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AMBIENT AIR AND SOIL GAS

SAMPLING REPORT

EASTERN SURPLUS COMPANY MEDDYBEMPS, MAINE

JUNE 1997

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U.S. EPA, REGION I, OFFICE OF ENVIRONMENTAL MEASUREMENT & EVALUATION

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1.0 Introduction

The EPA Region I, Office of Environmental Measurement and Evaluation, at the request of Edward Hathaway, Remedial Project Manager (RPM) for the Eastern Surplus Company Superfund Site in Meddybemps, Maine, collected soil gas samples on June 9, 1997 and performed an ambient air sampling survey on June 10, 1997 at the site. This survey focused on collecting ambient air samples to determine what volatile organic compounds (VOCs) were being emitted from a hot spot area located on the site and the extent contaminants were migrating into the community. In addition, two soil gas samples were collected from a location within the hot spot area that have shown high levels of VOCs in the soil.

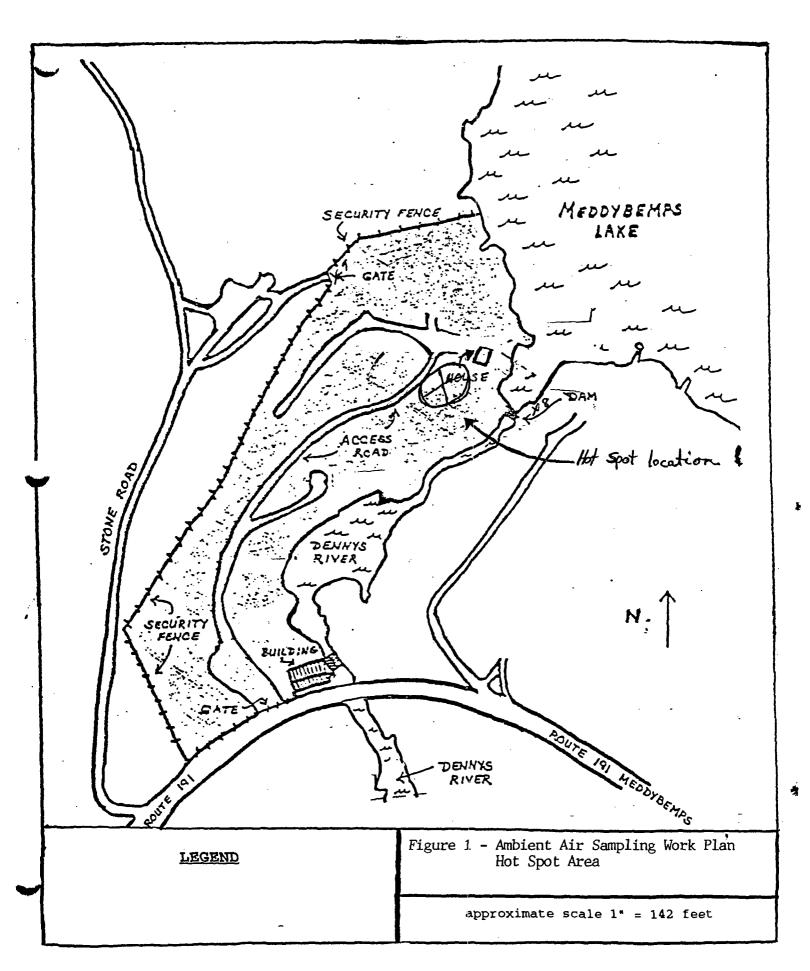
The Eastern Surplus Company covers approximately three acres near the center of Meddybemps, Maine. Eastern Surplus Company is bordered by Meddybemps Lake to the north, the Dennys River to the east, Route 191 to the south, and Stone Road to the west (see Figure 1). This property was originally inspected in October 1985 by ME DEP. During the inspection ME DEP personnel noted chemical odors, leaking electrical transformers, hundreds of deteriorating drums and containers, compressed gas cylinders, 16,000 pounds of calcium carbide, and numerous areas of stained soil. ME DEP immediately initiated emergency cleanup and removal measures and erected a fence to secure the property.

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Source sampling arranged by EPA and ME DEP between November 1985 and August 1990 identified more than fifty different hazardous materials on the property, including PCBs, chlorinated organic compounds, heavy metals, acids, paints, oils, asbestos, and pesticides. Soil, groundwater, and sediment samples collected by EPA between 1987 and 1988 have shown that many of these contaminants were released into the environment.

Soil samples from the hot spot area identified the following volatile organic compounds: trichloroethene, tetrachloroethene, toluene, ethylbenzene, xylene, methylene chloride, acetone, chloroform, 1,2-dichloroethene, 4-methyl-2-pentanone (methylisobutylketone), and methylethylketone(2-butanone).



1.1 <u>Description</u>

On June 9, 1997, the START contractor performed soil gas measurements within the hot spot area using a slam bar equipped with a monitoring probe and a Photovac TIP to measure the total VOCs present in the soil gas. Using the data collected from the soil gas measurements, one location within the hot spot area that showed the highest readings was selected for canister sample collection. The location selected for canister sampling was marked as soil sample location D-13. Immediately after the second round of Photovac measurements at location D-13 was made, two canister grab samples were collected one after the other by attaching the canister valve to the monitoring probe, opening the canister until the pressure inside the canister reached atmospheric pressure. Each sample took approximately thirty seconds to collect.

On June 10, 1997, the START contractor collected soil samples within the hot spot area for approximately two hours, during this time canister samples were collected from two locations within hot spot area and four locations around the perimeter of the hot spot area. In addition, canister samples were collected over an eight-hour period at one down wind location and one upwind location of the entire site. All air samples were collected using certified cleaned, evacuated fused silica lined stainless steel canisters (Restek SilcoCan Canister) and then analyzed for the volatile organic compounds (VOCs) listed on Table 1 using a gas chromatograph/ion-trap mass spectrometer (GC/MS).

1.2 Program Objective

The purpose of this survey was to collect ambient air samples for the volatile organic compounds listed on Table 1 to help determine the extent these compounds are being emitted from the hot spot area, migrating off-site and impacting the community. In addition, soil gas samples were collected to help characterize the presents of VOCs in the soil. The information contained in this report will be part of the 1997 remedial investigation for the site and the preparation of the human health risk assessment and RI Report.

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TABLE 1

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SELECTED VOCS USING THE CANISTER METHOD

Dichlorodifluoromethane (F12) Methyl Chloride (Chloromethane) 1,2-Dichloro-1,1,2,2-Tetrafluoroethane (F114) Vinyl Chloride Methyl Bromide (Bromomethane) Chloroethane Acetonitrile Acrolien Acetone Trichlorofluoromethane Acrylonitrile 1,1-Dichloroethylene Methylene Chloride 3-Chloropropene 1,1,2-Trichloro-1,2,2-Trifluoroethane (F113) 1,1-Dichloroethane Methyl-t-butyl ether cis-1,2-Dichloroethene Trichloromethane (Chloroform) Ethyl Acetate Methyl Ethyl Ketone Tetrahydrofuran 1,2-Dichloroethane 1,1,1-Trichloroethane Benzene Carbon Tetrachloride 1,2-Dichloropropane Trichloroethene Methylmethacrylate cis-1,3-Dichloropropene Methyl Isobutyl Ketone trans-1,3-Dichloropropene 1,1,2-Trichloroethane Toluene 1,2-Dibromoethane Tetrachloroethene Chlorobenzene Ethyl Benzene m,p-Xylene Styrene 1,1,2,2-Tetrachloroethane o-Xylene 4-Ethyl Toluene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene Chloromethylbenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene

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2.0 Sampling Locations

2.1 Soil Gas Sampling Location

One soil gas sampling station was established within the hot spot area at soil sampling location D-13. Grab samples were collected on June 9, 1997, with canister #1574 and canister #1594.

2.2 Ambient Air Sampling Locations

The sampling network described below was designed to determine what VOCs are being emitted from the hot spot area located on the site and the extent contaminants are migrating into the community. Air samples were collected on June 10, 1997, while soil samples were being collected within the hot spot area between 09:20 and 11:40.

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Sampling Station #1

Station #1 was located within the hot spot area at soil sampling location D-13. Two canisters, canister #1584 and canister #1565 were collected side-by-side from 09:22 to 11:22 approximately one foot above ground level to serve as duplicate samples for obtaining precision data.

Sampling Station #2

Station #2 was located within the hot spot area at soil sampling location D-10, which is approximately twenty-seven feet from monitoring well #205. Canister #1560 was collected from 09:21 to 11:21 approximately one foot above ground level.

Sampling Station #3

Station #3 was located east of the hot spot area, approximately twenty-four feet north of monitoring well #3B, sixteen feet from station #4, and twelve feet from station #1. Canister #1576 was collected from 09:24 to 11:24 approximately two feet above ground level.

Sampling Station #4

Station #4 was located southeast of the hot spot area, approximately nine feet north of monitoring well #3B. Canister #1577 was collected from 09:24 to 11:24 approximately two feet above ground level.

Sampling Station #5

Station #5 was located south of the hot spot area, approximately twelve feet west of monitoring well #3B. Canister #1587 was collected from 09:23 to 11:23 approximately two feet above ground level.

Sampling Station #6

Station #6 was located southeast of the hot spot area, west of monitoring well #3B, and approximately 12 feet from sampling station #5. Canister #1586 was collected from 09:25 to 11:25 approximately two feet above ground level.

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Sampling Station #7

Station #7 was located on Mrs. Orchard's property, approximately thirty-two yards northeast of the dam, approximately 40 yards west of the old house adjacent to the hot spot area. Canister #1592 was collected from 08:08 to 16:08 approximately four feet above ground level.

Sampling Station #8

Station #8 was located on the security fence gate, which is off of Stone Road along the site's western boundary. Canister #1582 was collected from 08:02 to 16:02 approximately four feet above ground level.

3.0 Canister VOC Air Sampling and Analytical Methodology

3.1 <u>Description</u>

EPA Region I Standard Operating Procedure for the Sampling of Trace Volatile Organic Compounds using SUMMA Polished Stainless Steel Canisters, EPA-REG1-ESD/CAN-SAM-SOP, March 1994, Revision 1, was used to collect the ambient air samples and the soil gas samples. The ambient air samples were collected as subatmospheric samples in evacuated 6 liter canisters using the procedure described in Part 2 of the Region I SOP, described above. The soil gas samples were collected as grab samples in evacuated 6 liter canisters using the procedure described in Part 1 of the Region I SOP, described above. Detailed descriptions of the quality assurance procedures are provided in Part 4.

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Ambient air and soil gas canister samples were brought back to the EPA laboratory logged in on June 11, 1997. Canister analyses began on June 12, 1997, using a gas chromatograph/ion-trap mass spectrometer (GC/MS) following the EPA Region I standard operating procedure entitled, "The Determination of Volatile Organic Compounds in Ambient Air using Summa Passivated Canisters," a modification of EPA Method TO14 - The Determination of Volatile Organic Compounds in Ambient Air using SUMMA Passivated Canister Sampling and Gas Chromatographic Analysis, from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA-600/4-84-041, May 1987. This analytical procedure was used to identify and quantify the VOCs listed on Table 1. Soil gas canister samples #1594 and #1574 were analyzed at different dilutions to measure the target compound within the calibration range of the instrument. Some of the target compounds still exceeded the calibration range; these compounds are "E" qualified on the summary tables and in Appendix A. All polar compounds were quantitated using a two-point calibration curve (5 - 10 ppb, v/v).

3.2 Canister Cleaning and Leak Certification Procedures

3.2.1 Canister Cleaning Procedure

Prior to the sampling event, the canisters were cleaned by placing them in ovens maintained at 150°C, evacuated to 10⁻³ Torr, and then pressurized with humidified nitrogen to approximately 30 psig. This process was repeated three times. Detailed descriptions of these procedures are provided in the document entitled, "Canister Cleaning Standard Operating Procedures, EPA-REG1-OEME/CANISTER-CLEANING-SOP, May 1996."

3.2.2 Canister Leak Certification Procedure

At the end of the cleaning process described above, the canisters were evacuated to less than 10⁻³ Torr, with a Pirani sensor the vacuum in each canister was measured. The canisters were then placed on a shelf for at least 24 hours. At the conclusion of this period, the Pirani sensor was used again to measure the final canister vacuum which was then compared to the initial reading to determine if the canisters showed signs of leaking. No leaks were detected in the canisters or valves. A more detailed description of these procedures is provided in the document entitled, "Canister Leak Certification Standard Operating Procedures, EPA-REG1-OEME/ CANISTER-LEAK-CERT-SOP, May 1996."

3.2.3 Canister Cleanliness Certification Procedure

After all the canisters were certified leak free, each canister was pressurized with 25% humidified nitrogen and analyzed for contamination using GC/FID. The results of the analysis showed levels to be less than 10 ppb/c TNMOC and less than 1 ppb/c of any target compound, therefore, the canisters were certified clean. A more detailed description of these procedures is provided in the document entitled, "Pressurized Canisters for Clean Certification Standard Operating Procedures, EPA-REG1-OEME/CANISTER-PREP-SOP, May 1996."

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3.3 Canister Analysis Quality Control/Quality Assurance

3.3.1 Laboratory Blank Results

Three humidified canisters were prepared as laboratory blanks and analyzed prior to analyzing the canister samples using the same procedures. The laboratory blanks were analyzed to determine the background contamination present in the analytical instrumentation prior to analyzing the samples. Laboratory blank #1 was analyzed before canister samples #1589, #1582, #1592, #1586, #1587, #1576, and #1577. Laboratory blank #2 was analyzed before canister samples #1584, #1565, and #1560 and laboratory blank #3 was analyzed before samples #1574 and #1594. If the canister samples detect compounds below three times the blank value (before a dilution factor was applied), they were qualified as estimated values with a "B". If a compound was not qualified, the blank value was not subtracted from the sample value.

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The blank results are presented in Appendix C. Laboratory blank #3 was contaminated with 1,2,4-trichlorobenzene at 0.17 ppb/v and hexachlorobutadiene at 0.24 ppb/v. Therefore, the concentrations reported for 1,2,4-trichlorobenzene and hexachlorobutadiene in canister sample #1594 were qualified as estimated values with a "B". There was minor contamination with other target compounds detected at levels below their reporting limits in laboratory blanks #1, #2, and #3. However, several of these compounds were qualified as estimated values with a "B" because they did not meet the performance criteria described above.

3.3.2 Field/Trip Blank Results

Canister #1589 went through the procedures described in Section 3.2, except that after the canister was certified clean, it remained under pressure and accompanied the sampling canisters to the field and back to the laboratory to serve as a field/trip blank. The canister was analyzed to determine if any cross contamination had occurred after the cleaning process and before analysis. If the canister samples detect compounds below three times the blank value (before a dilution factor was applied), they were qualified as estimated values with a "B". If a compound was not qualified, the blank value was not subtracted from the sample value.

The results are presented in Appendix C. The field/trip blank detected benzene at 1.2 ppb/v. There was also minor contamination with other target compounds detected at levels below their reporting limits. However, several of these compounds were qualified as estimated values with a "B" because they did not meet the performance criteria described above.

3.3.3 Data Reproducibility/Precision Procedures and Results

Canister #1565 was analyzed a second time for assessing analytical precision. Two 0.5 liter aliquots' were withdrawn from the canister and analyzed in a similar manner. Those compounds having values above their reporting limits are presented on Table 2. The reporting limits for the nonpolar compounds are 0.5 ppb,v/v and 20 ppb,v/v for polar compounds. The relative percent differences were calculated and all fell within \pm 25%, except for: 1,1,1-trichloroethane, benzene, carbon tetrachloride, ethylbenzene, m,p-xylene, and o-xylene. The concentrations for these compounds were not above 10 times the reporting limit (0.5 ppb/v x 10 = 5 ppb/v). Therefore, the canister sampling data were not qualified as estimated values.

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In addition, two canister samples (Canister #1584 and Canister #1565) were collected simultaneously in parallel from sampling Station #1 to determine sampling precision. The results are presented on Table 3. The relative percent difference between parallel/duplicate samples was calculated. All the compounds detected above their reporting limit agreed within ± 25 %, except for: 1,1,1-trichloroethane, benzene, carbon tetrachloride, ethylbenzene, m,p-xylene, and o-xylene. The concentration for these compounds was not above 10 times the reporting limit (0.5 ppb/v x 10 = 5 ppb/v). Therefore, the canister sampling data were not qualified as estimated values.

TABLE 2

DUPLICATE ANALYSIS RESULTS

The following are the results of duplicate analyses performed on canister #1565. Note that only those compounds detected above the reporting limit (RL) are presented in this table for comparison, the other target compounds are reported as none detected. Note that the RL for the nonpolar target compounds is 0.5 ppb,v/v and for the polar compounds it is 20 ppb, v/v. All the compounds presented were not detected above 10 times the reporting limit. Therefore, the sampling data was not qualified even though several of the relative percent differences are greater than 25%.

COMPOUND	SAMPI CONCENTR (PPb, V	ATION	DUPLIC CONCENT (PPD,	- 1 to -	RELATIVE PERCENT DIFFERENCE (%)	Average (ppb,v/v)
Dichlorodifluoromethane	0.38	L,B	0.38	J,L,B	0	0.38 J,L,B
Chloromethane	0.28	L	0.28	J,L	0	0.28 J,L
Acetone *	6.6	L	6.6	J,L	0	6.6 J,L
Trichlorofluoromethane	0.14	L	0.14	J,L	0	0.14 J,1
thylene Chloride	8.5		8.0	J	6	8.2 J
1,1,2-Trichloro-1,2,2- trifluoroethane	0.05	L	0.05	J,L	0	0.05 J,L
Methyl Ethyl Ketone *	1.1	L	1.1	J,L	0	1.1 J,L
1,1,1-Trichloroethane	0.80		0.80		0	0.80
Benzene	0.57	В	0.52	В	9	0.54 B
Carbon Tetrachloride	0.15	L	0.09	L	50	0.12 L
Toluene	0.43	L,B	0.38	L,B	12	0.41 L
Tetrachloroethene	0.05	L	0.05	L	0	0.05 L
Ethylbenzene	0.28	L	0.19	L	38	0.24 L
m,p-Xylene	1.0		0.57		55	0.78
0-Xylene	0.28	L	0.19	L	38	0.24 L

- Notes: B = Analyte is associated with blank contamination. Value is qualified when the observed concentration in the sample is less than three times the blank level.
 - L = Estimated value, below the calibration range.
 - J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit
 - * = Polar compounds

TABLE 3

DUPLICATE SAMPLING RESULTS

The following are the results of duplicate/replicate canister samples (#1584 and #1565) collected from sampling station #1. Only those compounds detected above the RL 0.5 ppb, v/v for nonpolar compounds and 20 ppb, v/v for polar compounds are provided for comparison. All the compounds presented were not detected above 10 times the reporting limit. Therefore, the sampling data was not qualified even though several of the relative percent differences are greater than 25%.

COMPOUND	CANISTER #1584 (ppb,v/v)	CANISTER #1565 FROM TABLE 2 AVERAGE CONCENTRATION (ppb, v/v)	RELATIVE PERCENT DIFFERENCE (%)	AVERAGE (ppb,v/v)
Dichlorodifluoromethane	0.37 J,L,	B 0.38 J,L	3	0.38 J,L
Chloromethane	ND	0.28 J,L	NA	NA
Acetone *	6.9 J,L	6.6 J,L	4	6.8 J,L
Trichlorofluoromethane	0.14 J,L	0.14 J,L	0	0.14 J,L
Methylene Chloride	7.9 J	8.2 J	4	8.1 J
1,2,2-Trichloro-1,2,2- trifluoroethane	0.05 J,L	0.05 J,L	0 .	0.05 J,L
Methyl Ethyl Ketone *	0.88 J,L	1.1 J,L	22	0.99 J,L
1,1,1-Trichloroethane	0.09 L	0.80	160	0.44
Benzene	0.42 L,B	0.54 B	25	0.48 L,B
Carbon Tetrachloride	0.09 L	0.12 L	29	0.10 L
Toluene	0.37 L	0.41 L	10	0.39 L
Te trachloroethene	0.05 L	0.05 L	0	0.05 L
Ethylbenzene	0.18 L	0.24 L	29	0.21 L
m,p-Xylene	0.60	0.78	26	0.69
0-Xylene	0.18 L	0.24 L	29	0.21 L

- Notes: B = Analyte is associated with blank contamination. Value is qualified when the observed concentration in the sample is less than three times the blank level.
 - L = Estimated value, below the calibration range.
 - J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC
 limit

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* = Polar compound

3.3.4 Data Accuracy Procedure and Results

A quality control canister sample (AAL-21380) containing selected VOCs was analyzed twice with the canister samples to determine analytical accuracy. The results of the observed concentrations compared to the known acceptable range are reported on Table 4. The observed concentrations all fell within the acceptable range (80% - 120% of the acceptable value), except for trichloroethene. The trichloroethene observed concentrations for QC-1 and QC-2 were slightly below the acceptable range (4.14 - 6.20 ppb,v/v) at 4.14 ppb,v/v and 4.06 ppb,v/v, respectively. Trichloroethene was only detected above the reporting limit in soil gas canister samples #1574 and #1594 at 350 ppb,v/v and 39 ppb,v/v, respectively. Therefore, trichloroethene concentrations reported for these two samples are qualified as estimated values with a "J".

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3.3.5 Canister Surrogate Spiking Procedure and Results

Prior to analysis, surrogate compounds 1,2-dichloroethane d4, toluene d8, and p-bromofluorobenzene were added to each canister. The results are presented in Appendices A, B, and C on the second page of each analytical report. All surrogate compounds' recoveries were within the acceptable range of 60% - 140%, except for 1,2-dichloroethane,d4 which was just below the QC Limit (60% - 140%) at 58%. The reason for the low percent recovery is that there was interference in the measurement of the internal standard, bromochloromethane. Therefore, compounds' one through twenty-three are estimated and qualified with a "J" for canister #1584, #1565, #1560, #1576, #1577, #1592, #1582, and #1589.

TABLE 4

AUDIT CYLINDER RESULTS

The following are the results of analyzing QC sample, AAL-21380 twice. The QC samples were analyzed with the samples.

COMPOUND	QC-1 OBSERVED VALUE (ppb/v)	QC-2 OBSERVED VALUE (ppb/v)	ACCEPTABLE RANGE (ppb/v)
Vinyl Chloride	4.99	5.36	4.19 - 6.29
Methyl Bromide	5.03	5.63	4.57 - 6.85
Trichlorofluoromethane	4.91	4.78	4.16 - 6.24
Methylene Chloride	4.87	5.12	3.62 - 5.42
Chloroform	4.95	5.42	3.89 - 5.83
1,2-Dichloroethane	4.91	4.75	4.06 - 6.10
1,1,1-Trichloroethane	4.75	4.71	4.23 - 6.35
Benzene	4.50	4.46	4.15 - 6.23
Carbon Tetrachloride	5.55	5.49	4.05 - 6.07
1,2-Dichloropropane	4.91	5.04	4.18 - 6.26
Trichloroethene	4.14	4.06	4.14 - 6.20
Toluene	4.67	4.73	4.21 - 6.31
1,2-Dibromoethane	4.02	4.09	3.88 - 5.82
Tetrachloroethene	4.75	4.61	4.26 - 6.40
Chlorobenzene	4.54	4.89	4.29 - 6.43
Ethylbenzene	4.38	4.71	3.94 - 5.92
o-Xylene	4.42	4.77	4.15 - 6.23

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4.0 Meteorological Measurement Method and Results

4.1 <u>Description</u>

A portable meteorological measuring system was located in an open field across the road (route 191) from the site main entrance gate, approximately 40 yards west of monitoring well #11S and 1001 yards southeast of route 191. The system measured wind speed, wind direction, ambient temperature, relative humidity, and atmospheric pressure continuously over the duration of the sampling event to collect data that represented local meteorological conditions. The meteorological station operating and data reporting procedures described in the manufacturers manual were followed. The system's sensors were attached to a 10 to a 15-foot high portable tripod.

Components of the measuring system are described below:

 The data recording system consists of an Omnidata International Easy Logger Field Unit, Easy logger Terminal, and a 32K EPROM Data Storage Pack. The Easy Logger Field Unit is housed in a 14.96" x 14.96" x 8.27", 25.3 pound, steel constructed FE Mental Field Enclosure. 1

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- The atmospheric pressure sensor is a Weathertronics Model 7105-A Barometer housed inside the enclosure described above.
- Relative humidity and temperature are measured with an ES-120 Vaisala Temperature and relative Humidity Probe housed inside an EA-130 RM Young Radiation Shield.
- Wind direction and horizontal wind speed are measured with an R.M. Young Wind Monitor - AQ, Model 05305. The wind sensors will be oriented to magnetic north using a magnetic compass and checked for proper orientation prior to the sampling event.

The June 10, 1997, meteorological data are presented in Appendix D. Between 08:17 and 16:17, the average ambient temperature was 27.36°C (81°F) ranging from 20.99°C to 30.92°C; the average

barometric pressure was 29.71 inches of mercury ranging from 29.65 to 29.76 inches of mercury; the average percent relative humidity was 29.8% ranging from 29.6% to 59.3%; the average wind speed was 5.4 mph ranging from 2.4 to 8.9 mph; the wind direction was from the west northwest 39% of the time, from the south southwest 24% of the time, from the west southwest 18% of the time, from the north northwest 15 % of the time, and from the south southeast 3% of the time. The wind directions are relative to magnetic north.

5.0 Air Sampling Results and Discussions

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5.1 Soil Gas Sampling Results

On June 9, 1997, two soil gas canister grab samples were collected within the hot spot area from soil sampling location D-The results are presented in Appendix A and summarized on 13. Table 5. The data reported on Table 5 are only the values which were detected above the reporting limit. Soil samples previously collected from the hot spot area identified the following compounds: trichloroethene, tetrachloroethene, toluene, ethylbenzene, xylene, methylene chloride, acetone, chloroform, 1,2-dichloroethene, methylisobutylketone, and methylethylketone. The soil gas samples identified some of these compounds at relatively high concentrations compared to ambient levels, they are as follows: trichloroethene (210 - 1,900 ug/m³ J), tetrachloroethene (480 - 2,900 ug/m³), toluene (860 - 57,000 ug/m³), ethylbenzene (13,000 - 500,000 ug/m³ L), m,p-xylene (86,000 - 1,200,000 ug/m³ E), o-xylene (32,000 ug/m³), methylene chloride (85,000 - 500,000 ug/m³ E), acetone (870 - 18,000 ug/m³ L), chloroform $(40 - 1,600 \text{ ug/m}^3)$, and methylethylketone (1,900 -20,000 ug/m³ L). Methylisobutylketone was the only compound from the list on Table 1 which was not detected in the soil gas samples but was detected in the soil samples. In addition, other compounds were detected in the soil gas at relatively high levels which have not been previously detected in the soil, they are as follows: chloromethane, 1,1-dichlorothylene, 1,1,1-trichloroethane, and styrene. The Photovac PID total hydrocarbon readings

TABLE 5

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CANISTER SOIL GAS SAMPLING RESULTS SUMMARY

The llowing are the results of the soil gas samples collected on June 9, 1997, from the hot spot area at so. Sampling location D-13. Only those values detected above the reporting limits are presented.

COMPOUND	CANISTER #1 (ug/m3)	574	CANISTER # (ug/m3)	
Dichlorodifluoromethane	6.4	L,B	6.4	L,B
Chloromethane	240		7.6	·
Vinyl Chloride	5.5		ND	
Chloroethane	36		ND	
Acetone	870	- <u>L</u>	18,000	L
1,1-Dichloroethylene	710		ND	
Methylene Chloride	500,000	Е	85,000	E
1,1,2-Trichloro-1,2,2-	1.6	L	1.6	L
1,1-Dichloroethane	46	Ŀ	5.2	Ľ
Chloroform	1600		40	<u></u>
Methyl Ethyl Ketone	1900	L	20,000	L
Tetrahydrofuran	ND		44	
1,2-Dichloroethane	ND		77	
1,1,1-Trichloroethane	320		5.9	
Benzene	68		8.9	В
Trichloroethene	1900	_ 	210	J
Toluene	57,000		860	
Tetrachloroethene	2900		480	···· <u>·</u>
Ethylbenzene	500,000	L	13,000	
m,p-Xylene	1,200,000	Е	86,000	E
Styrene	360,000	E	ND	
o-Xylene	ND		32,000	
1-Ethyltoluene	ND		41	
1,3,5-Trimethylbenzene	ND		46	
L,3-Dichlorobenzene	ND		2.6	L,B
L,4-Dichlorobenzene	ND		2.6	L,B
1,2,4-Trichlorobenzene	ND		16	B
lexachlorobutadiene	ND		130	В

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Notes: B = Analyte is associated with blank contamination. Value is qualified when the observed concentration in the sample is less than three times the blank level.

- L = Estimated value, below the calibration range.
- E = Estimated value, above the calibration range
- J = Estimated value, analytical accuracy data outside acceptable range
- ND = not detected above reporting limit (see Appendix A)

(relative to a 100 ppm iosbutylene gas standard) prior to collecting canister #1574 ranged between 40 ppm and 1208 ppm and the readings prior to collecting canister #1594 were between 40 ppm and 377 ppm.

In general, the data provided above are useful to help characterize the contaminants that may have the potential to be emitted into the ambient air and what compounds may be present in the soil within the hot spot area. The soil gas results are representative only of levels present at the sample location under the specific conditions prevailing during sampling, and may vary given differing site activities and meteorological conditions.

5.2 Ambient Air Sampling Results

On June 10, 1997, ambient air canister samples were collected in and around the hot spot area over a four-hour period while soil samples were being collected. Sampling stations were positioned to characterize the VOCs volatilizing from the contaminated soils within the hot spot area and the extent they migrated from the area. In addition, canister samples were collected over an eight-hour period from two sampling stations. Station #8 was positioned upwind of the site on the western gate to collect background data. Station #7 was placed downwind of the site on Mrs. Orchard's property to collect data that characterize emissions coming from the site. The results are presented in Appendix B and summarized on Table 6. The data reported on Table 6 are only the values which were detected above the reporting limit.

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The data collected from Station #1, which was located over soils determined to be highly contaminated with VOCs, detected methylene chloride at 28 ug/m³ which was much higher than concentrations detected from Stations' #2, #3, #4, #5, and #6 at 0.1 - 2 ug/m³. The other compounds identified at Station #1 had concentrations that were at approximately the same levels as those detected at Stations' #2 - #6, except for 1,1,1trichloroehtane. 1,1,1-trichloroehtane was detected at 3 ug/m³ at Station #1 which was slightly higher than the levels at Stations #2, #4, #5, and #6. The highest concentration of 1,1,1trichloroethane (6 ug/m³) was detected at Station #3. At Station #4, benzene was detected at 39 ug/m³, this was the only compound which showed significantly higher concentrations compared to the other stations. At Station #2, tetrachloroethene was detected at 5 ug/m³ which was at slightly a higher concentration compared to the other stations. In general, the data collected on June 10, within and immediately surrounding the hot spot area shows, of the target compounds presented on Table 1, methylene chloride was the only compound that was detected at levels which could be related to the soil contamination within the hot spot area. However, the concentrations of methylene chloride and the other compounds detected around the hot spot area indicate they did not migrate from this area and did not significantly impact the ambient air in the surrounding area.

Comparing the upwind/background data collected on June 10, from Station #8 to off-site downwind Station #7, there is no significant difference in the compounds detected nor with their corresponding concentrations. This shows that the target volatile organic compounds were all at background levels over the eight-hour sampling period indicating contaminants were not migrating off-site. The ambient air sampling results are representative only of levels present at the sample locations under the specific conditions prevailing during sampling, and may vary given differing site activities and meteorological conditions.

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TABLE 6

CANISTER AMBIENT AIR SAMPLING RESULTS SUMMARY

This table shows a comparison of the data collected on June 10, 1997, from each ambient air sampling station. Only those values detected above the reporting limits are presented. The concentrations reported in Appendix A were rounded-up and presented in this table.

		··· · · · ·		·····					NUMBER				la deser			
COMPOUND	# ug,	L /m3		‡2 3/m3	· ·	#3 //m3		#4 3/m3	#5 ug/		ug		# ug,	7. /m3	#8 49/	er di
Dichlorodifluoromethane	2	J,L	2	J,L,B	2	J,L,B	2	J,L,B	4		4		2	J,B	2	J,B
Chloromethane	1	J,L	0.5	J,L	0.5	J,L	0.5	J,L	1		1		0.5	J,L	0.5	J,L
Acetonitrile	ND		ND		ND	·	ND		ND		ND		ND		1	J,L
Acetone	16	J,L	15	J,L	12	J,L,B	15	J,L	27	L	24	L	13	J,L	15	J,L
Trichlorofluoromethane	1	J,L	1	J,L	1	J,L	1	J,L	2	L	1		1	J,L	1	J,L
Methylene Chloride	28	J	1	J,L,B	1	J,L	1	J	2		2		0.1	J,L	0.2 3	,L,B
1,1,2-Trichloro-1,2,2- tr'``uoroethane	0.4	J,L	0.3	J,L	0.3	J,L	0.2	J,L	1	L	1	L	1	J,L	0.5	J,L
Mean 1 Ethyl Ketone	2	J,L	1	J,L	1	J,L	1	J,L	3	L	ND		1	J,L	1	J,L
1,1,1-Trichloroethane	3		0.5	L	6		1	L	1	L	0.4	L	1	L	1	L
Benzene	2	L,B	1	в	1	в	39		2	в	2	в	2	В	2	в
Carbon Tetrachloride	0.5	L	1	L	0.4	L	1	L	0.04	L	1	L	0.5	L	1	L
Toluene	2	L	1	L,B	1	L,B	2		1	L,B	1	L,B	1	L	1	L .
Tetrachloroethene	0.3	L	5		0.3	L	1	L	0.3	L	0.3	L	ND		ND	
Bthylbenzene	1	L	1	L	0.2	L,B	1	L	0.2	L,B	0.2	L,B	0.1	L,B	0.1	L,B
m,p-Xylene	3		2		1	L	2		1	L	0.5	L	0.2	L,B	0.3	L,B
o-Xylene	1	L	1	L,B	0.2	L,B	1	L	0.2	L,B	ND		ND		0.1	L,B
1,2,4-trimethylbenzene	ND		ND		ND		ND		ND		ND		0.2	L,B	0.1	L,B
Hexachlorobutadiene	ND		ND		ND		ND		ND		0.4	L,B	0.3	L,B	1	L,B

Notes: B = Analyte is associated with blank contamination. Value is qualified when the observed concentration in the sample is less than three times the blank level.

- L = Estimated value, below the calibration range.
- ND = not detected above reporting limit (see Appendix B)

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside the QC limit

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APPENDIX A

CANISTER SOIL GAS SAMPLING DATA

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AIR SAMPLING RESULTS

OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Soil Gas Sample at D-13 SAMPLE DATE: 6-09-97 SAMPLE TIME: Grab Sample at 16:00 CANISTER NUMBER: 1574 SAMPLER NUMBER: NA VOLUME ANALYZED: 0.075 liters REPORT FACTOR: 21.5

COMPOUND	CONCENT	RATION	RL
		UG/M3	PPB,V/V
			• •
Dichlorodifluoromethane	1.3 L,B	6.4 L,B	2.0
Chloromethane	120	240	2.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	2.0
Vinyl Chloride	2.2	5.5	2.0
Methyl Bromide	ND	ND	2.0
Chloroethane	14	36	2.0
Acetonitrile	ND	ND	100
Acrolein	ND	ND	100
Acetone	370* L	870* L	800
Trichlorofluoromethane	ND	ND	2.0
Acrylontrile	ND	ND	100
1,1-Dichloroethylene	180	710	2.0
Methylene Chloride	150.000* E	500,000* E	200
3-Chloropropene	ND 0.22 L	ND	2.0 # 2.0
1,1,2-Trichloro-1,2,2-trifluoroethane		1.6 L 46 L	£
1-Dichloroethane	11 L		2.0
ethyl-t-Butyl Ether	ND	ND	100
cis-1,2-Dichloroethene	ND	ND	2.0
Chloroform	340*	1600*	200
Ethyl Acetate	ND	ND	100
Methyl Ethyl Ketone	660* L	1900* L	800
Tetrahydrofuran	ND	ND	100
1.2-Dichloroethane	ND	ND	2.0
1,1,1-Trichloroethane	58	320	2.0
Benzene	22	68	2.0
Carbon Tetrachoride	ND	ND	2.0
1,2-Dichloropropane	ND	ND	2.0
Trichloroethene	350* J	1900* J	20
	ND S	ND	100
Methylmethacrylate	ND	ND	2.0
cis-1,3-Dichloropropene			2.0
Methyl Isobutyl Ketone	ND	ND	
trans-1,2-Dichloropropene	ND	ND	2.0
1,1,2-Trichloroethane	ND	ND	2.0
Toluene	15,000*	57,000*	2.0
1,2-Dibromoethane	ND	ND	2.0
Tetrachloroethene	430*	2900*	2.0
Chlorobenzene	ND	ND	2.0
Ethyl Benzene	120,000* E	500,000* E	2.0
m,p-Xylene	270,000* E	1,200,000*E	2.0
Styrene	84,000* E	360,000* E	2.0
1,1,2,2-Tetrachloroethane	ND	ND	2.0
o-Xvlene	ND	ND	2.0
4-Ethyl Toluene	ND	ND	2.0
		ND	2.0
1,3,5-Trimethylbenzene	ND		2.0 -
1,2,4-Trimethylbenzene	ND	ND	
1,3-Dichlorobenzene	ND	ND	2.0 *
Chloromethylbenzene	ND	ND	2.0
1,4-Dichlorobenzene	ND	ND	2.0
1.2-Dichlorobenzene	ND	ND	2.0
2,4-Trichlorobenzene	ND	ND	2.0

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRA PPB,V/V	TION
2,5-Dihydro-3-methyl-furan	90	
Ethenyl-cyclohexane	100	
1,1'-oxybis-Heptane	100	
Unknown	90	
SURROGATE COMPOUNDS	RECOVERY (%)	
1,2-Dichloroethane, d4	118	60 - 140
Toluene, d8	116	60 - 140
p-Bromofluorobenzene	114	60 - 140
NOTEO		

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

* = From analysis of sample at higher dilution

J = Estimated value, analytical accuracy data outside acceptable range

E = Estimated value, above the calibration range

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AIR SAMPLING RESULTS

COJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Soil Gas Sample at D-13 SAMPLE DATE: 6-09-97 SAMPLE TIME: Grab Sample at 16:20 CANISTER NUMBER: 1594 SAMPLER NUMBER: NA VOLUME ANALYZED: 0.075 liters REPORT FACTOR: 21.5

COMPOUND		NTRATION	RL
	PPB,V/V	UG/M3	PPB,V/V
Dichlorodifluoromethane	1.3 L,B	6.4 L,B	2.0
Chloromethane	3.6	7.6	2.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	2.0
	ND	ND	2.0
Vinyl Chloride			
Methyl Bromide	ND	ND	2.0
Chloroethane	ND	ND	2.0
Acetonitrile	ND	ND	100
Acrolein	ND	ND	100
Acetone	7500″ L	18,000* L	8000
Trichlorofluoromethane	ND	ND	2.0
Acrylontrile	ND	ND	100
1,1-Dichloroethylene	ND	ND	20
	• - =		
Methylene Chloride	25,0000* E		200
3-Chloropropene	ND	ND	2.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.22 L	1.6 L	2.0 //
1-Dichloroethane	1.3 L	5.2 L	2.0
ethyl-t-Butyl Ether	ND	ND	100
cis-1,2-Dichloroethene	ND	ND	2.0
Chloroform	8.2	40	2.0
Ethyl Acetate	ND	ND	100
Elliyi Auglald			8000
Methyl Ethyl Ketone	6900* L	20,000* L	
Tetrahydrofuran	15 L	44 L	100
1,2-Dichloroethane	19	77	2.0
1,1,1-Trichloroethane	1.1 L	5.9 L	2.0
Benzene	2.8 B	8.9 B	2.0
Carbon Tetrachoride	ND	ND	2.0
1,2-Dichloropropane	ND	ND	2.0
Trichloroethene	39 J	210 J	2.0
Methylmethacrylate	ND	ND	100
			2.0
cis-1,3-Dichloropropene	ND	ND	
Methyl Isobutyl Ketone	ND	ND	100
trans-1,2-Dichloropropene	ND	ND	2.0
1,1,2-Trichloroethane	ND	ND	2.0
Toluene	230*	860*	20
1,2-Dibromoethane	ND	ND	2.0
Tetrachloroethene	71	480	2.0
Chlorobenzene	ND	ND	2.0
	2900*	13,000*	200
Ethyl Benzene			
m,p-Xylene	20,000* E	86,000* E	200
Styrene	ND	ND	2.0
1,1,2,2-Tetrachloroethane	ND	ND	2.0
o-Xylene	7400*	32,000*	20
4-Ethyl Toluene	8.4	41	2.0
1.3.5-Trimethylbenzene	9.5	46	2.0 -
	ND	ND	2.0
1,2,4-Trimethylbenzene			2.0
1,3-Dichlorobenzene	0.43 L,B	2.6 L,B	2.0 '
Chloromethylbenzene	ND	ND	2.0
1.4-Dichlorobenzene	0.43 L,B	2.6 L,B	2.0
¹ 2-Dichlorobenzene	ND	ND	2.0
2.4-Trichlorobenzene	2.2 B	16 B	2.0
	12 B	130 B	2.0
Rexachlorobutadiene	12 D		2.0

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V		
1-Methyl-4-(1-methylethyl)-1,4-Cyclohexadiene	100		
2,2-Dimethyl Bicyclo [2,2,1] heptane	40 30		
1-methyl-4-(1-methylethyl) Cyclohexane			
Unknown	30		
Unknown	40 50		
Unknown			
UnKnown cyclic compound	30		
Unknown cyclic compound	20		
Unknown cyclic compound	80		
SURROGATE COMPOUNDS	RECOVERY (%)	QCLIMIT	
1,2-Dichloroethane, d4	103	60 - 140	
Toluene, d8	108	60 - 140	
p-Bromofluorobenzene	127	60 - 140	

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination. Value is qualified when the observed concentration in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

* = from analysis of sample at higher dilution

J = Estimated value, analytical accuracy data outside acceptable range

E = Estimated value, above the calibration range

APPENDIX B

CANISTER AMBIENT AIR DATA

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_____ OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #1 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:22 - 11:22 (2 Hours) CANISTER NUMBER: 1584 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.62

COMPOUND	CONCENTRATION			RL	
	<u></u>	PPB,V/V	UG/M3	PPB,V/V	
Dichlorodifluoromethane		0.37 J,L,B	1.8 J,L,B	0.5	
Chloromethane		ND	ND	0.5	
Unioromemane			ND		
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND		0.5	
Vinyl Chloride		ND	ND	0.5	
Methyl Bromide		ND	ND	0.5	
Chloroethane		ND	ND	0.5	
Acetonitrile		ND	ND	20	
Acrolein		ND	ND	20	
Acetone		6.9 J,L	16 J,L	20	
Trichlorofluoromethane		0.14 J,L	0.78 J,L	0.5	
Acrylontrile		ND	ND	20	
1,1-Dichloroethylene		ND	ND	0.5	
Methylene Chloride		7.9 J	27 J	0.5	
3-Chloropropene		ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane		0.05 J.L	0.35 J.L	0.5 0.5	
1-Dichloroethane		ND	ND	0.5	
ethyl-t-Butyl Ether		ND	ND	20	
zis-1,2-Dichloroethene		ND	ND	0.5	
	,				
Chloroform		ND	ND	0.5	
Ethyl Acetate		ND	ND	20	
Methyl Ethyl Ketone		0.88 J,L	2.6 J,L	20	
Tetrahydrofuran		ND	ND	20	
I,2-Dichloroethane		ND	ND	0.5	
I,1,1-Trichloroethane		0.09 L	0.50 L	0.5	
Benzene		0.42 L,B	1.3 L,B	0.5	
Carbon Tetrachoride		0.09 L	0.42 L	0.5	
I,2-Dichloropropane		ND	ND	0.5	
Frichloroethene		ND	ND	0.5	
Methylmethacrylate		ND	ND	20	
xis-1,3-Dichloropropene		ND	ND	0.5	
Methyl Isobutyl Ketone		ND	ND	20	
rans-1,2-Dichloropropene		ND	ND	0.5	
1,1,2-Trichloroethane		ND	ND	0.5	
roluene			1.4 L.B	0.5	
				0.5	
2-Dibromoethane		ND	ND	0.5	
Tetrachloroethene		0.05 L	0.31 L	0.5	
Chlorobenzene		ND	ND	0.5	
Ethyl Benzene		0.18 L	0.80 L	0.5	
n,p-Xylene		0.60	2.6	0.5	
Styrene		ND	ND	0.5	
1,1,2,2-Tetrachloroethane		ND	ND	0.5	
-Xylene		0.18 L	0.08 L	0.5	
-Ethyl Toluene		ND	ND	0.5	
,3,5-Trimethylbenzene		ND	ND	0.5 -	
.2.4-Trimethylbenzene		ND	ND	0.5	
.3-Dichlorobenzene		ND	ND	0.5 '	
Chloromethylbenzene		ND	ND	0.5	
,4-Dichlorobenzene		ND	ND	0.5	
,2-Dichlorobenzene		ND	ND	0.5	
2,4-Trichlorobenzene		ND	ND	0.5	
exachlorobutadiene		ND	ND	0.5	

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TENTATIVELY IDENTIFIED COMPOUNDS:		-4 ³	ESTIMATED CONCENTRATION PPB,V/V	
None Detected		1.0		
SURROGATE COMPOUNDS		ай на <u>1</u>	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4			58	60 - 140
Toluene, d8			106	60 - 140
p-Bromofluorobenzene			96	60 - 140
NOTES				

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

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AIR SAMPLING RESULTS

ROJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #1 (Colocated Station) SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:22 - 11:22 (2 Hours) CANISTER NUMBER: 1565 (Duplicate Sample) VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.73

COMPOUND		INTRATION UG/M3	PPB,V/V
	PPB,V/V	00////0	FFD,V/V
Dichlorodifluoromethane	0.38 L,B	1.9 L,B	0.5
Chloromethane	0.28 L	0.59 L	0.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.5
Vinyl Chloride	ND	ND	0.5
Methyl Bromide	ND	ND	0.5
Chloroethane	ND	ND	0.5
Acetonitrile	ND	ND	20
Acrolein	ND	ND	20
Acetone	6.6 L	16 L	20
Trichlorofluoromethane	0.14 L	0.80 L	0.5
Acrylontrile	ND	ND	20
1,1-Dichloroethylene	ND	ND	0.5
Methylene Chloride	8.5	30	0.5
3-Chloropropene	8.5 ND	ND	
1.1.2-Trichloro-1.2.2-trifluoroethane	0.05 L	0.36 L	0.5 4
1,1,2-1 nchloro-1,2,2-trinuoroethane	ND	ND	0.5 4.
	ND ND	ND	20
<pre>>thyl-t-Butyl Ether WS-1,2-Dichloroethene</pre>	ND ND	ND	20 0.5
Chloroform	, ND	ND	0.5
Ethyl Acetate	ND	ND	20
Methyl Ethyl Ketone	1.1 L	3.2 L	20
Tetrahydrofuran	ND	ND	20
1,2-Dichloroethane	ND	ND	0.5
1,1,1-Trichloroethane	0.80	4.4	0.5
Benzene	0.57 B	1.8 B	0.5
Carbon Tetrachoride	0.15 L	0.66 L	0.5
1,2-Dichloropropane	ND	' ND	0.5
Trichloroethene	ND	ND	0.5
Methylmethacrylate	ND	ND	20
cis-1,3-Dichloropropene	ND	ND	0.5
Methyl Isobutyl Ketone	ND	ND	20
rans-1,2-Dichloropropene	ND	ND	0.5
1.1.2-Trichloroethane	ND	ND	0.5
Toluene	0.43 L,B	1.6 L,B	0.5
1,2-Dibromoethane	ND	ND	0.5
Tetrachloroethene	0.05 L	0.32 L	0.5
Chlorobenzene	ND	ND	0.5
Ethyl Benzene	0.28 L	1.2 L	0.5
n,p-Xylene	1.0	4.3	0.5
Styrene	ND	ND	0.5
1,1,2,2-Tetrachloroethane	ND	ND	0.5
o-Xylene	0.28 L	1.2 L	0.5
F-Ethyl Toluene	ND	ND	0.5
1,3,5-Trimethylbenzene	ND	ND	0.5
	ND ND	ND	0.5
I,2,4-Trimethylbenzene	ND ND	ND ND	0.5
,3-Dichlorobenzene			÷·+
Chloromethylbenzene	ND	ND	0.5
4-Dichlorobenzene	ND	ND	0.5
,2-Dichlorobenzene	ND	ND	0.5
2,4-Trichlorobenzene	ND	ND	0.5
Jxachlorobutadiene	ND	ND	0.5

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	
None Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%) Q	CLIMIT
1,2-Dichloroethane, d4	61 61	0 - 140
Toluene, d8	111 6	0 - 140
p-Bromofluorobenzene	98 60	0 - 140
NOTES:		

NUTES.

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

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AIR SAMPLING RESULTS

OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #1 (Colocated Station) SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:22 - 11:22 (2 Hours) CANISTER NUMBER: 1565 (Duplicate Analysis) VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.73

COMPOUND	CONCENT PPB,V/V	RATION UG/M3	RL PPB,V/V
Dichlorodifluoromethane	0.38 J,L,B	1.9 J,L,B	0.5
Chloromethane	0.28 J,L	0.59 J,L	0.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.5
Vinyl Chloride	ND	ND	0.5
Methyl Bromide	ND	ND	0.5
Chloroethane	ND	ND	0.5
	ND	ND	
Acetonitrile			20
Acrolein	ND	ND	20
Acetone	6.6 J,L	16 J,L	20
Trichlorofluoromethane	0.14 J,L	0.80 J,L	0.5
Acrylontrile	ND	ND	20
1,1-Dichloroethylene	ND	ND	0.5
Methylene Chloride	8.0 J	28 J	0.5
3-Chloropropene	ND	ND	0.5 🛔
1,1,2-Trichloro-1,2,2-trifluoroethane	0.05 J,L	0.36 J,L	0.5
1-Dichloroethane	ND	ND	0.5
"thyl-t-Butyl Ether	ND	ND	20
us-1,2-Dichloroethene	ND	ND	0.5
Chloroform	· ND	ND	0.5
Ethyl Acetate	ND	ND	20
Methyl Ethyl Ketone	1.1 J,L	3.2 J,L	20
Tetrahydrofuran	ND	ND	20
1,2-Dichloroethane	ND	ND	0.5
	0.80	4.4	0.5
1,1,1-Trichloroethane	0.52 B	1.7 B	0.5
Benzene			0.5
Carbon Tetrachoride	0.09 L		
1,2-Dichloropropane	ND	ND	0.5
Trichloroethene	ND	ND	0.5
Methylmethacrylate	ND	ND	20
cis-1,3-Dichloropropene	ND	ND	0.5
Methyl Isobutyl Ketone	ND	ND	20
trans-1,2-Dichloropropene	ND	ND	0.5
1,1,2-Trichloroethane	ND	ND	0.5
Toluene	0.38 L,B	1.4 L,B	0.5
1.2-Dibromoethane	ND	ND	0.5
Tetrachloroethene	0.05 L	0.32 L	0.5
Chlorobenzene	ND	ND	0.5
Ethyl Benzene	0.19 L	0.82 L	0.5
m,p-Xylene	0.57	2.5	0.5
Stvrene	ND	ND	0.5
1,1,2,2-Tetrachloroethane	ND	ND	0.5
	0.19 L	0.82 L	0.5
o-Xylene 4 Ethyl Taluana	ND	ND	0.5
4-Ethyl Toluene		ND	0.5
1,3,5-Trimethylbenzene	ND		
1,2,4-Trimethylbenzene	ND	ND	0.5
1,3-Dichlorobenzene	ND	ND	0.5 *
Chloromethylbenzene	ND	ND	0.5
1,4-Dichlorobenzene	ND	ND	0.5
1,2-Dichlorobenzene	ND	ND	0.5
⁷ ,4-Trichlorobenzene	ND	ND	0.5
	ND	ND	0.5

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	
none Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	58	60 - 140
Toluene, d8	107	60 - 140
p-Bromofluorobenzene	97	60 - 140
NOTES		

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

ROJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #2 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:21 - 11:21 (2 Hours) CANISTER NUMBER: 1560 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.37

COMPOUND	CONCEN PPB,V/V	TRATION UG/M3	RL PPB,V/V
Dichlorodifluoromethane	0.35 J,L,B	1.7 J,L,B	0.4
Chloromethane	0.26 J,L	0.54 J,L	0.4
1.2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.4
Vinvl Chloride	ND	ND	0.4
Methyl Bromide	ND	ND	0.4
Chloroethane	ND	ND	0.4
Acetonitrile	ND	ND	20
Acrolein	ND	ND	20
Acetone	6.1 J.L	15 J.L	20
Trichlorofluoromethane	0.13 J.L	0.74 J.L	0.4
Acrylontrile	ND	ND	20
1.1-Dichloroethylene	ND	ND	0.4
Methylene Chloride	0.22 J,B,L	0.76 J,B,L	0.4
A Chloropropene	0.22 J, D, L ND	0.76 Ј, В, L ND	
3-Chloropropene	0.04 J,L		0.4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.33 J,L ND	V. T '
1 1-Dichloroethane			0.4
thyl-t-Butyl Ether	ND	ND	20
us-1,2-Dichloroethene	ND	ND	0.4
Chloroform	, ND	ND	0.4
Ethyl Acetate	ND	ND	20
Methyl Ethyl Ketone	0.48 J,L	1.4 J,L	20
Tetrahydrofuran	ND	ND	20
1,2-Dichloroethane	ND	ND	0.4
1,1,1-Trichloroethane	0.09 L	0.48 L	0.4
Benzene	0.44 B	1.4 B	0.4
Carbon Tetrachoride	0.13 L	0.61 L	0.4
1,2-Dichloropropane	ND	ND	0.4
Trichloroethene	ND	ND	0.4
Methylmethacrylate	ND	ND	20
cis-1,3-Dichloropropene	ND	ND	0.4
Methyl Isobutyl Ketone	ND	ND	20
trans-1,2-Dichloropropene	ND	ND	0.4
1.1.2-Trichloroethane	ND	ND	0.4
Toluene	0.35 L,B	1.3 L,B	0.4
1.2-Dibromoethane	ND	ND _,_	0.4
Tetrachloroethene	0.74	5.1	0.4
Chlorobenzene	ND	ND	0.4
Ethyl Benzene	0.17 L	0.76 L	0.4
m,p-Xylene	0.48	2.1	0.4
Styrene	ND	ND	0.4
1,1,2,2-Tetrachloroethane	ND	ND	0.4
o-Xylene	0.13 L,B	0.57 L.B	0.4 0.4
4-Ethyl Toluene	ND	ND	0.4
	ND	ND	
1,3,5-Trimethylbenzene		ND ND	0.4 -
1,2,4-Trimethylbenzene	ND		0.4
1,3-Dichlorobenzene	ND	ND	0.4 *
Chloromethylbenzene	ND	ND	0.4
1,4-Dichlorobenzene	ND	ND	0.4
1,2-Dichlorobenzene	ND	ND	0.4
2,4-Trichlorobenzene	ND	ND	0.4
xachlorobutadiene	ND	ND	0.4

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB.V/V	
None Detected		
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	58	60 - 140
Toluene, d8	107	60 - 140
p-Bromofluorobenzene	95	60 - 140
NOTES:		

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

AIR SAMPLING RESULTS

OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #3 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:24 - 11:24 (2 Hours) CANISTER NUMBER: 1576 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.34

COMPOUND		NTRATION UG/M3	RL PPB,V/V
Dichlorodifluoromethane	0.35 J,L,B	1.7 J,L,B	0.4
Chloromethane	0.22 J,L	0.45 J.L	0.4
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.4
Vinyl Chloride	ND	ND	0.4
Methyl Bromide	ND	ND	0.4
Chloroethane	ND	ND	0.4
Acetonitrile	ND	ND	20
Acrolein	ND	ND	20
Acetone	5.2 J.L.B	12 J,L,B	20
Trichlorofluoromethane	0.13 J,L	0.73 J.L	0.4
Acrylontrile	ND	ND	20
1,1-Dichloroethylene	ND	ND	0.4
Nethylene Chleside		1.4 J,L	0.4
Methylene Chloride		ND	
3-Chloropropene	ND	• • • •	0.4
1,1,2-Trichloro-1,2,2-trifluoroethane	0.04 J,L		U.4
1 1-Dichloroethane	ND	ND	0.4
thyl-t-Butyl Ether	ND	ND	20
ws-1,2-Dichloroethene	ND	ND	0.4
Chloroform	ND	ND	0.4
Ethyl Acetate	ND	ND	20
Methyl Ethyl Ketone	0.39 J,L	1.1 J,L	20
Tetrahydrofuran	ND	ND	20
1,2-Dichloroethane	ND	ND	0.4
1,1,1-Trichloroethane	1.0	5.5	0.4
Benzene	0.43 B	1.4 B	0.4
Carbon Tetrachoride	0.09 L	0.40 L	0.4
1,2-Dichloropropane	ND	ND	0.4
Trichloroethene	ND	ND	0.4
Methylmethacrylate	ND	ND	20
cis-1,3-Dichloropropene	ND	ND	0.4
Methyl Isobutyl Ketone	ND	ND	20
trans-1,2-Dichloropropene	ND	ND	0.4
1,1,2-Trichloroethane	ND	ND	0.4
Toluene	0.26 L.B	0.98 L.B	0.4
1,2-Dibromoethane	ND	ND	0.4
Tetrachloroethene	0.04 L	0.30 L	0.4
Chlorobenzene	ND	ND	0.4
Ethyl Benzene	0.04 L,B	0.17 L,B	0.4
m,p-Xylene	0.22 L	0.94 L	0.4
Styrene	ND	ND	0.4
1,1,2,2-Tetrachloroethane	ND	ND	0.4
o-Xylene	0.04 L.B	0.17 L.B	0.4
4-Ethyl Toluene	ND	ND	0.4
1,3,5-Trimethylbenzene	ND	ND	0.4 -
1,2,4-Trimethylbenzene	ND	ND	0.4
1,2-Dichlorobenzene	ND	ND	0.4
Chloromothylhonyono	ND	ND	0.4
Chloromethylbenzene			
1,4-Dichlorobenzene	ND	ND	0.4
1,2-Dichlorobenzene	ND	ND	0.4
1 ?,4-Trichlorobenzene	ND	ND	0.4
xachlorobutadiene	ND	ND	0.4

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	· · ·
whe Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	53	60 - 140
Toluene, d8	98	60 - 140
p-Bromofluorobenzene	90	60 - 140
NOTES:		
RI. = Reporting Limit		

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

ROJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #4 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:24 - 11:24 (2 Hours) CANISTER NUMBER: 1577 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.37

COMPOUND	CONCE PPB,V/V	CONCENTRATION PPB.V/V UG/M3	
	((D, V/V	00/103	PPB,V/V
Dichlorodifluoromethane	0.39 J.L.B	1.9 J.L.B	0.4
Chloromethane	0.26 J,L	0.54 J.L	0.4
,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.4
/invl Chloride	ND	ND	0.4
Aethyl Bromide	ND	ND	0.4
Chloroethane	ND	ND	0.4
	ND	ND	20
Acrolein	ND	ND	20
Acetone	6.1 J.L	15 J.L	20
richlorofluoromethane		0.74 J.L	0.4
	ND	ND	20
,1-Dichloroethylene	ND	ND	0.4
lethylene Chloride	0.26 J	0.91 J	0.4
-Chloropropene	ND	ND	0.4
,1,2-Trichloro-1,2,2-trifluoroethane	0.04 J,L	0.19 J,L	0.7
.1-Dichloroethane	ND	ND	0.4
sthyl-t-Butyl Ether	ND	ND	20
6-1,2-Dichloroethene	ND	ND	0.4
Chloroform	, ND	ND	0.4
thyl Acetate	ND	ND	20
lethyl Ethyl Ketone	0.44 J,L	1.3 J,L	20
etrahydrofuran	ND	ND	20
2-Dichloroethane	ND	ND	0.4
,1,1-Trichloroethane	0.22 L	1.2 L	0.4
lenzene	12	39	0.4
Carbon Tetrachoride	0.13 L	0.61 L	0.4
.2-Dichloropropane	ND	ND	0.4
richloroethene	ND	ND	0.4
fethylmethacrylate	ND	ND	20
is-1.3-Dichloropropene	ND	ND	0.4
lethyl isobutyl Ketone	ND	ND	20
ans-1,2-Dichloropropene	ND	ND	0.4
1,2-Trichloroethane	ND	ND	0.4
oluene	0.52	1.9	0.4
2-Dibromoethane	ND	ND	0.4
etrachloroethene	0.09 L	0.59 L	0.4
	ND	ND	0.4
hlorobenzene			÷
thyl Benzene	0.13 L	0.57 L	0.4
n,p-Xylene	0.44	1.9	0.4
tyrene	ND	ND	0.4
1,2,2-Tetrachloroethane	ND	ND	0.4
-Xylene	0.13 L	0.57 L	0.4
-Ethyl Toluene	ND	ND	0.4
,3,5-Trimethylbenzene	ND	ND	0.4
2,4-Trimethylbenzene	ND	ND	0.4
3-Dichlorobenzene	ND	ND	0.4 *
hloromethylbenzene	NĎ	ND	0.4
4-Dichlorobenzene	ND	ND	0.4
,2-Dichlorobenzene	ND	ND	0.4
2.4-Trichlorobenzene	ND	ND	0.4
"xachlorobutadiene	ND	ND	0.4

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TENTATIVELY IDENTIFIED COMPOUNDS:		CONCENTRATION PPB,V/V
whe Detected		1.0
SURROGATE COMPOUNDS	RECO	/ERY (%) QC LIMIT
1,2-Dichloroethane, d4	5	3 60 - 140
Toluene, d8	1	00 60 - 140
p-Bromofluorobenzene	9	3 60 - 140
NOTES:		

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

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ROJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #5 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:23 - 11:23 (2 Hours) CANISTER NUMBER: 1587 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.35

COMPOUND	CONCENTRATION		RL
	PPB,V/V	UG/M3	PPB,V/V
Dichlorodifluoromethane	0.78	3,9	0.4
Chloromethane			0.4
	0.61	1.3	0.4
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.4
Vinyl Chloride	ND	ND	0.4
Methyl Bromide	ND	ND	· 0.4
Chloroethane	ND	ND	0.4
Acetonitrile	ND	ND	20
Acrolein	ND	ND	20
Acetone	11 L	27 L	20
Frichlorofluoromethane	0.26 L	1.5 L	0.4
Acrylontrile	ND	ND	20
I,1-Dichloroethylene	ND	ND	0.4
Methylene Chloride	0.54	1.9	0.4
B-Chloropropene	ND	ND	0.4
I,1,2-Trichloro-1,2,2-trifluoroethane	0.13 L	1.0 L	0.4
1-Dichloroethane	ND	ND	0.4
thyl-t-Butyl Ether	ND	ND	20
s-1,2-Dichloroethene	ND	ND	0.4
Chloroform	ND	ND	0.4
	ND		
Ethyl Acetate		ND	20
lethyl Ethyl Ketone	0.87 L	2.6 L	20
Tetrahydrofuran	ND	ND	20
,2-Dichloroethane	ND	ND	0.4
,1,1-Trichloroethane	0.26 L	1.4 L	0.4
Benzene	0.48 B	1.5 B	0.4
Carbon Tetrachoride	0.09 L	0.04 L	0.4
.2-Dichloropropane	ND	ND	0.4
richloroethene	ND	ND	0.4
Methylmethacrylate	ND	ND	20
sis-1,3-Dichloropropene	ND	ND	0.4
Aethyl Isobutyl Ketone	ND	ND	20
rans-1,2-Dichloropropene	ND	ND	0.4
rans-1,2-Dichloropropene			
,1,2-Trichloroethane	ND	ND	0.4
oluene	0.26 L,B	0.98 L,B	0.4
,2-Dibromoethane	ND	ND	0.4
etrachloroethene	0.04 L	0.29 L	0.4
Chlorobenzene	ND	ND	0.4
thyl Benzene	0.04 L,B	0.17 L,B	0.4
n,p-Xylene	0.13 L	0.57 L	0.4
Styrene	ND	ND	0.4
,1,2,2-Tetrachloroethane	ND	ND	0.4
			••••
-Xylene	0.04 L,B	0.17 L,B	0.4
-Ethyl Toluene	ND	ND	0.4
,3,5-Trimethylbenzene	ND	ND	0.4
,2,4-Trimethylbenzene	ND	ND	0.4
3-Dichlorobenzene	ND	ND	0.4 *
chloromethylbenzene	ND	ND	0.4
,4-Dichlorobenzene	ND	ND	0.4
,2-Dichlorobenzene	ND	ND	
			0.4
2,4-Trichlorobenzene	ND	ND	0.4
xachlorobutadiene	ND	ND	0.4

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	
Mone Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	105	60 - 140
Toluene, d8	100	60 - 140
p-Bromofluorobenzene	92	60 - 140
NOTES:		

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

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OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #6 SAMPLE DATE: 6-10-97 SAMPLE TIME: 09:25 - 11:25 (2 Hours) CANISTER NUMBER: 1586 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 4.02

COMPOUND		CONCENTRATION		RL	
	<u>i kan na sa sa</u>	PPB,V/V	UG/M3	PPB,V/V	
Dichlorodifluoromethane		0.72	3.6	0.4	
		*=	1.0		
Chloromethane		0.48		0.4	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND	ND	0.4	
Vinyl Chloride		ND	ND	0.4	
Methyl Bromide		ND	ND	0.4	
Chloroethane		ND	ND	0.4	
Acetonitrile		ND	ND	20	
Acrolein		ND	ND	20	
Acetone		10 L	24 L	20	
Trichlorofluoromethane		0.24 L	1.4 L	0.4	
Acrylontrile		ND	ND	20	
1,1-Dichloroethylene		ND	ND	0.4	
Methylene Chloride		0.56	1.9	0.4	
3-Chloropropene		ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane		0.12 L	0.92 L	0.4 0.4	
¹ -Dichloroethane		ND	ND	0.4	
_thyl-t-Butyl Ether		ND	ND	20	
as-1,2-Dichloroethene		ND	ND	0.4	
Chloroform		· ND	ND	0.4	
		ND	ND	20	
Ethyl Acetate					
Methyl Ethyl Ketone		ND	ND	20	
Fetrahydrofuran		ND	ND	20	
1,2-Dichloroethane		ND	ND	0.4	
1,1,1-Trichloroethane		0.08 L	0.44 L	0.4	
Benzene		0.48 B	1.5 B	0.4	
Carbon Tetrachoride		0.12 L	0.56 L	0.4	
1,2-Dichloropropane		ND	ND	0.4	
Trichloroethene		ND	ND	0.4	
Methylmethacrylate		ND	ND	20	
cis-1,3-Dichloropropene		ND	ND	0.4	
Methyl Isobutyl Ketone		ND	ND	20	
rans-1,2-Dichloropropene		ND	ND	0.4	
1,1,2-Trichloroethane		ND	ND	0.4	
Foluene		0.24 L,B	0.91 L.B	0.4	
1.2-Dibromoethane		ND	ND L,D	0.4	
Tetrachloroethene		0.04 L	0.27 L	0.4	
Chlorobenzene		ND	ND	0.4	
Ethyl Benzene		0.04 L,B	0.17 L,B	0.4	
		0.04 L,D	0.17 L,D		
n,p-Xylene		0.12 L	0.52 L	0.4	
Styrene		ND	ND	0.4	
1,1,2,2-Tetrachloroethane		ND	ND	0.4	
-Xylene		ND	ND	0.4	
-Ethyl Toluene		ND	ND	0.4	
,3,5-Trimethylbenzene		ND	ND	0.4	
,2,4-Trimethylbenzene		ND	ND	0.4	
3-Dichlorobenzene		ND	ND	0.4 *	
Chloromethylbenzene		ND	ND	0.4	
.4-Dichlorobenzene		ND	ND	0.4	
1.2-Dichlorobenzene		ND	ND	0.4	
4-Trichlorobenzene		ND	ND	0.4	
				0.4	
xachlorobutadiene		0.04 L,B	0.43 L,B		

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RECOVERY (%)	QC LIMIT
117	60 - 140
101	60 - 140
93	60 - 140
	117 101

D) --- Deservations

RL = Reporting Limit

 $B \approx$ Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside QC limit

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AIR SAMPLING RESULTS

JJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #7 (Off-Site, Mrs. Orchard's Home) SAMPLE DATE: 6-10-97 SAMPLE TIME: 08:08 - 16:08 (8 Hours) CANISTER NUMBER: 1592 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 2.84

.

COMPOUND			
	PPB,V/V	UG/M3	PPB,V/V
Dichlorodifluoromethane	0.34 J.B	1.7 J.B	0.3
Chloromethane	0.26 J.L	0.53 J,L	0.3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.3
Vinyl Chloride	ND	ND	0.3
Methyl Bromide	ND	ND	0.3
Chloroethane	ND	ND	0.3
Acetonitrile	ND	ND	10
Acrolein	ND	ND	10
Acetone	5.4 J,L	13 J,L	10
Trichlorofluoromethane	0.11 J,L	0.64 J.L	0.3
Acrylontrile	ND	ND	10
1,1-Dichloroethylene	ND	ND	0.3
Methylene Chloride	0.03 J.L	0.10 J,L	0.3
3-Chloropropene	ND	ND	•
1,1,2-Trichloro-1,2,2-trifluoroethane	0.09 J,L	0.65 J,L	0.3 0.3
-Dichloroethane	ND	ND ND	0.3
-blandoetrane	ND	ND	10
A 2 Dichlesesthere	ND	ND	0.3
cis-1,2-Dichloroethene			
Chloroform	· ND	ND	0.3
Ethyl Acetate	ND	ND	10
Methyl Ethyl Ketone	0.40 J,L	1.2 J,L	10
Tetraĥydrofuran	ND	ND	10
1,2-Dichloroethane	ND	ND	0.3
1,1,1-Trichloroethane	0.11 L	0.60 L	0.3
Benzene	0.54 B	1.7 B	0.3
Carbon Tetrachoride	0.11 L	0.51 L	0.3
1.2-Dichloropropane	ND	ND	0.3
Trichloroethene	ND	ND	0.3
Methylmethacrylate	ND	ND	10
cis-1,3-Dichloropropene	ND	ND	0.3
Methyl Isobutyl Ketone	ND	ND	10
rans-1,2-Dichloropropene	ND	ND	0.3
140 Trichlereethene	ND	ND	0.3
1,1,2-Trichloroethane	· · -		0.3 0.3
Toluene			
1,2-Dibromoethane	ND	ND	0.3
Tetrachloroethene	ND	ND	0.3
Chlorobenzene	ND	ND	0.3
Ethyl Benzene	0.03 L,B	0.12 L,B	0.3
n,p-Xylene	0.06 L,B	0.24 L,B	0.3
Styrene	ND	ND	0.3
1,1,2,2-Tetrachloroethane	ND	ND	0.3
-Xvlene	ND	ND	0.3
HEthyl Toluene	ND	ND	0.3
I,3,5-Trimethylbenzene	ND	ND	0.3
1.2.4-Trimethylbenzene	0.03 L.B	0.15 L.B	0.3
		ND	0.3
1,3-Dichlorobenzene	ND	_	
Chloromethylbenzene	ND	ND	0.3
1,4-Dichlorobenzene	ND	ND	0.3
1 2-Dichlorobenzene	ND	ND	0.3
4-Trichlorobenzene	ND	ND	0.3
achlorobutadiene	0.03 L,B	0.32 L,B	0.3

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	
None Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	58	60 - 140
Toluene, d8	110	60 - 140
p-Bromofluorobenzene	96	60 - 140
NOTES:		

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside the QC limit

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AIR SAMPLING RESULTS

OJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Station #8 (Off-Site, Fence Line, West Gate) SAMPLE DATE: 6-10-97 SAMPLE TIME: 08:02 - 16:02 (8 Hours) CANISTER NUMBER: 1582 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 2.88

COMPOUND	CONCEN PPB,V/V		RL
	Pro,v/v	UG/M3	PPB,V/V
Dichlorodifluoromethane	0.35 J,B	1.7 J.B	0.3
Chloromethane	0.26 J,L	0.54 J,L	0.3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND ND	ND	0.3
Vinyi Chloride	ND	ND	
	ND	ND	0.3
Methyl Bromide		ND	0.3
Chloroethane	ND 0.35 J.L		0.3
Acetonitrile			10
Acrolein	ND 6.3 J,L	ND	10
Acetone		15 J,L	10
Trichlorofluoromethane	0.12 J,L	0.65 J,L	0.3
Acrylontrile	ND	ND	10
1,1-Dichloroethylene	ND	ND	0.3
Methylene Chloride	0.06 J,L,B	0.19 J,L,B	0.3
3-Chloropropene	ND	ND	0.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.06 J,L	0.46 J,L	U.U 1
1-Dichloroethane	ND	ND	0.3
thyl-t-Butyl Ether	ND	ND	10
cis-1,2-Dichloroethene	ND	ND	0.3
Chloroform	· ND	ND	0.3
Ethyl Acetate	ND	ND	10
Methyl Ethyl Ketone	0.49 J,L	1.44 J,L	10
Tetrahydrofuran	ND	ND	10
1,2-Dichloroethane	ND	ND	0.3
1,1,1-Trichloroethane	0.12 L	0.63 L	0.3
Benzene	0.49 B	1.6 B	0.3
Carbon Tetrachoride	0.12 L	0.55 L	0.3
1,2-Dichloropropane	ND	ND	0.3
Trichloroethene	ND	ND	0.3
Methylmethacrylate	ND	ND	10
cis-1,3-Dichloropropene	ND	ND	0.3
Methyl Isobutyl Ketone	ND	ND	10
rans-1.2-Dichloropropene	ND	ND	0.3
I,1,2-Trichloroethane	ND	ND	0.3
l'oluene	0.26 L	0.97 L	0.3
I,2-Dibromoethane	ND	ND	0.3
letrachloroethene	ND	ND	0.3
Chlorobenzene	ND	ND	0.3
Ethyl Benzene	0.03 L,B	0.13 L.B	0.3
n,p-Xylene	0.06 L.B	0.26 L,B	0.3
Styrene	ND	ND	0.3
,1,2,2-Tetrachloroethane	ND	ND	0.3
-Xylene	0.03 L,B	0.13 L,B	0.3
-Ethyl Toluene	ND	ND	0.3
,3,5-Trimethylbenzene	ND	ND	0.3
.2.4-Trimethylbenzene	0.03 L,B	0.14 L.B	0.3
,3-Dichlorobenzene	ND	ND	0.3 •
Chloromethylbenzene	ND	ND	0.3
.4-Dichlorobenzene	ND	ND	0.3
,2-Dichlorobenzene	ND	ND	0.3
?,4-Trichlorobenzene	ND	ND	0.3
exachiorobutadiene	0.06 L,B	0.64 L,B	0.3

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TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB.V/V	· · · ·
Junknown Aliphatic Compound	3.0	
SURROGATE COMPOUNDS	RECOVERY (%) QC	LIMIT
1,2-Dichloroethane, d4	58 60) - 140
Toluene, d8	106 60) - 140
p-Bromofluorobenzene	94 60) - 140
NOTES		

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

J = Estimated value, 1,2-dichloroethane, d4 surrogate is outside the QC limit

APPENDIX C

LABORATORY AND FIELD/TRIP BLANK DATA

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AIR SAMPLING RESULTS

JECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Laboratory Blank #1 SAMPLE DATE: NA SAMPLE TIME: NA CANISTER NUMBER: NA VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 1.0

COMPOUND		CONCENTRATION PPB,V/V UG/M3	
Dichlorodifluoromethane	0.04 L	0.20 L	0.1
Chloromethane	ND	ND	0.1
I,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.1
/invl Chloride	ND	ND	0.1
Methyl Bromide	ND	ND	0.1
Chloroethane	ND	ND	0.1
Acetonitrile	ND	ND	5.0
Acrolein	ND	ND	5.0
Acetone	0.41 L	0.98 L	5.0 5.0
richlorofluoromethane	ND	ND	0.1
	ND	ND	
		ND	5.0
,1-Dichloroethylene	ND 0.02 L	=	0.1
lethylene Chloride			0.1
-Chioropropene	ND	ND	0.1
.1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	0.1
Dichloroethane	ND	ND	0.1
chyl-t-Butyl Ether	ND	ND	5.0
is-1,2-Dichloroethene	ND	ND	0.1
Chloroform	ND	ND	0.1
Ethyl Acetate	ND	ND	5.0
lethyl Ethyl Ketone	ND	ND	5.0
etrahydrofuran	0.05 L	0.15 L	5.0
,2-Dichloroethane	ND	ND	0.1
,1,1-Trichloroethane	ND	ND	0.1
Benzene	0.08 L	0.25 L	0.1
Carbon Tetrachoride	ND	ND	0.1
,2-Dichloropropane	ND	ND	0.1
richloroethene	ND	ND	0.1
lethylmethacrylate	0.04 L	0.16 L	5.0
is-1,3-Dichloropropene	ND	ND	• 0.1
lethyl Isobutyl Ketone	0.10 L	0.41 L	5.0
ans-1,2-Dichloropropene	ND	ND	0.1
,1,2-Trichloroethane	0.01 L	0.05 L	0.1
oluene	0.03 L	0.11 L	0.1
.2-Dibromoethane	ND	ND	0.1
etrachloroethene	ND	ND	0.1
hlorobenzene	ND	ND	0.1
thyl Benzene	0.01 L	0.04 L	0.1
i,p-Xylene	0.01 L	0.04 L	0.1
i,p-Aylene tyrene	0.01 L	0.04 L	0.1
tyrene 1,2,2-Tetrachloroethane	0.01 L	0.04 L 0.14 L	0.1
	ND	ND	0.1
-Xylene	0.01 L	0.05 L	0.1
-Ethyl Toluene			0.1
,3,5-Trimethylbenzene		0.05 L	
,2,4-Trimethylbenzene	0.02 L	0.10 L	0.1
,3-Dichlorobenzene	0.01 L	0.06 L	0.1 •
hloromethylbenzene	ND	ND	0.1
,4-Dichlorobenzene	ND	ND	0.1
?-Dichlorobenzene	0.01 L	0.06 L	0.1
_4-Trichlorobenzene	0.02 L	0.15 L	0.1
xachlorobutadiene	0.02 L	0.21 L	0.1

TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V	
None Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	101	60 - 140
Toluene, d8	95	60 - 140
p-Bromofluorobenzene	89	60 - 140
NOTES:		

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NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

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AIR SAMPLING RESULTS

JECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Laboratory Blank #2 SAMPLE DATE: NA SAMPLE TIME: NA CANISTER NUMBER: NA VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 1.0

COMPOUND	······	CONCE	NTRATION	RL	
		PPB,V/V	UG/M3	PPB,V/V	
Dichlorodifluoromethane		0.05 L.	0.25 L	0.1	
Chloromethane		ND	ND	0.1	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND	ND	0.1	
Vinyl Chloride		ND	ND	0.1	
Methyl Bromide		ND	ND	0.1	
Chloroethane		ND	ND	0.1	
Acetonitrile		ND	ND	5.0	
Acrolein		ND	ND	5.0	
Acetone		0.44 L	1.0 L	5.0	
Trichlorofluoromethane		ND	ND	0.1	
Acrylontrile		ND	ND	5.0	
1,1-Dichloroethylene		ND	ND	0.1	
Methylene Chloride		0.02 L	0.07 L	0.1	
		ND	ND	0.1	
3-Chloropropene			ND		
1,1,2-Trichloro-1,2,2-trifluoroethane		ND		0.1 🔻	
² Dichloroethane		ND	ND	0.1	
yl-t-Butyl Ether		ND	ND	5.0	
cis-1,2-Dichloroethene		ND	ND	0.1	
Chloroform		ND	ND	0.1	
Ethyl Acetate		ND	ND	5.0	
Methyl Ethyl Ketone		ND	ND	5.0	
Tetrahydrofuran		ND	ND	5.0	
1,2-Dichloroethane		ND	ND	0.1	
1,1,1-Trichloroethane		ND	ND	0.1	
Benzene		0.08 L	0.25 L	0.1	
Carbon Tetrachoride		ND	ND	0.1	
1,2-Dichloropropane		ND	ND	0.1	
Trichloroethene		ND	ND	0.1	
Methylmethacrylate		ND	ND	5.0	
cis-1,3-Dichloropropene		ND	ND	0.1	
Methyl Isobutyl Ketone		ND	ND	5.0	
trans-1,2-Dichloropropene		ND	ND	0.1	
1,1,2-Trichloroethane		ND	ND	0.1	
Toluene		0.04 L	0.15 L	0.1	
1.2-Dibromoethane		0.04 L	0.08 L	0.1	
Tetrachloroethene		ND	ND	0.1	
		ND	ND	0.1	
Chlorobenzene				0.1	
Ethyl Benzene		ND	ND		
m,p-Xylene		0.02 L	0.09 L	0.1	
Styrene		0.02 L	0.09 L	0.1	
1,1,2,2-Tetrachloroethane		0.01 L	0.07 L	0.1	
p-Xylene		ND	ND	0.1	
4-Ethyl Toluene		0.01 L	0.05 L	0.1	
1,3,5-Trimethylbenzene		0.01 L	0.05 L	0.1 -	
1,2,4-Trimethylbenzene		0.02 L	0.10 L	0.1	
1.3-Dichlorobenzene		0.01 L	0.06 L	0,1 '	
Chloromethylbenzene		ND	ND	0.1	
1,4-Dichlorobenzene		0.01 L	0.06 L	0.1	
1 ?-Dichlorobenzene		0.02	0.12 L	0.1	
1-Trichlorobenzene		0.02 L	0.22 L	0.1	
				0.1	
achlorobutadiene		0.02 I_	0.21 L	V.1	

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TENTATIVELY IDENTIFIED COMPOUNDS	ESTIMATED CONCENTRATION PPB,V/V	
None Detected	1.0	
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4	103	60 - 140
Toluene, d8	88	60 - 140
p-Bromofluorobenzene	93	60 - 140

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

JJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Laboratory Blank #3 SAMPLE DATE: NA SAMPLE TIME: NA CANISTER NUMBER: NA VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 1.0

		TRATION	RL	
	PPB,V/V	UG/M3	PPB,V/V	
Dichlorodifluoromethane	0.04 L	0.20 L	0.1	
Chloromethane	ND	ND	0.1	
			••••	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	0.1	
Vinyl Chloride	ND	ND	0.1	
Methyl Bromide	ND	ND	0.1	
Chloroethane	ND	ND	0.1	
Acetonitrile	ND	ND	5.0	
Acrolein	ND	ND	5.0	
Acetone	0.39 L	0.93 L	5.0	
Trichlorofluoromethane	ND	ND	0.1	
Acrylontrile	ND	ND	5.0	
1,1-Dichloroethylene	ND	ND	0.1	
Methylene Chloride	0.02 L	0.07 L	0.1	
3-Chloropropene	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	0.1 0.1	
Dichloroethane	ND	ND	0.1	
	ND		5.0	
hyl-t-Butyl Ether		ND		
cis-1,2-Dichloroethene	ND	ND	0.1	
Chloroform	ND	ND	0.1	
Ethyl Acetate	ND	ND	5.0	
Methyl Ethyl Ketone	ND	ND	5.0	
Tetrahydrofuran	ND	ND	5.0	
1,2-Dichloroethane	ND	ND	0.1	
1,1,1-Trichloroethane	ND	ND	0.1	
Benzene	0.07 L	0.22 L	0.1	
Carbon Tetrachoride	ND	ND	0.1	
1,2-Dichloropropane	ND	ND	0.1	
Trichloroethene	ND	ND	0.1	
Methylmethacrylate	ND	ND	5.0	
xis-1,3-Dichloropropene	ND	ND	0.0	
Methyl Isobutyl Ketone	ND	ND	5.0	
	0.01 L	0.05 L	0.1	
rans-1,2-Dichloropropene	····			
I,1,2-Trichloroethane	ND	ND	0.1	
Foluene	ND	ND	0.1	
I,2-Dibromoethane	0.01 L	0.08 L	0.1	
Fetrachloroethene	ND	ND	0.1	
Chlorobenzene	ND	ND	0.1	
Ethyl Benzene	0.02 L	0.09 L	0.1	
n,p-Xylene	0.06 L	0.26 L	0.1	
Styrene	0.03 L	0.13 L	0.1	
1.1.2.2-Tetrachloroethane	ND	ND	0.1	
-Xvlene	0.02 L	0.09 L	0.1	
	0.02 L	0.10 L	0.1	
r-Luiyi i Uluciic I 2 5 Trimothulhonzono	0.02 L 0.04 L	0.16 L	0.1	
1,3,5-Trimethylbenzene		0.10	0.1	
1,2,4-Trimethylbenzene	0.05 L	0.25 L		
1,3-Dichlorobenzene	0.04 L	0.24 L	0.1 *	
Chloromethylbenzene	0.03 L	0.16 L	0.1	
I,4-Dichlorobenzene	0.04 L	0.24 L	0.1	
2-Dichlorobenzene	0.07 L	0.42 L	0.1	
4-Trichlorobenzene	0.17	1.3	0.1	
wkachlorobutadiene	0.24	2.6	0.1	

TENTATIVELY IDENTIFIED COMPOUNDS:	ESTIMATED CONCENTRATION PPB,V/V		
None Detected	1.0		
SURROGATE COMPOUNDS	RECOVERY (%)	QC LIMIT	
1,2-Dichloroethane, d4	101	60 - 140	
Toluene, d8	89	60 - 140	
p-Bromofluorobenzene	90	60 - 140	
NOTES:			

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

COJECT NAME: Eastern Surplus

PROJECT LOCATION: Meddybemps, Maine

SAMPLING LOCATION: Field/Trip Blank SAMPLE DATE: NA SAMPLE TIME: NA CANISTER NUMBER: 1589 VOLUME ANALYZED: 0.5 liters REPORT FACTOR: 1.0

COMPOUND	CONCEN	RL	
	PPB,V/V	UG/M3	PPB,V/V
Dichlorodifluoromethane	0.02 J,L,B	0.10 J,L,B	0.1
Chloromethane	ND	ND	0.1
		ND	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.1
Vinyl Chloride	ND	ND	0.1
Methyl Bromide	ND	ND	0.1
Chloroethane	ND	ND	0.1
Acetonitrile	ND	ND	5.0
Acrolein	ND	ND	5.0
Acetone	0.39 J,L,B	0.93 J,L,B	5.0
Frichlorofluoromethane	ND	ND	0.1
Acrylontrile	ND	ND	5.0
I,1-Dichloroethylene	ND	ND	0.1
Methylene Chloride	0.01 J,L,B	0.03 J,L,B	0.1
3-Chloropropene	ND	ND	
	ND	ND	0.1
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	0.1 -
1-Dichloroethane	ND		0.1 5.0
thyl-t-Butyl Ether	ND	ND	
s-1,2-Dichloroethene	ND	ND	0.1
Chloroform	ND	ND	0.1
Ethyl Acetate	ND	ND	5.0
Methyl Ethyl Ketone	ND	ND	5.0
Fetrahydrofuran	ND	ND	5.0
1.2-Dichloroethane	ND	ND	0.1
1.1.1-Trichloroethane	0.01 L	0.05 L	0.1
Benzene	1.2	3.8	0.1
Carbon Tetrachoride	ND	ND	0.1
1.2-Dichloropropane	ND	ND	0.1
Trichloroethene	ND	ND	0.1
Methylmethacrylate	ND	ND	5.0
	ND	ND	0.1
cis-1,3-Dichloropropene			
Methyl Isobutyl Ketone	ND	ND	5.0
rans-1,2-Dichloropropene	ND	ND	0.1
1,1,2-Trichloroethane	ND	ND	0.1
Toluene	0.03 L,B	0.11 L,B	0.1
I,2-Dibromoethane	ND	ND	0.1
Fetrachloroethene	ND	ND	0.1
Chlorobenzene	ND	ND	0.1
Ethvi Benzene	ND	ND	0.1
n,p-Xylene	ND	ND	0.1
Styrene	ND	ND	0.1
1,1,2,2-Tetrachloroethane	ND	ND	0.1
-Xylene	ND	ND	0.1
-Aylene	ND	ND	0.1
	ND	ND	0.1
1,3,5-Trimethylbenzene		ND	0.1
,2,4-Trimethylbenzene	ND		
,3-Dichlorobenzene	ND	ND	0.1 •
Chloromethylbenzene	ND	ND	0.1
,4-Dichlorobenzene	ND	ND	0.1
,2-Dichlorobenzene	ND	ND	0.1
4-Trichlorobenzene	0.03 L,B	0.22 L,B	0.1
	0.03 L,B	0.32 L,B	0.1

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TENTATIVELY IDENTIFIED COMPOUNDS:	••••• 11 ••••	ESTIMATED CONCENTRATION PPB,V/V	
None Detected		1.0	
SURROGATE COMPOUNDS		 RECOVERY (%)	QC LIMIT
1,2-Dichloroethane, d4		 58	60 - 140
Toluene, d8		105	60 - 140
p-Bromofluorobenzene		92	60 - 140
NOTES			

NOTES:

RL = Reporting Limit

B = Analyte is associated with lab or field/trip blank contamination.

Value is qualified when the observed concentration

in the sample is less than three times the blank level.

L = Estimated value, below the calibration range

ND = not detected above RL

APPENDIX D

METEOROLOGICAL DATA

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CATION: EASTERN SURPLUS COMPANY MEDDYBEMPS, MAINE

SCAN INTERVAL: 5 MINUTE

REPORT INTERVAL: 15 MINUTE

DATE	TIME	BAROMETRIC PRESSURE IN HG 15-MIN AVG	DU	AIR TEMPERATURE DEGREE C 15-MIN AVG	WIND DIRECTION DEGREES 15-MIN AVG	WIND SPEED MPH 15-MIN AVG
06/10/97	08:17	29.76	59.3	20.99	303.8	2.4
06/10/97	08:32	29.76	56.3	21.97	319.2	2.4
06/10/97	08:47	29.76	52.9	22.80	319.4	6.1
06/10/97	09:02	29.75	54.3	23.10	206.5	5.5
06/10/97	09:17	29.75	50.1	23.78	228.5	4.4
06/10/97	09:32	29.75	50.9	23.96	321.5	5.1
06/10/97	09:47	29.75	50.3	24.06	121.8	3.2
06/10/97	10:02	29.75	48.8	24.54	232.9	4.2
06/10/97	10:17	29.75	48.7	25.01	321.0	2.8
06/10/97	10:32	29.74	48.9	24.85	207.7	3.5
06/10/97	10:47	29.74	47.3	25.37	215.0	5.7
06/10/97	11:02	29.74	46.8	26.10	318.8	
۶/10/97 ۶/10/97	11:17	29.73	44.0	26.40	293.3	4.9 5.8
v10/97 €/10/97	11:32	29.73	43.3	26.91	144.4	4.3
0/10/97 06/10/97	11:47	29.73	43.3 44.8	20.9	311.3	4.3
					199.9	5.2
06/10/97	12:02	29.72	41.4	27.43		
06/10/97	12:17	29.72	40.2	28.11	314.3	5.1
06/10/97	12:32	29.71	41.3	28.34	312.8	4.9
06/10/97	12:47	29.71	36.1	28.68	320.7	7.6
06/10/97	13:02	29.70	33.3	28.97	312.8	6.4
06/10/97	13:17	29.70	32.0	29.46	223.2	4.5
06/10/97	13:32	29.70	33.2	29.50	227.1	4.6
06/10/97	13:47	29.69	30.5	29.62	226.8	6.2
06/10/97	14:02	29.68	29.6	29.78	307.9	8.9
06/10/97	14:17	29.68	29.7	30.02	309.9	4.6
6/10/97	14:32	29.67	30.5	29.96	290.7	8.8
6/10/97	14:47	29.67	30.5	30.13	298.9	7.0
6/10/97	15:02	29.67	29.8	30.21	310.0	7.5
06/10/97	15:17	29.67	31.1	30.44	305.1	6.1
06/10/97	15:32	29.66	29.8	30.80	197.4	8.8
)6/10/97)6/10/97	15:47 16:02	29.66 29.66	28.9 29.8	30.56 30.92	302.5 213.1	7.7 4.8
6/10/97	16:17	29.65	29.8	30.52	242.3	5.1
VERAGE	8 HOURS	29.71	40.4	27.36	NA	5.4
RANGE	NA	29.76 - 29.65	59.3 - 29.6	20.99 - 30.92	FROM SSE 3% FROM SSW 24% FROM WSW 18% FROM WNW 39% FROM NNW 15%	2.4 - 8.9

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