/30/2002	F	-8.0	0.55	88	92.69	161.15
	R	-8.0	0.30	88	68.46	
6/6/2002	F	-7.5	0.50	72	89.76	153.25
	R	-7.2	0.25	72	63.49	
6/13/2002	F	-8.0	0.55	74	93.90	150.52
	R	-8.0	0.20	74	56.62	
6/21/2002	F	-7.0	0.50	90	88.33	145.58
	R	-7.0	0.21	90	57.25	
6/27/2002	F	-7.0	0.60	92	96.59	152.35
	R	-7.0	0.20	92	55.76	
7/3/2002	F	-7.8	0.50	115	86.30	140.75
	R	-7.0	0.20	119	54.45	
7/11/2002	F	-7.0	0.55	84	93.15	149.40
	R	-6.0	0.20	84	56.24	
7/15/2002	F	-7.1	0.46	98	84.10	136.73
	R	-6.9	0.18	98	52.62	
7/19/2002	F	-6.1	0.45	80	84.67	133.55
	R	-6.1	0.15	80	48.88	
7/25/2002	F	-6.0	0.50	82	89.09	152.09
	R	-6.0	0.25	82	63.00	
8/2/2002	F	-6.0	0.54	98	91.25	149.50
	R	-6.0	0.22	98	58.24	
8/8/2002	F	-7.0	0.50	94	88.01	143.68
	R	-7.0	0.20	94	55.66	
8/16/2002	F	-5.2	0.45	104	82.94	125.78
	R	-5.1	0.12	104	42.84	
8/22/2002	F	-6.0	0.45	93	83.68	132.05
	R	-5.0	0.15	93	48.37	
8/30/2002	F	-6.0	0.50	78	89.42	152.54
	R	-7.5	0.25	78	63.11	
9/13/2002	F	-4.8	0.38	91	77.15	127.21
	R	-4.8	0.16	91	50.06	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
9/19/2002	F	-5.0	0.40	84	79.64	128.41
	R	-5.0	0.15	84	48.77	
9/26/2002	F	-5.2	0.50	77	89.60	146.27
	R	-5.2	0.20	77	56.67	
10/3/2002	F	-5.0	0.50	76	89.70	138.84
	R	-5.0	0.15	76	49.13	
10/10/2002	F	-5.2	0.42	77	82.12	126.01
	R	-5.2	0.12	77	43.89	
10/17/2002	F	-6.0	0.40	72	80.43	120.65
	R	-6.0	0.10	72	40.22	
10/25/2002	F	-6.0	0.40	66	80.89	121.36
	R	-5.5	0.10	66	40.47	
11/7/2002	F	-6.0	0.45	56	86.63	136.64
	R	-6.0	0.15	56	50.01	
11/14/2002	F	-6.0	0.45	62	86.13	126.73
	R	-6.0	0.10	62	40.60	
11/18/2002	F	-7.0	0.50	63	90.58	131.14
	R	-6.0	0.10	63	40.56	
11/21/2002	F	-7.0	0.45	51	86.94	127.97
	R	-6.0	0.10	51	41.03	
11/26/2002	F	-6.5	0.37	58	78.35	123.91
	R	-6.0	0.13	58	45.57	
12/5/2002	F	-6.0	0.45	44	87.65	138.19
	R	-7.0	0.15	44	50.54	
12/9/2002	F	-7.0	0.45	44	87.54	138.11
	R	-6.5	0.15	44	50.57	
12/19/2002	F	-7.0	0.50	52	91.55	183.22
	R	-6.0	0.50	52	91.67	
12/27/2002	F	-7.0	0.75	47	112.68	163.13
	R	-6.0	0.15	47	50.46	
1/2/2003	F	-7.0	0.35	44	77.20	148.68
	R	-7.0	0.30	44	71.48	
1/10/2003	F	-7.0	0.75	46	112.79	205.00
	R	-6.0	0.50	46	92.21	
1/16/2003	F	-7.0	0.45	42	87.71	138.35
	R	-7.0	0.15	42	50.64	
1/24/2003	F	-9.0	0.75	40	113.17	178.52
	R	-9.0	0.25	40	65.34	
1/30/2003	F	-7.0	0.45	45	87.45	145.83
	R	-6.0	0.20	45	58.38	
2/10/2003	F	-6.0	0.65	48	104.93	187.24
	R	-6.0	0.40	48	82.31	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
2/14/2003	F	-7.0	0.45	44	87.54	175.08
	R	-6.0	-	-	-	
2/21/2003	F	-7.0	0.65	50	104.59	288.28
	R	-6.0	2.00	50	183.69	
2/28/2003	F	-7.0	0.55	48	96.40	167.59
	R	-7.0	0.30	48	71.19	
3/7/2003	F	-8.0	0.40	50	81.94	139.96
	R	-7.0	0.20	50	58.02	
3/13/2003	F	9.0	0.60	44	103.12	175.95
	R	8.0	0.30	44	72.83	
3/21/2003	F	8.5	0.85	60	120.76	217.78
	R	7.5	0.55	60	97.02	
3/27/2003	F	7.0	0.45	64	87.37	152.57
	R	8.0	0.25	64	65.20	
4/2/2003	F	8.0	0.40	60	82.79	124.13
	R	7.0	0.10	60	41.34	
4/10/2003	F	9.0	0.40	61	82.81	133.46
	R	8.0	0.15	61	50.65	
4/18/2003	F	7.0	0.50	50	93.35	159.36
	R	7.0	0.25	50	66.01	
4/24/2003	F	8.0	0.10	60	41.39	124.08
	R	7.0	0.40	60	82.69	
5/2/2003	F	7.0	0.48	80	88.89	138.55
	R	6.5	0.15	80	49.66	
5/8/2003	F	7.0	0.40	62	82.53	133.07
	R	7.0	0.15	62	50.54	
5/15/2003	F	7.0	0.40	70	81.90	122.81
	R	6.0	0.10	70	40.90	
5/22/2003	F	7.0	0.55	66	96.41	161.32
	R	6.0	0.25	66	64.92	
5/30/2003	F	6.0	0.50	86	90.11	153.83
	R	6.0	0.25	86	63.72	
6/5/2003	F	8.0	0.45	69	87.06	145.03
	R	7.0	0.20	69	57.97	
6/12/2003	F	6.5	0.49	80	89.75	139.38
	R	6.0	0.15	80	49.63	
6/20/2003	F	7.0	0.50	80	90.72	154.87
	R	7.0	0.25	80	64.15	
6/30/2003	F	6.0	0.50	92	89.62	152.99
	R	6.0	0.25	92	63.37	
7/3/2003	F	7.0	0.45	90	85.28	134.51
	R	7.0	0.15	90	49.24	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
7/10/2003	F	5.5	0.50	90	89.73	153.13
	R	5.0	0.25	90	63.41	
7/17/2003	F	6.0	0.45	91	85.10	134.23
	R	6.0	0.15	91	49.13	
7/24/2003	F	6.0	0.50	80	90.61	154.64
	R	5.5	0.25	80	64.03	
8/1/2003	F	6.0	0.50	78	90.78	154.89
	R	5.0	0.25	78	64.11	
8/6/2003	F	6.5	0.50	88	90.00	153.56
	R	5.5	0.25	88	63.56	
8/14/2003	F	7.0	0.45	98	84.66	141.04
	R	6.0	0.20	98	56.37	
8/21/2003	F	6.0	0.50	98	89.13	152.16
	R	6.0	0.25	98	63.03	
8/28/2003	F	6.0	0.50	86	90.11	130.41
	R	6.0	0.10	86	40.30	
9/4/2003	F	6.0	0.50	72	91.29	155.84
	R	6.0	0.25	72	64.55	
9/11/2003	F	0.0	0.00	80	0.00	0.00
	R	0.0	0.00	80	0.00	
9/18/2003	F	6.0	0.50	80	90.61	154.64
	R	5.5	0.25	80	64.03	
9/25/2003	F	2.0	0.45	86	85.06	134.36
	R	5.0	0.15	86	49.29	
10/2/2003	F	6.0	0.45	86	85.49	134.81
	R	5.5	0.15	86	49.32	
10/9/2003	F	6.0	0.55	78	95.21	159.32
	R	5.0	0.25	78	64.11	
10/16/2003	F	6.5	0.50	72	91.34	141.31
	R	5.5	0.15	72	49.97	
10/23/2003	F	6.0	0.55	56	97.22	155.84
	R	6.0	0.20	56	58.62	
11/3/2003	F	6.5	0.25	70	64.71	129.34
	R	5.5	0.25	70	64.63	
11/6/2003	F	7.0	0.60	64	100.88	142.02
	R	6.0	0.10	64	41.14	
11/13/2003	F	6.5	0.50	58	92.57	157.95
	R	5.5	0.25	58	65.38	
11/20/2003	F	6.0	0.45	56	87.93	138.70
	R	6.0	0.15	56	50.77	
11/26/2003	F	6.5	0.50	58	92.57	157.99
	R	6.0	0.25	58	65.42	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
12/4/2003	F	7.0	0.45	49	88.65	139.83
	R	7.0	0.15	49	51.18	
12/8/2003	F	6.0	0.50	48	93.42	144.59
	R	6.0	0.15	48	51.17	
12/18/2003	F	8.0	0.45	50	88.67	139.86
	R	8.0	0.15	50	51.19	
12/23/2003	F	8.0	0.50	54	93.10	144.09
	R	8.0	0.15	54	50.99	
12/30/2003	F	7.0	0.50	58	92.63	143.36
	R	7.0	0.15	58	50.73	
1/6/2004	F	6.5	0.49	46	92.72	158.95
	R	6.5	0.25	46	66.23	
1/13/2004	F	7.0	0.50	48	93.53	144.76
	R	7.0	0.15	48	51.23	
1/22/2004	F	6.5	0.50	38	94.41	161.13
	R	6.0	0.25	38	66.72	
1/30/2004	F	7.0	0.10	39	42.21	101.82
	R	6.0	0.20	39	59.61	
2/5/2004	F	7.0	0.50	44	93.90	160.22
	R	6.0	0.25	44	66.32	
2/13/2004	F	8.0	0.50	52	93.28	159.16
	R	7.0	0.25	52	65.88	
2/19/2004	F	6.5	0.50	50	93.29	159.22
	R	6.0	0.25	50	65.93	
2/26/2004	F	7.0	0.50	53	93.08	143.99
	R	6.0	0.15	53	50.92	
3/3/2004	F	5.5	0.25	60	65.25	157.47
	R	5.0	0.50	60	92.22	
3/11/2004	F	5.0	0.45	56	87.83	138.53
	R	5.0	0.15	56	50.71	
3/18/2004	F	5.5	0.50	46	93.55	159.65
	R	5.0	0.25	46	66.11	
3/24/2004	F	6.0	0.50	60	92.33	142.85
	R	5.0	0.15	60	50.51	
3/31/2004	F	6.0	0.45	52	88.28	139.18
	R	5.0	0.15	52	50.90	
4/8/2004	F	8.0	0.50	66	92.03	150.17
	R	7.0	0.20	66	58.13	
4/29/2004	F	7.5	0.50	80	90.78	154.88
	R	6.5	0.25	80	64.11	
5/6/2004	F	7.0	0.35	78	76.04	133.53
	R	7.0	0.20	78	57.48	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
5/14/2004	F	6.5	0.50	76	91.00	155.31
	R	6.0	0.25	76	64.31	
5/20/2004	F	6.0	0.40	82	80.89	121.34
	R	6.0	0.10	82	40.45	
5/27/2004	F	6.0	0.25	80	64.07	128.10
	R	5.5	0.25	80	64.03	
6/10/2004	F	6.0	0.50	76	90.95	155.21
	R	5.5	0.25	76	64.27	
6/17/2004	F	6.0	0.40	90	80.30	120.40
	R	5.0	0.10	90	40.10	
6/24/2004	F	5.5	0.55	92	93.93	142.96
	R	5.0	0.15	92	49.03	
7/1/2004	F	6.0	0.45	94	84.87	124.82
	R	5.0	0.10	94	39.96	
7/8/2004	F	5.0	0.45	84	85.54	125.86
	R	5.0	0.10	84	40.32	
7/15/2004	F	5.0	0.45	84	85.54	125.86
	R	5.0	0.10	84	40.32	
8/27/2004	F	5.0	0.50	92	89.51	152.88
	R	6.0	0.25	92	63.37	
9/2/2004	F	6.0	0.50	91	89.70	147.06
	R	15.0	0.20	91	57.36	
9/16/2004	F	6.0	0.40	82	80.89	121.29
	R	5.0	0.10	82	40.40	
9/24/2004	F	6.0	0.55	86	94.51	158.22
	R	6.0	0.25	86	63.72	
9/30/2004	F	7.0	0.45	80	86.06	135.69
	R	6.0	0.15	80	49.63	
10/8/2004	F	6.0	0.60	80	99.26	169.48
	R	6.5	0.30	80	70.23	
10/15/2004	F	6.0	0.45	69	86.85	144.75
	R	6.0	0.20	69	57.90	
10/22/2004	F	6.5	0.65	60	105.34	176.86
	R	6.0	0.30	60	71.52	
10/28/2004	F	6.0	0.50	68	91.63	141.82
	R	6.0	0.15	68	50.19	
11/4/2004	F	6.5	0.60	60	101.21	172.64
	R	5.0	0.30	60	71.43	
11/12/2004	F	7.0	0.45	52	88.39	139.35
	R	6.0	0.15	52	50.97	
11/19/2004	F	5.5	0.45	66	87.04	151.88
	R	5.0	0.25	66	64.84	

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)
11/24/2004	F	6.0	0.45	59	87.68	146.06
	R	5.0	0.20	59	58.38	
12/9/2004	F	6.0	0.45	54	88.11	146.77
	R	5.0	0.20	54	58.66	
12/23/2004	F	7.0	0.45	55	88.13	138.88
	R	5.0	0.15	55	50.76	
1/5/2005	F	6.0	0.40	45	83.80	125.71
	R	6.0	0.10	45	41.90	
1/20/2005	F	7.0	0.50	40	94.28	136.44
	R	7.0	0.10	40	42.16	
2/3/2005	F	7.0	0.55	44	98.49	157.88
	R	7.0	0.20	44	59.39	
2/3/2005	F	7.0	0.55	44	98.49	157.88
	R	7.0	0.20	44	59.39	
2/9/2005	F	6.0	0.45	51	88.36	147.20
	R	5.0	0.20	51	58.84	
3/3/2005	F	6.0	0.35	45	78.39	129.71
	R	6.0	0.15	45	51.32	
3/17/2005	F	7.0	0.40	56	83.01	124.46
	R	6.0	0.10	56	41.45	
4/1/2005	F	7.0	0.35	61	77.27	118.58
	R	7.0	0.10	61	41.30	
4/14/2005	F	6.0	0.60	54	101.74	152.60
	R	6.0	0.15	54	50.87	
4/28/2005	F	6.0	0.40	54	83.07	133.94
	R	6.0	0.15	54	50.87	
5/12/2005	F	6.0	0.40	62	82.43	133.40
	R	6.0	0.15	52	50.97	
5/26/2005	F	7.0	0.40	52	83.33	125.00
	R	7.0	0.10	52	41.67	
6/9/2005	F	7.0	0.40	74	81.60	122.35
	R	6.0	0.10	74	40.75	
6/22/2005	F	6.0	0.30	67	71.05	112.01
	R	5.0	0.10	67	40.97	
7/25/2005	F	5.0	0.35	86	75.30	115.55
	R	5.0	0.10	86	40.25	

R=NAPL area

[1]Flowrate calculated based on the following formula provided by Dwyer instruments:

$$[K*(D^2)]*[(dP*P*16,590)/(Ss*(T+460))]^{0.5}$$

where:

K- Flow coefficient

Table E-1

Flow Rate Calculations

Olin Chemical Corporation - Wilmington, MA

Date	Front or Rear	Inlet Pressure ("H2O)	delta Pressure ("H2O)	Temperature °F	System Flow Rate (scfm)[1]	Front & Rear Combined Flow Rate (scfm)

D- Pipe diameter
dP- Differential pressure
P- Guage pressure
Ss- Specific gravity
T- Temperature

Table F-1

Effluent Air Sample Results for SVE/AS System Trailer

Olin Chemical Corporation - Wilmington, MA

All compounds presented below are reported in micrograms per cubic meter (ug/M)

Sample Location	Date	2,4,4 Trimethyl-1-Pentene	2,4,4 Trimethyl-2-Pentene	Toluene	m&p Xylenes	Ethylbenzene	Benzene	Acetone	2 - Propanol	1,2,4-Trimethylbenzene	Methylene Chloride	C9-C12 Aliphatic Hydrocarbons	C5-C8 Aliphatic Hydrocarbons	C9-C10 Aromatic Hydrocarbons	Ethanol
Pre Carbon (C1)	12/08/00	300435E	26740*	844	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND
Effluent (C3)	12/08/00	ND	ND	ND	ND	ND	2.94	ND	ND	ND	ND	ND	ND	ND	ND
Pre Carbon	01/08/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	92000	660000	ND	ND
Effluent	01/08/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E/VPH Infl.	02/25/01	400000	110000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPL Infl.	02/25/01	370000	87000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pre Carbon	02/25/01	360000	95000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Effluent	02/25/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E/VPH Infl.	03/23/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
NAPL Infl.	03/23/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
Pre Carbon	03/23/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
Effluent	03/23/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
E/VPH Infl.	04/27/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
NAPL Infl.	04/27/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
Pre Carbon	04/27/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
Effluent	04/27/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
E/VPH Infl.	05/14/01	92000	19000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPL Infl.	05/14/01	67000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pre Carbon	05/14/01	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	ND	ND
Effluent	05/14/01	ND	ND	6.6	6.4	ND	ND	ND	ND	ND	ND	470	260	ND	ND
E/VPH Infl.	06/22/01	140000	22000	ND	ND	ND	ND	600J	600J	ND	600J	NS	NS	600J	600J
NAPL Infl.	06/22/01	98000	18000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
NAPL Infl.(dup)	06/22/01	100000	19000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
Pre Carbon	06/22/01	160000	23000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
Effluent	06/22/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	300	280	ND	ND
E/VPH Infl.	07/20/01	150000	20000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
NAPL Infl.	07/20/01	120000	22000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
Pre Carbon	07/20/01	92000	14000	530	ND	ND	ND	ND	1900	ND	1900	NS	NS	1900	1900
Effluent	07/20/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	400	630	ND	ND
E/VPH Infl.	08/30/01	260000	41000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
NAPL Infl.	08/30/01	250000	43000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
Pre Carbon	08/30/01	250000	39000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND
Effluent	08/30/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E/VPH Infl.	09/28/01	430000	81000	ND	ND	ND	ND	ND	ND	ND	1700	ND	ND	ND	ND
NAPL Infl.	09/28/01	270000	41000	ND	ND	ND	ND	ND	ND	ND	1700	ND	ND	ND	ND
Pre Carbon	09/28/01	330000	59000	ND	ND	ND	ND	ND	ND	ND	1400	ND	ND	ND	ND
Effluent	09/28/01	1500**	370**	ND	ND	ND	ND	ND	ND	ND	ND	ND	10000**	ND	ND
E/VPH Infl.	10/26/01	550000	100000	ND	ND	ND	ND	ND	31000	ND	3000	ND	ND	ND	31000
NAPL Infl.	10/26/01	310000	48000	ND	ND	ND	ND	ND	14000	ND	1200	ND	ND	ND	14000
Pre Carbon	10/26/01	510000	90000	ND	ND	ND	ND	ND	30000	ND	2400	ND	ND	ND	30000
Effluent	10/26/01	ND	ND	ND	ND	ND	17	ND	ND	ND	ND	120	760	90	ND
E/VPH Infl.	11/28/01	340000	68000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPL Infl.	11/28/01	240000	39000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pre Carbon	11/28/01	240000	46000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Effluent	11/28/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E/VPH Infl.	01/04/02	100000	17000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	01/04/02	110000	18000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	01/04/02	110000	18000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	01/04/02	4100	1700	ND	ND	ND	ND	NS	NS	NS	NS	ND	7000	ND	NS
E/VPH Infl.	02/01/02	48000	6400	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	02/01/02	80000	12000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	02/01/02	60000	8700	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	02/01/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS

Table F-1

Effluent Air Sample Results for SVE/AS System Trailer
Olin Chemical Corporation - Wilmington, MA

All compounds presented below are reported in micrograms per cubic meter (ug/M)

Sample Location	Date	2,4,4 Trimethyl-1-Pentene	2,4,4 Trimethyl-2-Pentene	Toluene	m&p Xylenes	Ethylbenzene	Benzene	Acetone	2 - Propanol	1,2,4-Trimethylbenzene	Methylene Chloride	C9-C12 Aliphatic Hydrocarbons	C5-C8 Aliphatic Hydrocarbons	C9-C10 Aromatic Hydrocarbons	Ethanol
E/VPH Infl.	03/08/02	20000	1200	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	03/08/02	37000	6100	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	03/08/02	24000	2700	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	03/08/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	89	ND	NS
E/VPH Infl.	03/29/02	15000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	03/29/02	15000	2200	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	280
Pre Carbon	03/29/02	15000	960	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	03/29/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS
E/VPH Infl.	04/26/02	14000	850	ND	ND	ND	ND	170	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	04/26/02	34000	4300	ND	ND	ND	ND	ND	ND	ND	140	NS	NS	NS	ND
Pre Carbon	04/26/02	21000	2000	ND	ND	ND	ND	180	ND	ND	190	NS	NS	NS	ND
Effluent	04/26/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS
E/VPH Infl.	06/06/02	5900	490	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	06/06/02	11000	1200	ND	ND	ND	ND	550	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	06/06/02	8500	840	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	06/06/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	120	ND	ND	NS
E/VPH Infl.	07/03/02	4000	210	ND	ND	ND	ND	98	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	07/03/02	4200	230	ND	ND	ND	ND	110	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	07/03/02	5300	280	ND	ND	ND	ND	240	ND	ND	ND	NS	NS	NS	ND
Effluent	07/03/02	ND	ND	ND	ND	ND	6.5	NS	NS	NS	NS	690	640	ND	NS
E/VPH Infl.	08/02/02	20000	4100	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	08/02/02	21000	2600	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	08/02/02	16000	3000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	08/02/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS
E/VPH Infl.	08/30/02	51000	10000	ND	ND	ND	ND	ND	ND	ND	170	NS	NS	NS	ND
NAPL Infl.	08/30/02	46000	6400	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	08/30/02	49000	9100	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	08/30/02	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
E/VPH Infl.	09/26/02	31000	5100	ND	ND	ND	ND	ND	ND	ND	170	NS	NS	NS	ND
NAPL Infl.	09/26/02	35000	5600	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	09/26/02	32000	5200	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	09/26/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	370	ND	NS
E/VPH Infl.	10/25/02	80000	17000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	10/25/02	22000	3400	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	10/25/02	63000	13000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	10/25/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	98	69	ND	NS
E/VPH Infl.	11/26/02	92000	21500	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	11/26/02	6600	1200	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	11/26/02	67000	16000	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	11/26/02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS
E/VPH Infl.	02/21/03	4240	623	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	02/21/03	11700	2820	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	02/21/03	1980	252	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	02/21/03	ND	ND	ND	6.88	ND	ND	NS	NS	NS	NS	428	179	ND	NS
E/VPH Infl.	03/26/03	859	170	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	03/26/03	4290	886	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	03/26/03	2800	603	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	03/26/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	151	ND	ND	NS
E/VPH Infl.	05/30/03	41.6	ND	ND	ND	ND	ND	ND	ND	38.0	ND	NS	NS	NS	ND
NAPL Infl.	05/30/03	3360	639	ND	ND	ND	ND	ND	ND	38.0	ND	NS	NS	NS	ND
Pre Carbon	05/30/03	1180	212	ND	ND	ND	ND	ND	ND	41.1	ND	NS	NS	NS	ND
Effluent	05/30/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	220	ND	NS

Table F-1

Effluent Air Sample Results for SVE/AS System Trailer
Olin Chemical Corporation - Wilmington, MA

All compounds presented below are reported in micrograms per cubic meter (ug/M)

Sample Location	Date	2,4,4 Trimethyl-1-Pentene	2,4,4 Trimethyl-2-Pentene	Toluene	m&p Xylenes	Ethylbenzene	Benzene	Acetone	2 - Propanol	1,2,4-Trimethylbenzene	Methylene Chloride	C9-C12 Aliphatic Hydrocarbons	C5-C8 Aliphatic Hydrocarbons	C9-C10 Aromatic Hydrocarbons	Ethanol
E/VPH Infl.	06/30/03	746	62.2	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	06/30/03	3130	450	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	06/30/03	2280	288	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	06/30/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	201	124	ND	NS
E/VPH Infl.	08/01/03	1010	145	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	08/01/03	>11500	3320	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	08/01/03	>4580	1130	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	08/01/03	ND	ND	2.62	ND	ND	ND	NS	NS	NS	NS	307	284	ND	NS
E/VPH Infl.	08/28/03	603	163	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	08/28/03	>2290	2650	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	08/28/03	>2290	1050	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	08/28/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	121	107	ND	NS
E/VPH Infl.	10/02/03	>4590	3350	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	10/02/03	>11500	20300	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	10/02/03	>11500	9270	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	10/02/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	ND	ND	NS
E/VPH Infl.	11/03/03	75.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	11/03/03	>11500	3200	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	11/03/03	7710	1530	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	11/03/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	314	139	ND	NS
E/VPH Infl.	11/26/03	624	59.3	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	12/08/03	>11500	3630	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	12/08/03	12000	1520	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	11/26/03	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	53.4	42.6	ND	NS
E/VPH Infl.	01/02/04	25600	5700	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	01/02/04	7310	939	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	01/02/04	45700	15900	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	01/02/04	ND	ND	2	ND	ND	ND	NS	NS	NS	NS	89.7	64.6	ND	NS
E/VPH Infl.	01/22/04	35000	7590	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	01/22/04	19700	2960	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	01/22/04	56100	9220	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	01/22/04	ND	ND	8.76	ND	ND	ND	NS	NS	NS	NS	49.7	36.2	ND	NS
E/VPH Infl.	02/19/04	20700	3260	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	02/19/04	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	02/19/04	54400	6590	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	02/19/04	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	65	85.4	ND	NS
E/VPH Infl.	03/18/04	4650	683	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	03/18/04	30200	4560	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	03/18/04	25900	3310	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	03/18/04	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	355	130	ND	NS
E/VPH Infl.	04/29/04	2860	325	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	04/29/04	1720	118	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	04/29/04	3090	284	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	04/29/04	ND	ND	ND	ND	ND	145	NS	NS	NS	NS	145	92.7	ND	NS
E/VPH Infl.	05/27/04	1410	69.3	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	05/27/04	12100	1540	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	05/27/04	12200	1320	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	05/27/04	ND	ND	6.92	ND	ND	ND	NS	NS	NS	NS	206	97.8	ND	NS
E/VPH Infl.	06/24/04	850	32.4	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	06/24/04	26700	6500	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	06/24/04	16800	3490	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	06/24/04	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	203	ND	ND	NS
E/VPH Infl.	08/27/04	1500	843	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	08/27/04	22200	6500	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	08/27/04	10400	3210	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND

Table F-1

Effluent Air Sample Results for SVE/AS System Trailer
Olin Chemical Corporation - Wilmington, MA

All compounds presented below are reported in micrograms per cubic meter (ug/M)

Sample Location	Date	2,4,4-Trimethyl-1-Pentene	2,4,4-Trimethyl-2-Pentene	Toluene	m&p-Xylenes	Ethylbenzene	Benzene	Acetone	2-Propanol	1,2,4-Trimethylbenzene	Methylene Chloride	C9-C12 Aliphatic Hydrocarbons	C5-C8 Aliphatic Hydrocarbons	C9-C10 Aromatic Hydrocarbons	Ethanol
Effluent	08/27/04	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	239	38	ND	NS
E/VPH Infl.	09/24/04	70.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	09/24/04	26200	6280	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	09/24/04	13900	3070	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	09/24/04	ND	ND	4.99	ND	ND	ND	NS	NS	NS	NS	307	200	ND	NS
E/VPH Infl.	10/22/04	41.6	2.88	70.3	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	10/22/04	2.42	ND	39.8	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	10/22/04	6860	882	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	10/22/04	ND	ND	31.5	ND	ND	ND	NS	NS	NS	NS	45.8	47.9	ND	NS
E/VPH Infl.	11/19/04	902	172	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	11/19/04	43200	7070	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	11/19/04	20500	3280	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	11/19/04	ND	ND	11.8	9.16	ND	2.01	NS	NS	NS	NS	334	194	ND	NS
E/VPH Infl.	12/16/04	12	ND	3.9	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	12/16/04	1390	77	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	12/16/04	3060	193	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	12/16/04	ND	ND	2.4	ND	ND	ND	NS	NS	NS	NS	33	35	ND	NS
E/VPH Infl.	01/31/05	13	ND	17.6	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	01/31/05	1510	91	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	01/31/05	4340	442	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	01/31/05	ND	ND	28	ND	ND	ND	NS	NS	NS	NS	39	127	ND	NS
E/VPH Infl.	02/23/05	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	02/23/05	3100	272	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	02/23/05	5000	511	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	02/23/05	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND	33	ND	NS
E/VPH Infl.	03/31/05	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	03/31/05	492	31	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	03/31/05	1060	70	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	03/31/05	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	111	67	ND	NS
E/VPH Infl.	04/21/05	35	ND	15	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	04/21/05	980	98	6	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	04/21/05	1030	68	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	04/21/05	ND	ND	11	ND	ND	ND	NS	NS	NS	NS	83	ND	ND	NS
E/VPH Infl.	05/20/05	39	4	2	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
NAPL Infl.	05/20/05	5500	517	6	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Pre Carbon	05/20/05	3180	267	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND
Effluent	05/20/05	ND	ND	11	ND	ND	2.6	NS	NS	NS	NS	248	183	ND	NS

** = First day breakthrough detected.
E = Estimated
Samples analyzed using TO-14 and MADEP APH methods.

Table H-1

Contaminant Mass Removal Summary via AS/SVE

Olin Chemical Corporation - Wilmington, MA

Date	Time	Incremental Operating Hours	Field Measurement of Total VOCs as Isobutylene (ppmv)	Conc. [A] (mg/m3)	Flow Rate[B] (scfm)	Mass Removal Rate (lb/hr)	Incremental Mass Removed (lbs)	Cumulative Mass Removed (lbs)	Cumulative System Run Time (days)
12/08/00	8:45 AM	0	0	0.0	0.00	0.00	0.00	0.0	0.0
12/14/00	1:23 PM	148.6	575	1027.0	174.92	0.67	100.01	100.0	6.2
12/15/00	3:42 PM	26.3	511	912.6	172.54	0.59	15.52	115.5	7.3
12/18/00	1:32 PM	69.8	514	918.0	105.63	0.36	25.36	140.9	10.2
12/19/00	4:42 PM	27.2	339	605.5	171.80	0.39	10.58	151.5	11.3
12/20/00	2:59 PM	22.3	390	696.5	169.28	0.44	9.84	161.3	12.3
12/21/00	2:47 PM	23.8	314	560.8	171.84	0.36	8.59	169.9	13.3
12/22/00	2:55 PM	24.1	269	480.4	171.71	0.31	7.46	177.4	14.3
12/27/00	12:40 PM	117.8	267	476.9	174.43	0.31	36.69	214.1	19.2
12/28/00	3:45 PM	27.1	238	425.1	174.48	0.28	7.52	221.6	20.3
01/02/01	2:55 PM	119.2	268	478.6	174.37	0.31	37.25	258.8	25.3
01/03/01	3:15 PM	24.3	153	273.3	174.30	0.18	4.34	263.2	26.3
01/04/01	2:56 PM	23.7	217	387.6	169.50	0.25	5.83	269.0	27.3
01/05/01	1:37 PM	22.7	234	417.9	173.16	0.27	6.15	275.2	28.2
01/08/01	11:50 AM	70.2	254	453.6	173.16	0.29	20.66	295.8	31.1
01/10/01	2:25 PM	50.6	167	298.3	174.46	0.19	9.86	305.7	33.2
01/18/01	3:26 PM	193.0	474	846.6	186.76	0.59	114.31	420.0	41.3
01/22/01	11:15 AM	91.8	395	705.5	178.99	0.47	43.43	463.4	45.1
01/24/01	2:51 PM	51.6	314	560.8	175.35	0.37	19.01	482.4	47.3
01/26/01	3:40 PM	48.8	433	773.3	178.12	0.52	25.19	507.6	49.3
02/08/01	11:55 AM	308.3	383	684.0	165.00	0.42	130.32	637.9	62.1
02/13/01	11:20 AM	119.4	217	387.6	165.00	0.24	28.60	666.5	67.1
02/16/01	2:53 PM	75.6	218	389.3	169.81	0.25	18.71	685.2	70.3
02/22/01	2:46 PM	143.9	211	376.8	163.55	0.23	33.22	718.4	76.3
03/01/01	1:30 PM	166.7	172	307.2	179.95	0.21	34.52	753.0	83.2
03/08/01	12:14 PM	166.7	200	357.2	170.31	0.23	37.99	791.0	90.1
03/14/01	12:32 PM	144.3	133	237.5	149.11	0.13	19.14	810.1	96.2
03/23/01	8:00 AM	211.5	133	237.5	149.11	0.13	28.06	838.2	105.0
04/13/01	1:24 PM	509.4	15	26.1	40.21	0.00	2.00	840.2	126.2
04/20/01	10:45 AM	165.3	17	30.4	62.71	0.01	1.18	841.3	133.1
05/11/01	11:16 AM	504.5	142	253.6	146.72	0.14	70.32	911.7	154.1
05/14/01	11:56 AM	72.7	96	171.5	187.42	0.12	8.75	920.4	157.1
05/18/01	1:20 PM	97.4	115	205.4	175.62	0.14	13.16	933.6	161.2
05/25/01	3:18 PM	170.0	64	114.3	159.00	0.07	11.57	945.1	168.3
06/01/01	2:23 PM	167.1	98	175.0	84.17	0.06	9.22	954.4	175.2
06/08/01	3.04 PM	168.7	174	310.8	79.58	0.09	15.63	970.0	182.3
06/15/01	1:20 PM	166.3	75	134.0	83.96	0.04	7.00	977.0	189.2
06/22/01	10:40 AM	165.3	115	205.4	96.98	0.07	12.34	989.3	196.1
06/28/01	10:50 AM	144.2	73	130.4	90.55	0.04	6.38	995.7	202.1
07/10/01	2:49 PM	292.0	78	139.3	96.49	0.05	14.70	1010.4	214.3
07/20/01	11:15 AM	236.4	94	167.9	169.38	0.11	25.18	1035.6	224.1
07/27/01	11:48 AM	168.6	126	225.0	137.23	0.12	19.50	1055.1	231.1
08/03/01	2:49 PM	171.0	89	159.0	144.78	0.09	14.74	1069.8	238.3
08/17/01	12:57 PM	334.1	95	169.7	87.36	0.06	18.55	1088.4	252.2
08/21/01	12:00 AM	83.1	95	169.7	43.68	0.03	2.31	1090.7	255.6
08/23/01	4:04 PM	64.1	131	234.0	238.37	0.21	13.38	1104.1	258.3
08/30/01	4:10 PM	168.1	118	210.7	67.76	0.05	8.99	1113.0	265.3
09/07/01	1:04 PM	188.9	193	344.7	144.91	0.19	35.34	1148.4	273.2
09/14/01	12:39 PM	167.6	247	441.1	178.85	0.30	49.53	1197.9	280.2
09/21/01	10:47 AM	166.1	171	305.4	199.75	0.23	37.96	1235.9	287.1
09/28/01	10:43 AM	167.9	192	342.9	134.38	0.17	28.99	1264.9	294.1
10/05/01	2:48 PM	172.1	207	369.7	229.34	0.32	54.65	1319.5	301.3
10/07/01	12:00 AM	33.2	Shutdown						302.6
10/09/01	12:00 AM	0.0	Restart						302.6
10/12/01	11:24 AM	83.4	188	335.8	187.83	0.24	19.70	1339.2	306.1
10/19/01	11:10 AM	167.8	298	532.2	198.83	0.40	66.50	1405.7	313.1
10/26/01	10:10 AM	167	288	514.4	179.95	0.35	57.90	1463.6	320.1
11/01/01	2.42 PM	148.5	215	384.0	231.02	0.33	49.35	1513.0	326.2
11/09/01	2:19 PM	191.6	181	323.3	171.94	0.21	39.89	1552.9	334.2
11/19/01	1:35 PM	239.3	155	276.8	187.09	0.19	46.42	1599.3	344.2
11/28/01	12:16 PM	214.7	220	392.9	173.18	0.25	54.72	1654.0	353.1

Table H-1

Contaminant Mass Removal Summary via AS/SVE

Olin Chemical Corporation - Wilmington, MA

Date	Time	Incremental Operating Hours	Field Measurement of Total VOCs as Isobutylene (ppmv)	Conc. [A] (mg/m3)	Flow Rate[B] (scfm)	Mass Removal Rate (lb/hr)	Incremental Mass Removed (lbs)	Cumulative Mass Removed (lbs)	Cumulative System Run Time (days)
12/07/01	12:55 PM	216.7	183	326.8	162.95	0.20	43.22	1697.2	362.2
12/13/01	12:20 PM	143.4	259	462.6	174.10	0.30	43.26	1740.5	368.1
12/21/01	11:53 AM	191.5	53	94.7	180.22	0.06	12.24	1752.7	376.1
12/28/01	9:40 AM	165.8	74	132.2	177.79	0.09	14.59	1767.3	383.0
01/04/02	10:43 AM	168.0	51	91.1	178 56	0.06	10.23	1777.5	390.0
01/11/02	11:07 AM	168.4	58	103.6	185.86	0.07	12.14	1789.7	397.1
01/25/02	1:42 PM	338.6	45	80.4	160.35	0.05	16.34	1806.0	411.2
02/01/02	12:14 PM	166.5	44	78.6	160.11	0.05	7.85	1813.9	418.1
02/08/02	11:06 AM	166.9	31	55.4	148.31	0 03	5.13	1819.0	425.1
02/15/02	11:10 AM	168.1	25	44.7	181.70	0.03	5.11	1824.1	432.1
02/21/02	11:26 AM	144 3	38	67.9	171.60	0.04	6.29	1830.4	438.1
03/01/02	10:45 AM	191.3	11	19.6	158.57	0.01	2.23	1832.7	446.0
03/07/02	11:48 AM	145.1	15	26.6	166.18	0.02	2.40	1835.1	452.1
03/08/02	11:15 AM	23.4	10	17.9	157.85	0.01	0.25	1835.3	453.1
03/15/02	11:05 AM	167.8	9	16.1	137.94	0.01	1 39	1836.7	460.1
03/21/02	11:51 AM	144.8	20	35.9	153.25	0.02	2.98	1839.7	466.1
03/29/02	11:03 AM	191.2	6	10.7	165.62	0.01	1.27	1840.9	474.1
04/04/02	11:53 AM	144.8	6	10.7	155.03	0.01	0.90	1841.9	480.1
04/12/02	10:59 AM	191.1	12	21.4	165.54	0.01	2.54	1844.4	488.0
04/19/02	11:50 AM	168.8	27	48.4	153.41	0.03	4.70	1849.1	495.1
04/26/02	11:05 AM	167.3	17	30.4	214.55	0.02	4.08	1853.2	502.1
05/02/02	11:35 AM	144.5	16	28.0	170.37	0.02	2.59	1855.8	508.1
05/10/02	11:20 AM	191.7	9	15.9	165.54	0.01	1.89	1857.6	516.1
05/16/02	11:30 AM	144.2	13	22.9	143.48	0.01	1.77	1859.4	522.1
05/24/02	11:17 AM	191.8	7	12.5	151 44	0.01	1.36	1860.8	530.1
05/29/02	4:33 PM	125.3	Shutdown						535.3
05/30/02	11:35 AM	0.0	9	16.6	161.15	0.01	0.00	1860.8	535.3
06/03/02	10:00 AM	0.0	Restart						535.3
06/06/02	11:30 AM	167.9	9	16.1	153.25	0.01	1.55	1862.3	542.3
06/13/02	11:46 AM	168.3	22	39.8	150.52	0.02	3.78	1866.1	549.3
06/21/02	11:01 AM	191.3	15	26.8	145.58	0.01	2.79	1868.9	557.3
06/27/02	10:55 AM	143.9	6	11.3	152.35	0 01	0.92	1869.8	563.3
07/02/02	3:18 PM	124.4	Shutdown						568 4
07/03/02	11:50 AM	0.0	15	26.8	140 75	0.01	0.00	1869.8	568.4
07/08/02	1:00 PM	0.0	Restart						568.4
07/11/02	11:16 AM	191.4	56	100.2	149.4	0.06	10.73	1880.6	576.4
07/15/02	11:10 AM	95.9	25	44.7	136.73	0.02	2.19	1882.7	580.4
07/19/02	11:10 AM	96.0	20	35.7	133.55	0.02	1.72	1884.5	584.4
07/19/02	12:30 PM	1.3	Shutdown						584.5
07/19/02	1:30 PM	0.0	Restart						584.5
07/25/02	2:30 PM	147.3	3	5.5	152.09	0.00	0.46	1884.9	590.6
08/02/02	1:42 PM	191.2	33	58.9	149.5	0 03	6.31	1891.2	598.6
08/08/02	11:25 AM	141 7	24	42.9	143.68	0.02	3.27	1894.5	604.5
08/16/02	11:59 AM	192.6	33	58.9	125.78	0.03	5.35	1899.9	612.5
08/22/02	1:15 PM	145.3	52	92.3	132.05	0.05	6.63	1906.5	618.6
08/30/02	11:08 AM	189.9	38	67 9	152.54	0.04	7.36	1913.9	626.5
09/13/02	1:20 PM	338.2	46	82.2	127.21	0.04	13.24	1927.1	640.6
09/19/02	12:00 PM	142.7	56	99.1	128 41	0.05	6.80	1933.9	646.5
09/26/02	11:12 AM	167.2	16	28.6	146.27	0.02	2 62	1936.5	653.5
10/03/02	1:24 PM	170.2	50	88.8	138.84	0.05	7.86	1944.4	660.6
10/10/02	12:50 PM	167.4	34	60.7	126.01	0.03	4.80	1949.2	667.5
10/17/02	11:46 AM	166.9	73	130.7	120.65	0.06	9.86	1959.0	674.5
10/25/02	12:55 PM	193.2	32	57.2	121.36	0.03	5.02	1964 0	682.5
10/31/02	6:40 AM	137.8	Shutdown						688.3
11/01/02	1:10 PM	0.0	Restart						688.3
11/07/02	11:19 AM	142.2	9	15.5	136.64	0.01	1.13	1965.2	694.2
11/14/02	3:02 PM	171.7	16	28.6	126.73	0.01	2.33	1967.5	701.4
11/18/02	2:27 PM	95.4	Shutdown						705.3
11/18/02	2 36 PM	0.0	6	10 7	131.14	0.01	0.00	1967 5	705.3
11/18/02	2:45 PM	0.0	Restart						705.3
11/21/02	11:05 AM	68.3	46	82.5	127.97	0.04	2.70	1970.2	708.2

Table H-1

Contaminant Mass Removal Summary via AS/SVE

Olin Chemical Corporation - Wilmington, MA

Date	Time	Incremental Operating Hours	Field Measurement of Total VOCs as Isobutylene (ppmv)	Conc. [A] (mg/m3)	Flow Rate[B] (scfm)	Mass Removal Rate (lb/hr)	Incremental Mass Removed (lbs)	Cumulative Mass Removed (lbs)	Cumulative System Run Time (days)
11/26/02	11:33 AM	120.5	28	50.0	123.91	0.02	2.80	1973.0	713.2
12/05/02	12:06 PM	216.6	20	35.4	138.19	0.02	3.96	1977.0	722.2
12/09/02	1:52 PM	97.8	16	28.6	138.11	0.01	1.45	1978.4	726.3
12/19/02	2:18 PM	240 4	10	17.0	183.22	0.01	2.80	1981.2	736.3
12/27/02	10:44 AM	188.4	12	21.4	163.13	0.01	2.47	1983.7	744.2
01/02/03	3:00 PM	148.3	5	9.5	148.68	0.01	0.78	1984.5	750.3
01/10/03	2:59 PM	192.0	4	7.9	205.00	0.01	1.16	1985.6	758.3
01/16/03	1:31 PM	142.5	3	5.5	138.35	0.00	0.41	1986.0	764.3
01/24/03	2.52 PM	193.3	1	2.3	178.52	0.00	0.30	1986.3	772.3
01/30/03	1:54 PM	143.0	2	3.4	145.83	0.00	0.27	1986.6	778.3
02/10/03	2:08 PM	264.2	2	3.6	187.24	0.00	0.66	1987.3	789.3
02/14/03	2 07 PM	96.0	3	4.8	175.08	0.00	0 30	1987.6	793.3
02/20/03	2:00 AM	131.9	Shutdown						
02/21/03	9:35 AM	0.0	Restart						
02/21/03	1:20 PM	3.8	5	8.9	288.28	0.01	0.04	1987.6	793.5
02/27/03	1:44 PM	144.4	10	17.7	167.59	0.01	1.60	1989.2	799.5
03/07/03	12:02 PM	190.3	2	3.6	139.96	0.00	0.36	1989.6	807.4
03/17/03	1:56 PM	241 9	Shutdown						
03/21/03	9:10 AM	0.0	Restart						
03/21/03	12:08 PM	3.0	1	1.8	139.96	0.00	0.00	1989.6	807.5
03/27/03	10:45 AM	142.6	3	5.2	152.57	0.00	0.42	1990.0	813.5
04/02/03	11:52 AM	145 1	2	3.2	124.13	0.00	0.22	1990.2	819.5
04/10/03	10:59 AM	191.1	2	2.9	133.46	0.00	0.27	1990.5	827.5
04/18/03	1:17 PM	194.3	3	5.0	159.36	0.00	0.58	1991.1	835.6
04/24/03	10:47 AM	141.5	4	6.8	124.08	0.00	0.45	1991.5	841.5
05/02/03	3:37 PM	196.8	5	8.6	138.55	0.00	0.88	1992.4	849.7
05/08/03	1:33 PM	141.9	1	2.1	133.07	0.00	0.15	1992.5	855.6
05/15/03	2:24 PM	168.8	0	0.0	122 81	0.00	0.00	1992.5	862.6
05/22/03	1:28 PM	167.1	8	14.1	161.32	0.01	1.42	1993.9	869.6
05/30/03	1:56 PM	192.5	3	4.5	153.83	0.00	0.50	1994.4	877.6
06/02/03	8:06 AM	66.2	Shutdown						
06/03/03	10:00 AM	0.0	Restart						
06/05/03	1:50 PM	51.8	8	14.8	145.03	0.01	0.42	1994.9	879.8
06/12/03	2:53 PM	169.0	3	5.7	139.38	0 00	0.50	1995.4	886.8
06/20/03	1:26 PM	190.5	8	14.8	154.87	0 01	1.64	1997.0	894.7
06/21/03	10:09 AM	20.7	Shutdown						
06/21/03	12:00 PM	0.0	Restart						
06/23/03	2:29 PM	50.5	Shutdown						
06/23/03	4:40 PM	0.0	Restart						
06/30/03	11:57 AM	163.3	6	11.4	152.99	0.01	1.07	1998.1	901.6
07/03/03	10:24 AM	70.5	13	23.0	134.51	0.01	0.82	1998.9	904.5
07/10/03	11:57 AM	169.5	9	16.8	153.29	0.01	1.63	2000.5	911.6
07/17/03	10:37 AM	166.7	15	26.3	134.23	0.01	2.20	2002.7	918.5
07/24/03	11:30 AM	168.9	Shutdown						
07/24/03	0.25	0.0	Restart						
07/24/03	11:42 AM	5.7	10	18 6	154.64	0.01	0.06	2002.8	918.7
08/01/03	11:11 AM	191.5	9	15.2	154.89	0.01	1.69	2004.5	926.7
08/02/03	12:11 PM	25.0	10	17.0	155.89	0.01	0.25	2004.7	927.8
08/06/03	11:32 AM	95.3	12	21.4	153.56	0.01	1.18	2005.9	931.7
08/12/03	5:27 PM	149.9	Shutdown						
08/12/03	7:27 PM	0.0	Restart						
08/13/03	11:19 AM	15.9	Shutdown						
08/13/03	11:45 AM	0.0	Restart						
08/14/03	2:26 PM	26.7	20	35.7	141.04	0.02	0.50	2006.4	932.8
08/21/03	12.29 PM	166.0	10	17.9	152.16	0.01	1.69	2008.1	939.8
08/22/03	5:50 PM	29.3	Shutdown						
08/22/03	7:50 PM	0.0	Restart						
08/28/03	10:31 AM	134.7	4	6.4	130.41	0.00	0.42	2008.5	945.4
09/04/03	11:31 AM	169.0	23	40.4	155.84	0.02	3.98	2012.5	952.4
09/09/03	1:48 PM	122.3	Shutdown						
09/11/03	11:14 AM	0.0	2	2.7	0.00	0.00	0.00	2012.5	952.4

Table H-1

Contaminant Mass Removal Summary via AS/SVE

Olin Chemical Corporation - Wilmington, MA

Date	Time	Incremental Operating Hours	Field Measurement of Total VOCs as Isobutylene (ppmv)	Conc. [A] (mg/m3)	Flow Rate[B] (scfm)	Mass Removal Rate (lb/hr)	Incremental Mass Removed (lbs)	Cumulative Mass Removed (lbs)	Cumulative System Run Time (days)
09/12/03	10:00 AM	0.0	Restart						
09/18/03	1:20 PM	147.3	15	26.8	154.64	0.02	2.29	2014.8	958.5
09/25/03	11:05 AM	165.8	18	32.3	134.36	0.02	2.70	2017.5	965.5
10/02/03	11:50 AM	168 8	11	19.6	134 81	0.01	1.67	2019.2	972.5
10/09/03	11:21 AM	167.5	18	32.9	159.32	0 02	3.29	2022.4	979.5
10/12/03	9:36 PM	82.3	Shutdown						
10/13/03	12:00 PM	0.0	Restart						
10/16/03	11:46 AM	71.8	7	13.2	141.31	0.01	0.50	2022.9	982.5
10/23/03	1:13 PM	169.5	22	38.8	155.84	0 02	3.83	2026.8	989.5
10/24/03	1:07 PM	23.9	Shutdown						
10/24/03	3:07 PM	0.0	Restart						
11/03/03	1:33 PM	238.4	8	13.6	129.34	0.01	1.57	2028.3	999.5
11/06/03	1:38 PM	72 1	15	27.3	142.02	0.01	1.05	2029.4	1002.5
11/13/03	11:32 AM	165.9	15	27.1	157.95	0 02	2.66	2032.1	1009.4
11/20/03	2:01 PM	170.5	0	0.0	138.70	0.00	0.00	2032.1	1016.5
11/26/03	11:59 AM	142.0	7	13.2	157.99	0.01	1.11	2033.2	1022.4
12/04/03	1:31 PM	193.5	8	14.5	139 83	0 01	1.47	2034.6	1030.4
12/08/03	1:47 PM	96.3	11	19 1	144.59	0.01	1 00	2035.6	1034.5
12/17/03	7:44 PM	222.0	Shutdown						
12/17/03	9:44 PM	0.0	Restart						
12/18/03	2:00 PM	16.3	3	5.7	139.86	0.00	0.05	2035.7	1035.1
12/23/03	11:34 AM	117.6	13	23.8	144.09	0.01	1.51	2037.2	1040.0
12/30/03	1:25 PM	169.9	22	39.3	143.36	0.02	3.58	2040.8	1047.1
01/06/04	1:24 PM	168.0	25	44.3	158.95	0.03	4.43	2045.2	1054.1
01/13/04	1:20 PM	167.9	20	36.4	144.76	0.02	3.32	2048.5	1061.1
01/16/04	11:18 AM	70.0	Shutdown						
01/16/04	1:30 PM	0.0	Restart						
01/22/04	1:38 PM	144.1	27	48.6	161.13	0.03	4.23	2052.7	1067.1
01/30/04	1:35 PM	191.9	17	30.4	101.82	0 01	2.22	2055.0	1075.1
02/05/04	11:50 AM	142.3	34	60.7	160.22	0.04	5.18	2060.1	1081.0
02/07/04	1:03 PM	49.2	Shutdown						
02/09/04	8:30 AM	0.0	Restart						
02/10/04	11:17 AM	26.8	Shutdown						
02/11/04	8.30 AM	0.0	Restart						
02/13/04	1:06 PM	52.6	17	29.8	159.16	0.02	0.94	2061.1	1083 2
02/19/04	1:52 PM	144.8	15	27.3	159.22	0.02	2.36	2063.4	1089.3
02/26/04	NM	-	17	30.0	143 99	0.02	-	-	-
03/03/04	1:28 PM	311.6	15	27.5	157.47	0.02	5.06	2068.5	1102.2
03/06/04	9:41 AM	68.2	Shutdown						
03/08/04	8:30 AM	0.0	Restart						
03/10/04	2:31 PM	54.0	Shutdown						
03/10/04	4:30 PM	0.0	Restart						
03/11/04	NM	-	18	31.6	138.53	0.02	-	-	-
03/18/04	1:30 PM	189.0	17	29.6	159.65	0.02	3.35	2071.8	1110.1
03/24/04	1:30 PM	144.0	1	2.3	142.85	0 00	0 18	2072.0	1116.1
03/31/04	1:08 PM	167.6	12	22.1	139.18	0.01	1.94	2074.0	1123.1
04/08/04	1:47 PM	192.7	2	3.8	150.17	0.00	0.41	2074.4	1131.1
04/14/04	2:05 AM	132.3	Shutdown						
04/15/04	8:30 AM	0.0	Restart						
04/15/04	NM	-	NM	-	-	-	-	-	-
04/29/04	1:44 PM	341.2	3	5.9	154.88	0.00	1.17	2075.5	1145.4
05/06/04	11:17 AM	165.5	Shutdown						
05/06/04	1:00 PM	0.0	Restart						
05/06/04	2:10 PM	1.2	3	6.1	133.53	0.00	0.00	2075.5	1145.4
05/14/04	11:57 AM	189.8	5	8.9	155.19	0.01	0.99	2076.5	1153.3
05/20/04	10:33 AM	142 6	11	19.6	121.34	0.01	1.27	2077.8	1159.3
05/27/04	1:57 PM	171.4	6	11.4	128.10	0.01	0.94	2078.7	1166.4
05/28/04	11:21 AM	21.4	Shutdown						
05/29/04	1:00 PM	0.0	Restart						
06/02/04	11:23 AM	94.4	Shutdown						
06/02/04	4:00 PM	0.0	Restart						

Table H-1

Contaminant Mass Removal Summary via AS/SVE

Olin Chemical Corporation - Wilmington, MA

Date	Time	Incremental Operating Hours	Field Measurement of Total VOCs as Isobutylene (ppmv)	Conc. [A] (mg/m3)	Flow Rate[B] (scfm)	Mass Removal Rate (lb/hr)	Incremental Mass Removed (lbs)	Cumulative Mass Removed (lbs)	Cumulative System Run Time (days)
06/03/04	3:05 PM	23.1	7	11.6	121.68	0.01	0.12	2078.9	1167.4
06/10/04	11:57 AM	164.9	6	10.2	155.21	0.01	0.98	2079.8	1174.2
06/17/04	11:52 AM	167.9	11	18.8	120.40	0.01	1.42	2081.3	1181.2
06/18/04	9:56 AM	22.1	Shutdown						
06/18/04	12:00 PM	0.0	Restart						
06/24/04	11:57 AM	144.0	10	18.6	142.96	0.01	1.43	2082.7	1187.2
07/01/04	3:48 PM	171.8	8	14.6	124.82	0.01	1.18	2083.9	1194.4
07/08/04	2:20 PM	166.5	17	29.6	125.86	0.01	2.33	2086.2	1201.3
07/15/04	9:20 AM	163.0	8	14.3	125.86	0.01	1.10	2087.3	1208.1
07/15/04	10:55 AM	1.6	Shutdown						
08/27/04	9:34 AM	0.0	Restart						
08/27/04	1:23 PM	3.8	6	10.0	152.88	0.01	0.02	2087.3	1208.3
09/02/04	2:12 PM	144.8	15	26.8	147.06	0.01	2.14	2089.4	1214.3
09/03/04	11:01 AM	20.8	Shutdown						
09/04/04	1:00 PM	0.0	Restart						
09/16/04	2:16 PM	289.3	13	22.3	121.29	0.01	2.93	2092.4	1226.4
09/24/04	1:32 PM	191.3	10	18.0	158.22	0.01	2.04	2094.4	1234.3
09/30/04	3:05 PM	145.5	20	35.7	135.69	0.02	2.64	2097.1	1240.4
10/08/04	11:38 AM	188.6	7	12.9	169.48	0.01	1.54	2098.6	1248.2
10/15/04	1:19 PM	169.7	8	14.6	144.75	0.01	1.35	2100.0	1255.3
10/22/04	11:33 AM	166.2	5	8.0	176.86	0.01	0.89	2100.8	1262.2
10/28/04	11:33 AM	144.0	12	141.8	177.86	0.09	13.61	2114.4	1268.2
11/04/04	1:27 PM	169.9	12	141.8	172.64	0.09	15.58	2130.0	1275.3
11/12/04	11:00 AM	189.6	8	141.8	139.35	0.07	14.03	2144.1	1283.2
11/19/04	10:25 AM	167.4	5	141.8	151.88	0.08	13.51	2157.6	1290.2
11/24/04	11:00 AM	120.6	13	141.8	146.06	0.08	9.36	2166.9	1295.2
12/09/04	11:38 AM	360.6	10	17.7	146.77	0.01	3.51	2170.4	1310.2
12/23/04	11:38 AM	336.0	4	6.8	138.88	0.00	1.19	2171.6	1324.2
01/05/05	11:38 AM	312.0	5	8.9	125.71	0.00	1.31	2172.9	1337.2
01/20/05	11:38 AM	360.0	2	2.7	136.44	0.00	0.49	2173.4	1352.2
02/03/05	11:38 AM	336.0	3	4.8	157.88	0.00	0.96	2174.4	1366.2
02/09/05	11:38 AM	144.0	5	8.9	147.20	0.00	0.71	2175.1	1372.2
03/03/05	11:38 AM	528.0	1	0.9	129.71	0.00	0.23	2175.3	1394.2
03/17/05	11:38 AM	336.0	2	3.2	124.46	0.00	0.50	2175.8	1408.2
04/01/05	11:38 AM	360.0	8	14.3	118.58	0.01	2.28	2178.1	1423.2
04/14/05	11:38 AM	312.0	34	60.7	152.60	0.03	10.83	2188.9	1436.2
04/28/05	11:38 AM	336.0	2	4.1	133.94	0.00	0.69	2189.6	1450.2
05/12/05	11:38 AM	336.0	6	10.4	133.40	0.01	1.74	2191.4	1464.2
05/26/05	11:38 AM	336.0	5	9.3	125.00	0.00	1.46	2192.8	1478.2
06/09/05	11:38 AM	336.0	6	10.7	122.35	0.00	1.65	2194.5	1492.2
06/22/05	11:38 AM	312.0	6	11.1	112.01	0.00	1.45	2195.9	1505.2
	Total Time:	38177.8				Total Mass Removed:		2195.9	

Notes:

Shaded cells indicate the current reporting period.

ND = Non-detect (less than 0.1 ppmv)

[A] 2,4,4-trimethyl-1-pentene conversion factor (1ppm on PID = 1.786 mg/m3) calculated from Air Toxics Lab Data

[B] Flow rate based on field measurements

Table I-1

Summary of Baseline Groundwater Sampling Results
Olin Chemical Corporation - Wilmington, MA

Sample Location	Date	pH (EPA 150.1)	Bicarbonate Alkalinity (SM18 2320B)	Carbonate Alkalinity (SM18 2320B)	Sulfate (EPA 300.0)	Nitrate-N (EPA 300.0)	Nitrite-N (EPA 300.0)	Orthophosphate-P (SM18 4500PE)	Sulfide (SM18 4500SE)	Ammonia-N (LAC 107061A)	Total Kjeldahl Nitrogen (LAC 107062D
		S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GW-16	8/1/2002	5.86	14.00	ND	39.50	10.20	ND	ND	ND	0.92	ND
GW-102	8/1/2002	6.03	40.00	ND	18.10	0.16	ND	ND	ND	0.29	ND
GW-101	8/1/2002	6.32	85.00	ND	6.30	ND	ND	0.11	ND	0.43	ND
GW-100	8/2/2002	3.21	59.00	ND	9.00	ND	0.04	ND	ND	0.25	ND
IW-3	8/2/2002	6.06	126.00	ND	4.40	ND	ND	ND	ND	4.73	7.10
IW-1	8/2/2002	6.12	41.00	ND	25.40	1.71	ND	ND	ND	1.07	4.50

Note:
ND = Not Detected

TABLE I-2

NIS Field Kit Analytical Results
Olin Chemical Corp. - Wilmington, MA

Date	Orthophosphate - P (mg/L)			Nitrate-N (mg/L)			Ammonia-N (mg/L)		
	IW-11	IW-12	IW-13	IW-11	IW-12	IW-13	IW-11	IW-12	IW-13
4/17/2003	0.04	0.13	3.00	0.6	0.5	1.0	NT	NT	NT
4/21/2003	0.27	0.05	4.63	0.5	0.3	0.7	NT	NT	NT
4/28/2003	0.29	0.07	2.00	0.5	0.4	0.5	NT	NT	NT
5/5/2003	0.28	0.31	1.27	0.4	0.3	0.9	NT	NT	NT
5/13/2003	0.30	0.06	0.85	0.4	0.2	0.7	NT	NT	NT
5/19/2003	0.53	0.08	1.03	0.4	0.3	0.9	NT	NT	NT
5/27/2003	1.43	0.06	1.13	0.4	0.3	0.8	NT	NT	NT
6/2/2003	2.50	0.04	4.17	0.5	0.3	1.0	NT	NT	NT
6/9/2003	2.40	0.20	10.60	0.4	0.2	0.8	NT	NT	NT
6/17/2003	4.9	0.1	42.0	NT	NT	NT	4.3	3.0	21.8
6/23/2003	4.9	0.8	8.4	NT	NT	NT	4.3	1.8	23.8
6/30/2003	4.6	1.0	6.8	NT	NT	NT	2.3	2.0	21.3
7/7/2003	5.8	0.5	8.6	NT	NT	NT	4.6	3.0	28.7
7/15/2003	5.4	0.1	5.1	NT	NT	NT	5.5	3.7	23.2
7/21/2003	4.5	0.1	4.0	NT	NT	NT	4.6	3.3	27.4
7/28/2003	3.0	0.1	4.0	NT	NT	NT	5.2	4.0	18.3
8/11/2003	6.0	0.6	21.5	NT	NT	NT	4.0	2.1	26.8
8/18/2003	5.6	3.0	24.0	NT	NT	NT	5.2	3.7	27.0
8/25/2003	6.3	0.1	17.5	NT	NT	NT	7.5	0.6	20.1
9/2/2003	7.2	0.6	11.6	NT	NT	NT	0.5	0.9	11.7
9/8/2003	6.8	1.1	12.0	NT	NT	NT	4.3	4.6	25.0
9/15/2003	9.0	0.8	9.8	NT	NT	NT	3.7	2.1	29.3
9/22/2003	17.0	8.5	25.5	NT	NT	NT	4.9	3.1	30.5
10/1/2003	14.7	19.2	40.5	NT	NT	NT	5.2	2.7	29.9
10/14/2003	2.7	3.2	16.0	NT	NT	NT	4.9	4.0	28.0
10/20/2003	8.5	0.5	29.0	NT	NT	NT	4.9	2.8	26.8
10/27/2003	13.8	<1.0	23.5	NT	NT	NT	4.6	3.1	29.3
11/3/2003	2.5	1.7	25.0	NT	NT	NT	10.4	5.9	47.6
11/10/2003	14.2	1.0	24.5	NT	NT	NT	4.0	2.7	32.9
11/17/2003	30.0	0.5	15.5	NT	NT	NT	3.6	3.1	34.2
11/24/2003	14.3	1.5	11.5	NT	NT	NT	5.2	3.7	35.4
12/1/2003	18.0	1.5	20.0	NT	NT	NT	1.2	0.3	19.5
6/4/2004	6.3	0.2	2.3	NT	NT	NT	34.2	3.7	33.2
6/18/2004	6.5	0.1	3.5	NT	NT	NT	NT	NT	NT
6/22/2004	4.0	0.3	2.0	NT	NT	NT	4.5	0.01	20.0
6/29/2004	2.5	0.1	3.0	NT	NT	NT	4.0	4.00	20.0
7/22/2004	2.5	0.3	2.5	NT	NT	NT	3.0	2.50	25.0
7/30/2004	NT	NT	NT	NT	NT	NT	NT	NT	NT
8/5/2004	4.0	<1	8.5	NT	NT	NT	3.5	2.50	21.0
8/11/2004	5.0	0.4	8.3	NT	NT	NT	3.0	2.00	20.0
8/19/2004	7.0	0.2	19.0	NT	NT	NT	3.0	2.00	20.0
8/26/2004	9.0	<1	12.0	NT	NT	NT	3.0	2.50	20.0
9/1/2004	5.0	<0.5	17.0	NT	NT	NT	3.5	2.50	22.0
9/7/2004	9.6	0.3	7.5	NT	NT	NT	3.5	2.50	25.0
9/8/2004	9.6	0.3	7.5	NT	NT	NT	3.5	2.50	25.0
9/17/2004	11.4	<1	3.7	NT	NT	NT	3.0	2.00	20.0
9/23/2004	17.6	0.3	8.2	NT	NT	NT	3.5	2.50	27.5
9/28/2004	20.0	0.3	12.0	NT	NT	NT	3.0	2.50	23.0
10/7/2004	23.0	0.3	9.0	NT	NT	NT	2.5	2.00	20.0
10/13/2004	13.8	0.3	5.7	NT	NT	NT	3.5	2.50	27.5
10/21/2004	19.5	0.2	5.6	NT	NT	NT	2.5	2.50	22.5
10/27/2004	29.2	0.3	8.5	NT	NT	NT	2.5	2.50	27.5
11/3/2004	23.7	0.3	22.8	NT	NT	NT	2.5	2.50	25.0
11/10/2004	22.5	0.3	5.2	NT	NT	NT	25.0	2.50	27.5
11/17/2004	28.3	1.2	3.6	NT	NT	NT	2.5	2.50	27.5
11/29/2004	17.6	0.3	10.3	NT	NT	NT	2.5	2.50	25.0
12/8/2004	20.2	1.2	20.5	NT	NT	NT	2.5	2.50	25.0
12/15/2004	23.3	1.2	27.8	NT	NT	NT	2.5	2.50	25.0
12/21/2005	26.0	0.5	22.0	NT	NT	NT	2.5	2.50	25.0
12/28/2004	21.7	0.7	62.0	NT	NT	NT	2.5	2.00	25.0
1/4/2005	28.0	0.9	13.5	NT	NT	NT	3.0	2.50	20.0
1/19/2005	25.0	0.7	8.5	NT	NT	NT	2.5	2.50	25.0

1/25/2005	38.0	0.2	3.8	NT	NT	NT	3.0	2.50	30.0
2/1/2005	37.8	2.0	3.0	NT	NT	NT	2.5	2.50	27.5
2/8/2005	29.3	2.3	2.5	NT	NT	NT	3.0	2.50	25.0
2/15/2005	28.3	2.5	15.8	NT	NT	NT	2.5	2.50	25.0
2/23/2005	34.3	2.7	22.2	NT	NT	NT	3.0	2.50	30.0
3/2/2005	44.3	2.5	49.3	NT	NT	NT	5.5	2.50	32.5
3/8/2005	45.5	7.1	36.0	NT	NT	NT	7.5	2.50	32.5
3/15/2005	47.7	2.5	41.7	NT	NT	NT	8.0	2.50	32.5
3/22/2005	48.3	6.6	29.0	NT	NT	NT	9.0	2.50	35.0
4/6/2005	54.0	2.1	28.3	NT	NT	NT	11.0	2.00	37.5
4/12/2005	53.3	1.2	10.2	NT	NT	NT	10.0	2.50	32.5
4/19/2005	44.7	5.5	14.5	NT	NT	NT	13.0	2.50	30.0
4/26/2005	50.0	9.7	8.5	NT	NT	NT	13.0	2.50	32.5
5/3/2005	33.0	3.4	5.0	NT	NT	NT	11.0	2.50	35.0
5/11/2005	28.6	4.1	5.2	NT	NT	NT	10.0	2.50	27.5
5/24/2005	17.0	2.8	2.0	NT	NT	NT	7.0	2.50	23.0
6/2/2005	17.0	2.6	2.5	NT	NT	NT	7.5	2.50	17.5
6/7/2005	19.7	2.6	2.7	NT	NT	NT	7.5	2.00	2.5
6/13/2005	18.2	2.7	2.2	NT	NT	NT	7.5	2.50	25.0

TABLE I-3

NIS Groundwater Laboratory Analytical Results
Olin Chemical Corp. - Wilmington, MA

Date	Orthophosphate - P (mg/L)								
	B-5R	P5	IW-1	IW-2	IW-3	GW-102	GW-101	GW-100	GW-13
4/3/2003	ND	10.6	91.0	NT	ND	ND	ND	ND	ND
5/23/2003	NT	113.0	14.2	NT	NT	ND	ND	ND	ND
9/29/2003	NT	160.0	156.0	28.0	307.0	NT	ND	NT	NT

Date	Ammonia-N (mg/L)								
	B-5R	P5	IW-1	IW-2	IW-3	GW-102	GW-101	GW-100	GW-13
4/3/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT
5/23/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT
9/29/2003	NT	6.0	2.0	ND	ND	NT	ND	NT	NT

Date	pH								
	B-5R	P5	IW-1	IW-2	IW-3	GW-102	GW-101	GW-100	GW-13
4/3/2003	6.04	6.40	6.02	NT	6.43	5.82	6.44	6.39	5.26
5/23/2003	NT	6.59	6.49	NT	NT	5.90	6.47	6.35	5.12
9/29/2003	NT	6.24	6.47	6.25	6.07	NT	6.67	NT	NT

Date	BEHP (ug/L)								
	B-5R	P5	IW-1	IW-2	IW-3	GW-102	GW-101	GW-100	GW-13
4/3/2003	ND	29,000	2,800	NT	18,000	ND	1,700	19,000	ND
5/23/2003	NT	21,000	780	NT		84	510	9,600	20
9/29/2003	NT	85,000	1,200	12,000	5,800	NT	1,100	NT	NT

Date	n-NDPA (ug/L)								
	B-5R	P5	IW-1	IW-2	IW-3	GW-102	GW-101	GW-100	GW-13
4/3/2003	ND	790	380	NT	2000	ND	ND	ND	ND
5/23/2003	NT	1600	740	NT		ND	ND	ND	ND
9/29/2003	NT	ND	ND	5200	2900	NT	26	NT	NT

Note:
ND = Not Detected
NT = Not Taken

TABLE J-1

NIS Weekly Injection Volume
Olin Chemical Corp. - Wilmington, MA

Date	Injection Volume (Liters)										Total Weekly Injection Volume (Liters)
	IP-1	IP-2	IP-3	IP-4	IP-5	IP-6	IP-7	IT-1	IT-2	IT-3	
3/17/2003	11.4	11.4	11.4	11.4	11.4	11.4	11.4	81.7	81.7	81.7	325
3/26/2003	3.0	197.0	0.0	2.0	1.0	0.0	1.0	142.0	142.0	142.0	630
4/2/2003	0.0	90.0	0.0	0.0	0.0	0.0	0.0	150.0	150.0	150.0	540
4/11/2003	0.5	197.0	0.5	0.5	0.5	0.5	0.5	140.0	30.0	140.0	510
4/17/2003	0.8	275.0	0.8	0.8	0.8	0.8	0.8	420.0	30.0	140.0	870
4/22/2003	0.3	100.0	0.3	0.3	0.3	0.3	0.3	150.0	0.0	150.0	402
4/29/2003	0.5	197.0	0.5	0.5	0.5	0.5	0.5	125.0	50.0	125.0	500
5/6/2003	0.5	150.0	0.5	0.5	0.5	0.5	0.5	159.0	159.0	159.0	630
5/14/2003	0.5	200.0	0.5	0.5	0.5	0.5	0.5	140.0	140.0	140.0	623
5/20/2003	0.5	200.0	0.5	0.5	0.5	0.5	0.5	142.0	142.0	142.0	629
5/28/2003	0.5	200.0	0.5	0.5	0.5	0.5	0.5	142.0	142.0	0.0	487
6/3/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	148.0	147.0	0.0	500
6/11/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	145.0	0.0	0.0	350
6/17/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	145.0	150.0	150.0	650
6/24/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/1/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/8/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/16/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/22/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	200.0	100.0	655
7/29/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
8/12/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650
8/19/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650
8/26/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650
9/2/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650
9/9/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650
9/16/2003	0.8	195.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	650

TABLE J-1

NIS Weekly Injection Volume
Olin Chemical Corp. - Wilmington, MA

Date	Injection Volume (Liters)										Total Weekly Injection Volume (Liters)
	IP-1	IP-2	IP-3	IP-4	IP-5	IP-6	IP-7	IT-1	IT-2	IT-3	
9/23/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
10/2/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
10/14/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
10/21/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
10/28/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/4/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/11/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/18/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/25/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/2/2003	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
6/9/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
6/17/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
6/23/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
6/30/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/23/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
7/30/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
8/5/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
8/12/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
8/20/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
8/26/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
9/1/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
9/7/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
9/17/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654
9/23/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654
9/29/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654
10/7/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654

TABLE J-1

NIS Weekly Injection Volume

Olin Chemical Corp. - Wilmington, MA

Date	Injection Volume (Liters)										Total Weekly Injection Volume (Liters)
	IP-1	IP-2	IP-3	IP-4	IP-5	IP-6	IP-7	IT-1	IT-2	IT-3	
10/14/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654
10/21/2004	0.0	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	654
10/27/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
10/28/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/3/2004	0.8	0.0	0.8	0.8	2.0	0.8	0.8	150.0	150.0	150.0	456
11/10/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
11/17/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/2/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/8/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/15/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/22/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
12/28/2004	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
1/4/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	150.0	150.0	150.0	655
1/19/2005	0.8	350.0	0.8	0.8	0.8	0.8	0.8	150.0	NA	150.0	655
1/26/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	200.0	200.0	200.0	800
2/1/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	200.0	200.0	200.0	800
2/8/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	200.0	200.0	200.0	800
2/15/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	200.0	200.0	200.0	800
2/23/2005	0.8	200.0	0.8	0.8	0.8	0.8	0.8	200.0	200.0	200.0	800
6/14/2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	200.0	0.0	150.0	350

NA = Not accessible

TABLE J-2

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

Date		P5		IW 1		IW 2		IW 3		IW 7	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
3/17/2003	Pre Inj.	12.7	12.71	Trace	12.62	12.55	12.56	12.72	12.73	12.36	12.37
	Post Inj	12.8	12.81	12.64	12.65	12.53	12.54	12.71	12.72	12.36	12.37
3/26/2003	Pre Inj.	-	11.84	-	12.15	-	11.97	-	12.05	NT	NT
	Post Inj	-	12.02	-	12.14	-	11.99	-	12.06	NT	NT
4/3/2003	Pre Inj.	Trace	11.68	Trace	11.82	NT	NT	-	11.76	NT	NT
	Post Inj	Trace	11.65	Trace	11.81	NT	NT	Trace	11.77	NT	NT
4/11/2003	Pre Inj.	NT	NT	-	11.95	-	11.81	-	11.91	NT	NT
	Post Inj	NT	NT	-	11.98	-	11.8	-	11.91	NT	NT
4/17/2003	Pre Inj.	NT	NT	-	12.03	-	11.85	-	11.91	NT	NT
	Post Inj	NT	NT	-	11.96	-	11.81	-	11.89	NT	NT
4/22/2003	Pre Inj.	NT	NT	-	12.17	-	12.05	-	12.12	NT	NT
	Post Inj	NT	NT	-	12.22	-	12.04	-	12.13	NT	NT
4/29/2003	Pre Inj.	NT	NT	-	12.30	-	12.15	-	12.17	NT	NT
	Post Inj	NT	NT	-	12.32	-	12.14	-	12.18	NT	NT
4/30/2003	Pre Inj.	NT	NT	-	12.34	-	12.13	-	12.19	NT	NT
	Post Inj	NT	NT	-	12.36	-	12.12	-	12.2	NT	NT
5/6/2003	Pre Inj.	NT	NT	-	12.21	-	12.12	-	12.19	NT	NT
	Post Inj	NT	NT	-	12.22	-	12.12	-	12.21	NT	NT
5/14/2003	Pre Inj.	NT	NT	-	12.26	-	12.05	-	11.87	NT	NT
	Post Inj	NT	NT	-	12.33	-	12.08	-	11.86	NT	NT
5/20/2003	Pre Inj.	NT	NT	-	12.49	Trace	12.32	-	12.34	NT	NT
	Post Inj	NT	NT	-	12.5	Trace	12.33	-	12.34	NT	NT
5/28/2003	Pre Inj.	NT	NT	-	12.21	-	12.01	-	12.03	NT	NT
	Post Inj	NT	NT	-	12.23	-	12.02	-	12.04	NT	NT
6/3/2003	Pre Inj.	NT	NT	-	11.91	-	11.74	-	11.8	NT	NT
	Post Inj	NT	NT	-	11.95	-	11.76	-	11.8	NT	NT
6/11/2003	Pre Inj.	NT	NT	-	11.91	-	11.76	11.84	11.85	NT	NT
	Post Inj	NT	NT	-	11.93	-	11.76	11.84	11.85	NT	NT
6/17/2003	Pre Inj.	NT	NT	-	12.20	-	12.03	-	12.09	NT	NT
	Post Inj	NT	NT	-	12.22	-	12.04	-	12.1	NT	NT
6/24/2003	Pre Inj.	NT	NT	-	12.08	-	11.92	-	11.98	NT	NT
	Post Inj	NT	NT	-	12.08	-	11.92	-	11.98	NT	NT
7/1/2003	Pre Inj.	NT	NT	-	12.38	-	12.25	12.34	12.36	NT	NT
	Post Inj	NT	NT	-	12.41	-	12.28	12.32	12.34	NT	NT
7/8/2003	Pre Inj.	NT	NT	-	12.68	-	12.5	12.57	12.58	NT	NT
	Post Inj	NT	NT	-	12.69	-	12.51	12.57	12.58	NT	NT
7/16/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
7/22/2003	Pre Inj.	NT	NT	-	12.72	-	12.61	12.7	12.71	NT	NT
	Post Inj	NT	NT	-	12.73	-	12.62	Trace	12.71	NT	NT
7/29/2003	Pre Inj.	NT	NT	-	12.81	-	12.72	12.94	12.95	NT	NT
	Post Inj	NT	NT	-	12.82	-	12.72	12.92	12.93	NT	NT
8/12/2003	Pre Inj.	NT	NT	-	12.69	-	12.59	12.59	12.61	NT	NT
	Post Inj	NT	NT	-	12.71	-	12.59	12.58	12.6	NT	NT
8/19/2003	Pre Inj.	NT	NT	-	12.81	-	12.65	12.67	12.68	NT	NT
	Post Inj	NT	NT	-	12.82	-	12.66	12.67	12.68	NT	NT
8/26/2003	Pre Inj.	NT	NT	-	12.93	-	12.84	12.86	12.87	NT	NT
	Post Inj	NT	NT	-	12.94	-	12.84	12.86	12.87	NT	NT
9/2/2003	Pre Inj.	NT	NT	-	13.04	-	12.94	13.02	13.03	NT	NT
	Post Inj	NT	NT	-	1306	-	12.95	13.03	13.04	NT	NT
9/9/2003	Pre Inj.	NT	NT	-	13.37	-	13.25	-	13.32	NT	NT
	Post Inj	NT	NT	-	13.36	-	13.26	-	13.16	NT	NT
9/16/2003	Pre Inj.	NT	NT	-	13.41	-	13.3	Trace	13.4	NT	NT
	Post Inj	NT	NT	-	13.41	-	13.31	Trace	13.41	NT	NT
9/23/2003	Pre Inj.	NT	NT	-	13.41	-	13.26	-	12.96	NT	NT
	Post Inj	NT	NT	-	13.38	-	13.25	-	13.14	NT	NT
10/2/2003	Pre Inj.	NT	NT	-	13.40	-	13.31	Trace	13.44	NT	NT
	Post Inj	NT	NT	-	13.42	-	13.33	Trace	13.46	NT	NT
10/14/2003	Pre Inj.	NT	NT	-	13.24	Trace	13.17	-	13.2	NT	NT
	Post Inj	NT	NT	-	13.26	Trace	13.18	-	13.24	NT	NT
10/21/2003	Pre Inj.	NT	NT	-	13.10	Trace	13	-	13.07	NT	NT
	Post Inj	NT	NT	-	13.13	Trace	13	-	13.1	NT	NT
10/28/2003	Pre Inj.	NT	NT	-	13.27	Trace	13.2	-	13.23	NT	NT
	Post Inj	NT	NT	-	13.31	Trace	13.21	-	13.28	NT	NT
11/4/2003	Pre Inj.	NT	NT	-	13.16	Trace	13.05	-	13.07	NT	NT
	Post Inj	NT	NT	-	13.18	Trace	13.06	-	13.1	NT	NT
11/11/2003	Pre Inj.	NT	NT	-	13.27	Trace	13.15	-	13.21	NT	NT
	Post Inj	NT	NT	-	13.29	Trace	13.16	-	13.21	NT	NT
11/18/2003	Pre Inj.	NT	NT	-	13.47	13.36	13.37	-	13.41	NT	NT

TABLE J-2

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

Date		P5		IW 1		IW 2		IW 3		IW 7	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
	Post Inj	NT	NT	-	13.48	13.36	13.37	-	13 42	NT	NT
11/25/2003	Pre Inj.	NT	NT	-	13.48	Trace	13.39	-	13.42	NT	NT
	Post Inj	NT	NT	-	13.42	Trace	13.37	-	13.4	NT	NT
12/2/2003	Pre Inj.	NT	NT	-	13.54	Trace	13.42	-	13.45	NT	NT
	Post Inj	NT	NT	-	13 56	Trace	13.42	-	13.47	NT	NT
6/9/2004	Pre Inj.	NT	NT	-	13.15	-	13.1		13.25	NT	NT
	Post Inj	NT	NT	-	13.15	-	13.1	-	13.28	NT	NT
6/17/2004	Pre Inj.	NT	NT	-	13.21	-	13.17	-	13.35	NT	NT
	Post Inj	NT	NT	-	13.19	-	13.16	-	12.99	NT	NT
6/23/2004	Pre Inj.	NT	NT	-	13.04	-	13.2	-	13.15	NT	NT
	Post Inj	NT	NT	-	13.04	-	12.63	-	13	NT	NT
6/30/2004	Pre Inj.	NT	NT	-	13 17	Trace	13.21	-	13.2	NT	NT
	Post Inj	NT	NT	-	13.17	Trace	13.12	-	13.14	NT	NT
7/23/2004	Pre Inj.	NT	NT	-	13 70	Trace	13.69	Trace	13.76	NT	NT
	Post Inj	NT	NT	-	13.7		13.69	-	13.76	NT	NT
7/30/2004	Pre Inj.	NT	NT	-	13.39	Trace	13.37	Trace	13.41	NT	NT
	Post Inj	NT	NT	-	13.39		13.37	-	13.42	NT	NT
8/5/2004	Pre Inj.	NT	NT	-	13.52	Trace	13.51	Trace	13.58	NT	NT
	Post Inj	NT	NT	-	13.52	Trace	13.51	Trace	13.58	NT	NT
8/12/2004	Pre Inj.	NT	NT	-	13.68	13.66	13.67	13.74	13.75	NT	NT
	Post Inj	NT	NT	-	13.68	13.65	13.66	Trace	13.75	NT	NT
8/20/2004	Pre Inj.	NT	NT	-	13.25	13.23	13.24	Trace	13.26	NT	NT
	Post Inj	NT	NT	-	13 25	13.23	13.24	Trace	13.25	NT	NT
8/26/2004	Pre Inj.	NT	NT	-	13.02	13.02	13.03	13.02	13.03	NT	NT
	Post Inj	NT	NT	-	13.02	13.02	13.03	13.02	13.03	NT	NT
9/1/2004	Pre Inj.	NT	NT	-	13.14	Trace	13.37	Trace	13.24	NT	NT
	Post Inj	NT	NT	-	12.98	Trace	12.79	Trace	12.9	NT	NT
9/7/2004	Pre Inj.	NT	NT	-	13.40	13.7	13.71	-	13.36	NT	NT
	Post Inj	NT	NT	-	13.43	-	13.77	-	13.51	NT	NT
9/17/2004	Pre Inj.	NT	NT	-	13.04	-	12.94	-	13.08	NT	NT
	Post Inj	NT	NT	-	13.1	-	13.3	-	13.21	NT	NT
9/23/2004	Pre Inj.	NT	NT	-	12.97	-	13.11	-	12.8	NT	NT
	Post Inj	NT	NT	-	13.02	Trace	13.25	-	12.97	NT	NT
9/29/2004	Pre Inj.	NT	NT	-	12.88	-	12.77	-	12.78	NT	NT
	Post Inj	NT	NT	-	12.95	-	13.02	-	12.93	NT	NT
10/7/2004	Pre Inj.	NT	NT	-	12.98	-	12.57	-	12.85	NT	NT
	Post Inj	NT	NT	-	13.04	-	12.97	-	12.97	NT	NT
10/14/2004	Pre Inj.	NT	NT	-	13.22	-	13.32	-	13.21	NT	NT
	Post Inj	NT	NT	-	13.21	-	13.17	-	13.17	NT	NT
10/21/2004	Pre Inj.	NT	NT	-	13.10	-	12.85	-	13.08	NT	NT
	Post Inj	NT	NT	-	13.14	-	13.03	-	13.11	NT	NT
10/27/2004	Pre Inj.	NT	NT	-	13.25	-	13.33	-	13.18	NT	NT
	Post Inj	NT	NT	-	13.27	-	13.36	-	13.2	NT	NT
11/3/2004	Pre Inj.	NT	NT	-	13.39	-	13.47	-	13.31	NT	NT
	Post Inj	NT	NT	-	13.37	-	13.37	-	13.28	NT	NT
11/10/2004	Pre Inj.	NT	NT	-	13.61	-	13.57	-	13.61	NT	NT
	Post Inj	NT	NT	-	13.62	-	13.58	-	13.62	NT	NT
11/17/2004	Pre Inj.	NT	NT	-	13.62	-	13.41	-	13.68	NT	NT
	Post Inj	NT	NT	-	13.63	-	13.45	-	13.68	NT	NT
12/2/2004	Pre Inj.	NT	NT	-	13.56	0	13.45	-	13.49	NT	NT
	Post Inj	NT	NT	-	13.57	0	13.43	-	13.51	NT	NT
12/8/2004	Pre Inj.	NT	NT	-	13.35	0	13.29	-	13.33	NT	NT
	Post Inj	NT	NT	-	13.35	0	13.24	-	13.26	NT	NT
12/15/2004	Pre Inj.	NT	NT	-	13.21	0	13.07	-	13.08	NT	NT
	Post Inj	NT	NT	-	13.19	0	13.03	-	12.98	NT	NT
12/22/2004	Pre Inj.	NT	NT	-	13.32	0	13.27	-	13.18	NT	NT
	Post Inj	NT	NT	-	13.36	0	13.28	-	13.26	NT	NT
12/28/2004	Pre Inj.	NT	NT	-	13.38	0	13.24	-	13.32	NT	NT
	Post Inj	NT	NT	-	13.38	0	13.24	-	13.35	NT	NT
1/4/2005	Pre Inj.	NT	NT	-	13.39	0	13.35	-	13.31	NT	NT
	Post Inj	NT	NT	-	13.41	0	13.35	-	13.32	NT	NT
1/19/2005	Pre Inj.	NT	NT	-	12.99	0	12.98	-	12.98	NT	NT
	Post Inj	NT	NT	-	12.99	0	12.79	-	12.98	NT	NT
1/26/2005	Pre Inj.	NT	NT	-	13.15	0	13.17	-	13.21	NT	NT
	Post Inj	NT	NT	-	13.12	0	13.17	-	13.21	NT	NT
2/1/2005	Pre Inj.	NT	NT	-	13.45	0	13.36	-	13.53	NT	NT
	Post Inj	NT	NT	-	13.43	0	13.35	-	13.5	NT	NT
2/8/2005	Pre Inj.	NT	NT	-	13.52	0	13.52	-	13.66	NT	NT
	Post Inj	NT	NT	-	13.52	0	13.52	-	13.66	NT	NT

TABLE J-2

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

Date		P5		IW 1		IW 2		IW 3		IW 7	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
2/15/2005	Pre Inj.	NT	NT	-	13.28	13.28	13.29	-	13.36	NT	NT
	Post Inj	NT	NT	-	13.29	trace	13.29	-	13.35	NT	NT
2/23/2005	Pre Inj.	NT	NT	-	12.80	12.77	12.78	-	12.77	NT	NT
	Post Inj	NT	NT	-	12.85	12.78	12.79	-	12.77	NT	NT
6/14/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
DTP = Depth to Product
DTW = Depth to Water
NT = Not Taken
Measurements taken from top of PVC or casing.

TABLE J-2 (contd.)

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

Date		IW 8		IW 9		IW 10		PID		B 5R		GW 13	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
3/17/2003	Pre Inj.	12.09	12.1	11.85	11.86	-	12.24	Trace	12.59	-	11.72	12.09	12.11
	Post Inj	12.1	12.11	Trace	11.88	-	12.22	12.6	12.61	Trace	11.71	Trace	12.1
3/26/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.11	11.18	11.19
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.11	-	11.19
4/3/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	10.67	Trace	10.88
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	10.68	Trace	10.89
4/11/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	10.85	-	11.14
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	10.83	-	11.12
4/17/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	10.81	-	11.08
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	10.81	-	11.08
4/22/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.19	-	11.37
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.19	-	11.37
4/29/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.24	-	11.4
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.22	-	11.4
4/30/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.2	-	11.4
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.18	-	11.4
5/6/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.48	-	11.55
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.48	-	11.55
5/14/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.62	-	11.42
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.62	-	11.44
5/20/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.48	-	11.72
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.48	-	11.72
5/28/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.55	-	11.52
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.55	-	11.52
6/3/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11	-	11.14
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11	-	11.14
6/11/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.09	-	11.14
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.09	-	11.14
6/17/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.46	-	11.54
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.46	-	11.54
6/24/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.18	-	11.32
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.18	-	11.32
7/1/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.6	-	11.67
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.6	-	11.67
7/8/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.92	-	11.92
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.92	-	11.92
7/16/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
7/22/2003	Pre Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.26	-	12.05
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.26	-	12.05
7/29/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.38	-	12.25
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.38	-	12.25
8/12/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.16	-	11.98
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.16	-	11.98
8/19/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.24	-	12
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.24	-	12
8/26/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.48	-	12.21
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.48	-	12.21
9/2/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.68	-	12.4
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.68	-	12.4
9/9/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.02	-	12.76
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	1302	-	12.76
9/16/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.26	-	12.84
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.26	-	12.84
9/23/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.22	-	12.84
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.22	-	12.84
10/2/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.22	-	12.89
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.22	-	12.89
10/14/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.22	-	12.78
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.22	-	12.78
10/21/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.78	-	12.56
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	NT	-	NT
10/28/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.05	-	12.68
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.05	-	12.68
11/4/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.55	-	12.32
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.55	-	12.32
11/11/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.72	-	12.48
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.72	-	12.48
11/18/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.98	-	12.68

TABLE J-2 (contd.)

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

Date		IW 8		IW 9		IW 10		PID		B 5R		GW 13	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.98	-	12.68
11/25/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.02	-	12.66
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.02	-	12.66
12/2/2003	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.05	-	12.68
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.05	-	12.68
6/9/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.48	-	12.45
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.48	-	12.45
6/17/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.7	-	12.58
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.7	-	12.58
6/23/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.54	-	12.5
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.52	-	12.48
6/30/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.74	-	12.6
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.74	-	12.6
7/23/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.11	-	12.9
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.11	-	12.9
7/30/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.58	-	12.54
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.58	-	12.54
8/5/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.83	-	12.77
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.83	-	12.77
8/12/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.11	-	12.95
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.11	-	12.95
8/20/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.39	-	12.42
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.39	-	12.42
8/26/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.04	-	12.18
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.03	-	12.18
9/1/2002	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.44	-	12.51
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.44	-	12.5
9/7/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.8	-	12.78
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.8	-	12.78
9/17/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.7	-	12.67
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.71	-	12.68
9/23/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.19	-	12.25
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.19	-	12.25
9/29/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.33	-	12.28
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.32	-	12.29
10/7/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.39	-	12.33
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.38	-	12.34
10/14/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.67	-	12.51
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.67	-	12.51
10/21/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.62	-	12.41
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.63	-	12.45
10/27/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.75	-	12.51
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.75	-	12.51
11/3/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.95	-	12.64
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.96	-	12.62
11/10/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.1	-	12.86
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.1	-	12.86
11/17/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.23	-	12.95
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.22	-	12.95
12/2/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	13.02	-	12.66
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	13.00	-	12.65
12/8/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.79	-	12.39
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.76	-	12.37
12/15/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.31	-	12
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.31	-	12.02
12/22/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.57	-	12.4
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.57	-	12.4
12/28/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.58	-	12.38
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.54	-	12.38
1/4/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.66	-	12.5
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.65	-	12.5
1/19/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.78	-	11.76
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.78	-	11.75
1/26/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.16	-	12.18
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.17	-	12.19
2/1/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.55	-	12.52
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.55	-	12.53
12/2/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.79	-	12.67
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	12.78	-	12.67

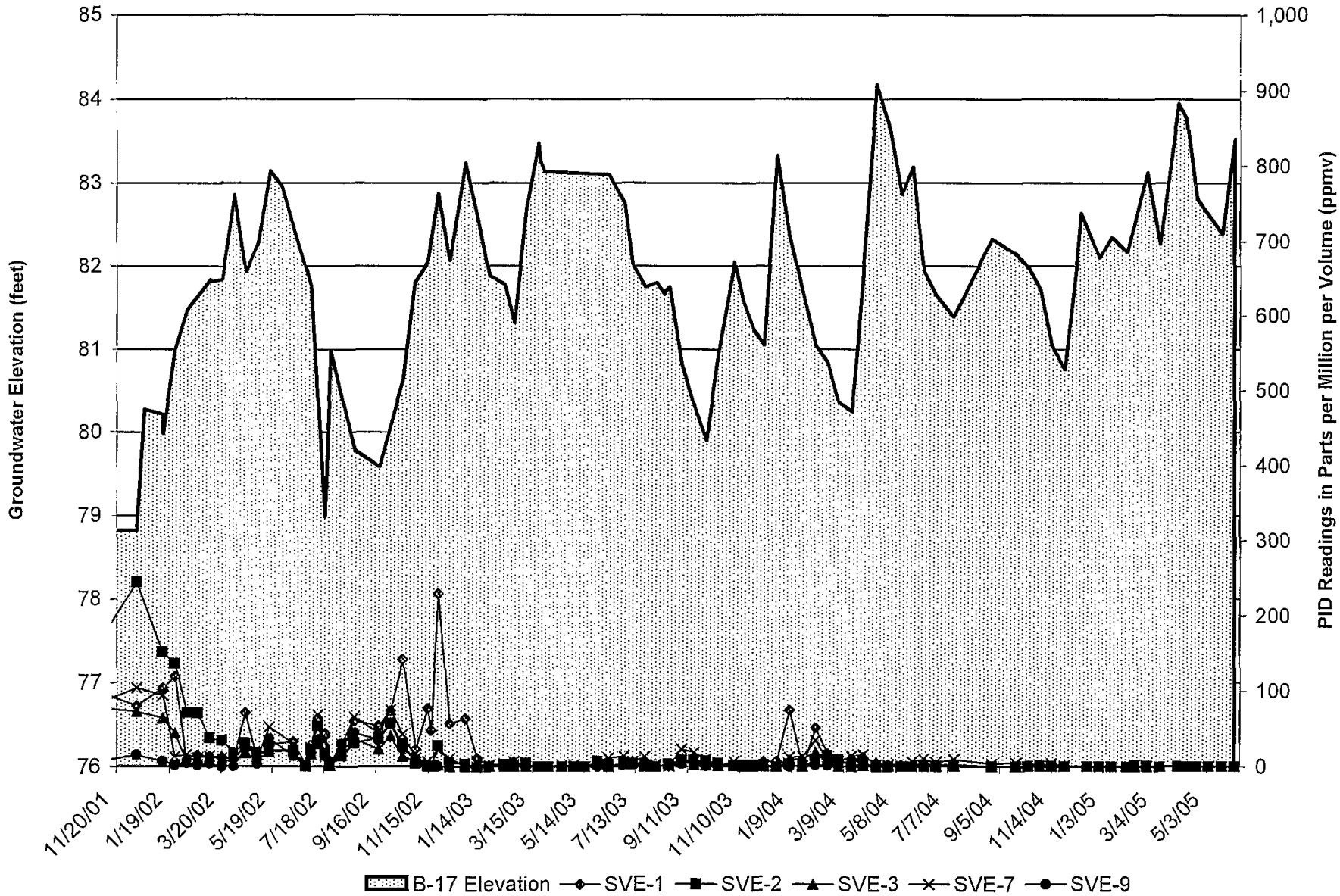
TABLE J-2 (contd.)

NIS Pre- and Post-Injection Groundwater Monitoring
Olin Chemical Corp. - Wilmington, MA

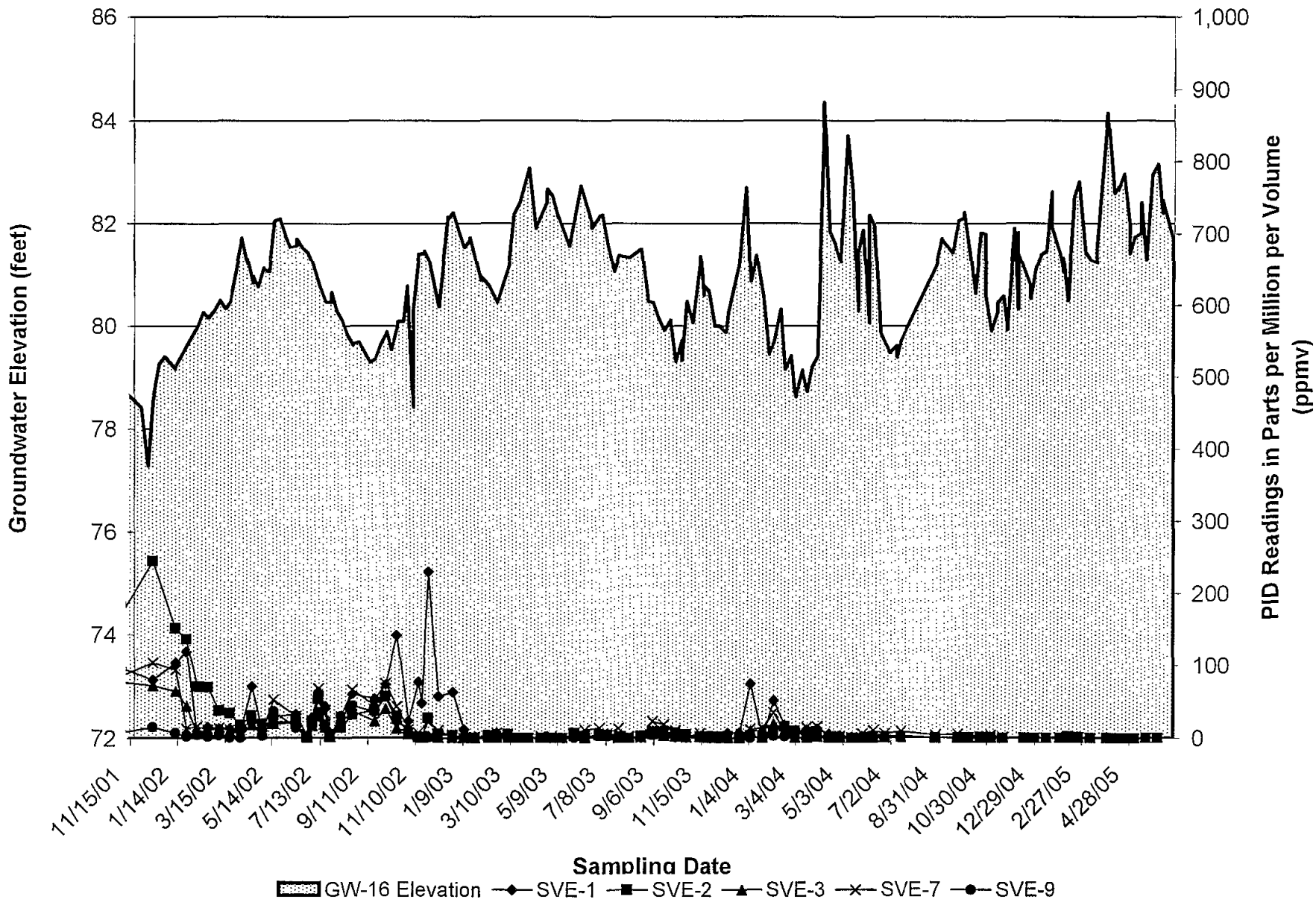
Date		IW 8		IW 9		IW 10		PiD		B 5R		GW 13	
		DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)	DTP (ft.)	DTW (ft.)
12/2/2004	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.49	-	12.4
	Post Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	12.48	-	12.41
2/23/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	-	11.76	-	11.87
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	-	11.76	-	11.88
6/14/2005	Pre Inj.	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Post Inj	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
DTP = Depth to Product
DTW = Depth to Water
NT = Not Taken
Measurements taken from top of PVC or casing.

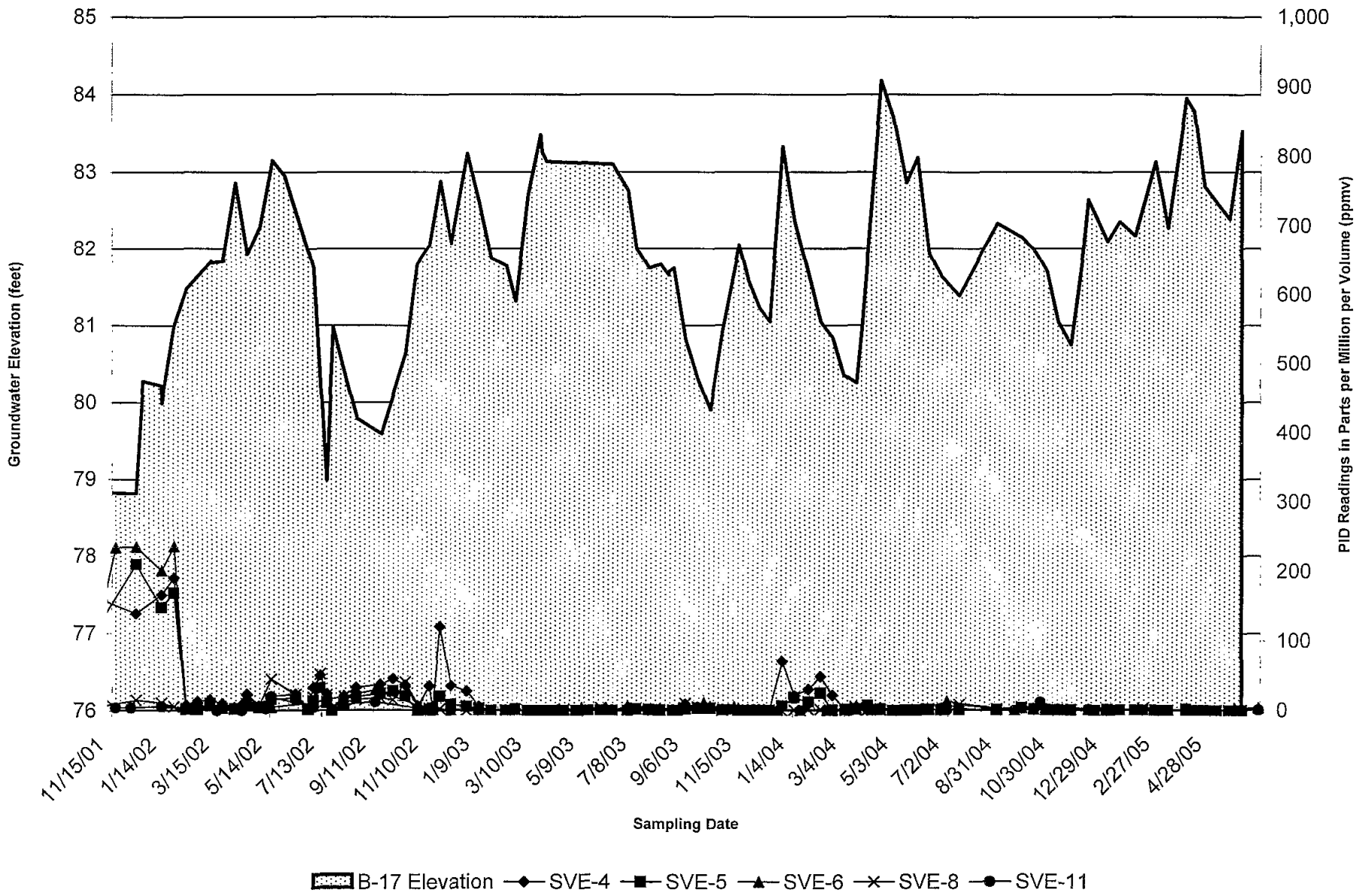
Graph G-1
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Zone A vs. Time



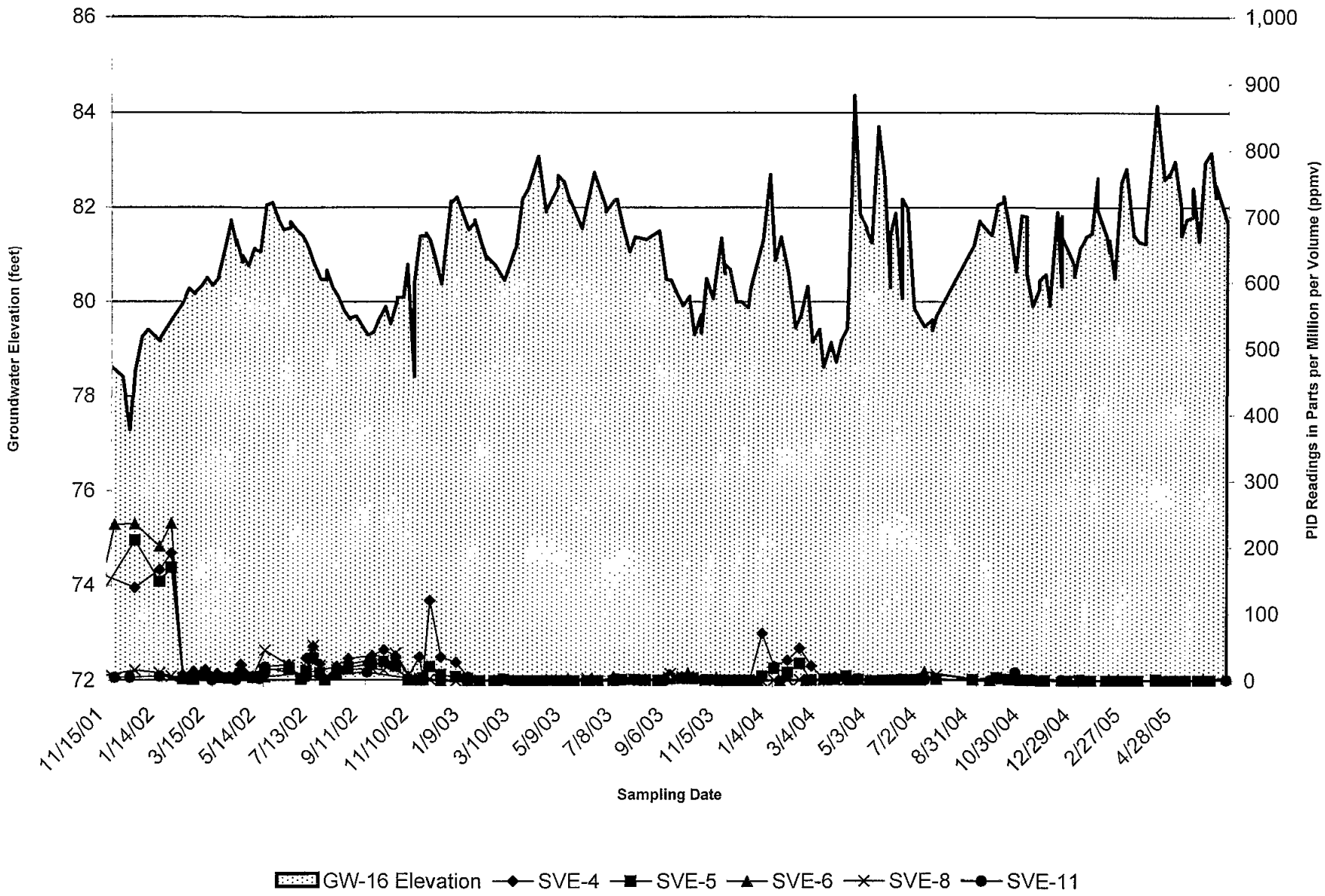
Graph G-2
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Zone A vs. Time



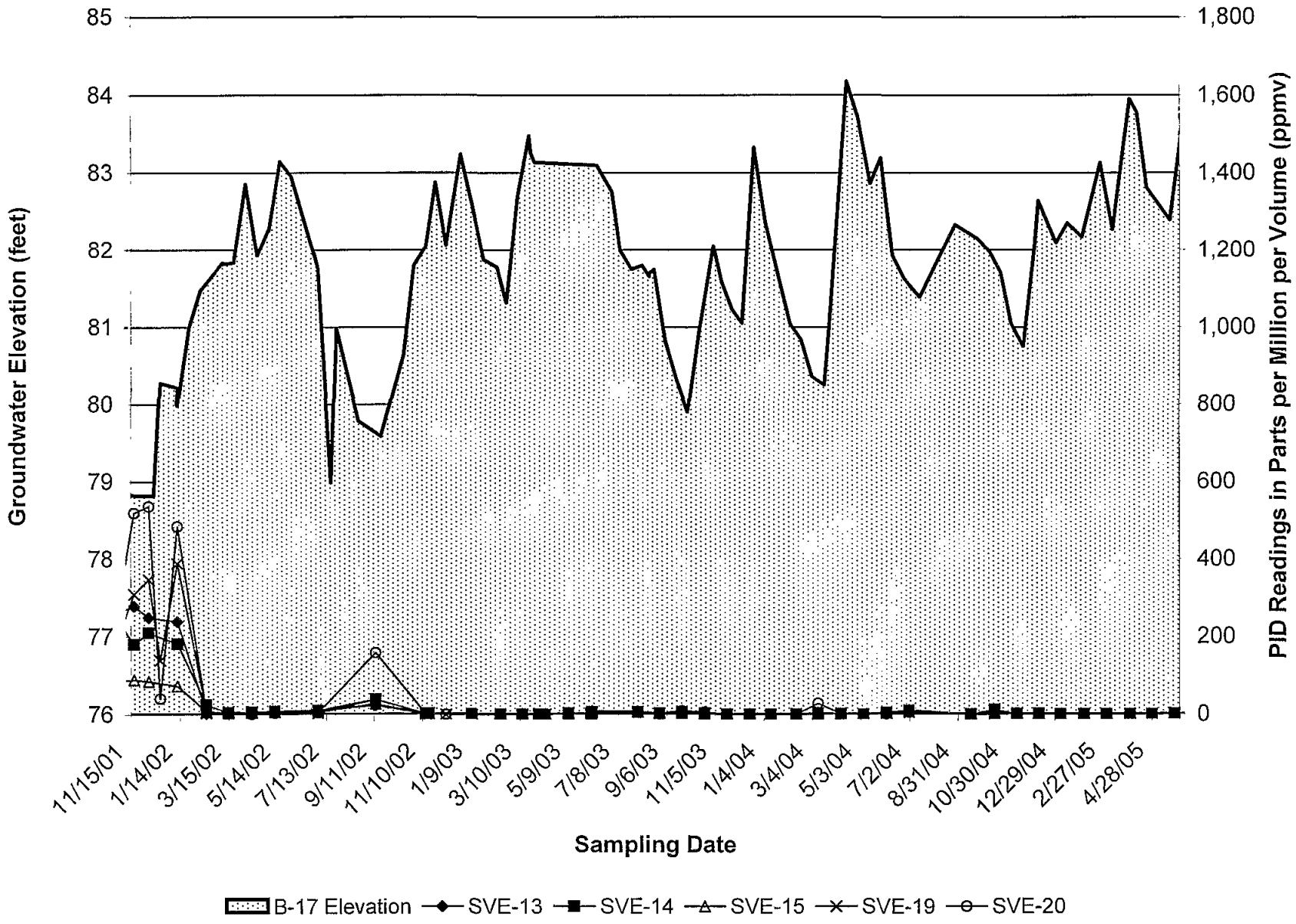
Graph G-3
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Zone B vs. Time



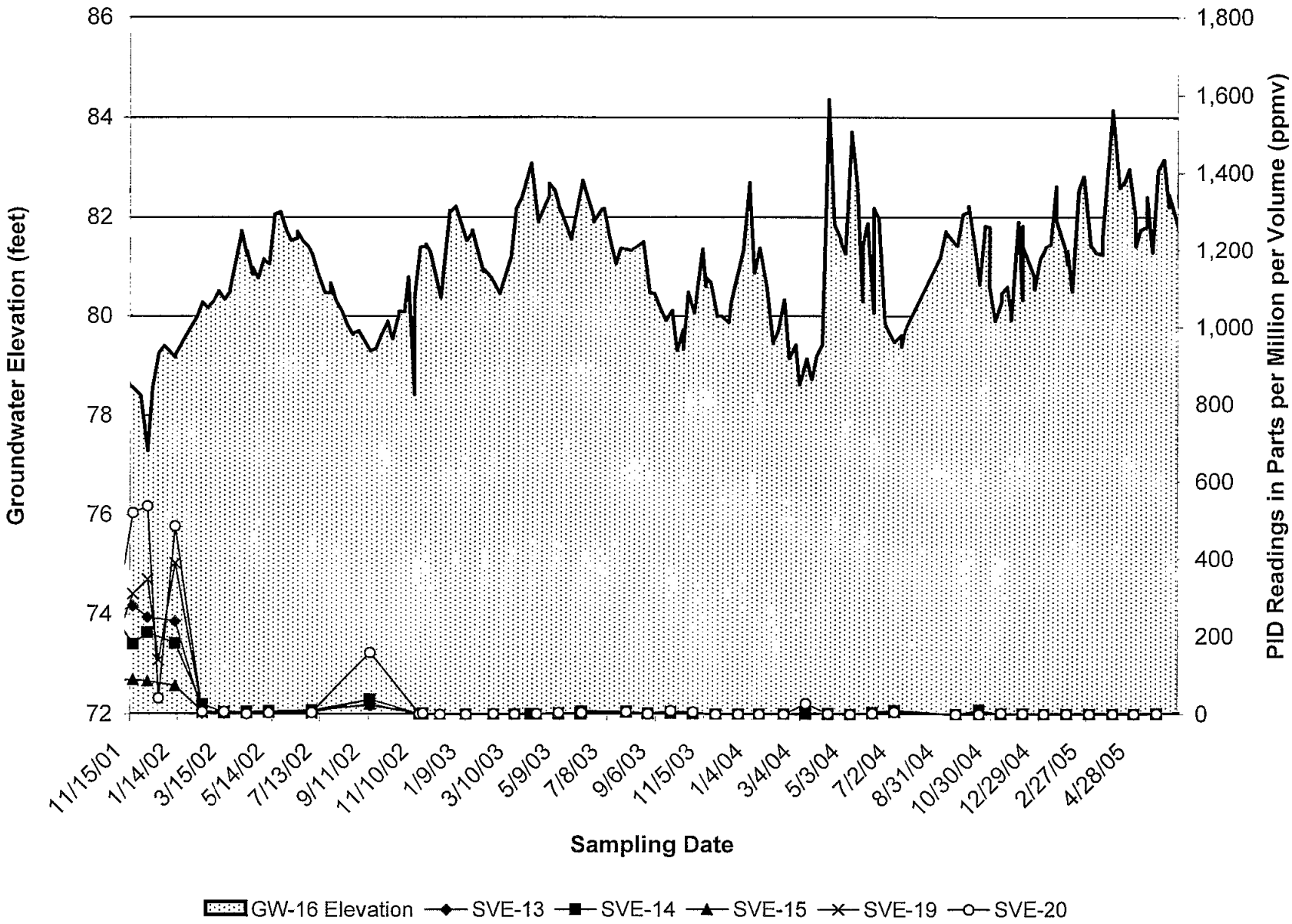
Graph G-4
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Zone B vs. Time



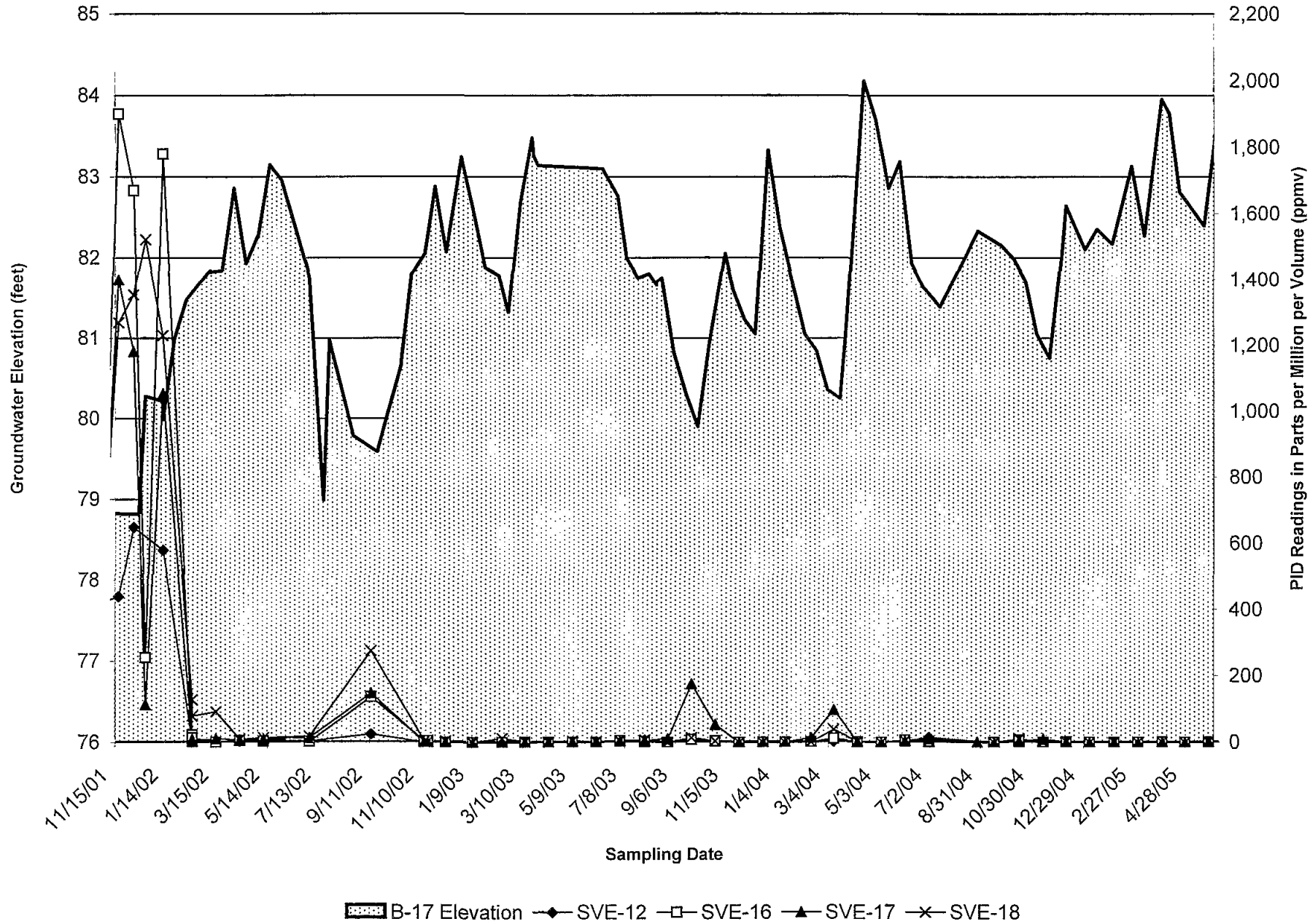
Graph G-5
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Test Pit Zone 1 vs. Time



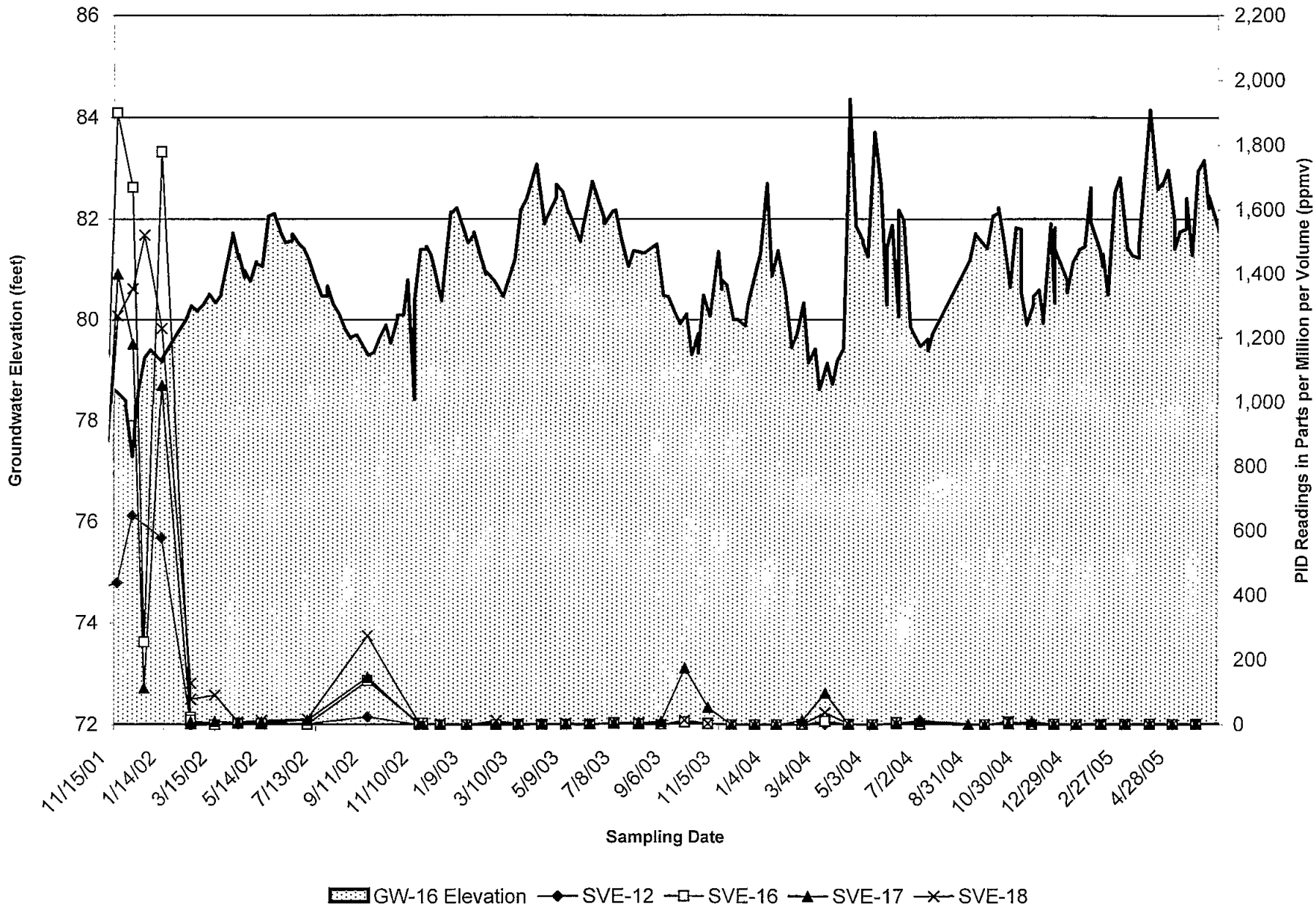
Graph G-6
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Test Pit Zone 1 vs. Time



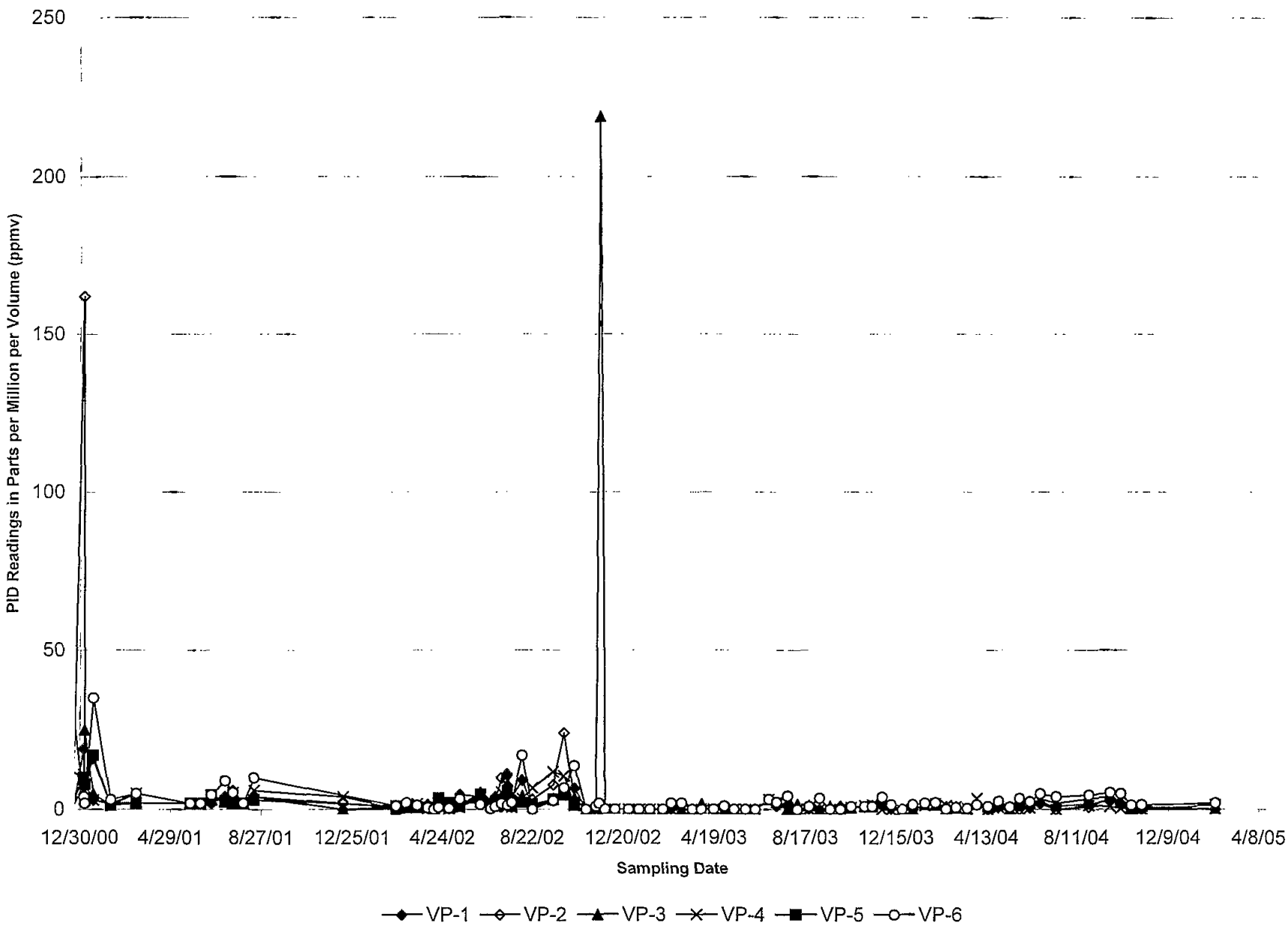
Graph G-7
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Test Pit Zone 2 vs. Time



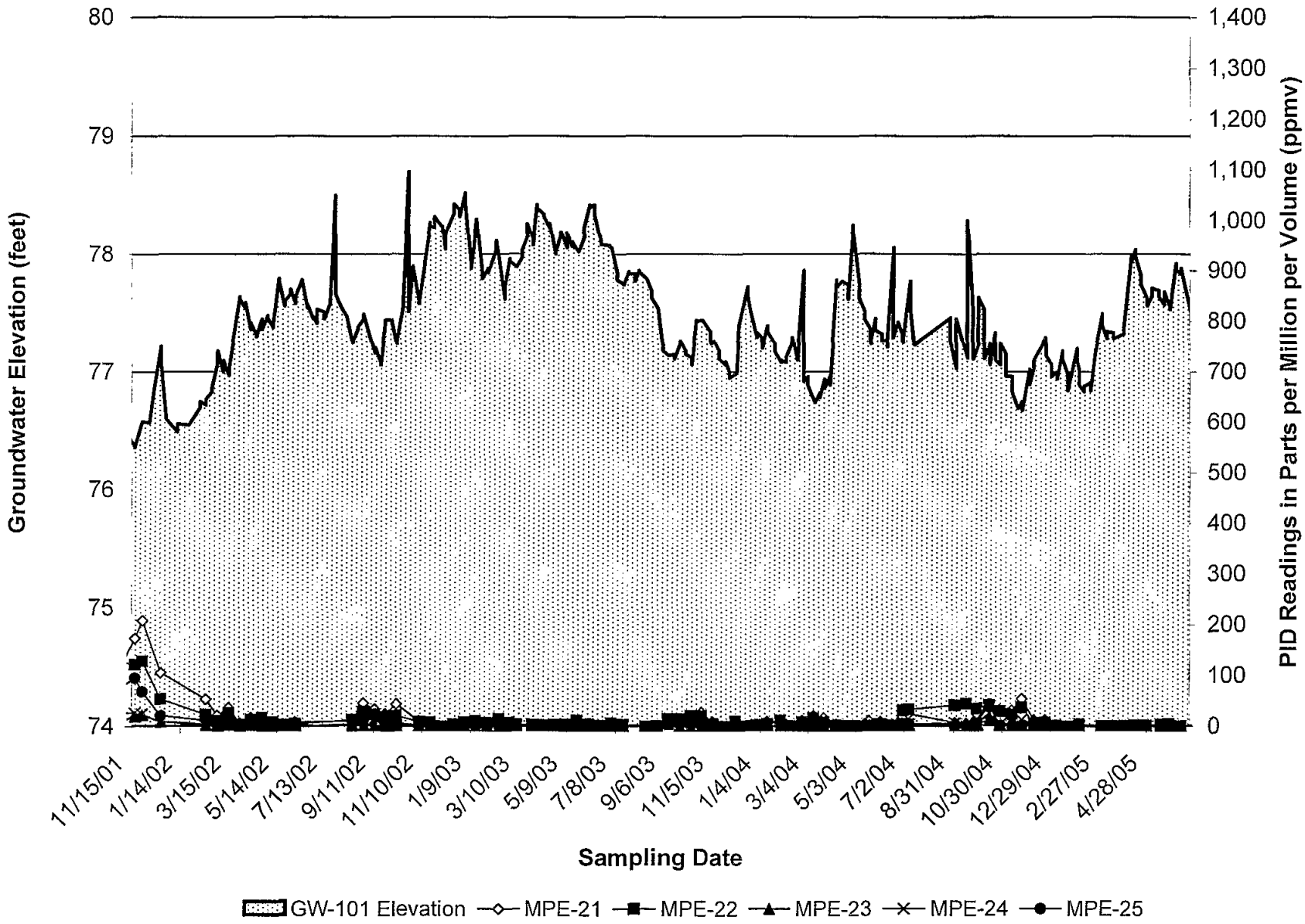
Graph G-8
Groundwater Elevations and Contaminant Concentrations in EPH/VPH Test Pit Zone 2 vs. Time



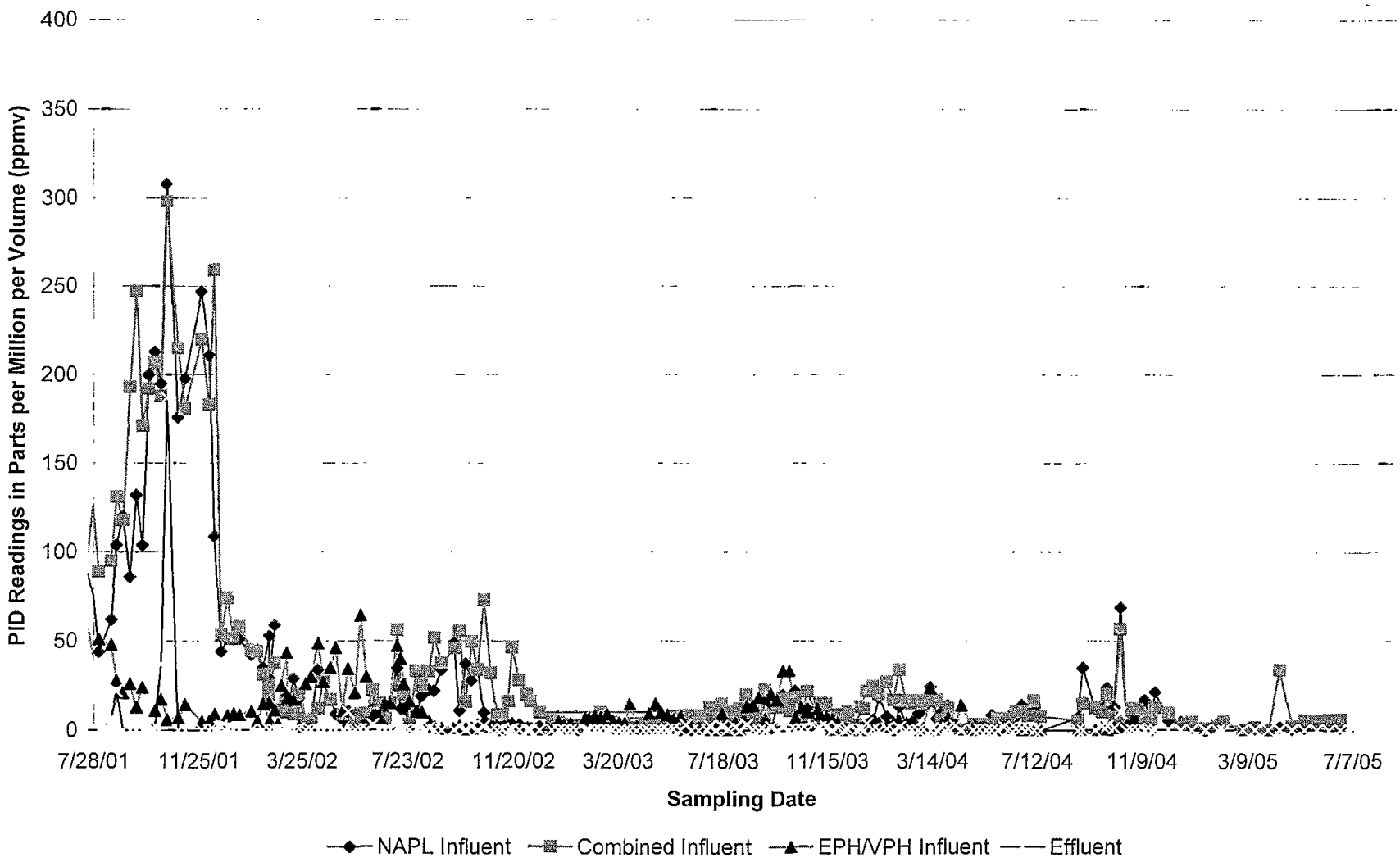
Graph G-9
Contaminant Concentrations in Vapor Probes vs. Time



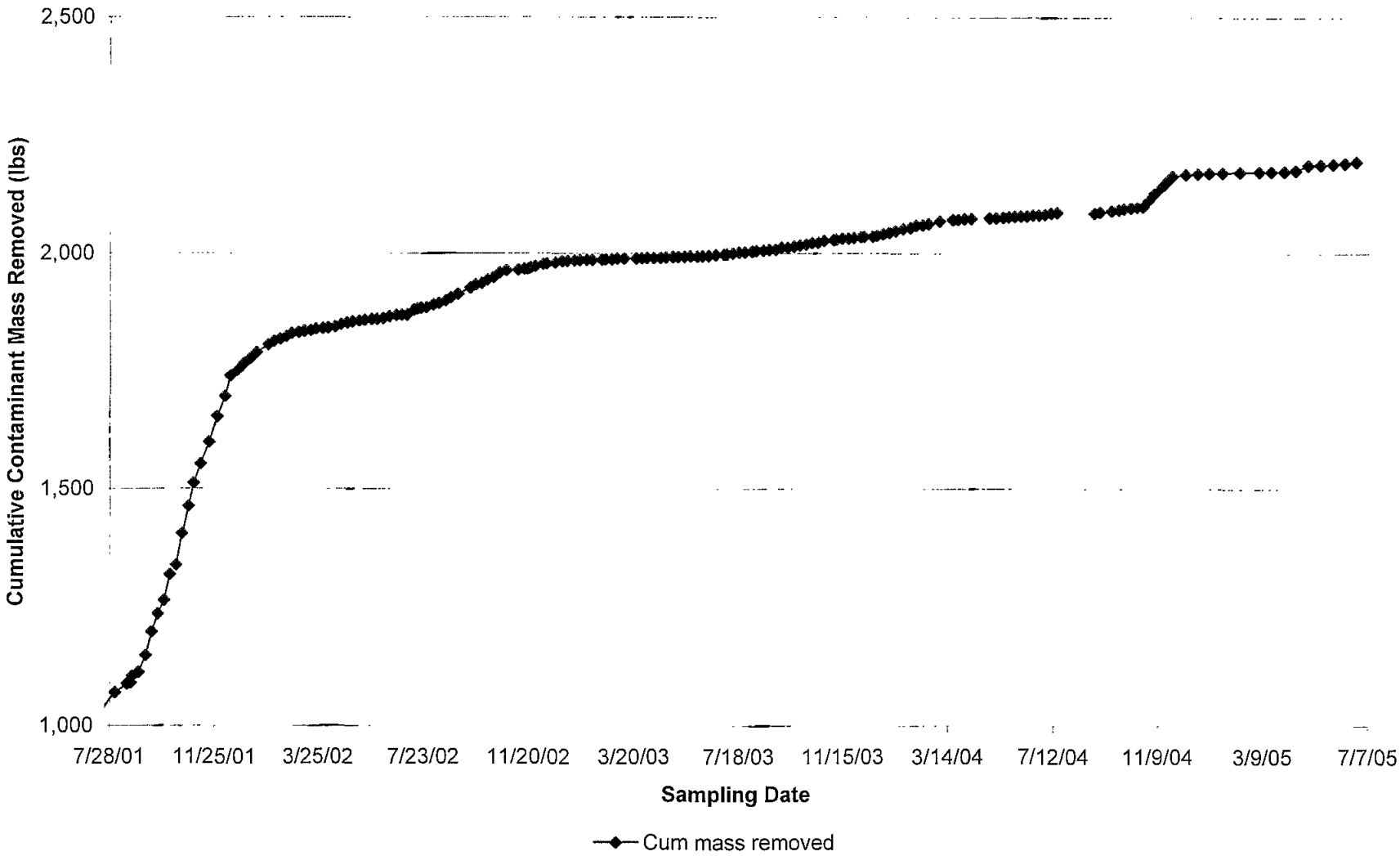
Graph G-10
Groundwater Elevations and Contaminant Concentrations in NAPL (MPE) Area vs. Time



Graph G-11
Contaminant Concentrations in Combined Influent and Effluent vs. Time



Graph G-12
Cumulative Contaminant Mass Removal vs. Time



ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive

Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0504292

Date Received: 22-APR-2005

Date Reported: 28-APR-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0504292-01	PRE CARBON	WILMINGTON, MA
L0504292-02	REAR INFLUENT	WILMINGTON, MA
L0504292-03	FRONT INFLUENT	WILMINGTON, MA
L0504292-04	EFFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Ellen M. Collins
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0504292

Organic Compounds in Air

In order to comply with various regulatory requirements, the results for the analysis of Organic Compounds in Air by EPA TO-14A or TO-15 are provided in ug/m3 as well as ppbv for each sample in a sequential format.

L0504292-01 and -02 have elevated limits of detection due to the 10X and 2X dilutions, respectively, required by the elevated concentrations of target compounds in the samples.

The LCS % recoveries for 1,1,-Dichloroethane, Benzyl chloride, and trans-1,2,-Dichloroethene are below the individual acceptance criteria for the compounds, but within the overall method allowances.

Petroleum Hydrocarbons in Air

Acetone, Trichlorofluoromethane, Isopropyl alcohol, and 2-Butanone are present in L0504292-04. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

The LCS % recovery for Naphthalene is above the acceptance criteria for the method. Since the associated sample was non-detect for this compound, no further action was taken.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0504292-01
PRE CARBON
Sample Matrix: AIR

Date Collected: 21-APR-2005 11:00
Date Received : 22-APR-2005
Date Reported : 28-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0427 00:44	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	ND	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0427 00:44	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	68.1	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	1030	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0427 00:44	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	ND	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0427 00:44	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	14.9	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	225.	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0504292-02
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 21-APR-2005 11:10
Date Received : 22-APR-2005
Date Reported : 28-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0427 01:54	PS
1,1,1-Trichloroethane	ND	ug/m3	5.45				
1,1,2,2-Tetrachloroethane	ND	ug/m3	6.86				
1,1,2-Trichloroethane	ND	ug/m3	5.45				
1,1-Dichloroethane	ND	ug/m3	4.04				
1,1-Dichloroethene	ND	ug/m3	3.96				
1,2,4-Trichlorobenzene	ND	ug/m3	7.42				
1,2,4-Trimethylbenzene	ND	ug/m3	4.91				
1,2-Dibromoethane	ND	ug/m3	7.68				
1,2-Dichlorobenzene	ND	ug/m3	6.01				
1,2-Dichloroethane	ND	ug/m3	4.04				
1,2-Dichloropropane	ND	ug/m3	4.62				
1,3,5-Trimethylbenzene	ND	ug/m3	4.91				
1,3-Dichlorobenzene	ND	ug/m3	6.01				
1,4-Dichlorobenzene	ND	ug/m3	6.01				
Benzene	ND	ug/m3	3.19				
Benzyl chloride	ND	ug/m3	5.17				
Bromomethane	ND	ug/m3	3.88				
Carbon tetrachloride	ND	ug/m3	6.29				
Chlorobenzene	ND	ug/m3	4.60				
Chloroethane	ND	ug/m3	2.64				
Chloroform	ND	ug/m3	4.88				
Chloromethane	ND	ug/m3	2.06				
cis-1,2-Dichloroethene	ND	ug/m3	3.96				
cis-1,3-Dichloropropene	ND	ug/m3	4.53				
Dichlorodifluoromethane	ND	ug/m3	9.88				
Ethylbenzene	ND	ug/m3	4.34				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	7.66				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	6.98				
Hexachlorobutadiene	ND	ug/m3	10.6				
Methylene chloride	ND	ug/m3	6.94				
p/m-Xylene	ND	ug/m3	4.34				
o-Xylene	ND	ug/m3	4.34				
Styrene	ND	ug/m3	4.26				
Tetrachloroethene	ND	ug/m3	6.78				
Toluene	6.49	ug/m3	3.76				
trans-1,2-Dichloroethene	ND	ug/m3	3.96				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-02
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0427 01:54	PS
trans-1,3-Dichloropropene	ND	ug/m3	4.53				
Trichloroethene	ND	ug/m3	5.37				
Trichlorofluoromethane	ND	ug/m3	5.61				
Vinyl chloride	ND	ug/m3	2.55				
2,4,4-Trimethyl-2-Pentene	97.6	ug/m3	4.58				
2,4,4-Trimethyl-1-Pentene	980.	ug/m3	4.58				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0427 01:54	PS
1,1,1-Trichloroethane	ND	ppbV	1.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	1.00				
1,1,2-Trichloroethane	ND	ppbV	1.00				
1,1-Dichloroethane	ND	ppbV	1.00				
1,1-Dichloroethene	ND	ppbV	1.00				
1,2,4-Trichlorobenzene	ND	ppbV	1.00				
1,2,4-Trimethylbenzene	ND	ppbV	1.00				
1,2-Dibromoethane	ND	ppbV	1.00				
1,2-Dichlorobenzene	ND	ppbV	1.00				
1,2-Dichloroethane	ND	ppbV	1.00				
1,2-Dichloropropane	ND	ppbV	1.00				
1,3,5-Trimethylbenzene	ND	ppbV	1.00				
1,3-Dichlorobenzene	ND	ppbV	1.00				
1,4-Dichlorobenzene	ND	ppbV	1.00				
Benzene	ND	ppbV	1.00				
Benzyl chloride	ND	ppbV	1.00				
Bromomethane	ND	ppbV	1.00				
Carbon tetrachloride	ND	ppbV	1.00				
Chlorobenzene	ND	ppbV	1.00				
Chloroethane	ND	ppbV	1.00				
Chloroform	ND	ppbV	1.00				
Chloromethane	ND	ppbV	1.00				
cis-1,2-Dichloroethene	ND	ppbV	1.00				
cis-1,3-Dichloropropene	ND	ppbV	1.00				
Dichlorodifluoromethane	ND	ppbV	2.00				
Ethylbenzene	ND	ppbV	1.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	1.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	1.00				
Hexachlorobutadiene	ND	ppbV	1.00				
Methylene chloride	ND	ppbV	2.00				
p/m-Xylene	ND	ppbV	1.00				
o-Xylene	ND	ppbV	1.00				
Styrene	ND	ppbV	1.00				
Tetrachloroethene	ND	ppbV	1.00				
Toluene	1.72	ppbV	1.00				
trans-1,2-Dichloroethene	ND	ppbV	1.00				
trans-1,3-Dichloropropene	ND	ppbV	1.00				
Trichloroethene	ND	ppbV	1.00				
Trichlorofluoromethane	ND	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-02
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0427 01:54	PS
Vinyl chloride	ND	ppbV	1.00				
2,4,4-Trimethyl-2-Pentene	21.3	ppbV	1.00				
2,4,4-Trimethyl-1-Pentene	214.	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0504292-03
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 21-APR-2005 11:30
Date Received : 22-APR-2005
Date Reported : 28-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0427 02:32	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	1.33	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	14.9	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0427 02:32	PS
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	35.4	ug/m3	2.29				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0427 02:32	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	0.646	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	3.96	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0504292-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0427 02:32	PS
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	7.72	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0504292-04
EFFLUENT
Sample Matrix: AIR

Date Collected: 21-APR-2005 11:20
Date Received : 22-APR-2005
Date Reported : 28-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0427 03:12	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were greater than 130%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	ND	ug/m3	24.0
C9-C12 Aliphatics	83.3	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	10.9	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	82.9	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0504292

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01-03 (L0504292-01, WG200371-2)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	68.1	69.0	ug/m3	1	25
2,4,4-Trimethyl-1-Pentene	1030	1070	ug/m3	4	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0504292

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 04 (L0504276-01, WG200397-2)					
C5-C8 Aliphatics	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics	ND	ND	ug/m3	NC	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	ND	ND	ug/m3	NC	30
Benzene	ND	ND	ug/m3	NC	30
Toluene	ND	ND	ug/m3	NC	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0504292

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01-03 (WG200371-1)		
1,1,1-Trichloroethane	99	70-130
1,1,2,2-Tetrachloroethane	104	70-130
1,1,2-Trichloroethane	101	70-130
1,1-Dichloroethane	68	70-130
1,1-Dichloroethene	73	70-130
1,2,4-Trichlorobenzene	77	70-130
1,2,4-Trimethylbenzene	127	70-130
1,2-Dibromoethane	101	70-130
1,2-Dichlorobenzene	74	70-130
1,2-Dichloroethane	95	70-130
1,2-Dichloropropane	98	70-130
1,3,5-Trimethylbenzene	119	70-130
1,3-Dichlorobenzene	111	70-130
1,4-Dichlorobenzene	109	70-130
Benzene	88	70-130
Benzyl chloride	67	70-130
Bromomethane	84	70-130
Carbon tetrachloride	101	70-130
Chlorobenzene	98	70-130
Chloroethane	72	70-130
Chloroform	87	70-130
Chloromethane	74	70-130
cis-1,2-Dichloroethene	76	70-130
cis-1,3-Dichloropropene	82	70-130
Dichlorodifluoromethane	81	70-130
Ethylbenzene	105	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	75	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	78	70-130
Hexachlorobutadiene	103	70-130
Methylene chloride	77	70-130
p/m-Xylene	106	70-130
o-Xylene	111	70-130
Styrene	83	70-130
Tetrachloroethene	93	70-130
Toluene	99	70-130
trans-1,2-Dichloroethene	69	70-130
trans-1,3-Dichloropropene	81	70-130
Trichloroethene	96	70-130
Trichlorofluoromethane	78	70-130
Vinyl chloride	76	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG200397-1)		
1,3-Butadiene	75	70-130
Methyl tert butyl ether	86	70-130
Benzene	89	70-130
Toluene	93	70-130
Ethylbenzene	106	70-130
p/m-Xylene	127	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0504292

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG200397-1)		
o-Xylene	106	70-130
Naphthalene	154	70-130
2-Methylnaphthalene	92	70-130
C5-C8 Aliphatics, Adjusted	99	70-130
C9-C12 Aliphatics, Adjusted	92	70-130
C9-C10 Aromatics	96	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0504292

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG200371-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0426 16:28	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0504292

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG200371-3)							
Petroleum Hydrocarbons in Air - ppbV continued				48 TO-14A		0426 16:28	PS
Blank Analysis for sample(s) 01-03 (WG200371-3)							
Petroleum Hydrocarbons in Air - ppbV				48 TO-14A		0426 16:28	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0504292

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04 (WG200397-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0426 16:28	AR
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab: 4/22

ALPHA Job #: L0704292

Client Information

Client: Shaw E+I
Address: 100 Technology Center Dr.
Stoughton MA 02072
Phone: 617-589 5567
Fax:
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Olin
Project Location: Wilmington MA.
Project #: 681076
Project Manager: Dave Cobb
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
AIR - 10 DAYS
DISSOLVED GASES - 5 DAYS
Date Due: 4/29 Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed	Program	Criteria

Other Project Specific Requirements/Comments:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Start Time	Collection End Time	Sample Matrix	Sampler's Initials	ID Can	ID - Flow Controller	TO-14A	TO-15	APH	DISSOLVED GASES	FIXED GASES	TO-14	Sample Comments	TOTAL # CONTINERS
4292.1	Pre Carbon	4.21.05	1100		Air	PL	0121							X	X	
2	Rear Influent		1110		↓	↓	0233							X	X	
3	Front Influent		1130		↓	↓	0140							X	X	
4	Effluent		1120		↓	↓	0215				X				X	

X Include 2.4.4 Trimetuyl-1-Pentene + 2.4.4 Trimetuyl-2-Pentene

Shaded Gray Areas For Lab Use Only

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4.21.05 1500	[signature]	4/22/05 0945
[signature]	4/22/05	[signature]	4/22 1740

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Form No. 01-03

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive

Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0508291

Date Received: 28-JUL-2005

Date Reported: 08-AUG-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0508291-01	PRE-CARBON	WILMINGTON, MA
L0508291-02	FRONT INFLUENT	WILMINGTON, MA
L0508291-03	REAR INFLUENT	WILMINGTON, MA
L0508291-04	EFFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0508291

TO-14:

L0508291-01, -02, and -03 have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the samples.

L0508291-04 has elevated limits of detection due to the dilutions required by the elevated concentrations of non-target compounds in the sample.

The wg209708-1 LCS % recoveries for 1,2,4-trichlorobenzene, Hexachlorobutadiene, and benzyl chloride are below the individual acceptance criteria for the compound, but within the overall method allowances.

APH:

L0508291-04 has elevated limits of detection due to the dilutions required by the elevated concentrations of non-target compounds in the sample.

The LCS % recoveries for naphthalene and 2-methylnaphthalene are below the individual acceptance criteria for the compound, but within the overall method allowances.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0508291-01
PRE-CARBON
Sample Matrix: AIR

Date Collected: 27-JUL-2005 11:30
Date Received : 28-JUL-2005
Date Reported : 08-AUG-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0804 12:20	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0804 12:20	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	555.	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	6810	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0804 12:20	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0804 12:20	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	121.	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	1480	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0508291-02
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 27-JUL-2005 11:40
Date Received : 28-JUL-2005
Date Reported : 08-AUG-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0804 12:54	PS
1,1,1-Trichloroethane	ND	ug/m3	13.6				
1,1,2,2-Tetrachloroethane	ND	ug/m3	17.1				
1,1,2-Trichloroethane	ND	ug/m3	13.6				
1,1-Dichloroethane	ND	ug/m3	10.1				
1,1-Dichloroethene	ND	ug/m3	9.90				
1,2,4-Trichlorobenzene	ND	ug/m3	18.5				
1,2,4-Trimethylbenzene	ND	ug/m3	12.3				
1,2-Dibromoethane	ND	ug/m3	19.2				
1,2-Dichlorobenzene	ND	ug/m3	15.0				
1,2-Dichloroethane	ND	ug/m3	10.1				
1,2-Dichloropropane	ND	ug/m3	11.5				
1,3,5-Trimethylbenzene	ND	ug/m3	12.3				
1,3-Dichlorobenzene	ND	ug/m3	15.0				
1,4-Dichlorobenzene	ND	ug/m3	15.0				
Benzene	ND	ug/m3	7.98				
Benzyl chloride	ND	ug/m3	12.9				
Bromomethane	ND	ug/m3	9.70				
Carbon tetrachloride	ND	ug/m3	15.7				
Chlorobenzene	ND	ug/m3	11.5				
Chloroethane	ND	ug/m3	6.59				
Chloroform	ND	ug/m3	12.2				
Chloromethane	ND	ug/m3	5.16				
cis-1,2-Dichloroethene	ND	ug/m3	9.90				
cis-1,3-Dichloropropene	ND	ug/m3	11.3				
Dichlorodifluoromethane	ND	ug/m3	24.7				
Ethylbenzene	ND	ug/m3	10.8				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	19.1				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	17.5				
Hexachlorobutadiene	ND	ug/m3	26.6				
Methylene chloride	ND	ug/m3	17.4				
p/m-Xylene	ND	ug/m3	10.8				
o-Xylene	ND	ug/m3	10.8				
Styrene	ND	ug/m3	10.6				
Tetrachloroethene	ND	ug/m3	16.9				
Toluene	ND	ug/m3	9.41				
trans-1,2-Dichloroethene	ND	ug/m3	9.90				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-02
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0804 12:54	PS
trans-1,3-Dichloropropene	ND	ug/m3	11.3				
Trichloroethene	ND	ug/m3	13.4				
Trichlorofluoromethane	ND	ug/m3	14.0				
Vinyl chloride	ND	ug/m3	6.38				
2,4,4-Trimethyl-2-Pentene	115.	ug/m3	11.5				
2,4,4-Trimethyl-1-Pentene	838.	ug/m3	11.5				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0804 12:54	PS
1,1,1-Trichloroethane	ND	ppbV	2.50				
1,1,2,2-Tetrachloroethane	ND	ppbV	2.50				
1,1,2-Trichloroethane	ND	ppbV	2.50				
1,1-Dichloroethane	ND	ppbV	2.50				
1,1-Dichloroethene	ND	ppbV	2.50				
1,2,4-Trichlorobenzene	ND	ppbV	2.50				
1,2,4-Trimethylbenzene	ND	ppbV	2.50				
1,2-Dibromoethane	ND	ppbV	2.50				
1,2-Dichlorobenzene	ND	ppbV	2.50				
1,2-Dichloroethane	ND	ppbV	2.50				
1,2-Dichloropropane	ND	ppbV	2.50				
1,3,5-Trimethylbenzene	ND	ppbV	2.50				
1,3-Dichlorobenzene	ND	ppbV	2.50				
1,4-Dichlorobenzene	ND	ppbV	2.50				
Benzene	ND	ppbV	2.50				
Benzyl chloride	ND	ppbV	2.50				
Bromomethane	ND	ppbV	2.50				
Carbon tetrachloride	ND	ppbV	2.50				
Chlorobenzene	ND	ppbV	2.50				
Chloroethane	ND	ppbV	2.50				
Chloroform	ND	ppbV	2.50				
Chloromethane	ND	ppbV	2.50				
cis-1,2-Dichloroethene	ND	ppbV	2.50				
cis-1,3-Dichloropropene	ND	ppbV	2.50				
Dichlorodifluoromethane	ND	ppbV	5.00				
Ethylbenzene	ND	ppbV	2.50				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	2.50				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	2.50				
Hexachlorobutadiene	ND	ppbV	2.50				
Methylene chloride	ND	ppbV	5.00				
p/m-Xylene	ND	ppbV	2.50				
o-Xylene	ND	ppbV	2.50				
Styrene	ND	ppbV	2.50				
Tetrachloroethene	ND	ppbV	2.50				
Toluene	ND	ppbV	2.50				
trans-1,2-Dichloroethene	ND	ppbV	2.50				
trans-1,3-Dichloropropene	ND	ppbV	2.50				
Trichloroethene	ND	ppbV	2.50				
Trichlorofluoromethane	ND	ppbV	2.50				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-02
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0804 12:54	PS
Vinyl chloride	ND	ppbV	2.50				
2,4,4-Trimethyl-2-Pentene	25.0	ppbV	2.50				
2,4,4-Trimethyl-1-Pentene	183.	ppbV	2.50				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0508291-03
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 27-JUL-2005 11:45
Date Received : 28-JUL-2005
Date Reported : 08-AUG-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0804 11:46	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-03
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0804 11:46	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	937.	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	11600	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0804 11:46	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-03
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0804 11:46	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	204.	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	2530	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0508291-04
EFFLUENT
Sample Matrix: AIR

Date Collected: 27-JUL-2005 11:50
Date Received : 28-JUL-2005
Date Reported : 08-AUG-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0804 14:45	PS
1,1,1-Trichloroethane	ND	ug/m3	5.45				
1,1,2,2-Tetrachloroethane	ND	ug/m3	6.86				
1,1,2-Trichloroethane	ND	ug/m3	5.45				
1,1-Dichloroethane	ND	ug/m3	4.04				
1,1-Dichloroethene	ND	ug/m3	3.96				
1,2,4-Trichlorobenzene	ND	ug/m3	7.42				
1,2,4-Trimethylbenzene	ND	ug/m3	4.91				
1,2-Dibromoethane	ND	ug/m3	7.68				
1,2-Dichlorobenzene	ND	ug/m3	6.01				
1,2-Dichloroethane	ND	ug/m3	4.04				
1,2-Dichloropropane	ND	ug/m3	4.62				
1,3,5-Trimethylbenzene	ND	ug/m3	4.91				
1,3-Dichlorobenzene	ND	ug/m3	6.01				
1,4-Dichlorobenzene	ND	ug/m3	6.01				
Benzene	ND	ug/m3	3.19				
Benzyl chloride	ND	ug/m3	5.17				
Bromomethane	ND	ug/m3	3.88				
Carbon tetrachloride	ND	ug/m3	6.29				
Chlorobenzene	ND	ug/m3	4.60				
Chloroethane	ND	ug/m3	2.64				
Chloroform	ND	ug/m3	4.88				
Chloromethane	ND	ug/m3	2.06				
cis-1,2-Dichloroethene	ND	ug/m3	3.96				
cis-1,3-Dichloropropene	ND	ug/m3	4.53				
Dichlorodifluoromethane	ND	ug/m3	9.88				
Ethylbenzene	ND	ug/m3	4.34				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	7.66				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	6.98				
Hexachlorobutadiene	ND	ug/m3	10.6				
Methylene chloride	ND	ug/m3	6.94				
p/m-Xylene	ND	ug/m3	4.34				
o-Xylene	ND	ug/m3	4.34				
Styrene	ND	ug/m3	4.26				
Tetrachloroethene	ND	ug/m3	6.78				
Toluene	ND	ug/m3	3.76				
trans-1,2-Dichloroethene	ND	ug/m3	3.96				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-04
EFFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0804 14:45	PS
trans-1,3-Dichloropropene	ND	ug/m3	4.53				
Trichloroethene	ND	ug/m3	5.37				
Trichlorofluoromethane	ND	ug/m3	5.61				
Vinyl chloride	ND	ug/m3	2.55				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	4.58				
2,4,4-Trimethyl-1-Pentene	5.28	ug/m3	4.58				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0804 14:45	PS
1,1,1-Trichloroethane	ND	ppbV	1.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	1.00				
1,1,2-Trichloroethane	ND	ppbV	1.00				
1,1-Dichloroethane	ND	ppbV	1.00				
1,1-Dichloroethene	ND	ppbV	1.00				
1,2,4-Trichlorobenzene	ND	ppbV	1.00				
1,2,4-Trimethylbenzene	ND	ppbV	1.00				
1,2-Dibromoethane	ND	ppbV	1.00				
1,2-Dichlorobenzene	ND	ppbV	1.00				
1,2-Dichloroethane	ND	ppbV	1.00				
1,2-Dichloropropane	ND	ppbV	1.00				
1,3,5-Trimethylbenzene	ND	ppbV	1.00				
1,3-Dichlorobenzene	ND	ppbV	1.00				
1,4-Dichlorobenzene	ND	ppbV	1.00				
Benzene	ND	ppbV	1.00				
Benzyl chloride	ND	ppbV	1.00				
Bromomethane	ND	ppbV	1.00				
Carbon tetrachloride	ND	ppbV	1.00				
Chlorobenzene	ND	ppbV	1.00				
Chloroethane	ND	ppbV	1.00				
Chloroform	ND	ppbV	1.00				
Chloromethane	ND	ppbV	1.00				
cis-1,2-Dichloroethene	ND	ppbV	1.00				
cis-1,3-Dichloropropene	ND	ppbV	1.00				
Dichlorodifluoromethane	ND	ppbV	2.00				
Ethylbenzene	ND	ppbV	1.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	1.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	1.00				
Hexachlorobutadiene	ND	ppbV	1.00				
Methylene chloride	ND	ppbV	2.00				
p/m-Xylene	ND	ppbV	1.00				
o-Xylene	ND	ppbV	1.00				
Styrene	ND	ppbV	1.00				
Tetrachloroethene	ND	ppbV	1.00				
Toluene	ND	ppbV	1.00				
trans-1,2-Dichloroethene	ND	ppbV	1.00				
trans-1,3-Dichloropropene	ND	ppbV	1.00				
Trichloroethene	ND	ppbV	1.00				
Trichlorofluoromethane	ND	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-04
EFFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0804 14:45	PS
Vinyl chloride	ND	ppbV	1.00				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	1.00				
2,4,4-Trimethyl-1-Pentene	1.15	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0508291-04
EFFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0807 15:40	PS

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were less than 70%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	ND	ug/m3	120.
C9-C12 Aliphatics	ND	ug/m3	140.
1,3-Butadiene	ND	ug/m3	10.0
Methyl tert butyl ether	ND	ug/m3	10.0
Benzene	ND	ug/m3	10.0
Toluene	ND	ug/m3	10.0
Ethylbenzene	ND	ug/m3	10.0
p/m-Xylene	ND	ug/m3	20.0
o-Xylene	ND	ug/m3	10.0
Naphthalene	ND	ug/m3	10.0
2-Methylnaphthalene	ND	ug/m3	40.0
C5-C8 Aliphatics, Adjusted	ND	ug/m3	120.
C9-C12 Aliphatics, Adjusted	ND	ug/m3	140.
C9-C10 Aromatics	ND	ug/m3	120.

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0508291

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01-04 (L0508291-02, WG209708-2)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	115.	128.	ug/m3	11	25
2,4,4-Trimethyl-1-Pentene	838.	898.	ug/m3	7	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0508291

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01-04 (WG209708-1)		
1,1,1-Trichloroethane	92	70-130
1,1,2,2-Tetrachloroethane	90	70-130
1,1,2-Trichloroethane	88	70-130
1,1-Dichloroethane	92	70-130
1,1-Dichloroethene	106	70-130
1,2,4-Trichlorobenzene	26	70-130
1,2,4-Trimethylbenzene	76	70-130
1,2-Dibromoethane	80	70-130
1,2-Dichlorobenzene	72	70-130
1,2-Dichloroethane	92	70-130
1,2-Dichloropropane	95	70-130
1,3,5-Trimethylbenzene	86	70-130
1,3-Dichlorobenzene	73	70-130
1,4-Dichlorobenzene	74	70-130
Benzene	94	70-130
Benzyl chloride	61	70-130
Bromomethane	108	70-130
Carbon tetrachloride	95	70-130
Chlorobenzene	89	70-130
Chloroethane	98	70-130
Chloroform	94	70-130
Chloromethane	108	70-130
cis-1,2-Dichloroethene	89	70-130
cis-1,3-Dichloropropene	87	70-130
Dichlorodifluoromethane	99	70-130
Ethylbenzene	93	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	98	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	103	70-130
Hexachlorobutadiene	31	70-130
Methylene chloride	116	70-130
p/m-Xylene	100	70-130
o-Xylene	86	70-130
Styrene	97	70-130
Tetrachloroethene	84	70-130
Toluene	85	70-130
trans-1,2-Dichloroethene	89	70-130
trans-1,3-Dichloropropene	84	70-130
Trichloroethene	93	70-130
Trichlorofluoromethane	102	70-130
Vinyl chloride	102	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG210003-1)		
1,3-Butadiene	100	70-130
Methyl tert butyl ether	111	70-130
Benzene	91	70-130
Toluene	103	70-130
Ethylbenzene	106	70-130
p/m-Xylene	102	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0508291

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG210003-1)		
o-Xylene	111	70-130
Naphthalene	33	70-130
2-Methylnaphthalene	16	70-130
C5-C8 Aliphatics, Adjusted	96	70-130
C9-C12 Aliphatics, Adjusted	86	70-130
C9-C10 Aromatics	103	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0508291

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG209708-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0804 10:58	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0508291

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG209708-3)							
Petroleum Hydrocarbons in Air - ppbV cont'd				48 TO-14A		0804 10:58	PS
Blank Analysis for sample(s) 01-04 (WG209708-3)							
Petroleum Hydrocarbons in Air - ppbV				48 TO-14A		0804 10:58	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0508291

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04 (WG210003-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0807 15:03	PS
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

AIR ANALYSIS

PAGE ____ OF ____

CHAIN OF CUSTODY

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab: 7/28/05

ALPHA Job#: L0508291

Client Information

Client: Shaw E+I
Address: 100 Technology Center Dr. Stoughton MA. 02072
Phone: 617 589 5567
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Olin
Project Location: Wilmington MA.
Project#: 681076
Project Manager: Dave Cobb
ALPHA Quote#:

Turn-Around Time

☑ Standard 5 DAYS TO-13: 10 DAYS
☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker: ____
(Default based on Regulatory Criteria Indicated)
Other Formats: ____
☐ EMAIL (standard pdf report)
☐ Additional Deliverables: ____
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO#:

Regulatory Requirements/Report Limits

State /Fed	Program	Criteria

Other Project Specific Requirements/Comments:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Start Time	Collection End Time	Sample Matrix	Sampler's Initials	ID Can	ID-Flow Controller	TO-14A	TO-15	APH	DISSOLVED GASES	FIXED GASES	TO-13A	TO-15 SULFIDES/MERCAPTANS	DISS GASES CO2 ONLY	TO-14	Sample Comments	TOTAL # CONTAINERS
8291.1	Pre-Carbon	7-27-05	1130		Air	RL	0216										X	*	1
.2	Front influent	↓	1140		↓	RL	0252										X	*	1
.3	Rear influent	↓	1145		↓	RL	0214										X	*	1
.4	Effluent	↓	1150		↓	RL	0205				X							*	1
	* 2,4,4-Trimethyl-1-Pentene + 2,4,4-Trimethyl-2-Pentene																		

Shaded Gray Areas For Lab Use Only

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7-27-05 1200	[signature]	7/28/05 19:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Form No: 01-03 (rev. 8-JUN-05)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive
Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0506442

Date Received: 14-JUN-2005

Date Reported: 23-JUN-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0506442-01	PRE CARBON	WILMINGTON, MA
L0506442-02	FRONT INFLUENT	WILMINGTON, MA
L0506442-03	REAR INFLUENT	WILMINGTON, MA
L0506442-04	EFFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0506442

TO-14:

L0506442-01 and -03 have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the sample.

The wg205492-1 LCS % recovery for 1,2-dichlorobenzene is above the acceptance criteria for the method. This compound was not detected in any of the associated samples; data quality was therefore not affected.

APH:

The wg205170-1 LCS % recovery for 2-methylnaphthalene is below the individual acceptance criteria for the compound, but within the overall method allowances.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0506442-01
PRE CARBON
Sample Matrix: AIR

Date Collected: 14-JUN-2005 11:00
Date Received : 14-JUN-2005
Date Reported : 23-JUN-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0623 07:35	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	ND	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0623 07:35	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	130.	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	1400	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0623 07:35	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	ND	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0623 07:35	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	28.3	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	304.	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0506442-02
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 14-JUN-2005 11:05
Date Received : 14-JUN-2005
Date Reported : 23-JUN-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0623 07:03	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-02
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0623 07:03	PS
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	5.74	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	53.3	ug/m3	2.29				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0623 07:03	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-02
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0623 07:03	PS
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	1.25	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	11.6	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0506442-03
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 14-JUN-2005 11:10
Date Received : 14-JUN-2005
Date Reported : 23-JUN-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0623 08:08	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-03
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 cont'd				48 TO-14A		0623 08:08	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	133.	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	1500	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0623 08:08	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0506442-03
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV cont'd				48 TO-14A		0623 08:08	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	29.0	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	328.	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0506442-04
EFFLUENT
Sample Matrix: AIR

Date Collected: 14-JUN-2005 11:15
Date Received : 14-JUN-2005
Date Reported : 23-JUN-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0621 14:04	PS

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were less than 70%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	33.0	ug/m3	24.0
C9-C12 Aliphatics	73.2	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	ND	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	32.2	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	71.7	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0506442

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01-03 (L0506442-01, WG205492-2)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	130.	126.	ug/m3	3	25
2,4,4-Trimethyl-1-Pentene	1400	1350	ug/m3	4	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0506442

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 04 (L0506653-01, WG205170-2)					
C5-C8 Aliphatics	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics	201.	189.	ug/m3	6	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	ND	ND	ug/m3	NC	30
Benzene	ND	ND	ug/m3	NC	30
Toluene	ND	ND	ug/m3	NC	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics, Adjusted	198.	187.	ug/m3	6	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0506442

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01-03 (WG205492-1)		
1,1,1-Trichloroethane	98	70-130
1,1,2,2-Tetrachloroethane	103	70-130
1,1,2-Trichloroethane	92	70-130
1,1-Dichloroethane	102	70-130
1,1-Dichloroethene	98	70-130
1,2,4-Trichlorobenzene	128	70-130
1,2,4-Trimethylbenzene	112	70-130
1,2-Dibromoethane	108	70-130
1,2-Dichlorobenzene	133	70-130
1,2-Dichloroethane	109	70-130
1,2-Dichloropropane	98	70-130
1,3,5-Trimethylbenzene	72	70-130
1,3-Dichlorobenzene	121	70-130
1,4-Dichlorobenzene	120	70-130
Benzene	102	70-130
Benzyl chloride	103	70-130
Bromomethane	108	70-130
Carbon tetrachloride	97	70-130
Chlorobenzene	107	70-130
Chloroethane	96	70-130
Chloroform	105	70-130
Chloromethane	98	70-130
cis-1,2-Dichloroethene	104	70-130
cis-1,3-Dichloropropene	104	70-130
Dichlorodifluoromethane	98	70-130
Ethylbenzene	106	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	98	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97	70-130
Hexachlorobutadiene	124	70-130
Methylene chloride	95	70-130
p/m-Xylene	106	70-130
o-Xylene	107	70-130
Styrene	106	70-130
Tetrachloroethene	121	70-130
Toluene	107	70-130
trans-1,2-Dichloroethene	97	70-130
trans-1,3-Dichloropropene	87	70-130
Trichloroethene	98	70-130
Trichlorofluoromethane	101	70-130
Vinyl chloride	98	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG205170-1)		
1,3-Butadiene	86	70-130
Methyl tert butyl ether	88	70-130
Benzene	98	70-130
Toluene	106	70-130
Ethylbenzene	118	70-130
p/m-Xylene	113	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0506442

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG205170-1)		
o-Xylene	117	70-130
Naphthalene	112	70-130
2-Methylnaphthalene	29	70-130
C5-C8 Aliphatics, Adjusted	112	70-130
C9-C12 Aliphatics, Adjusted	106	70-130
C9-C10 Aromatics	120	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0506442

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG205492-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0622 09:57	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0506442

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG205492-3)							
Petroleum Hydrocarbons in Air - ppbV cont'd				48 TO-14A		0622 09:57	PS
Blank Analysis for sample(s) 01-03 (WG205492-3)							
Petroleum Hydrocarbons in Air - ppbV				48 TO-14A		0622 09:57	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0506442

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04 (WG205170-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0621 06:59	PS
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd In Lab: 6-14-05

ALPHA Job #: L0506442

Client Information

Client: Shaw E+I
Address: 100 Technology Center Dr.
Stoughton, MA 02072
Phone: 617-589-5567
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Olin
Project Location: Wilmington, MA
Project #: 681076
Project Manager: Dave Cobb
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
AIR - 10 DAYS
DISSOLVED GASES - 5 DAYS
Date Due: 6-21-05 Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed	Program	Criteria

Other Project Specific Requirements/Comments:
* Include 2,4,4-Trimethyl-1-Pentene + 2,4,4-Trimethyl-2-Pentene

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Start Time	Collection End Time	Sample Matrix	Sampler's Initials	ID Can	ID - Flow Controller	TO-14A	TO-15	APH	DISSOLVED GASES	FIXED GASES		Sample Comments	TOTAL # CONTINERS
6442.1	PRe Carbon	6-14-05	1100		AIR	PL	0104						X		*	
.2	Front influent	↓	1105				0150B						X		*	
.3	Rear influent	↓	1110				0176						X		*	
.4	Effluent	↓	1115				0148B				X				*	

Shaded Gray Areas For Lab Use Only

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6-14-05 1200	[signature]	6-14-05 1500
[signature]	6-14-05 1720	[signature]	6-14-05 1720

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

Form No: 01-03

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive

Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0502893

Date Received: 31-MAR-2005

Date Reported: 07-APR-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0502893-01	PRE-CARBON	WILMINGTON, MA
L0502893-02	EFFLUENT	WILMINGTON, MA
L0502893-03	FRONT INFLUENT	WILMINGTON, MA
L0502893-04	REAR INFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0502893

APH

Acetone, Trichlorofluoromethane, and 2-Butanone are present in L0502893-02. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

The wg198307-1 LCS % recoveries for naphthalene and 2-methylnaphthalene are above the acceptance criteria for the method. These compounds were not detected in any of the associated samples; data quality was therefore not affected.

TO-14:

L0502893-01 and -04 have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the samples.

The WG198362-1 LCS % recovery for 1,24-trichlorobenzene and Hexachlorobutadiene is above the acceptance criteria for the method. The compounds were not detected in any of the associated samples; data quality was therefore not affected.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0502893-01
PRE-CARBON
Sample Matrix: AIR

Date Collected: 31-MAR-2005 09:42
Date Received : 31-MAR-2005
Date Reported : 07-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0407 13:22	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	23.3	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0407 13:22	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	70.5	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	1060	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0407 13:22	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	8.84	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0407 13:22	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	15.4	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	231.	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0502893-02
EFFLUENT
Sample Matrix: AIR

Date Collected: 31-MAR-2005 09:43
Date Received : 31-MAR-2005
Date Reported : 07-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0407 12:13	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were greater than 130%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	66.7	ug/m3	24.0
C9-C12 Aliphatics	111.	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	ND	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	62.0	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	108.	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0502893-03
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 31-MAR-2005 09:45
Date Received : 31-MAR-2005
Date Reported : 07-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0407 12:47	FS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0407 12:47	PS
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	20.5	ug/m3	2.29				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0407 12:47	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0407 12:47	PS
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	4.48	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0502893-04
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 31-MAR-2005 09:46
Date Received : 31-MAR-2005
Date Reported : 07-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0407 14:44	PS
1,1,1-Trichloroethane	ND	ug/m3	5.45				
1,1,2,2-Tetrachloroethane	ND	ug/m3	6.86				
1,1,2-Trichloroethane	ND	ug/m3	5.45				
1,1-Dichloroethane	ND	ug/m3	4.04				
1,1-Dichloroethene	ND	ug/m3	3.96				
1,2,4-Trichlorobenzene	ND	ug/m3	7.42				
1,2,4-Trimethylbenzene	ND	ug/m3	4.91				
1,2-Dibromoethane	ND	ug/m3	7.68				
1,2-Dichlorobenzene	ND	ug/m3	6.01				
1,2-Dichloroethane	ND	ug/m3	4.04				
1,2-Dichloropropane	ND	ug/m3	4.62				
1,3,5-Trimethylbenzene	ND	ug/m3	4.91				
1,3-Dichlorobenzene	ND	ug/m3	6.01				
1,4-Dichlorobenzene	ND	ug/m3	6.01				
Benzene	ND	ug/m3	3.19				
Benzyl chloride	ND	ug/m3	5.17				
Bromomethane	ND	ug/m3	3.88				
Carbon tetrachloride	ND	ug/m3	6.29				
Chlorobenzene	ND	ug/m3	4.60				
Chloroethane	ND	ug/m3	2.64				
Chloroform	ND	ug/m3	4.88				
Chloromethane	ND	ug/m3	2.06				
cis-1,2-Dichloroethene	ND	ug/m3	3.96				
cis-1,3-Dichloropropene	ND	ug/m3	4.53				
Dichlorodifluoromethane	ND	ug/m3	9.88				
Ethylbenzene	ND	ug/m3	4.34				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	7.66				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	6.98				
Hexachlorobutadiene	ND	ug/m3	10.6				
Methylene chloride	ND	ug/m3	6.94				
p/m-Xylene	ND	ug/m3	4.34				
o-Xylene	ND	ug/m3	4.34				
Styrene	ND	ug/m3	4.26				
Tetrachloroethene	ND	ug/m3	6.78				
Toluene	ND	ug/m3	3.76				
trans-1,2-Dichloroethene	ND	ug/m3	3.96				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0407 14:44	PS
trans-1,3-Dichloropropene	ND	ug/m3	4.53				
Trichloroethene	ND	ug/m3	5.37				
Trichlorofluoromethane	ND	ug/m3	5.61				
Vinyl chloride	ND	ug/m3	2.55				
2,4,4-Trimethyl-2-Pentene	31.3	ug/m3	4.58				
2,4,4-Trimethyl-1-Pentene	492.	ug/m3	4.58				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0407 14:44	PS
1,1,1-Trichloroethane	ND	ppbV	1.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	1.00				
1,1,2-Trichloroethane	ND	ppbV	1.00				
1,1-Dichloroethane	ND	ppbV	1.00				
1,1-Dichloroethene	ND	ppbV	1.00				
1,2,4-Trichlorobenzene	ND	ppbV	1.00				
1,2,4-Trimethylbenzene	ND	ppbV	1.00				
1,2-Dibromoethane	ND	ppbV	1.00				
1,2-Dichlorobenzene	ND	ppbV	1.00				
1,2-Dichloroethane	ND	ppbV	1.00				
1,2-Dichloropropane	ND	ppbV	1.00				
1,3,5-Trimethylbenzene	ND	ppbV	1.00				
1,3-Dichlorobenzene	ND	ppbV	1.00				
1,4-Dichlorobenzene	ND	ppbV	1.00				
Benzene	ND	ppbV	1.00				
Benzyl chloride	ND	ppbV	1.00				
Bromomethane	ND	ppbV	1.00				
Carbon tetrachloride	ND	ppbV	1.00				
Chlorobenzene	ND	ppbV	1.00				
Chloroethane	ND	ppbV	1.00				
Chloroform	ND	ppbV	1.00				
Chloromethane	ND	ppbV	1.00				
cis-1,2-Dichloroethene	ND	ppbV	1.00				
cis-1,3-Dichloropropene	ND	ppbV	1.00				
Dichlorodifluoromethane	ND	ppbV	2.00				
Ethylbenzene	ND	ppbV	1.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	1.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	1.00				
Hexachlorobutadiene	ND	ppbV	1.00				
Methylene chloride	ND	ppbV	2.00				
p/m-Xylene	ND	ppbV	1.00				
o-Xylene	ND	ppbV	1.00				
Styrene	ND	ppbV	1.00				
Tetrachloroethene	ND	ppbV	1.00				
Toluene	ND	ppbV	1.00				
trans-1,2-Dichloroethene	ND	ppbV	1.00				
trans-1,3-Dichloropropene	ND	ppbV	1.00				
Trichloroethene	ND	ppbV	1.00				
Trichlorofluoromethane	ND	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0502893-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0407 14:44	PS
Vinyl chloride	ND	ppbV	1.00				
2,4,4-Trimethyl-2-Pentene	6.83	ppbV	1.00				
2,4,4-Trimethyl-1-Pentene	107.	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0502893

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01,03-04 (L0502893-04, WG198362-2)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	31.3	33.3	ug/m3	6	25
2,4,4-Trimethyl-1-Pentene	492.	508.	ug/m3	3	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0502893

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 02 (L0503098-10, WG198307-2)					
C5-C8 Aliphatics	113.	111.	ug/m3	2	30
C9-C12 Aliphatics	171.	180.	ug/m3	5	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	5.87	5.80	ug/m3	1	30
Benzene	2.36	2.37	ug/m3	0	30
Toluene	8.80	8.84	ug/m3	0	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	5.06	5.32	ug/m3	5	30
o-Xylene	2.03	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	87.4	85.5	ug/m3	2	30
C9-C12 Aliphatics, Adjusted	146.	153.	ug/m3	5	30
C9-C10 Aromatics	ND	24.1	ug/m3	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0502893

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01,03-04 (WG198362-1)		
1,1,1-Trichloroethane	95	70-130
1,1,2,2-Tetrachloroethane	123	70-130
1,1,2-Trichloroethane	92	70-130
1,1-Dichloroethane	95	70-130
1,1-Dichloroethene	96	70-130
1,2,4-Trichlorobenzene	170	70-130
1,2,4-Trimethylbenzene	118	70-130
1,2-Dibromoethane	110	70-130
1,2-Dichlorobenzene	116	70-130
1,2-Dichloroethane	99	70-130
1,2-Dichloropropane	92	70-130
1,3,5-Trimethylbenzene	109	70-130
1,3-Dichlorobenzene	120	70-130
1,4-Dichlorobenzene	127	70-130
Benzene	105	70-130
Benzyl chloride	121	70-130
Bromomethane	107	70-130
Carbon tetrachloride	88	70-130
Chlorobenzene	104	70-130
Chloroethane	104	70-130
Chloroform	102	70-130
Chloromethane	92	70-130
cis-1,2-Dichloroethene	116	70-130
cis-1,3-Dichloropropene	96	70-130
Dichlorodifluoromethane	88	70-130
Ethylbenzene	121	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	98	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	95	70-130
Hexachlorobutadiene	136	70-130
Methylene chloride	100	70-130
p/m-Xylene	112	70-130
o-Xylene	113	70-130
Styrene	97	70-130
Tetrachloroethene	115	70-130
Toluene	119	70-130
trans-1,2-Dichloroethene	98	70-130
trans-1,3-Dichloropropene	94	70-130
Trichloroethene	102	70-130
Trichlorofluoromethane	90	70-130
Vinyl chloride	97	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 02 (WG198307-1)		
1,3-Butadiene	110	70-130
Methyl tert butyl ether	108	70-130
Benzene	126	70-130
Toluene	113	70-130
Ethylbenzene	110	70-130
p/m-Xylene	102	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0502893

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 02 (WG198307-1)		
o-Xylene	107	70-130
Naphthalene	252	70-130
2-Methylnaphthalene	139	70-130
C5-C8 Aliphatics, Adjusted	111	70-130
C9-C12 Aliphatics, Adjusted	120	70-130
C9-C10 Aromatics	96	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0502893

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03-04 (WG198362-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0406 18:12	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0502893

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03-04 (WG198362-3)							
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0406 18:12	PS
Blank Analysis for sample(s) 01,03-04 (WG198362-3)							
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0406 18:12	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0502893

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02 (WG198307-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0406 18:12 AR	
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES

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(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive
Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0500911

Date Received: 31-JAN-2005

Date Reported: 08-FEB-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0500911-01	PRE-CARBON	WILMINGTON, MA
L0500911-02	FRONT-INFLUENT	WILMINGTON, MA
L0500911-03	REAR-INFLUENT	WILMINGTON, MA
L0500911-04	EFFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Kathleen M. O'Brien
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0500911

TO-14

Organic Compounds in Air

In order to comply with various regulatory requirements, the results for the analysis of Organic Compounds in Air by EPA TO-14A or TO-15 are provided in ug/m3 as well as ppbv for each sample in a sequential format.

L0500911-01 and -03 has elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the sample.

APH

Acetone and isopropyl alcohol are present in L0500911-04. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0500911-01
PRE-CARBON
Sample Matrix: AIR

Date Collected: 31-JAN-2005 09:47
Date Received : 31-JAN-2005
Date Reported : 08-FEB-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0202 22:15	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	ND	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0202 22:15	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	442.	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	4340	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0202 22:15	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	ND	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0202 22:15	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	96.5	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	947.	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0500911-02
FRONT-INFLUENT
Sample Matrix: AIR

Date Collected: 31-JAN-2005 09:54
Date Received : 31-JAN-2005
Date Reported : 08-FEB-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0203 10:57	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	17.6	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-02
FRONT-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0203 10:57	PS
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	13.4	ug/m3	2.29				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0203 10:57	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	4.67	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-02
FRONT-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0203 10:57	PS
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	2.92	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0500911-03
REAR-INFLUENT
Sample Matrix: AIR

Date Collected: 31-JAN-2005 09:52
Date Received : 31-JAN-2005
Date Reported : 08-FEB-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0202 22:47	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-03
REAR-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0202 22:47	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	91.0	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	1510	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0202 22:47	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0500911-03
REAR-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0202 22:47	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	19.8	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	329.	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0500911-04
EFFLUENT
Sample Matrix: AIR

Date Collected: 31-JAN-2005 09:48
Date Received : 31-JAN-2005
Date Reported : 08-FEB-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0207 15:51	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	127.	ug/m3	24.0
C9-C12 Aliphatics	38.7	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	27.6	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	96.8	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	37.4	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0500911

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 04 (L0500789-01, WG193404-2)					
C5-C8 Aliphatics	53.1	50.8	ug/m3	4	30
C9-C12 Aliphatics	69.1	64.2	ug/m3	7	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	5.84	5.81	ug/m3	1	30
Benzene	ND	ND	ug/m3	NC	30
Toluene	5.40	5.15	ug/m3	5	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	36.3	34.4	ug/m3	5	30
C9-C12 Aliphatics, Adjusted	60.8	56.1	ug/m3	8	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0500911

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01-03 (WG193210-1)		
1,1,1-Trichloroethane	115	70-130
1,1,2,2-Tetrachloroethane	119	70-130
1,1,2-Trichloroethane	103	70-130
1,1-Dichloroethane	100	70-130
1,1-Dichloroethene	96	70-130
1,2,4-Trichlorobenzene	87	70-130
1,2,4-Trimethylbenzene	101	70-130
1,2-Dibromoethane	112	70-130
1,2-Dichlorobenzene	95	70-130
1,2-Dichloroethane	106	70-130
1,2-Dichloropropane	104	70-130
1,3,5-Trimethylbenzene	112	70-130
1,3-Dichlorobenzene	94	70-130
1,4-Dichlorobenzene	88	70-130
Benzene	104	70-130
Benzyl chloride	82	70-130
Bromomethane	105	70-130
Carbon tetrachloride	106	70-130
Chlorobenzene	112	70-130
Chloroethane	92	70-130
Chloroform	108	70-130
Chloromethane	99	70-130
cis-1,2-Dichloroethene	104	70-130
cis-1,3-Dichloropropene	107	70-130
Dichlorodifluoromethane	108	70-130
Ethylbenzene	127	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	97	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97	70-130
Hexachlorobutadiene	93	70-130
Methylene chloride	91	70-130
p/m-Xylene	124	70-130
o-Xylene	124	70-130
Styrene	118	70-130
Tetrachloroethene	114	70-130
Toluene	116	70-130
trans-1,2-Dichloroethene	82	70-130
trans-1,3-Dichloropropene	108	70-130
Trichloroethene	108	70-130
Trichlorofluoromethane	99	70-130
Vinyl chloride	98	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG193404-4)		
1,3-Butadiene	83	70-130
Methyl tert butyl ether	98	70-130
Benzene	89	70-130
Toluene	96	70-130
Ethylbenzene	75	70-130
p/m-Xylene	93	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0500911

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG193404-4)		
o-Xylene	76	70-130
Naphthalene	81	70-130
2-Methylnaphthalene	96	70-130
C5-C8 Aliphatics, Adjusted	79	70-130
C9-C12 Aliphatics, Adjusted	91	70-130
C9-C10 Aromatics	87	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0500911

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG193210-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0202 13:37	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0500911

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG193210-3)							
Petroleum Hydrocarbons in Air - ppbV continued				48 TO-14A		0202 13:37	PS
Blank Analysis for sample(s) 01-03 (WG193210-3)							
Petroleum Hydrocarbons in Air - ppbV				48 TO-14A		0202 13:37	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0500911

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04 (WG193404-5)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0207 10:07	AR
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES

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MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive

Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0501774

Date Received: 24-FEB-2005

Date Reported: 02-MAR-2005

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0501774-01	PRE-CARBON	WILMINGTON, MA
L0501774-02	FRONT-INFLUENT	WILMINGTON, MA
L0501774-03	REAR-INFLUENT	WILMINGTON, MA
L0501774-04	EFFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Ellen M. Collins
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0501774

Organic Compounds in Air

In order to comply with various regulatory requirements, the results for the analysis of Organic Compounds in Air by EPA TO-14A are provided in ug/m3 as well as ppbv for each sample in a sequential format.

L0501774-01 and ~03 have elevated limits of detection due to the dilutions (-01: 10X and -03: 25X) required by the elevated concentrations of target compounds in the samples.

APH

Acetone, Trichlorofluoromethane, and 2-Butanone are present in L0501774-04. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

The LCS % recoveries for Naphthanlene and 2-Methylnaphthalene are above the acceptance criteria for the method. The associated sample is non-detect for these compounds.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0501774-01
PRE-CARBON
Sample Matrix: AIR

Date Collected: 23-FEB-2005 10:01
Date Received : 24-FEB-2005
Date Reported : 02-MAR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0301 16:55	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	ND	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0301 16:55	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	511.	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	5000	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0301 16:55	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	ND	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0301 16:55	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	112.	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	1090	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0501774-02
FRONT-INFLUENT
Sample Matrix: AIR

Date Collected: 23-FEB-2005 10:07
Date Received : 24-FEB-2005
Date Reported : 02-MAR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0301 17:30	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-02
FRONT-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0301 17:30	PS
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	15.8	ug/m3	2.29				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0301 17:30	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-02
FRONT-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0301 17:30	PS
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	3.44	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0501774-03
REAR-INFLUENT
Sample Matrix: AIR

Date Collected: 23-FEB-2005 10:09
Date Received : 24-FEB-2005
Date Reported : 02-MAR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0301 18:04	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-03
REAR-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		0301 18:04	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	272.	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	3100	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		0301 18:04	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0501774-03
REAR-INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		0301 18:04	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	59.4	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	676.	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0501774-04
EFFLUENT
Sample Matrix: AIR

Date Collected: 23-FEB-2005 10:04
Date Received : 24-FEB-2005
Date Reported : 02-MAR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		0228 19:13	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were greater than 130%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	32.8	ug/m3	24.0
C9-C12 Aliphatics	ND	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	ND	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	31.0	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0501774

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01-03 (L0501774-03, WG195461-2)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	272.	323.	ug/m3	17	25
2,4,4-Trimethyl-1-Pentene	3100	3680	ug/m3	17	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0501774

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 04 (L0501774-04, WG195351-2)					
C5-C8 Aliphatics	32.8	33.8	ug/m3	3	30
C9-C12 Aliphatics	ND	ND	ug/m3	NC	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	ND	ND	ug/m3	NC	30
Benzene	ND	ND	ug/m3	NC	30
Toluene	ND	ND	ug/m3	NC	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	31.0	32.1	ug/m3	3	30
C9-C12 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0501774

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01-03 (WG195461-1)		
1,1,1-Trichloroethane	88	70-130
1,1,2,2-Tetrachloroethane	99	70-130
1,1,2-Trichloroethane	94	70-130
1,1-Dichloroethane	97	70-130
1,1-Dichloroethene	99	70-130
1,2,4-Trichlorobenzene	75	70-130
1,2,4-Trimethylbenzene	105	70-130
1,2-Dibromoethane	95	70-130
1,2-Dichlorobenzene	97	70-130
1,2-Dichloroethane	90	70-130
1,2-Dichloropropane	95	70-130
1,3,5-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	96	70-130
1,4-Dichlorobenzene	99	70-130
Benzene	92	70-130
Benzyl chloride	84	70-130
Bromomethane	106	70-130
Carbon tetrachloride	103	70-130
Chlorobenzene	90	70-130
Chloroethane	98	70-130
Chloroform	93	70-130
Chloromethane	100	70-130
cis-1,2-Dichloroethene	100	70-130
cis-1,3-Dichloropropene	97	70-130
Dichlorodifluoromethane	105	70-130
Ethylbenzene	90	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	100	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	100	70-130
Hexachlorobutadiene	89	70-130
Methylene chloride	103	70-130
p/m-Xylene	97	70-130
o-Xylene	107	70-130
Styrene	78	70-130
Tetrachloroethene	90	70-130
Toluene	97	70-130
trans-1,2-Dichloroethene	105	70-130
trans-1,3-Dichloropropene	100	70-130
Trichloroethene	94	70-130
Trichlorofluoromethane	112	70-130
Vinyl chloride	97	70-130
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG195351-1)		
1,3-Butadiene	117	70-130
Methyl tert butyl ether	110	70-130
Benzene	119	70-130
Toluene	124	70-130
Ethylbenzene	106	70-130
p/m-Xylene	127	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0501774

Continued

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 04 (WG195351-1)		
o-Xylene	108	70-130
Naphthalene	203	70-130
2-Methylnaphthalene	184	70-130
C5-C8 Aliphatics, Adjusted	118	70-130
C9-C12 Aliphatics, Adjusted	107	70-130
C9-C10 Aromatics	119	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0501774

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG195461-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		0301 07:31	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0501774

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG195461-3)							
Petroleum Hydrocarbons in Air - ppbV continued				48 TO-14A		0301 07:31	PS
Blank Analysis for sample(s) 01-03 (WG195461-3)							
Petroleum Hydrocarbons in Air - ppbV				48 TO-14A		0301 07:31	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0501774

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04 (WG195351-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		0228 15:17	AR
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES

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(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive

Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0413976

Date Received: 16-DEC-2004

Date Reported: 20-DEC-2004

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0413976-01	PRE-CARBON	WILMINGTON, MA
L0413976-02	EFFLUENT	WILMINGTON, MA
L0413976-03	FRONT INFLUENT	WILMINGTON, MA
L0413976-04	REAR INFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0413976

Volatile Organic Compounds in Air

L0413976-01 and -04 have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the sample.

L0413976-03 has elevated limits of detection due to the dilutions required by the elevated concentrations of non-target compounds in the sample.

The LCS % recoveries for 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, and Hexachlorobutadiene are above the acceptance criteria for the method.

Petroleum Hydrocarbons in Air

Acetone, Trichlorofluoromethane, and 2-Butanone are present in L0413976-02. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

The LCS % recovery for Naphthalene is above the acceptance criteria for the method.

The LCS % recovery for 2-Methylnaphthalene is below the individual acceptance criteria for the compound, but within the overall method allowances.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0413976-01
PRE-CARBON
Sample Matrix: AIR

Date Collected: 16-DEC-2004 09:54
Date Received : 16-DEC-2004
Date Reported : 20-DEC-2004

Condition of Sample: *Satisfactory*

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1217 23:14	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1217 23:14	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	193.	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	3060	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1217 23:14	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-01
PRE-CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1217 23:14	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	42.2	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	668.	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0413976-02
EFFLUENT
Sample Matrix: AIR

Date Collected: 16-DEC-2004 09:57
Date Received : 16-DEC-2004
Date Reported : 20-DEC-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		1217 22:38	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were less than 70%.
2. One or more of the APH LCS recoveries were greater than 130%.

Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	35.2	ug/m3	24.0
C9-C12 Aliphatics	32.8	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	ND	ug/m3	2.00
Toluene	2.40	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	ND	ug/m3	4.00
o-Xylene	ND	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	28.4	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	31.0	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0413976-03
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 16-DEC-2004 09:59
Date Received : 16-DEC-2004
Date Reported : 20-DEC-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1220 14:25	PS
1,1,1-Trichloroethane	ND	ug/m3	5.45				
1,1,2,2-Tetrachloroethane	ND	ug/m3	6.86				
1,1,2-Trichloroethane	ND	ug/m3	5.45				
1,1-Dichloroethane	ND	ug/m3	4.04				
1,1-Dichloroethene	ND	ug/m3	3.96				
1,2,4-Trichlorobenzene	ND	ug/m3	7.42				
1,2,4-Trimethylbenzene	ND	ug/m3	4.91				
1,2-Dibromoethane	ND	ug/m3	7.68				
1,2-Dichlorobenzene	ND	ug/m3	6.01				
1,2-Dichloroethane	ND	ug/m3	4.04				
1,2-Dichloropropane	ND	ug/m3	4.62				
1,3,5-Trimethylbenzene	ND	ug/m3	4.91				
1,3-Dichlorobenzene	ND	ug/m3	6.01				
1,4-Dichlorobenzene	ND	ug/m3	6.01				
Benzene	ND	ug/m3	3.19				
Benzyl chloride	ND	ug/m3	5.17				
Bromomethane	ND	ug/m3	3.88				
Carbon tetrachloride	ND	ug/m3	6.29				
Chlorobenzene	ND	ug/m3	4.60				
Chloroethane	ND	ug/m3	2.64				
Chloroform	ND	ug/m3	4.88				
Chloromethane	ND	ug/m3	2.06				
cis-1,2-Dichloroethene	ND	ug/m3	3.96				
cis-1,3-Dichloropropene	ND	ug/m3	4.53				
Dichlorodifluoromethane	ND	ug/m3	9.88				
Ethylbenzene	ND	ug/m3	4.34				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	7.66				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	6.98				
Hexachlorobutadiene	ND	ug/m3	10.6				
Methylene chloride	ND	ug/m3	6.94				
p/m-Xylene	ND	ug/m3	4.34				
o-Xylene	ND	ug/m3	4.34				
Styrene	ND	ug/m3	4.26				
Tetrachloroethene	ND	ug/m3	6.78				
Toluene	3.82	ug/m3	3.76				
trans-1,2-Dichloroethene	ND	ug/m3	3.96				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1220 14:25	PS
trans-1,3-Dichloropropene	ND	ug/m3	4.53				
Trichloroethene	ND	ug/m3	5.37				
Trichlorofluoromethane	ND	ug/m3	5.61				
Vinyl chloride	ND	ug/m3	2.55				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	4.58				
2,4,4-Trimethyl-1-Pentene	11.5	ug/m3	4.58				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1220 14:25	PS
1,1,1-Trichloroethane	ND	ppbV	1.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	1.00				
1,1,2-Trichloroethane	ND	ppbV	1.00				
1,1-Dichloroethane	ND	ppbV	1.00				
1,1-Dichloroethene	ND	ppbV	1.00				
1,2,4-Trichlorobenzene	ND	ppbV	1.00				
1,2,4-Trimethylbenzene	ND	ppbV	1.00				
1,2-Dibromoethane	ND	ppbV	1.00				
1,2-Dichlorobenzene	ND	ppbV	1.00				
1,2-Dichloroethane	ND	ppbV	1.00				
1,2-Dichloropropane	ND	ppbV	1.00				
1,3,5-Trimethylbenzene	ND	ppbV	1.00				
1,3-Dichlorobenzene	ND	ppbV	1.00				
1,4-Dichlorobenzene	ND	ppbV	1.00				
Benzene	ND	ppbV	1.00				
Benzyl chloride	ND	ppbV	1.00				
Bromomethane	ND	ppbV	1.00				
Carbon tetrachloride	ND	ppbV	1.00				
Chlorobenzene	ND	ppbV	1.00				
Chloroethane	ND	ppbV	1.00				
Chloroform	ND	ppbV	1.00				
Chloromethane	ND	ppbV	1.00				
cis-1,2-Dichloroethene	ND	ppbV	1.00				
cis-1,3-Dichloropropene	ND	ppbV	1.00				
Dichlorodifluoromethane	ND	ppbV	2.00				
Ethylbenzene	ND	ppbV	1.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	1.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	1.00				
Hexachlorobutadiene	ND	ppbV	1.00				
Methylene chloride	ND	ppbV	2.00				
p/m-Xylene	ND	ppbV	1.00				
o-Xylene	ND	ppbV	1.00				
Styrene	ND	ppbV	1.00				
Tetrachloroethene	ND	ppbV	1.00				
Toluene	1.02	ppbV	1.00				
trans-1,2-Dichloroethene	ND	ppbV	1.00				
trans-1,3-Dichloropropene	ND	ppbV	1.00				
Trichloroethene	ND	ppbV	1.00				
Trichlorofluoromethane	ND	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1220 14:25	PS
Vinyl chloride	ND	ppbV	1.00				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	1.00				
2,4,4-Trimethyl-1-Pentene	2.50	ppbV	1.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0413976-04
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 16-DEC-2004 10:01
Date Received : 16-DEC-2004
Date Reported : 20-DEC-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1218 00:29	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1218 00:29	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	76.6	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	1390	ug/m3	57.3				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1218 00:29	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0413976-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1218 00:29	PS
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	16.7	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	303.	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0413976

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 02 (L0413923-01, WG189169)					
C5-C8 Aliphatics	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics	37.4	31.2	ug/m3	18	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	ND	ND	ug/m3	NC	30
Benzene	ND	ND	ug/m3	NC	30
Toluene	ND	ND	ug/m3	NC	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C12 Aliphatics, Adjusted	34.4	28.8	ug/m3	18	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30
Volatile Organic Compounds in Air for sample(s) 01,03-04 (L0413976-04, WG189902)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0413976

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01,03-04 (L0413976-04, WG189902)					
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	76.6	70.0	ug/m3	9	25
2,4,4-Trimethyl-1-Pentene	1390	1300	ug/m3	7	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0413976

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 02 (WG189169)		
1,3-Butadiene	106	70-130
Methyl tert butyl ether	103	70-130
Benzene	100	70-130
Toluene	102	70-130
Ethylbenzene	104	70-130
p/m-Xylene	112	70-130
o-Xylene	105	70-130
Naphthalene	142	70-130
2-Methylnaphthalene	67	70-130
C5-C8 Aliphatics, Adjusted	95	70-130
C9-C12 Aliphatics, Adjusted	119	70-130
C9-C10 Aromatics	106	70-130
Volatile Organic Compounds in Air LCS for sample(s) 01,04 (WG189902)		
1,1,1-Trichloroethane	103	70-130
1,1,2,2-Tetrachloroethane	106	70-130
1,1,2-Trichloroethane	102	70-130
1,1-Dichloroethane	99	70-130
1,1-Dichloroethene	97	70-130
1,2,4-Trichlorobenzene	256	70-130
1,2,4-Trimethylbenzene	127	70-130
1,2-Dibromoethane	99	70-130
1,2-Dichlorobenzene	132	70-130
1,2-Dichloroethane	112	70-130
1,2-Dichloropropane	103	70-130
1,3,5-Trimethylbenzene	122	70-130
1,3-Dichlorobenzene	119	70-130
1,4-Dichlorobenzene	115	70-130
Benzene	101	70-130
Benzyl chloride	75	70-130
Bromomethane	94	70-130
Carbon tetrachloride	99	70-130
Chlorobenzene	97	70-130
Chloroethane	97	70-130
Chloroform	100	70-130
Chloromethane	106	70-130
cis-1,2-Dichloroethene	106	70-130
cis-1,3-Dichloropropene	101	70-130
Dichlorodifluoromethane	99	70-130
Ethylbenzene	112	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	98	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97	70-130
Hexachlorobutadiene	179	70-130
Methylene chloride	100	70-130
p/m-Xylene	112	70-130
o-Xylene	111	70-130
Styrene	104	70-130
Tetrachloroethene	101	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0413976

Continued

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01,04 (WG189902)		
Toluene	109	70-130
trans-1,2-Dichloroethene	100	70-130
trans-1,3-Dichloropropene	108	70-130
Trichloroethene	102	70-130
Trichlorofluoromethane	96	70-130
Vinyl chloride	97	70-130
Volatile Organic Compounds in Air LCS for sample(s) 03 (WG189902)		
1,1,1-Trichloroethane	92	70-130
1,1,2,2-Tetrachloroethane	108	70-130
1,1,2-Trichloroethane	93	70-130
1,1-Dichloroethane	89	70-130
1,1-Dichloroethene	83	70-130
1,2,4-Trichlorobenzene	257	70-130
1,2,4-Trimethylbenzene	128	70-130
1,2-Dibromoethane	112	70-130
1,2-Dichlorobenzene	140	70-130
1,2-Dichloroethane	97	70-130
1,2-Dichloropropane	96	70-130
1,3,5-Trimethylbenzene	126	70-130
1,3-Dichlorobenzene	126	70-130
1,4-Dichlorobenzene	122	70-130
Benzene	101	70-130
Benzyl chloride	83	70-130
Bromomethane	78	70-130
Carbon tetrachloride	86	70-130
Chlorobenzene	110	70-130
Chloroethane	80	70-130
Chloroform	101	70-130
Chloromethane	80	70-130
cis-1,2-Dichloroethene	95	70-130
cis-1,3-Dichloropropene	101	70-130
Dichlorodifluoromethane	78	70-130
Ethylbenzene	125	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	84	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	79	70-130
Hexachlorobutadiene	176	70-130
Methylene chloride	79	70-130
p/m-Xylene	122	70-130
o-Xylene	116	70-130
Styrene	119	70-130
Tetrachloroethene	123	70-130
Toluene	128	70-130
trans-1,2-Dichloroethene	89	70-130
trans-1,3-Dichloropropene	104	70-130
Trichloroethene	102	70-130
Trichlorofluoromethane	78	70-130
Vinyl chloride	80	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0413976

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02 (WG189169-5)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		1217 16:25	AR
C5-C8 Aliphatics	ND	ug/m3	120.				
C9-C12 Aliphatics	ND	ug/m3	140.				
1,3-Butadiene	ND	ug/m3	10.0				
Methyl tert butyl ether	ND	ug/m3	10.0				
Benzene	ND	ug/m3	10.0				
Toluene	ND	ug/m3	10.0				
Ethylbenzene	ND	ug/m3	10.0				
p/m-Xylene	ND	ug/m3	20.0				
o-Xylene	ND	ug/m3	10.0				
Naphthalene	ND	ug/m3	10.0				
2-Methylnaphthalene	ND	ug/m3	40.0				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	120.				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	140.				
C9-C10 Aromatics	ND	ug/m3	120.				
Blank Analysis for sample(s) 01,04 (WG189902-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1217 15:51	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0413976

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,04 (WG189902-3)							
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1217 15:51	PS
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				
Blank Analysis for sample(s) 01,04 (WG189902-3)							
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1217 15:51	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0413976

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,04 (WG189902-3)							
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1217 15:51	PS
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				
Blank Analysis for sample(s) 03 (WG189902-5)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1220 13:50	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0413976

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG189902-5)							
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1220 13:50	PS
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				
Blank Analysis for sample(s) 03 (WG189902-5)							
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1220 13:50	PS
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0413976

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG189902-5)							
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1220 13:50	PS
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.

ug/cart Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES

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MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Shaw E&I

Address: 100 Technology Center Drive
Stoughton, MA 02072

Attn: Mr David Cobb

Project Number: 681076

Site: OLIN

Laboratory Job Number: L0412956

Date Received: 19-NOV-2004

Date Reported: 29-NOV-2004

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0412956-01	PRE CARBON	WILMINGTON, MA
L0412956-02	EFFLUENT	WILMINGTON, MA
L0412956-03	FRONT INFLUENT	WILMINGTON, MA
L0412956-04	REAR INFLUENT	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

Laboratory Job Number: L0412956

APH

All samples have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the sample.

Acetone, Trichlorofluoromethane, and 2-Butanone are present in L0412956-02. These compounds elute in the C5-C8 Aliphatic Hydrocarbon range. The response for these analytes was not included in the calculation of the C5-C8 range result since they are not petroleum hydrocarbons.

The LCS % recoveries for naphthalene and 2-methylnaphthalene are above the acceptance criteria for the method. All associated samples are non-detect for this compound.

TO-14

Organic Compounds in Air

In order to comply with various regulatory requirements, the results for the analysis of Organic Compounds in Air by EPA TO-14A or TO-15 are provided in ug/m3 as well as ppbv for each sample in a sequential format.

L0412956-01 and -04 were re-analyzed on dilution in order to quantitate the sample within the range of the calibration. The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

The LCS % recovery for 1,2,4-trichlorobenzene, Hexachlorobutadiene, and 1,4-dichlorobenzene is above the acceptance criteria for the method. All associated samples are non-detect for this compound.

The LCS % recovery for carbon tetrachloride is below the individual acceptance criteria for the compound, but within the overall method allowances.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0412956-01
PRE CARBON
Sample Matrix: AIR

Date Collected: 19-NOV-2004 09:13
Date Received : 19-NOV-2004
Date Reported : 29-NOV-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 12:31	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluor ethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1122 12:31	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	3280	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	>11500	ug/m3	57.3				
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 13:45	PS
2,4,4-Trimethyl-1-Pentene	20500	ug/m3	388.				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 12:31	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-01
PRE CARBON

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1122 12:31	PS
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	715.	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	>2500	ppbV	12.5				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 13:45	PS
2,4,4-Trimethyl-1-Pentene	4470	ppbV	84.6				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0412956-02 EFFLUENT
Sample Matrix: AIR
Date Collected: 19-NOV-2004 09:14
Date Received : 19-NOV-2004
Date Reported : 29-NOV-2004

Condition of Sample: *Satisfactory*
Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Petroleum Hydrocarbons in Air				43 DRAFT 1		1124 19:56	AR

Quality Control Information

Sample Type: Grab
Sample Container Type: Canister
Sampling Flow Controller: Mechanical
Sampling Zone: Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check: <=10%

Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the APH LCS recoveries were greater than 130%.
Were significant modifications made to the method as specified in Sect 11.3? NO

C5-C8 Aliphatics	222.	ug/m3	24.0
C9-C12 Aliphatics	346.	ug/m3	28.0
1,3-Butadiene	ND	ug/m3	2.00
Methyl tert butyl ether	ND	ug/m3	2.00
Benzene	2.01	ug/m3	2.00
Toluene	11.8	ug/m3	2.00
Ethylbenzene	ND	ug/m3	2.00
p/m-Xylene	9.16	ug/m3	4.00
o-Xylene	2.05	ug/m3	2.00
Naphthalene	ND	ug/m3	2.00
2-Methylnaphthalene	ND	ug/m3	8.00
C5-C8 Aliphatics, Adjusted	194.	ug/m3	24.0
C9-C12 Aliphatics, Adjusted	334.	ug/m3	28.0
C9-C10 Aromatics	ND	ug/m3	24.0

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0412956-03
FRONT INFLUENT
Sample Matrix: AIR

Date Collected: 19-NOV-2004 09:17
Date Received : 19-NOV-2004
Date Reported : 29-NOV-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 10:51	PS
1,1,1-Trichloroethane	ND	ug/m3	27.2				
1,1,2,2-Tetrachloroethane	ND	ug/m3	34.3				
1,1,2-Trichloroethane	ND	ug/m3	27.2				
1,1-Dichloroethane	ND	ug/m3	20.2				
1,1-Dichloroethene	ND	ug/m3	19.8				
1,2,4-Trichlorobenzene	ND	ug/m3	37.1				
1,2,4-Trimethylbenzene	ND	ug/m3	24.6				
1,2-Dibromoethane	ND	ug/m3	38.4				
1,2-Dichlorobenzene	ND	ug/m3	30.0				
1,2-Dichloroethane	ND	ug/m3	20.2				
1,2-Dichloropropane	ND	ug/m3	23.1				
1,3,5-Trimethylbenzene	ND	ug/m3	24.6				
1,3-Dichlorobenzene	ND	ug/m3	30.0				
1,4-Dichlorobenzene	ND	ug/m3	30.0				
Benzene	ND	ug/m3	16.0				
Benzyl chloride	ND	ug/m3	25.9				
Bromomethane	ND	ug/m3	19.4				
Carbon tetrachloride	ND	ug/m3	31.4				
Chlorobenzene	ND	ug/m3	23.0				
Chloroethane	ND	ug/m3	13.2				
Chloroform	ND	ug/m3	24.4				
Chloromethane	ND	ug/m3	10.3				
cis-1,2-Dichloroethene	ND	ug/m3	19.8				
cis-1,3-Dichloropropene	ND	ug/m3	22.7				
Dichlorodifluoromethane	ND	ug/m3	49.4				
Ethylbenzene	ND	ug/m3	21.7				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	38.3				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	34.9				
Hexachlorobutadiene	ND	ug/m3	53.3				
Methylene chloride	ND	ug/m3	34.7				
p/m-Xylene	ND	ug/m3	21.7				
o-Xylene	ND	ug/m3	21.7				
Styrene	ND	ug/m3	21.3				
Tetrachloroethene	ND	ug/m3	33.9				
Toluene	ND	ug/m3	18.8				
trans-1,2-Dichloroethene	ND	ug/m3	19.8				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1122 10:51	PS
trans-1,3-Dichloropropene	ND	ug/m3	22.7				
Trichloroethene	ND	ug/m3	26.8				
Trichlorofluoromethane	ND	ug/m3	28.1				
Vinyl chloride	ND	ug/m3	12.8				
2,4,4-Trimethyl-2-Pentene	172.	ug/m3	22.9				
2,4,4-Trimethyl-1-Pentene	902.	ug/m3	22.9				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 10:51	PS
1,1,1-Trichloroethane	ND	ppbV	5.00				
1,1,2,2-Tetrachloroethane	ND	ppbV	5.00				
1,1,2-Trichloroethane	ND	ppbV	5.00				
1,1-Dichloroethane	ND	ppbV	5.00				
1,1-Dichloroethene	ND	ppbV	5.00				
1,2,4-Trichlorobenzene	ND	ppbV	5.00				
1,2,4-Trimethylbenzene	ND	ppbV	5.00				
1,2-Dibromoethane	ND	ppbV	5.00				
1,2-Dichlorobenzene	ND	ppbV	5.00				
1,2-Dichloroethane	ND	ppbV	5.00				
1,2-Dichloropropane	ND	ppbV	5.00				
1,3,5-Trimethylbenzene	ND	ppbV	5.00				
1,3-Dichlorobenzene	ND	ppbV	5.00				
1,4-Dichlorobenzene	ND	ppbV	5.00				
Benzene	ND	ppbV	5.00				
Benzyl chloride	ND	ppbV	5.00				
Bromomethane	ND	ppbV	5.00				
Carbon tetrachloride	ND	ppbV	5.00				
Chlorobenzene	ND	ppbV	5.00				
Chloroethane	ND	ppbV	5.00				
Chloroform	ND	ppbV	5.00				
Chloromethane	ND	ppbV	5.00				
cis-1,2-Dichloroethene	ND	ppbV	5.00				
cis-1,3-Dichloropropene	ND	ppbV	5.00				
Dichlorodifluoromethane	ND	ppbV	10.0				
Ethylbenzene	ND	ppbV	5.00				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	5.00				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	5.00				
Hexachlorobutadiene	ND	ppbV	5.00				
Methylene chloride	ND	ppbV	10.0				
p/m-Xylene	ND	ppbV	5.00				
o-Xylene	ND	ppbV	5.00				
Styrene	ND	ppbV	5.00				
Tetrachloroethene	ND	ppbV	5.00				
Toluene	ND	ppbV	5.00				
trans-1,2-Dichloroethene	ND	ppbV	5.00				
trans-1,3-Dichloropropene	ND	ppbV	5.00				
Trichloroethene	ND	ppbV	5.00				
Trichlorofluoromethane	ND	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-03
FRONT INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1122 10:51	PS
Vinyl chloride	ND	ppbV	5.00				
2,4,4-Trimethyl-2-Pentene	37.5	ppbV	5.00				
2,4,4-Trimethyl-1-Pentene	197.	ppbV	5.00				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0412956-04
REAR INFLUENT
Sample Matrix: AIR

Date Collected: 19-NOV-2004 09:19
Date Received : 19-NOV-2004
Date Reported : 29-NOV-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 11:58	PS
1,1,1-Trichloroethane	ND	ug/m3	68.1				
1,1,2,2-Tetrachloroethane	ND	ug/m3	85.7				
1,1,2-Trichloroethane	ND	ug/m3	68.1				
1,1-Dichloroethane	ND	ug/m3	50.6				
1,1-Dichloroethene	ND	ug/m3	49.5				
1,2,4-Trichlorobenzene	ND	ug/m3	92.7				
1,2,4-Trimethylbenzene	ND	ug/m3	61.4				
1,2-Dibromoethane	ND	ug/m3	96.0				
1,2-Dichlorobenzene	ND	ug/m3	75.1				
1,2-Dichloroethane	ND	ug/m3	50.6				
1,2-Dichloropropane	ND	ug/m3	57.7				
1,3,5-Trimethylbenzene	ND	ug/m3	61.4				
1,3-Dichlorobenzene	ND	ug/m3	75.1				
1,4-Dichlorobenzene	ND	ug/m3	75.1				
Benzene	ND	ug/m3	39.9				
Benzyl chloride	ND	ug/m3	64.7				
Bromomethane	ND	ug/m3	48.5				
Carbon tetrachloride	ND	ug/m3	78.6				
Chlorobenzene	ND	ug/m3	57.5				
Chloroethane	ND	ug/m3	33.0				
Chloroform	ND	ug/m3	61.0				
Chloromethane	ND	ug/m3	25.8				
cis-1,2-Dichloroethene	ND	ug/m3	49.5				
cis-1,3-Dichloropropene	ND	ug/m3	56.7				
Dichlorodifluoromethane	ND	ug/m3	124.				
Ethylbenzene	ND	ug/m3	54.2				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	95.7				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	87.3				
Hexachlorobutadiene	ND	ug/m3	133.				
Methylene chloride	ND	ug/m3	86.8				
p/m-Xylene	ND	ug/m3	54.2				
o-Xylene	ND	ug/m3	54.2				
Styrene	ND	ug/m3	53.2				
Tetrachloroethene	ND	ug/m3	84.7				
Toluene	ND	ug/m3	47.1				
trans-1,2-Dichloroethene	ND	ug/m3	49.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1122 11:58	PS
trans-1,3-Dichloropropene	ND	ug/m3	56.7				
Trichloroethene	ND	ug/m3	67.1				
Trichlorofluoromethane	ND	ug/m3	70.2				
Vinyl chloride	ND	ug/m3	31.9				
2,4,4-Trimethyl-2-Pentene	7070	ug/m3	57.3				
2,4,4-Trimethyl-1-Pentene	>11500	ug/m3	57.3				
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 13:11	PS
2,4,4-Trimethyl-1-Pentene	43200	ug/m3	371.				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 11:58	PS
1,1,1-Trichloroethane	ND	ppbV	12.5				
1,1,2,2-Tetrachloroethane	ND	ppbV	12.5				
1,1,2-Trichloroethane	ND	ppbV	12.5				
1,1-Dichloroethane	ND	ppbV	12.5				
1,1-Dichloroethene	ND	ppbV	12.5				
1,2,4-Trichlorobenzene	ND	ppbV	12.5				
1,2,4-Trimethylbenzene	ND	ppbV	12.5				
1,2-Dibromoethane	ND	ppbV	12.5				
1,2-Dichlorobenzene	ND	ppbV	12.5				
1,2-Dichloroethane	ND	ppbV	12.5				
1,2-Dichloropropane	ND	ppbV	12.5				
1,3,5-Trimethylbenzene	ND	ppbV	12.5				
1,3-Dichlorobenzene	ND	ppbV	12.5				
1,4-Dichlorobenzene	ND	ppbV	12.5				
Benzene	ND	ppbV	12.5				
Benzyl chloride	ND	ppbV	12.5				
Bromomethane	ND	ppbV	12.5				
Carbon tetrachloride	ND	ppbV	12.5				
Chlorobenzene	ND	ppbV	12.5				
Chloroethane	ND	ppbV	12.5				
Chloroform	ND	ppbV	12.5				
Chloromethane	ND	ppbV	12.5				
cis-1,2-Dichloroethene	ND	ppbV	12.5				
cis-1,3-Dichloropropene	ND	ppbV	12.5				
Dichlorodifluoromethane	ND	ppbV	25.0				
Ethylbenzene	ND	ppbV	12.5				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	12.5				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	12.5				
Hexachlorobutadiene	ND	ppbV	12.5				
Methylene chloride	ND	ppbV	25.0				
p/m-Xylene	ND	ppbV	12.5				
o-Xylene	ND	ppbV	12.5				
Styrene	ND	ppbV	12.5				
Tetrachloroethene	ND	ppbV	12.5				
Toluene	ND	ppbV	12.5				
trans-1,2-Dichloroethene	ND	ppbV	12.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0412956-04
REAR INFLUENT

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1122 11:58	PS
trans-1,3-Dichloropropene	ND	ppbV	12.5				
Trichloroethene	ND	ppbV	12.5				
Trichlorofluoromethane	ND	ppbV	12.5				
Vinyl chloride	ND	ppbV	12.5				
2,4,4-Trimethyl-2-Pentene	1540	ppbV	12.5				
2,4,4-Trimethyl-1-Pentene	>2500	ppbV	12.5				
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 13:11	PS
2,4,4-Trimethyl-1-Pentene	9420	ppbV	80.9				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0412956

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Petroleum Hydrocarbons in Air for sample(s) 02 (L0412971-02, WG187853)					
C5-C8 Aliphatics	53.9	64.4	ug/m3	18	30
C9-C12 Aliphatics	ND	ND	ug/m3	NC	30
1,3-Butadiene	ND	ND	ug/m3	NC	30
Methyl tert butyl ether	4.27	5.25	ug/m3	21	30
Benzene	2.26	2.70	ug/m3	18	30
Toluene	5.59	6.68	ug/m3	18	30
Ethylbenzene	ND	ND	ug/m3	NC	30
p/m-Xylene	ND	ND	ug/m3	NC	30
o-Xylene	ND	ND	ug/m3	NC	30
Naphthalene	ND	ND	ug/m3	NC	30
2-Methylnaphthalene	ND	ND	ug/m3	NC	30
C5-C8 Aliphatics, Adjusted	37.7	45.1	ug/m3	18	30
C9-C12 Aliphatics, Adjusted	ND	ND	ug/m3	NC	30
C9-C10 Aromatics	ND	ND	ug/m3	NC	30
Volatile Organic Compounds in Air for sample(s) 01,03-04 (L0412956-03, WG187419)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	ND	ND	ug/m3	NC	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
Methylene chloride	ND	ND	ug/m3	NC	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0412956

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01,03-04 (L0412956-03, WG187419)					
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	ND	ND	ug/m3	NC	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	ND	ND	ug/m3	NC	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25
2,4,4-Trimethyl-2-Pentene	172.	152.	ug/m3	12	25
2,4,4-Trimethyl-1-Pentene	902.	841.	ug/m3	7	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0412956

Parameter	% Recovery	QC Criteria
Petroleum Hydrocarbons in Air LCS for sample(s) 02 (WG187853)		
1,3-Butadiene	113	70-130
Methyl tert butyl ether	99	70-130
Benzene	107	70-130
Toluene	90	70-130
Ethylbenzene	108	70-130
p/m-Xylene	120	70-130
o-Xylene	113	70-130
Naphthalene	172	70-130
2-Methylnaphthalene	144	70-130
C5-C8 Aliphatics, Adjusted	112	70-130
C9-C12 Aliphatics, Adjusted	125	70-130
C9-C10 Aromatics	118	70-130
Volatile Organic Compounds in Air LCS for sample(s) 01,03-04 (WG187419)		
1,1,1-Trichloroethane	88	70-130
1,1,2,2-Tetrachloroethane	107	70-130
1,1,2-Trichloroethane	109	70-130
1,1-Dichloroethane	110	70-130
1,1-Dichloroethene	107	70-130
1,2,4-Trichlorobenzene	278	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2-Dibromoethane	101	70-130
1,2-Dichlorobenzene	125	70-130
1,2-Dichloroethane	92	70-130
1,2-Dichloropropane	110	70-130
1,3,5-Trimethylbenzene	126	70-130
1,3-Dichlorobenzene	127	70-130
1,4-Dichlorobenzene	136	70-130
Benzene	113	70-130
Benzyl chloride	70	70-130
Bromomethane	102	70-130
Carbon tetrachloride	67	70-130
Chlorobenzene	101	70-130
Chloroethane	106	70-130
Chloroform	107	70-130
Chloromethane	84	70-130
cis-1,2-Dichloroethene	113	70-130
cis-1,3-Dichloropropene	112	70-130
Dichlorodifluoromethane	102	70-130
Ethylbenzene	109	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	106	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	101	70-130
Hexachlorobutadiene	155	70-130
Methylene chloride	109	70-130
p/m-Xylene	110	70-130
o-Xylene	115	70-130
Styrene	114	70-130
Tetrachloroethene	107	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0412956

Continued

Parameter	% Recovery	QC Criteria
Volatile Organic Compounds in Air LCS for sample(s) 01,03-04 (WG187419)		
Toluene	108	70-130
trans-1,2-Dichloroethene	111	70-130
trans-1,3-Dichloropropene	120	70-130
Trichloroethene	113	70-130
Trichlorofluoromethane	104	70-130
Vinyl chloride	104	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0412956

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02 (WG187853-3)							
Petroleum Hydrocarbons in Air				43 DRAFT 1		1124 16:30	AR
C5-C8 Aliphatics	ND	ug/m3	24.0				
C9-C12 Aliphatics	ND	ug/m3	28.0				
1,3-Butadiene	ND	ug/m3	2.00				
Methyl tert butyl ether	ND	ug/m3	2.00				
Benzene	ND	ug/m3	2.00				
Toluene	ND	ug/m3	2.00				
Ethylbenzene	ND	ug/m3	2.00				
p/m-Xylene	ND	ug/m3	4.00				
o-Xylene	ND	ug/m3	2.00				
Naphthalene	ND	ug/m3	2.00				
2-Methylnaphthalene	ND	ug/m3	8.00				
C5-C8 Aliphatics, Adjusted	ND	ug/m3	24.0				
C9-C12 Aliphatics, Adjusted	ND	ug/m3	28.0				
C9-C10 Aromatics	ND	ug/m3	24.0				
Blank Analysis for sample(s) 01,03-04 (WG187419-3)							
Volatile Organic Compounds in Air - ug/m3				48 TO-14A		1122 10:00	PS
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromomethane	ND	ug/m3	1.94				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ug/m3	3.49				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0412956

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03-04 (WG187419-3)							
Volatile Organic Compounds in Air - ug/m3 continued				48 TO-14A		1122 10:00 PS	
Hexachlorobutadiene	ND	ug/m3	5.33				
Methylene chloride	ND	ug/m3	3.47				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl chloride	ND	ug/m3	1.28				
2,4,4-Trimethyl-2-Pentene	ND	ug/m3	2.29				
2,4,4-Trimethyl-1-Pentene	ND	ug/m3	2.29				
Blank Analysis for sample(s) 01,03-04 (WG187419-3)							
Volatile Organic Compounds in Air - ppbV				48 TO-14A		1122 10:00 PS	
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluor oethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluo roethane	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0412956

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03-04 (WG187419-3)							
Volatile Organic Compounds in Air - ppbV continued				48 TO-14A		1122 10:00 PS	
Hexachlorobutadiene	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				
2,4,4-Trimethyl-2-Pentene	ND	ppbV	0.500				
2,4,4-Trimethyl-1-Pentene	ND	ppbV	0.500				

REFERENCES

43. Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), Draft 1.0, Massachusetts Department of Environmental Protection, February 2000.

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.

ug/cart Micrograms per Cartridge.

LIMITATION OF LIABILITIES

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