DVIADEC95

c 1/3 #03

SA/AOC — Grp
57 — 2
73 — AREC
29 — 8
61B } AREE
61AU
44 — 3
— 3
52 — 3
38
61X, 61AA, 69AN, 69AT, 69AS,
61D, 61AV, 61AX, 61AX, 69F, 63S } AREE

U.S. Army Environmental Center

FORT DEVENS
FEASIBILITY STUDY
FOR GROUP 1A SITES

LOWER COLD SPRING BROOK
SITE INVESTIGATION REPORT
DATA ITEM A009

CONTRACT DAAA15-91-D-0008

U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND

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AEC Form 45, 1 Feb 93 replaces THAMA Form 45 which is obsolete.

LABORATORY QC EVALUATION

LOWER COLD SPRING BROOK ANALYTICAL DATA QUALITY EVALUATION

1.0 INTRODUCTION

This data quality evaluation assesses data from analysis of laboratory and field quality control samples, matrix spike and matrix spike duplicate (MS/MSD) samples, and field duplicate samples collected for the Lower Cold Spring Brook Site Investigation (SI) conducted at Fort Devens in September 1994. Attachment 1 to this appendix contains summaries of quality control sample data associated with a several subsequent samples collected by A.D. Little, Inc. in July 1995.

Soil, sediment, and surface water samples collected during the Lower Cold Spring Brook SI were analyzed by the U.S. Army Environmental Center (USAEC) performance demonstrated laboratory Environmental Science and Engineering, Inc. (ESE) of Gainesville, Florida for analytes on the Fort Devens Project Analyte List (PAL). Analytical results for PAL organics and inorganics are considered approximately equivalent to U.S. Environmental Protection Agency (USEPA) analytical support Level III quality data.

A list of USAEC performance demonstrated methods used by ESE during the SI is provided in Table C-1. The table includes a description of the methods used as well as equivalent USEPA methods, where they exist. The USAEC method numbers (e.g., method JS16) are specific to the project and to the laboratory doing the analyses. More detailed descriptions of the USAEC methods are presented in the Fort Devens Project Operations Plan (POP) (ABB-ES, 1993). As described in Section 2 of the text, the laboratory must document proficiency in performing each of the methods by meeting strict USAEC performance protocols. Once the laboratory has demonstrated proficiency, they are considered qualified to perform that particular method. As part of the performance demonstration process, certified reporting limits (CRLS) are established. CRLs for PAL compounds and elements are presented in Tables C-2 through C-6. Reporting limits for noncertified analyses are presented in Table C-7.

All data used in this evaluation came directly from the USAEC Installation Restoration Data Management Information System (IRDMIS). Samples discussed below pertain only to those collected for the Lower Cold Spring Brook SI sampling effort.

2.0 LABORATORY QUALITY CONTROL SAMPLES

Laboratory quality control samples included in the Lower Cold Spring Brook SI consisted of method blanks. Method blanks were analyzed to evaluate if sample processing and handling at the laboratory introduced contaminants to the samples. Both water and soil matrices were evaluated. Water method blanks were prepared by the laboratory from chemically pure deionized water, while a "Rocky Mountain blend" soil was used for soil method blanks. One method blank was analyzed in each analytical lot following the same procedure used to analyze field samples and tracked by lot number in IRDMIS.

Cold Spring Brook water method blanks were analyzed for the following parameters: inorganics, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), total organic carbon (TOC), total suspended solids (TSS), total petroleum hydrocarbons (TPHC), total hardness, and alkalinity. Soil method blanks were analyzed for inorganics, VOCs, SVOCs, pesticides, PCBs, TOC, and TPHC. To facilitate the assessment of potential laboratory contamination, method blank data were downloaded from the IRDMIS system and tabulated by lot number in Table C-8. Any compounds that were detected in the water method blanks were attributed to laboratory contamination.

Inorganics

Soil method blanks were analyzed for inorganics using USAEC methods JB01, JD15, JD17, JD19, JD24, JD25, and JS16. Water method blanks were analyzed using USAEC methods SB01, SD09, SD20, SD21, SD22, SD28 and SS10.

Lower Cold Spring Brook water and soil method blanks were tested for the 23 inorganics on the PAL:

- aluminum
- antimony
- arsenic
- barium
- beryllium
- cadmium
- calcium
- chromium
- cobalt
- copper
- iron
- lead
- magnesium
- manganese
- mercury
- nickel
- potassium
- selenium
- silver
- sodium
- thallium
- vanadium
- zinc

Two water method blanks were analyzed in conjunction with aqueous inorganic samples. None of the above elements were detected above respective CRLs in either of the two water method blanks.

Three soil method blanks were analyzed. Forty-eight of the seventy-two reported inorganic soil method blank results (67%) were below the CRL. Elements which were detected in the soil method blanks are presented in the following table.

SUMMARY OF DETECTED ELEMENTS IN SOIL METHOD BLANKS

ELEMENT	FREQUENCY OF DETECTION	CONCENTRATION RANGE (ug/g)
Aluminum	3/3	379 to 520
Barium	3/3	7.3 to 9.09
Calcium	3/3	220 to 258
Iron	3/3	548 to 839
Lead	3/3	0.426 to 0.724
Magnesium	3/3	113 to 141
Manganese	3/3	19.6 to 26.2
Potassium	3/3	135 to 179

The above detections are not believed to represent introductions from the laboratory. Instead, they are thought to be representative of concentrations of the respective elements in the soil used for the blanks. Soil method blanks analyzed in the past using this same soil type had the same elements detected and at similar concentrations.

VOCs

USAEC method LM19 was used to analyze one soil method blank for VOC contamination. There were no VOCs detected above CRLs in this blank. VOC contamination from the laboratory did not occur.

SVOCs

USAEC methods LM18 and UM18 were used to analyze soil and water method blanks, respectively, for SVOC contamination. Three soil and four water method blanks were analyzed for this evaluation. There were no SVOC compounds detected at concentrations above CRLs in any of the soil method blanks. The only SVOC detected in any of the water method blanks was mesityl oxide (4-methyl-3-penten-2-one). It was detected in one of four water method blanks at 3 ug/L. Mesityl oxide is often produced as an aldol condensation product of acetone in the laboratory. The presence of this compound in a method blank was likely due to this form of laboratory contamination.

Pesticides and PCBs

USAEC methods LH10 and UH13 were used to analyze soil and water method blanks, respectively, for pesticide contamination. USAEC methods LH13 and UH02 were used to determine PCB concentrations in soil and water method blanks. There were no pesticide or PCB compounds detected in concentrations above CRLs in either the soil or water method blanks.

Other Methods

Method blank data were also available for the following parameters: total hardness, TSS, TOC, TPHC, and alkalinity. Analytical results for all of the above parameters were below CRLs except for TSS and TPHC. Three of four method blanks had reported TSS concentrations below the CRL of 4,000 ug/L. TSS was reported at a concentration of 5,000 ug/L in the method blank associated with lot TEYX. This indicated that a small amount of TSS contamination was introduced into the method blank at the laboratory. Contamination of this magnitude is not believed to have affected the data quality of the TSS results.

There were two soil method blanks for which TPHC measurements were reported. One of these blanks had a result which was above the CRL of 28 ug/g. The concentration reported was 30 ug/g in lot ZERE. Based on method blank data, TPHC sample results at similar concentrations in soil samples may be false positives related to laboratory contamination.

3.0 FIELD QUALITY CONTROL

Three rinsate blanks and one trip blank were collected as field quality control samples. Rinsate blanks are collected by rinsing decontaminated sampling equipment (e.g., split spoons and trowels) with previously analyzed water and collecting the water in sample containers. The purpose of collecting rinsate blanks is to assess the effectiveness of decontamination procedures in removing target analytes from sampling apparatus, and to evaluate the potential for cross contamination of samples resulting from sampling equipment residual contamination during sample collection. Rinsate blanks are collected at a rate of one per 20 samples per decontamination event.

Trip blanks are prepared from analyte free water by the laboratory and shipped to the site with other VOC sample containers. One trip blanks is included with each shipment of samples scheduled for VOC analysis and accompanies field samples to be analyzed for VOCs during collection and shipping. The purpose of trip blanks is to assess the potential for contamination of samples with VOCs during handling and storage.

3.1 RINSATE BLANK RESULTS

The three rinsate blanks collected during the Lower Cold Spring Brook SI were assigned sample numbers SBK94577, SBK94578, and SBK94579. Rinsate blanks were analyzed for the following parameters: inorganics, VOCs, SVOCs, TSS, TOC, TPHC, alkalinity, and total hardness. Rinsate blank results are presented in Table C-9.

Inorganics

Rinsate blanks were analyzed for the 23 PAL inorganics. Eighty-eight of ninety-two concentrations (96%) for all of the elements reported in the rinsates were below respective CRLs. Concentrations of any elements detected in the rinsates are summarized in the following Table.

SUMMARY OF DETECTED ELEMENTS IN RINSATE BLANKS

ELEMENT DETECTED	FREQUENCY OF DETECTION	CONCENTRATION RANGE (ug/L)
Iron	1/3	65
Manganese	2/3	6.3 to 13
Sodium	1/3	562

The above detections represent results for all three of the rinsates. The frequency and concentrations of detected elements in the rinsate blanks indicate that decontamination procedures effectively removed residual inorganic contamination from the sampling equipment.

SVOCs

USAEC method UM18 was used to measure SVOCs in the three rinsate blanks. One SVOC contaminant, di-n-butyl phthalate, was reported in all three of the rinsates at concentrations ranging from 17 to 20 ug/L. Di-n-butyl phthalate is a member of the family of phthalate esters which have been classified by the USEPA as common laboratory contaminants. Similar concentrations observed in field samples may represent introduced contamination.

Pesticides and PCBs

USAEC methods UH13 and UH02 were used to assess whether there was pesticide /PCB contamination in the rinsate blank SBK94579. There were no pesticide or PCB compounds reported above CRL in this rinsate.

Other Methods

The rinsate blank SBK94577 was analyzed for TSS, alkalinity, and total hardness. The concentrations for all of these parameters were below respective CRLs. The rinsate blanks SBK94578 and SBK94579 were analyzed for TOC and TPHC. The concentrations for these parameters were also less than the CRLs in both rinsates.

3.2 TRIP BLANK RESULTS

One trip blank, TRP49800, was collected during the Cold Spring Brook SI sampling effort. The trip blank was analyzed for VOCs using USAEC method UM20. All trip blank results are presented in Table C-10. No VOCs were reported above CRLs. This indicates that sample integrity was maintained and that cross contamination did not occur.

4.0 MATRIX SPIKE SAMPLES

Matrix spike and matrix spike duplicate samples were collected at a rate of one per 20 environmental samples. The purpose of collecting these samples was to evaluate the accuracy and precision of the analytical method in the sample matrix and the effect of the sample matrix on the recovery of known concentrations of target analytes. MS/MSD sample results have been tabulated and are presented in Table C-11. Data have been segregated by method and spiked analyte to show recovery trends and to assess the accuracy of particular analyses. Matrix spike data have been paired with corresponding data for matrix spike duplicates to make recovery comparisons and evaluate the precision of measurement.

Recoveries of analytes were calculated by subtracting the concentration measured in the unspiked sample from the concentration measured in the spiked sample and then dividing by the spike concentration. The relative percent difference

(RPD) between recoveries for the MS and MSD samples was used to measure the analytical precision of the results. The RPDs were calculated as the difference between the measured MS and MSD recoveries divided by their average recovery and multiplied by 100. RPDs are included in Table C-11. The average, maximum and minimum recoveries for each method are also included as a way of measuring accuracy and trends.

MS/MSD analysis was performed on two soil samples and one water sample. The soil samples were DXCS2000 and DXCS0400. The water sample was WXCS0400. MS/MSD samples were analyzed for inorganics, VOCs, SVOCs, pesticides, PCBs, total hardness, alkalinity, TOC and TPHC. The criteria used for interpreting MS/MSD data are from the analytical USEPA Contract Laboratory Program (CLP) protocols and the Fort Devens POP, Volume III.

Inorganics

Matrix spike analysis for inorganics collected during the Lower Cold Spring Brook SI included an assessment of recoveries for the 23 inorganics on the PAL. Sample WXCS0400 was an unfiltered surface water sample. Water matrix spike results were evaluated based on USEPA CLP guidelines. A recovery of 75 to 125 percent is specified by these guidelines for inorganics (USEPA, 1989).

Matrix spike recoveries for forty of forty-four (91%) analyses met the EPA criteria. Elements for which recoveries did not meet this criteria were iron and antimony. The MS/MSD recoveries for iron were 74% and 63%. The RPD of these results is 17%. The recoveries for antimony were 39% and 36% with an RPD of 8%. These results suggest that antimony concentrations for water samples may be biased low based on the low matrix spike recoveries. Results for all other elements for the water sample did not appear to be affected by the matrix.

The soil inorganic matrix spike recoveries were also assessed using the USEPA CLP guideline for inorganics of 75 to 125 percent recovery. Seventy-nine percent of the calculated recoveries were within CLP limits for MS/MSD sample pairs. One hundred and sixty-two of one hundred eighty-eight total soil inorganic recoveries (86%) met this criteria. Elements for which MS/MSD recoveries were not within CLP limits for at least one sample are summarized in the following table.

ELEMENTS FOR WHICH USEPA RECOVERY CRITERIA WERE NOT MET

ELEMENT	SAMPLE ID	PERCENT RECOVERIES	RPD
Aluminum	DXCS0400 DXCS2000	59/0.6 0.6/0.6	196% 0.0%
Antimony	DXCS2000	75/71	5.3%
Iron	DXCS0400 DXCS2000	43/22 76/18	67% 123%
Manganese	DXCS0400	84/2.0	191%
Selenium	DXCS2000	70/63	9.8%

Recoveries for the following elements were *below* the USEPA CLP lower limit for the MS/MSD of at least one sample: aluminum, antimony, iron, and selenium. The RPDs between the MS and MSD were below 10% for antimony and selenium. This showed consistency for the results of these elements even though the recoveries did not meet EPA criteria. Corresponding sample results for these elements may be biased low due to matrix effects.

The RPDs for the other elements ranged from 66.5% to 196.1%. This indicated that there was more variability for recoveries of spikes of these elements. This variability may have been due to a lack of homogeneity of the soil matrix. Concentrations of aluminum, iron, and manganese in original samples were high compared to laboratory spike concentrations. No qualifications of results would be necessary based on USEPA guidance (USEPA, 1989).

VOCs

Matrix spike analysis for VOCs was based on MS/MSD results for one soil sample. This sample was identified as DXCS2000. VOCs contained in the spike included the following: 1,1-dichloroethene, benzene, chlorobenzene, toluene, and trichloroethene. Surrogate recoveries were included to provide additional data to make an assessment of the accuracy of the results. These surrogates included deuterated 1,2-dichloroethane, deuterated toluene and 4-bromofluorobenzene.

The USEPA CLP Statement of Work For Organics Analysis (USEPA, 1988) was used as a reference to assess VOC MS/MSD recoveries. Recovery limits specified in this document are summarized in the following table.

VOC MATRIX SPIKE RECOVERY LIMITS

COMPOUND	PERCENT RECOVERY LIMITS
1,1-Dichloroethene	59-172
Trichloroethene	62-137
Benzene	66-142
Toluene	59-139
Chlorobenzene	60-133

MS/MSD recoveries for all five of the VOCs in the above table were within the specified recovery limits. This indicated that there were no matrix effects observed for the VOC analyses.

VOC Surrogate Recoveries

Surrogates are compounds chemically similar to target compounds which were spiked into all samples to determine the accuracy of the method. Potential matrix effects can also be identified by the analysis of surrogate recoveries. VOC surrogate recoveries were tabulated and are presented in Table C-12. Assessments of VOC surrogate recoveries were based on limits specified in the Fort Devens POP, Volume III. These limits and surrogate recoveries for VOC field samples are presented in the following table.

VOC SURROGATE RECOVERIES VERSUS RECOVERY LIMITS

SURROGATE	WATER RECOVERY LIMITS	% WITHIN WATER LIMITS	SOIL RECOVERY LIMITS	% WITHIN SOIL LIMITS
1,2-Dichloroethane-D4	76-114	100	70-121	100
4-Bromofluorobenzene	86-115	0	74-121	67
Toluene-D8	88-110	100	81-117	22

Surrogate recoveries included in the above table represent four water results and eighteen soil results. The 4-bromofluorobenzene recoveries for water were 2 to 4% below the lower limit. The recoveries do not indicate problems with the accuracy of the method or matrix effects. A low percentage (22%) of toluene-d8 soil recoveries were within criteria. The majority of recoveries slightly exceeded the upper limit for this surrogate. The VOC surrogate data demonstrated that there were no matrix effects and that there was good accuracy for the method.

SVOCs

MS/MSD analysis for SVOCs was based on spike recoveries for two soil samples and one water sample. The two soil samples were DXCS0400 and DXCS2000. The water sample was WXCS0400. SVOC recoveries for both water and soil were assessed using criteria specified in the USEPA CLP Statement of Work For Organic Analyses (USEPA, 1988). A summary of recovery limits found in this document is included in the following table.

USEPA SVOC MATRIX SPIKE RECOVERY LIMITS

COMPOUND	SOIL PERCENT RECOVERY LIMITS	WATER PERCENT RECOVERY LIMITS
Phenol	26-90	12-89
2-Chlorophenol	25-102	27-123
1,4-Dichlorobenzene	28-104	36-97
1,2,4-Trichlorobenzene	38-107	39-98
4-Chloro-3-methylphenol	26-103	23-97
Acenaphthene	31-137	46-118
4-Nitrophenol	11-114	10-80
2,4-Dinitrotoluene	28-89	24-96
Pentachlorophenol	17-109	9-103
Pyrene	35-142	26-127

The recoveries for the soil sample DXCS0400 were within CLP limits for all SVOCs. The recoveries for several SVOCs exceeded CLP limits for the sample DXCS2000. These compounds are identified in the following table.

SVOC MATRIX SPIKE RECOVERIES

COMPOUND	MS/MSD RECOVERY
2-Chlorophenol	154/154
4-Nitrophenol	231/231
Acenaphthene	149/149
Pentachlorophenol	231/231
Pyrene	134/134

Based on high MS/MSD recoveries, the sample concentrations of the compounds found in the above table for DXCS2000 may be biased high.

The SVOC recoveries for the water sample WXCS0400 were within respective CLP limits for all compounds except phenol. The MS/MSD recoveries for this compound were 140% and 130%. Overall, MS/MSD results for WXCS0400 showed that there were no matrix effects for SVOCs in an aqueous media.

SVOC Surrogate Recoveries

Surrogate recoveries for SVOCs were assessed using guidelines specified in the Fort Devens POP, Volume III. These guidelines are summarized in the following table. Also included in the table are the percentage of surrogate recoveries from field samples that were within the specified limits. Individual SVOC surrogate recoveries are presented in Table C-13.

SVOC SURROGATE RECOVERIES VERSUS RECOVERY LIMITS

SVOC SURROGATE	WATER RECOVERY LIMITS	% WITHIN WATER LIMITS	SOIL RECOVERY LIMITS	% WITHIN SOIL LIMITS
2-Fluorophenol	21-100	81	25-121	79
Phenol-D6	10-94	83	24-113	91
2,4,6-Tribromophenol	10-123	100	19-122	98
Nitrobenzene-D5	35-114	100	23-120	98
2-Fluorobiphenyl	43-116	100	30-115	100
Terphenyl-D14	33-141	100	18-137	100

Surrogate spike recovery analysis for SVOCs was based on seventy-two water results and eighty soil results. SVOC surrogate recoveries demonstrate that there were no matrix effects seen and that there was good accuracy shown for the SVOC method.

Pesticides and PCBs

The soil sample DXCS2000 was used to observe matrix effects for pesticide and PCB compounds. The EPA CLP advisory limits of 60 to 150% recovery were used to assess matrix effects. Pesticide and PCB recoveries were within these limits for all compounds.

Other Methods

Other methods for which MS/MSD data were available included TOC and TPHC.

Two sediment samples, DXCS0400 and DXCS2000, were used to collect MS/MSD data for TOC. TOC spike recoveries ranged from 85 to 171%. The RPDs for DXCS2000 were 78% and 67%. The results for these samples did not show good precision between the MS and MSD. Because of the lack of agreement for the MS/MSDs, sediment TOC results should be considered estimated concentrations.

The sediment samples DXCS0400 and DXCS2000 were used as MS/MSD samples for TPHC. Recoveries for DXCS0400 were 92% and 90% while those for DXCS2000 were 133% and 89%. The RPD for the MS/MSD results for DXCS0400 was 2.8% versus an RPD of 40% for the MS/MSD results of DXCS2000.

5.0 FIELD DUPLICATE SAMPLES

Field duplicate samples were collected at the rate of one per twenty field samples to assess the effects of sampling and analytical procedures on the precision of results. USEPA Region I Guidelines were used to make assessments regarding the reproducibility of the results based on the RPD between the results reported for the primary and duplicate samples. Duplicate data are presented in Table C-14. The sample ID differentiates duplicates from other samples by using a "D" as the second character in the identification code.

A total of three field duplicate samples were collected during Lower Cold Spring Brook SI. There were two sediment samples and one surface water sample. The sediment samples are DXCS0500 and DXCS2000. The surface water sample is WXCS0500. Field duplicate samples were analyzed for inorganics, VOCs, SVOCs, and TOC.

Inorganics

Duplicate sets of soil and water samples were analyzed for the 23 PAL inorganics. The USEPA Region I criteria for the RPD of inorganic duplicate pair soil samples is 50 percent. Twenty-nine of forty-five (65%) inorganic soil duplicate pair results had RPDs that were within USEPA guidelines. The RPDs for the following elements met USEPA Region I criteria for all soil duplicates: antimony, arsenic, chromium, lead, mercury, potassium, silver, and thallium. The precision of results for these elements was good. The RPDs of duplicate pair concentrations exceeded USEPA criteria for the elements listed in the following table.

DUPLICATE INORGANIC SOIL DATA OUTSIDE USEPA GUIDELINES

ELEMENT	SAMPLE ID	CONCENTRATION (ug/g)	RPD
Aluminum	DXCS0500	14000/2700	136%
Barium	DXCS0500	< 5.2/ 210	190%
Beryllium	DXCS0500	3.4/< 0.5	148%
Cadmium	DXCS0500	6.4/< 0.7	161%
Calcium	DXCS0500 DXCS2000	6500/1000 4900/2800	146% 53%
Cobalt	DXCS0500	21/120	140%
Copper	DXCS0500	< 0.97/28	187%
Iron	DXCS0500	28000/4800	142%
Magnesium	DXCS0500	1400/< 100	173%
Manganese	DXCS0500	5600/840	147%

ELEMENT	SAMPLE ID	CONCENTRATION (ug/g)	RPD
Nickel	DXCS0500	23/150	145%
Selenium	DXCS0500	2.2/< 0.25	159%
Sodium	DXCS0500	2000/< 100	181%
Vanadium	DXCS0500	< 3.4/26	153%
Zinc	DXCS0500	600/110	141%

Most of the sample results for which the RPD did not meet USEPA criteria were associated with DXCS0500. The results for this sample did not show good precision for inorganic results. This may have been due to a lack of homogeneity of inorganics throughout the sample matrix. Sample results for inorganics in DXCS0500 should be considered estimated because of the uncertainties associated with the duplicate data.

USEPA Region I criteria for duplicate pairs of water samples is an RPD of no greater than 30%. Fourteen of twenty-three (61%) RPDs for sample WXCS0500 met USEPA Region I criteria. Elements for which this criteria was not met are summarized in the following table.

DUPLICATE INORGANIC WATER DATA OUTSIDE USEPA GUIDELINES

ELEMENT	CONCENTRATION (ug/L)	RPD
Aluminum	4700/2000	83%
Arsenic	5.5/14	87%
Barium	136/65	71%
Cobalt	44/< 25	56%
Iron	14000/5800	83%

ELEMENT	CONCENTRATION (ug/L)	RPD
Lead	27/10	92%
Manganese	6100/1900	103%
Potassium	2500/1800	32%
Zinc	190/110	50%

There is low precision for the aqueous results for elements listed in the above table. Reported concentrations of these elements for WXCS0500 should be considered estimated.

VOCs

The sediment sample DXCS2000 and its associated duplicate were used to measure the precision of VOC analysis using method LM19. The USEPA Region I criteria which was used to measure this precision is 50% RPD. The RPDs for all VOCs were within the USEPA criteria except for toluene. The RPD of the toluene results for DXCS2000 was 69%. In general, the VOC results indicated that there was little variability for reported concentrations.

SVOCs

Two soil samples and their associated duplicates were used to measure the precision of the SVOC analysis using method LM18. The RPDs for the majority of SVOCs were within the USEPA Region I guideline of 50%. Compounds which exceeded this limit are presented in the following table.

DUPLICATE SVOC SOIL DATA OUTSIDE USEPA GUIDELINES

COMPOUND	SAMPLE ID	RPD
Benzo[k]fluoranthene	DXCS0500	152%
Chrysene	DXCS0500	155%
Fluoranthene	DXCS2000	100%
Phenanthrene	DXCS2000	86%

It should be noted that a 1:10 dilution was performed for one sample of the duplicate pair DXCS2000. These compounds were not detected in the sample, but large differences were reported for the CRLs. This resulted in high RPD calculations for SVOC results of this duplicate. The high RPD results do not indicate a lack of precision for these results. Based on the results for polynuclear aromatic hydrocarbons, concentrations for these compounds in soil should be considered estimated.

TABLE C-1

LIST OF AEC METHODS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

USATHAMA METHOD NUMBER	COMPARABLE EPA METHOD NUMBER	METHOD DESCRIPTION
JB01	7471	MERCURY IN SOIL BY CVAA.
JD15	7740	SELENIUM IN SOIL BY GFAA.
JD16	7911	VANADIUM IN SOIL BY GFAA.
JD17	7421	LEAD IN SOIL BY GFAA.
JD18	7761	SILVER IN SOIL BY GFAA.
JD19	7060	ARSENIC IN SOIL BY GFAA.
JD24	7841	THALLIUM IN SOIL BY GFAA
JS16	6010	METALS IN SOIL BY ICP.
LM18	8270	EXTRACTABLE ORGANICS IN SOIL BY GC/MS.
SB01	245.1	MERCURY IN WATER BY CVAA.
SD09	279.2	THALLIUM IN WATER BY GFAA
SD20	239.2	LEAD IN WATER BY GFAA.
SD21	270.2	SELENIUM IN WATER BY GFAA.
SD22	206.2	ARSENIC IN WATER BY GFAA.
SD23	272.2	SILVER IN WATER BY GFAA.
SD28	204.2	ANTIMONY IN WATER BY GFAA
SS10	200.7	METALS IN WATER BY ICAP.
UM18	625	EXTRACTABLE ORGANICS IN WATER BY GC/MS.
N/A	415.1	TOTAL ORGANIC CARBON
N/A	160.1	TOTAL DISSOLVED SOLIDS
N/A	160.2	TOTAL SUSPENDED SOLIDS
N/A	130.2	HARDNESS
N/A	310.1	ALKALINITY

TABLE C-2

SUMMARY OF CERTIFIED REPORTING LIMITS
SEMIVOLATILE ORGANIC COMPOUNDS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

	CERTIFIED REPORTING LIMIT	
COMPOUND	USATHAMA METHOD UM20 WATER ANALYSIS (ug/L)	USATHAMA METHOD LM19 SOIL ANALYSIS (ug/g)
1,2,4-Trichlorobenzene	1.8	0.04
1,2-Dichlorobenzene	1.7	0.11
1,3-Dichlorobenzene	1.7	0.13
1,4-Dichlorobenzene	1.7	0.098
2,4,5-Trichlorophenol	5.2	0.1
2,4-Dichlorophenol	2.9	0.18
2,4-Dimethylphenol	5.8	0.69
2,4-Dinitrophenol	21	1.2
2,4-Dinitrotoluene	4.5	0.14
2-Chlorophenol	0.99	0.06
2-Chloronaphthalene	0.5	0.036
2-Methylnaphthalene	1.7	0.049
2-Nitroaniline	4.3	0.062
2-Methylphenol	3.9	0.029
2-Nitrophenol	3.7	0.14
3,3-Dichlorobenzidine	12	6.3
3-Nitroaniline	4.9	0.45
2-Methyl-4,6-Dinitrophenol	17	0.55
4-Bromophenylphenyl ether	4.2	0.033
3-Methyl-4-Chlorophenol	4.0	0.095
4-Chlorophenylphenyl ether	5.1	0.033
4-Methylphenol	0.52	0.24
4-Nitroaniline	5.2	0.41
4-Nitrophenol	12	1.4
Acenaphthene	1.7	0.036
Acenaphthylene	0.5	0.033
Anthracene	0.5	0.033
bis (2-Chlorethoxy) methane	1.5	0.059
bis (2-Chloroisopropyl) ether	5.3	0.2
bis (2-Chloroethyl) ether	1.9	0.033
bis (2-Ethylhexyl) phthalate	4.8	0.62
Benzo(a)anthracene	1.6	0.17
Benzo(a)pyrene	4.7	0.25
Benzo(b)fluoranthene	5.4	0.21
Butylbenzylphthalate	3.4	0.17

SUMMARY OF CERTIFIED REPORTING LIMITS
SEMIVOLATILE ORGANIC COMPOUNDS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

COMPOUND	CERTIFIED REPORTING LIMIT	
	USATHAMA METHOD UM18 WATER ANALYSIS (ug/L)	USATHAMA METHOD LM18 SOIL ANALYSIS (ug/g)
Benzo(g,h,i)perylene	6.1	0.25
Benzo(k)fluoranthene	0.87	0.066
Benzyl Alcohol	0.72	0.19
Butylbenzylphthalate	3.4	0.17
Chrysene	2.4	0.12
Hexachlorobenzene	1.6	0.033
Hexachlorocyclopentadiene	8.6	6.2
Hexachloroethane	1.5	0.15
Dibenz(a,h)anthracene	6.5	0.21
Dibenzofuran	1.7	0.035
Diethylphthalate	2.0	0.24
Dimethylphthalate	1.5	0.17
Di-n-butylphthalate	3.7	0.061
Fluoranthene	3.3	0.068
Fluorene	3.7	0.033
Hexachlorobutadiene	3.4	0.23
Indeno(1,2,3-cd)pyrene	8.6	0.29
Isophorone	4.8	0.033
Naphthalene	0.5	0.037
Nitrobenzene	0.5	0.045
N-Nitroso di-n-propylamine	4.4	0.2
N-Nitrosodiphenylamine	3.0	0.19
Pentachlorophenol	18	1.3
Phenanthrene	0.5	0.033
Phenol	9.2	0.11
Pyrene	2.8	0.033
2,4,6-Trichlorophenol	4.2	0.17
2,6-Dinitrotoluene	0.79	0.085
4-Chloroaniline	7.3	0.81
Di-n-octylphthalate	15	0.19
Carbazole	N/A	N/A

TABLE C-3

SUMMARY OF CERTIFIED REPORTING LIMITS
OF INORGANICS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

PARAMETER	MATRIX	USATHAMA METHOD NUMBER	METHOD DESCRIPTION	CERTIFIED REPORTING LIMIT
ALUMINUM (Al)	WATER	SS10	ICP	141 ug/L
	SOIL	JS16	ICP	2.35 ug/g
ANTIMONY (Sb)	WATER	SS10	ICP	38 ug/L
	SOIL	JS16	ICP	7.14 ug/g
	WATER	SD28	GFAA	3.03 ug/L
	SOIL	JD25	GFAA	1.09 ug/g
ARSENIC (As)	WATER	SD22	GFAA	2.54 ug/L
	SOIL	JD19	GFAA	0.25 ug/g
BARIUM (Ba)	WATER	SS10	ICP	5.0 ug/L
	SOIL	JS16	ICP	5.18 ug/g
BERYLLIUM (Be)	WATER	SS10	ICP	5.0 ug/L
	SOIL	JS16	ICP	0.50 ug/g
CADMIUM (Cd)	WATER	SS10	ICP	4.01 ug/L
	SOIL	JS16	ICP	0.70 ug/g
CALCIUM (Ca)	WATER	SS10	ICP	500 ug/L
	SOIL	JS16	ICP	100 ug/g
CHROMIUM (Cr)	WATER	SS10	ICP	6.02 ug/L
	SOIL	JS16	ICP	4.05 ug/g
COBALT (Co)	WATER	SS10	ICP	25 ug/L
	SOIL	JS16	ICP	1.42 ug/g
COPPER (Cu)	WATER	SS10	ICP	8.09 ug/L
	SOIL	JS16	ICP	0.965 ug/g
IRON (Fe)	WATER	SS10	ICP	42.7 ug/L
	SOIL	JS16	ICP	3.68 ug/g
LEAD (Pb)	WATER	SS10	ICP	18.6 ug/L
	SOIL	JS16	ICP	10.5 ug/g
	WATER	SD20	GFAA	1.26 ug/L
	SOIL	JD17	GFAA	0.177 ug/g
MAGNESIUM (Mg)	WATER	SS10	ICP	500 ug/L
	SOIL	JS16	ICP	100 ug/g
MANGANESE (Mn)	WATER	SS10	ICP	2.75 ug/L
	SOIL	JS16	ICP	2.05 ug/g
MERCURY (Hg)	WATER	SB01	CVAA	0.243 ug/L
	SOIL	JB01	CVAA	0.05 ug/g
NICKEL (Ni)	WATER	SS10	ICP	34.3 ug/L
	SOIL	JS16	ICP	1.71 ug/g

SUMMARY OF CERTIFIED REPORTING LIMITS
OF INORGANICS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

PARAMETER	MATRIX	USATHAMA METHOD NUMBER	METHOD DESCRIPTION	CERTIFIED REPORTING LIMIT
POTASSIUM (K)	WATER	SS10	ICP	375 ug/L
	SOIL	JS16	ICP	100 ug/g
SELENIUM (Se)	WATER	SD21	GFAA	3.02 ug/L
	SOIL	JS16	GFAA	2.42 ug/g
SILVER (Ag)	WATER	SD23	GFAA	0.25 ug/L
	SOIL	JD18	GFAA	.025 ug/g
	WATER	SS10	ICP	4.60 ug/L
	SOIL	JS16	ICP	0.589 ug/g
SODIUM (Na)	WATER	SS10	ICP	500 ug/L
	SOIL	JS16	ICP	100 ug/g
THALLIUM (Tl)	WATER	SD09	GFAA	6.99 ug/L
	SOIL	JD24	GFAA	6.62 ug/g
TIN (Sn)	WATER	SS10	ICP	47.1 ug/L
	SOIL	JS16	ICP	5 ug/g
VANADIUM (V)	WATER	SS10	ICP	11.0 ug/L
	SOIL	JS16	ICP	3.39 ug/g
ZINC (Zn)	WATER	SS10	ICP	21.1 ug/L
	SOIL	JS16	ICP	8.03 ug/g

TABLE C-4

SUMMARY OF CERTIFIED REPORTING LIMITS
VOLATILE ORGANIC COMPOUNDS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

	CERTIFIED REPORTING LIMIT	
COMPOUND	USATHAMA METHOD UM20 WATER ANALYSIS (ug/L)	USATHAMA METHOD LM19 SOIL ANALYSIS (ug/g)
1,1,1-Trichloroethane	0.5	0.0044
1,1,2-Trichloroethane	1.2	0.0054
1,1-Dichloroethene	0.5	0.0039
1,1-Dichloroethane	0.68	0.0023
1,2-Dichloroethene (total)	0.5	0.0030
1,2-Dichloroethane	0.5	0.0017
1,2-Dichloropropane	0.5	0.0029
Acetone	13	0.017
Bromodichloromethane	0.59	0.0029
Cis-1,3-dichloropropene	0.58	0.0032
Vinyl acetate	8.3	0.0032
Vinyl Chloride	2.6	0.0062
Chloroethane	1.9	0.012
Benzene	0.5	0.0015
Carbon Tetrachloride	0.58	0.007
Methylene Chloride	2.3	0.012
Bromomethane	5.8	0.0057
Chlormethane	3.2	0.0088
Bromoform	2.6	0.0069
Dichloromethane	2.3	0.012
Chloroform	0.5	0.00087
Chlorobenzene	0.5	0.00086
Carbon Disulfide	0.5	0.0044
Dibromochloromethane	0.67	0.0031
Ethylbenzene	0.5	0.0017
Toluene	0.5	0.00078
Methyl Ethyl Ketone	6.4	0.070
Methyl Isobutyl Ketone	3.0	0.027
Methyl-n-Butyl Ketone	3.6	0.032
Styrene	0.5	0.0026
Trans-1,3-Dichloropropene	0.7	0.0028
1,1,2,2-Tetrachloroethane	0.51	0.0024
Tetrachloroethane	1.6	0.00081
Trichloroethene	0.5	0.0028
Xylene (total)	0.84	0.0015

TABLE C-5

SUMMARY OF CERTIFIED REPORTING LIMITS
PESTICIDE COMPOUNDS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

COMPOUND	CERTIFIED REPORTING LIMIT USATHAMA METHOD UH13 WATER ANALYSIS (ug/L)	USATHAMA METHOD LH10 SOIL ANALYSIS (ug/g)
BHC, A	0.039	0.00907
Endosulfan, A	0.023	0.00602
Aldrin	0.092	0.00729
BHC, B	0.024	0.00257
Endosulfan, B	0.023	0.00663
BHC, D	0.029	0.00555
Dieldrin	0.024	0.00629
Endrin	0.024	0.00657
Endrin Aldehyde	0.029	0.0240
Endosulfan Sulfate	0.079	0.00763
Heptachlor	0.042	0.00618
Heptachlor Epoxide	0.025	0.00622
Lindane	0.051	0.00657
Methoxychlor	0.057	0.0711
DDD-PP	0.023	0.00826
DDE-PP	0.027	0.00765
DDT-PP	0.034	0.00739
Toxaphene	1.350	0.444
Chlordane-alpha	0.075	0.005
Chlordane-gamma	0.075	0.005

TABLE C-6

SUMMARY OF CERTIFIED REPORTING LIMITS
OF PCB COMPOUNDS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

COMPOUND	CERTIFIED REPORTING LIMIT USATHAMA METHOD UH02 WATER ANALYSIS (ug/L)	 USATHAMA METHOD LH13 SOIL ANALYSIS (ug/g)
PCB 1016	0.16	0.067
PCB 1221	0.16	0.067
PCB 1232	0.16	0.067
PCB 1242	0.19	0.082
PCB 1248	0.19	0.082
PCB 1254	0.19	0.082
PCB 1260	0.19	0.082

TABLE C–7

SUMMARY OF CERTIFIED REPORTING LIMITS
OF MISCELLANEOUS METHODS
COLD SPRING BROOK SAMPLES
FORT DEVENS, MA

PARAMETER	MATRIX	USATHAMA METHOD NUMBER	METHOD DESCRIPTION	CERTIFIED REPORTING LIMIT
TOTAL ORGANIC CARBON	WATER SOIL	NO CERTIFIED METHOD	EPA METHOD 415.1 GRAVIMETRIC	1000 ug/L 100 ug/g
ALKALINITY	WATER	NO CERTIFIED METHOD	EPA METHOD 310.1	5000 ug/L
HARDNESS	WATER		EPA METHOD 130.2	1000 ug/L
TOTAL SUSPENDED SOLIDS	WATER	NO CERTIFIED METHOD	EPA METHOD 160.2	4000 ug/L
TOTAL PETROLEUM HYDROCARBONS	WATER	NO CERTIFIED METHOD	EPA METHOD 418.1	180 ug/L

TABLE C-8

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
1302	TECY	HARD				30-SEP-94	30-SEP-94	<	1000	UGL	
	TEDY	HARD				30-SEP-94	30-SEP-94	<	1000	UGL	
1602	TEAY	TSS				28-SEP-94	28-SEP-94	<	4000	UGL	
	TEPY	TSS				10-OCT-94	10-OCT-94	<	4000	UGL	
	TEYX	TSS				26-SEP-94	26-SEP-94		5000	UGL	
	TEZX	TSS				27-SEP-94	27-SEP-94	<	4000	UGL	
3101	TEBY	ALK				29-SEP-94	29-SEP-94	<	5000	UGL	
	TEGY	ALK				04-OCT-94	04-OCT-94	<	5000	UGL	
	TEOY	ALK				12-OCT-94	12-OCT-94	<	5000	UGL	
9030	ZEPE	SULFID				11-OCT-94	12-OCT-94	<	.5	UGG	
	ZEPE	SULFID				11-OCT-94	12-OCT-94	<	.5	UGG	
9045	TEIY	PH				05-OCT-94	05-OCT-94		8.38		
	TEIY	PH				05-OCT-94	05-OCT-94		8.31		
9060	ZEQE	TOC				06-OCT-94	06-OCT-94	<	360	UGG	
	ZETE	TOC				07-OCT-94	07-OCT-94	<	360	UGG	
	ZEUE	TOC				10-OCT-94	10-OCT-94	<	360	UGG	
	ZEXE	TOC				18-OCT-94	18-OCT-94	<	360	UGG	
	ZEXE	TOC				18-OCT-94	18-OCT-94	<	360	UGG	
9071	ZERE	TPHC				12-OCT-94	13-OCT-94		30	UGG	
	ZESE	TPHC				13-OCT-94	14-OCT-94	<	28.2	UGG	
JB01	QHDC	HG				06-OCT-94	06-OCT-94	<	.05	UGG	
	QHEC	HG				13-OCT-94	13-OCT-94	<	.05	UGG	
	QHIC	HG				20-OCT-94	20-OCT-94	<	.05	UGG	
	QHNC	HG				21-OCT-94	21-OCT-94	<	.05	UGG	
JD15	MBBC	SE				11-OCT-94	13-OCT-94	<	.25	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
JD15	MBCC	SE				13-OCT-94	19-OCT-94	<	.25	UGG	
	MBGC	SE				19-OCT-94	29-OCT-94	<	.25	UGG	
JD17	OBAC	PB				11-OCT-94	13-OCT-94		.426	UGG	
	OBBC	PB				13-OCT-94	19-OCT-94		.623	UGG	
	OBFC	PB				19-OCT-94	25-OCT-94		.724	UGG	
JD19	QBBC	AS				11-OCT-94	13-OCT-94	<	.25	UGG	
	QBCC	AS				13-OCT-94	18-OCT-94	<	.25	UGG	
	QBGC	AS				19-OCT-94	26-OCT-94	<	.25	UGG	
JD24	RBHA	TL				11-OCT-94	13-OCT-94	<	.5	UGG	
	RBIA	TL				13-OCT-94	19-OCT-94	<	.5	UGG	
	RBJA	TL				19-OCT-94	25-OCT-94	<	.5	UGG	
JD25	SBTA	SB				11-OCT-94	18-OCT-94	<	1.09	UGG	
	SBUA	SB				13-OCT-94	20-OCT-94	<	1.09	UGG	
	SBVA	SB				19-OCT-94	27-OCT-94	<	1.09	UGG	
JS16	UBCD	AG				19-OCT-94	20-OCT-94	<	.589	UGG	
	UBCD	AL				19-OCT-94	20-OCT-94		520	UGG	
	UBCD	BA				19-OCT-94	20-OCT-94		9.09	UGG	
	UBCD	BE				19-OCT-94	20-OCT-94	<	.5	UGG	
	UBCD	CA				19-OCT-94	20-OCT-94		258	UGG	
	UBCD	CD				19-OCT-94	20-OCT-94	<	.7	UGG	
	UBCD	CO				19-OCT-94	20-OCT-94	<	1.42	UGG	
	UBCD	CR				19-OCT-94	20-OCT-94	<	4.05	UGG	
	UBCD	CU				19-OCT-94	20-OCT-94	<	.965	UGG	
	UBCD	FE				19-OCT-94	20-OCT-94		839	UGG	
	UBCD	K				19-OCT-94	20-OCT-94		179	UGG	
	UBCD	MG				19-OCT-94	20-OCT-94		141	UGG	
	UBCD	MN				19-OCT-94	20-OCT-94		26.2	UGG	
	UBCD	NA				19-OCT-94	20-OCT-94	<	100	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
JS16	UBCD	NI				19-OCT-94	20-OCT-94	<	1.71	UGG	
	UBCD	V				19-OCT-94	20-OCT-94	<	3.39	UGG	
	UBCD	ZN				19-OCT-94	20-OCT-94	<	8.03	UGG	
	UBVC	AG				04-OCT-94	06-OCT-94	<	.589	UGG	
	UBVC	AL				04-OCT-94	06-OCT-94		379	UGG	
	UBVC	BA				04-OCT-94	06-OCT-94		7.99	UGG	
	UBVC	BE				04-OCT-94	06-OCT-94	<	.5	UGG	
	UBVC	CA				04-OCT-94	06-OCT-94		220	UGG	
	UBVC	CD				04-OCT-94	06-OCT-94	<	.7	UGG	
	UBVC	CO				04-OCT-94	06-OCT-94	<	1.42	UGG	
	UBVC	CR				04-OCT-94	06-OCT-94	<	4.05	UGG	
	UBVC	CU				04-OCT-94	06-OCT-94	<	.965	UGG	
	UBVC	FE				04-OCT-94	06-OCT-94		548	UGG	
	UBVC	K				04-OCT-94	06-OCT-94		137	UGG	
	UBVC	MG				04-OCT-94	06-OCT-94		113	UGG	
	UBVC	MN				04-OCT-94	06-OCT-94		19.6	UGG	
	UBVC	NA				04-OCT-94	06-OCT-94	<	100	UGG	
	UBVC	NI				04-OCT-94	06-OCT-94	<	1.71	UGG	
	UBVC	PB				04-OCT-94	06-OCT-94	<	10.5	UGG	
	UBVC	V				04-OCT-94	06-OCT-94	<	3.39	UGG	
	UBVC	ZN				04-OCT-94	06-OCT-94	<	8.03	UGG	
	UBXC	AG				07-OCT-94	10-OCT-94	<	.589	UGG	
	UBXC	AL				07-OCT-94	10-OCT-94		452	UGG	
	UBXC	BA				07-OCT-94	10-OCT-94		7.3	UGG	
	UBXC	BE				07-OCT-94	10-OCT-94	<	.5	UGG	
	UBXC	CA				07-OCT-94	10-OCT-94		238	UGG	
	UBXC	CD				07-OCT-94	10-OCT-94	<	.7	UGG	
	UBXC	CO				07-OCT-94	10-OCT-94	<	1.42	UGG	
	UBXC	CR				07-OCT-94	10-OCT-94	<	4.05	UGG	
	UBXC	CU				07-OCT-94	10-OCT-94	<	.965	UGG	
	UBXC	FE				07-OCT-94	10-OCT-94		753	UGG	
	UBXC	K				07-OCT-94	10-OCT-94		135	UGG	
	UBXC	MG				07-OCT-94	10-OCT-94		130	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
JS16	UBXC	MN				07-OCT-94	10-OCT-94		21	UGG	
	UBXC	NA				07-OCT-94	10-OCT-94	<	100	UGG	
	UBXC	NI				07-OCT-94	10-OCT-94	<	1.71	UGG	
	UBXC	PB				07-OCT-94	10-OCT-94	<	10.5	UGG	
	UBXC	V				07-OCT-94	10-OCT-94	<	3.39	UGG	
	UBXC	ZN				07-OCT-94	10-OCT-94	<	8.03	UGG	
LH10	UFCB	ABHC				27-SEP-94	04-OCT-94	<	.00907	UGG	
	UFCB	ACLDAN				27-SEP-94	04-OCT-94	<	.005	UGG	
	UFCB	AENSLF				27-SEP-94	04-OCT-94	<	.00602	UGG	
	UFCB	ALDRN				27-SEP-94	04-OCT-94	<	.00729	UGG	
	UFCB	BBHC				27-SEP-94	04-OCT-94	<	.00257	UGG	
	UFCB	BENSLF				27-SEP-94	04-OCT-94	<	.00663	UGG	
	UFCB	DBHC				27-SEP-94	04-OCT-94	<	.00555	UGG	
	UFCB	DLDRN				27-SEP-94	04-OCT-94	<	.00629	UGG	
	UFCB	ENDRN				27-SEP-94	04-OCT-94	<	.00657	UGG	
	UFCB	ENDRNA				27-SEP-94	04-OCT-94	<	.024	UGG	
	UFCB	ENDRNK				27-SEP-94	04-OCT-94	<	.024	UGG	
	UFCB	ESFSO4				27-SEP-94	04-OCT-94	<	.00763	UGG	
	UFCB	GCLDAN				27-SEP-94	04-OCT-94	<	.005	UGG	
	UFCB	HPCL				27-SEP-94	04-OCT-94	<	.00618	UGG	
	UFCB	HPCLE				27-SEP-94	04-OCT-94	<	.0062	UGG	
	UFCB	ISODR				27-SEP-94	04-OCT-94	<	.00461	UGG	
	UFCB	LIN				27-SEP-94	04-OCT-94	<	.00638	UGG	
	UFCB	MEXCLR				27-SEP-94	04-OCT-94	<	.0711	UGG	
	UFCB	PPDDD				27-SEP-94	04-OCT-94	<	.00826	UGG	
	UFCB	PPDDE				27-SEP-94	04-OCT-94	<	.00765	UGG	
	UFCB	PPDDT				27-SEP-94	04-OCT-94	<	.00707	UGG	
	UFCB	TXPHEN				27-SEP-94	04-OCT-94	<	.444	UGG	
	UFZA	ABHC				22-SEP-94	28-SEP-94	<	.00907	UGG	
	UFZA	ACLDAN				22-SEP-94	28-SEP-94	<	.005	UGG	
	UFZA	AENSLF				22-SEP-94	28-SEP-94	<	.00602	UGG	
	UFZA	ALDRN				22-SEP-94	28-SEP-94	<	.00729	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LH10	UFZA	BBHC				22-SEP-94	28-SEP-94	<	.00257	UGG	
	UFZA	BENSLF				22-SEP-94	28-SEP-94	<	.00663	UGG	
	UFZA	DBHC				22-SEP-94	28-SEP-94	<	.00555	UGG	
	UFZA	DLDRN				22-SEP-94	28-SEP-94	<	.00629	UGG	
	UFZA	ENDRN				22-SEP-94	28-SEP-94	<	.00657	UGG	
	UFZA	ENDRNA				22-SEP-94	28-SEP-94	<	.024	UGG	
	UFZA	ENDRNK				22-SEP-94	28-SEP-94	<	.024	UGG	
	UFZA	ESFSO4				22-SEP-94	28-SEP-94	<	.00763	UGG	
	UFZA	GCLDAN				22-SEP-94	28-SEP-94	<	.005	UGG	
	UFZA	HPCL				22-SEP-94	28-SEP-94	<	.00618	UGG	
	UFZA	HPCLE				22-SEP-94	28-SEP-94	<	.0062	UGG	
	UFZA	ISODR				22-SEP-94	28-SEP-94	<	.00461	UGG	
	UFZA	LIN				22-SEP-94	28-SEP-94	<	.00638	UGG	
	UFZA	MEXCLR				22-SEP-94	28-SEP-94	<	.0711	UGG	
	UFZA	PPDDD				22-SEP-94	28-SEP-94	<	.00826	UGG	
	UFZA	PPDDE				22-SEP-94	28-SEP-94	<	.00765	UGG	
	UFZA	PPDDT				22-SEP-94	28-SEP-94	<	.00707	UGG	
	UFZA	TXPHEN				22-SEP-94	28-SEP-94	<	.444	UGG	
LH16	NGEB	PCB016				22-SEP-94	29-SEP-94	<	.0666	UGG	
	NGEB	PCB221				22-SEP-94	29-SEP-94	<	.082	UGG	
	NGEB	PCB232				22-SEP-94	29-SEP-94	<	.082	UGG	
	NGEB	PCB242				22-SEP-94	29-SEP-94	<	.082	UGG	
	NGEB	PCB248				22-SEP-94	29-SEP-94	<	.082	UGG	
	NGEB	PCB254				22-SEP-94	29-SEP-94	<	.082	UGG	
	NGEB	PCB260				22-SEP-94	29-SEP-94	<	.0804	UGG	
	NGHB	PCB016				27-SEP-94	04-OCT-94	<	.0666	UGG	
	NGHB	PCB221				27-SEP-94	04-OCT-94	<	.082	UGG	
	NGHB	PCB232				27-SEP-94	04-OCT-94	<	.082	UGG	
	NGHB	PCB242				27-SEP-94	04-OCT-94	<	.082	UGG	
	NGHB	PCB248				27-SEP-94	04-OCT-94	<	.082	UGG	
	NGHB	PCB254				27-SEP-94	04-OCT-94	<	.082	UGG	
	NGHB	PCB260				27-SEP-94	04-OCT-94	<	.0804	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEKC	124TCB				22-SEP-94	29-SEP-94	<	.04	UGG	
	OEKC	12DCLB				22-SEP-94	29-SEP-94	<	.11	UGG	
	OEKC	12DPH				22-SEP-94	29-SEP-94	<	.14	UGG	
	OEKC	13DCLB				22-SEP-94	29-SEP-94	<	.13	UGG	
	OEKC	14DCLB				22-SEP-94	29-SEP-94	<	.098	UGG	
	OEKC	245TCP				22-SEP-94	29-SEP-94	<	.1	UGG	
	OEKC	246TCP				22-SEP-94	29-SEP-94	<	.17	UGG	
	OEKC	24DCLP				22-SEP-94	29-SEP-94	<	.18	UGG	
	OEKC	24DMPN				22-SEP-94	29-SEP-94	<	.69	UGG	
	OEKC	24DNP				22-SEP-94	29-SEP-94	<	1.2	UGG	
	OEKC	24DNT				22-SEP-94	29-SEP-94	<	.14	UGG	
	OEKC	26DNT				22-SEP-94	29-SEP-94	<	.085	UGG	
	OEKC	2CLP				22-SEP-94	29-SEP-94	<	.06	UGG	
	OEKC	2CNAP				22-SEP-94	29-SEP-94	<	.036	UGG	
	OEKC	2MNAP				22-SEP-94	29-SEP-94	<	.049	UGG	
	OEKC	2MP				22-SEP-94	29-SEP-94	<	.029	UGG	
	OEKC	2NANIL				22-SEP-94	29-SEP-94	<	.062	UGG	
	OEKC	2NP				22-SEP-94	29-SEP-94	<	.14	UGG	
	OEKC	33DCBD				22-SEP-94	29-SEP-94	<	6.3	UGG	
	OEKC	3NANIL				22-SEP-94	29-SEP-94	<	.45	UGG	
	OEKC	46DN2C				22-SEP-94	29-SEP-94	<	.55	UGG	
	OEKC	4BRPPE				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	4CANIL				22-SEP-94	29-SEP-94	<	.81	UGG	
	OEKC	4CL3C				22-SEP-94	29-SEP-94	<	.095	UGG	
	OEKC	4CLPPE				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	4MP				22-SEP-94	29-SEP-94	<	.24	UGG	
	OEKC	4NANIL				22-SEP-94	29-SEP-94	<	.41	UGG	
	OEKC	4NP				22-SEP-94	29-SEP-94	<	1.4	UGG	
	OEKC	ABHC				22-SEP-94	29-SEP-94	<	.27	UGG	
	OEKC	ACLDAN				22-SEP-94	29-SEP-94	<	.33	UGG	
	OEKC	AENSLF				22-SEP-94	29-SEP-94	<	.62	UGG	
	OEKC	ALDRN				22-SEP-94	29-SEP-94	<	.33	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEKC	ANAPNE				22-SEP-94	29-SEP-94	<	.036	UGG	
	OEKC	ANAPYL				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	ANTRC				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	B2CEXM				22-SEP-94	29-SEP-94	<	.059	UGG	
	OEKC	B2CIPE				22-SEP-94	29-SEP-94	<	.2	UGG	
	OEKC	B2CLEE				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	B2EHP				22-SEP-94	29-SEP-94	<	.62	UGG	
	OEKC	BAANTR				22-SEP-94	29-SEP-94	<	.17	UGG	
	OEKC	BAPYR				22-SEP-94	29-SEP-94	<	.25	UGG	
	OEKC	BBFANT				22-SEP-94	29-SEP-94	<	.21	UGG	
	OEKC	BBHC				22-SEP-94	29-SEP-94	<	.27	UGG	
	OEKC	BBZP				22-SEP-94	29-SEP-94	<	.17	UGG	
	OEKC	BENSLF				22-SEP-94	29-SEP-94	<	.62	UGG	
	OEKC	BENZID				22-SEP-94	29-SEP-94	<	.85	UGG	
	OEKC	BENZOA				22-SEP-94	29-SEP-94	<	6.1	UGG	
	OEKC	BGHIPY				22-SEP-94	29-SEP-94	<	.25	UGG	
	OEKC	BKFANT				22-SEP-94	29-SEP-94	<	.066	UGG	
	OEKC	BZALC				22-SEP-94	29-SEP-94	<	.19	UGG	
	OEKC	CARBAZ				22-SEP-94	29-SEP-94	<	.1	UGG	
	OEKC	CHRY				22-SEP-94	29-SEP-94	<	.12	UGG	
	OEKC	CL6BZ				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	CL6CP				22-SEP-94	29-SEP-94	<	6.2	UGG	
	OEKC	CL6ET				22-SEP-94	29-SEP-94	<	.15	UGG	
	OEKC	DBAHA				22-SEP-94	29-SEP-94	<	.21	UGG	
	OEKC	DBHC				22-SEP-94	29-SEP-94	<	.27	UGG	
	OEKC	DBZFUR				22-SEP-94	29-SEP-94	<	.035	UGG	
	OEKC	DEP				22-SEP-94	29-SEP-94	<	.24	UGG	
	OEKC	DLDRN				22-SEP-94	29-SEP-94	<	.31	UGG	
	OEKC	DMP				22-SEP-94	29-SEP-94	<	.17	UGG	
	OEKC	DNBP				22-SEP-94	29-SEP-94	<	.061	UGG	
	OEKC	DNOP				22-SEP-94	29-SEP-94	<	.19	UGG	
	OEKC	ENDRN				22-SEP-94	29-SEP-94	<	.45	UGG	
	OEKC	ENDRNA				22-SEP-94	29-SEP-94	<	.53	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEKC	ENDRNK				22-SEP-94	29-SEP-94	<	.53	UGG	
	OEKC	ESFSO4				22-SEP-94	29-SEP-94	<	.62	UGG	
	OEKC	FANT				22-SEP-94	29-SEP-94	<	.068	UGG	
	OEKC	FLRENE				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	GCLDAN				22-SEP-94	29-SEP-94	<	.33	UGG	
	OEKC	HCBD				22-SEP-94	29-SEP-94	<	.23	UGG	
	OEKC	HPCL				22-SEP-94	29-SEP-94	<	.13	UGG	
	OEKC	HPCLE				22-SEP-94	29-SEP-94	<	.33	UGG	
	OEKC	ICDPYR				22-SEP-94	29-SEP-94	<	.29	UGG	
	OEKC	ISOPHR				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	LIN				22-SEP-94	29-SEP-94	<	.27	UGG	
	OEKC	MEXCLR				22-SEP-94	29-SEP-94	<	.33	UGG	
	OEKC	NAP				22-SEP-94	29-SEP-94	<	.037	UGG	
	OEKC	NB				22-SEP-94	29-SEP-94	<	.045	UGG	
	OEKC	NNDMEA				22-SEP-94	29-SEP-94	<	.14	UGG	
	OEKC	NNDNPA				22-SEP-94	29-SEP-94	<	.2	UGG	
	OEKC	NNDPA				22-SEP-94	29-SEP-94	<	.19	UGG	
	OEKC	PCB016				22-SEP-94	29-SEP-94	<	1.4	UGG	
	OEKC	PCB221				22-SEP-94	29-SEP-94	<	1.4	UGG	
	OEKC	PCB232				22-SEP-94	29-SEP-94	<	1.4	UGG	
	OEKC	PCB242				22-SEP-94	29-SEP-94	<	1.4	UGG	
	OEKC	PCB248				22-SEP-94	29-SEP-94	<	2	UGG	
	OEKC	PCB254				22-SEP-94	29-SEP-94	<	2.3	UGG	
	OEKC	PCB260				22-SEP-94	29-SEP-94	<	2.6	UGG	
	OEKC	PCP				22-SEP-94	29-SEP-94	<	1.3	UGG	
	OEKC	PHANTR				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	PHENOL				22-SEP-94	29-SEP-94	<	.11	UGG	
	OEKC	PPDDD				22-SEP-94	29-SEP-94	<	.27	UGG	
	OEKC	PPDDE				22-SEP-94	29-SEP-94	<	.31	UGG	
	OEKC	PPDDT				22-SEP-94	29-SEP-94	<	.31	UGG	
	OEKC	PYR				22-SEP-94	29-SEP-94	<	.033	UGG	
	OEKC	TXPHEN				22-SEP-94	29-SEP-94	<	2.6	UGG	
	OEKC	UNK521				22-SEP-94	29-SEP-94		.4	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OENC	124TCB				27-SEP-94	06-OCT-94	<	.04	UGG	
	OENC	12DCLB				27-SEP-94	06-OCT-94	<	.11	UGG	
	OENC	12DPH				27-SEP-94	06-OCT-94	<	.14	UGG	
	OENC	13DCLB				27-SEP-94	06-OCT-94	<	.13	UGG	
	OENC	14DCLB				27-SEP-94	06-OCT-94	<	.098	UGG	
	OENC	245TCP				27-SEP-94	06-OCT-94	<	.1	UGG	
	OENC	246TCP				27-SEP-94	06-OCT-94	<	.17	UGG	
	OENC	24DCLP				27-SEP-94	06-OCT-94	<	.18	UGG	
	OENC	24DMPN				27-SEP-94	06-OCT-94	<	.69	UGG	
	OENC	24DNP				27-SEP-94	06-OCT-94	<	1.2	UGG	
	OENC	24DNT				27-SEP-94	06-OCT-94	<	.14	UGG	
	OENC	26DNT				27-SEP-94	06-OCT-94	<	.085	UGG	
	OENC	2CLP				27-SEP-94	06-OCT-94	<	.06	UGG	
	OENC	2CNAP				27-SEP-94	06-OCT-94	<	.036	UGG	
	OENC	2MNAP				27-SEP-94	06-OCT-94	<	.049	UGG	
	OENC	2MP				27-SEP-94	06-OCT-94	<	.029	UGG	
	OENC	2NANIL				27-SEP-94	06-OCT-94	<	.062	UGG	
	OENC	2NP				27-SEP-94	06-OCT-94	<	.14	UGG	
	OENC	33DCBD				27-SEP-94	06-OCT-94	<	6.3	UGG	
	OENC	3NANIL				27-SEP-94	06-OCT-94	<	.45	UGG	
	OENC	46DN2C				27-SEP-94	06-OCT-94	<	.55	UGG	
	OENC	4BRPPE				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	4CANIL				27-SEP-94	06-OCT-94	<	.81	UGG	
	OENC	4CL3C				27-SEP-94	06-OCT-94	<	.095	UGG	
	OENC	4CLPPE				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	4MP				27-SEP-94	06-OCT-94	<	.24	UGG	
	OENC	4NANIL				27-SEP-94	06-OCT-94	<	.41	UGG	
	OENC	4NP				27-SEP-94	06-OCT-94	<	1.4	UGG	
	OENC	ABHC				27-SEP-94	06-OCT-94	<	.27	UGG	
	OENC	ACLDAN				27-SEP-94	06-OCT-94	<	.33	UGG	
	OENC	AENSLF				27-SEP-94	06-OCT-94	<	.62	UGG	
	OENC	ALDRN				27-SEP-94	06-OCT-94	<	.33	UGG	
	OENC	ANAPNE				27-SEP-94	06-OCT-94	<	.036	UGG	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OENC	ANAPYL				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	ANTRC				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	B2CEXM				27-SEP-94	06-OCT-94	<	.059	UGG	
	OENC	B2CIPE				27-SEP-94	06-OCT-94	<	.2	UGG	
	OENC	B2CLEE				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	B2EHP				27-SEP-94	06-OCT-94	<	.62	UGG	
	OENC	BAANTR				27-SEP-94	06-OCT-94	<	.17	UGG	
	OENC	BAPYR				27-SEP-94	06-OCT-94	<	.25	UGG	
	OENC	BBFANT				27-SEP-94	06-OCT-94	<	.21	UGG	
	OENC	BBHC				27-SEP-94	06-OCT-94	<	.27	UGG	
	OENC	BBZP				27-SEP-94	06-OCT-94	<	.17	UGG	
	OENC	BENSLF				27-SEP-94	06-OCT-94	<	.62	UGG	
	OENC	BENZID				27-SEP-94	06-OCT-94	<	.85	UGG	
	OENC	BENZOA				27-SEP-94	06-OCT-94	<	6.1	UGG	
	OENC	BGHIPY				27-SEP-94	06-OCT-94	<	.25	UGG	
	OENC	BKFANT				27-SEP-94	06-OCT-94	<	.066	UGG	
	OENC	BZALC				27-SEP-94	06-OCT-94	<	.19	UGG	
	OENC	CARBAZ				27-SEP-94	06-OCT-94	<	.1	UGG	
	OENC	CHRY				27-SEP-94	06-OCT-94	<	.12	UGG	
	OENC	CL6BZ				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	CL6CP				27-SEP-94	06-OCT-94	<	6.2	UGG	
	OENC	CL6ET				27-SEP-94	06-OCT-94	<	.15	UGG	
	OENC	DBAHA				27-SEP-94	06-OCT-94	<	.21	UGG	
	OENC	DBHC				27-SEP-94	06-OCT-94	<	.27	UGG	
	OENC	DBZFUR				27-SEP-94	06-OCT-94	<	.035	UGG	
	OENC	DEP				27-SEP-94	06-OCT-94	<	.24	UGG	
	OENC	DLDRN				27-SEP-94	06-OCT-94	<	.31	UGG	
	OENC	DMP				27-SEP-94	06-OCT-94	<	.17	UGG	
	OENC	DNBP				27-SEP-94	06-OCT-94	<	.061	UGG	
	OENC	DNOP				27-SEP-94	06-OCT-94	<	.19	UGG	
	OENC	ENDRN				27-SEP-94	06-OCT-94	<	.45	UGG	
	OENC	ENDRNA				27-SEP-94	06-OCT-94	<	.53	UGG	
	OENC	ENDRNK				27-SEP-94	06-OCT-94	<	.53	UGG	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OENC	ESFSO4				27-SEP-94	06-OCT-94	<	.62	UGG	
	OENC	FANT				27-SEP-94	06-OCT-94	<	.068	UGG	
	OENC	FLRENE				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	GCLDAN				27-SEP-94	06-OCT-94	<	.33	UGG	
	OENC	HCBD				27-SEP-94	06-OCT-94	<	.23	UGG	
	OENC	HPCL				27-SEP-94	06-OCT-94	<	.13	UGG	
	OENC	HPCLE				27-SEP-94	06-OCT-94	<	.33	UGG	
	OENC	ICDPYR				27-SEP-94	06-OCT-94	<	.29	UGG	
	OENC	ISOPHR				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	LIN				27-SEP-94	06-OCT-94	<	.27	UGG	
	OENC	MEXCLR				27-SEP-94	06-OCT-94	<	.33	UGG	
	OENC	NAP				27-SEP-94	06-OCT-94	<	.037	UGG	
	OENC	NB				27-SEP-94	06-OCT-94	<	.045	UGG	
	OENC	NNDMEA				27-SEP-94	06-OCT-94	<	.14	UGG	
	OENC	NNDNPA				27-SEP-94	06-OCT-94	<	.2	UGG	
	OENC	NNDPA				27-SEP-94	06-OCT-94	<	.19	UGG	
	OENC	PCB016				27-SEP-94	06-OCT-94	<	1.4	UGG	
	OENC	PCB221				27-SEP-94	06-OCT-94	<	1.4	UGG	
	OENC	PCB232				27-SEP-94	06-OCT-94	<	1.4	UGG	
	OENC	PCB242				27-SEP-94	06-OCT-94	<	1.4	UGG	
	OENC	PCB248				27-SEP-94	06-OCT-94	<	2	UGG	
	OENC	PCB254				27-SEP-94	06-OCT-94	<	2.3	UGG	
	OENC	PCB260				27-SEP-94	06-OCT-94	<	2.6	UGG	
	OENC	PCP				27-SEP-94	06-OCT-94	<	1.3	UGG	
	OENC	PHANTR				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	PHENOL				27-SEP-94	06-OCT-94	<	.11	UGG	
	OENC	PPDDD				27-SEP-94	06-OCT-94	<	.27	UGG	
	OENC	PPDDE				27-SEP-94	06-OCT-94	<	.31	UGG	
	OENC	PPDDT				27-SEP-94	06-OCT-94	<	.31	UGG	
	OENC	PYR				27-SEP-94	06-OCT-94	<	.033	UGG	
	OENC	TXPHEN				27-SEP-94	06-OCT-94	<	2.6	UGG	
	OENC	UNK521				27-SEP-94	06-OCT-94		.3	UGG	
	OENC	UNK644				27-SEP-94	06-OCT-94		2	UGG	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEOC	124TCB				27-SEP-94	07-OCT-94	<	.04	UGG	
	OEOC	12DCLB				27-SEP-94	07-OCT-94	<	.11	UGG	
	OEOC	12DPH				27-SEP-94	07-OCT-94	<	.14	UGG	
	OEOC	13DCLB				27-SEP-94	07-OCT-94	<	.13	UGG	
	OEOC	14DCLB				27-SEP-94	07-OCT-94	<	.098	UGG	
	OEOC	245TCP				27-SEP-94	07-OCT-94	<	.1	UGG	
	OEOC	246TCP				27-SEP-94	07-OCT-94	<	.17	UGG	
	OEOC	24DCLP				27-SEP-94	07-OCT-94	<	.18	UGG	
	OEOC	24DMPN				27-SEP-94	07-OCT-94	<	.69	UGG	
	OEOC	24DNP				27-SEP-94	07-OCT-94	<	1.2	UGG	
	OEOC	24DNT				27-SEP-94	07-OCT-94	<	.14	UGG	
	OEOC	26DNT				27-SEP-94	07-OCT-94	<	.085	UGG	
	OEOC	2CLP				27-SEP-94	07-OCT-94	<	.06	UGG	
	OEOC	2CNAP				27-SEP-94	07-OCT-94	<	.036	UGG	
	OEOC	2MNAP				27-SEP-94	07-OCT-94	<	.049	UGG	
	OEOC	2MP				27-SEP-94	07-OCT-94	<	.029	UGG	
	OEOC	2NANIL				27-SEP-94	07-OCT-94	<	.062	UGG	
	OEOC	2NP				27-SEP-94	07-OCT-94	<	.14	UGG	
	OEOC	33DCBD				27-SEP-94	07-OCT-94	<	6.3	UGG	
	OEOC	3NANIL				27-SEP-94	07-OCT-94	<	.45	UGG	
	OEOC	46DN2C				27-SEP-94	07-OCT-94	<	.55	UGG	
	OEOC	4BRPPE				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	4CANIL				27-SEP-94	07-OCT-94	<	.81	UGG	
	OEOC	4CL3C				27-SEP-94	07-OCT-94	<	.095	UGG	
	OEOC	4CLPPE				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	4MP				27-SEP-94	07-OCT-94	<	.24	UGG	
	OEOC	4NANIL				27-SEP-94	07-OCT-94	<	.41	UGG	
	OEOC	4NP				27-SEP-94	07-OCT-94	<	1.4	UGG	
	OEOC	ABHC				27-SEP-94	07-OCT-94	<	.27	UGG	
	OEOC	ACLDAN				27-SEP-94	07-OCT-94	<	.33	UGG	
	OEOC	AENSLF				27-SEP-94	07-OCT-94	<	.62	UGG	
	OEOC	ALDRN				27-SEP-94	07-OCT-94	<	.33	UGG	
	OEOC	ANAPNE				27-SEP-94	07-OCT-94	<	.036	UGG	

Chemical Quality Control Report
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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEOC	ANAPYL				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	ANTRC				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	B2CEXM				27-SEP-94	07-OCT-94	<	.059	UGG	
	OEOC	B2CIPE				27-SEP-94	07-OCT-94	<	.2	UGG	
	OEOC	B2CLEE				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	B2EHP				27-SEP-94	07-OCT-94	<	.62	UGG	
	OEOC	BAANTR				27-SEP-94	07-OCT-94	<	.17	UGG	
	OEOC	BAPYR				27-SEP-94	07-OCT-94	<	.25	UGG	
	OEOC	BBFANT				27-SEP-94	07-OCT-94	<	.21	UGG	
	OEOC	BBHC				27-SEP-94	07-OCT-94	<	.27	UGG	
	OEOC	BBZP				27-SEP-94	07-OCT-94	<	.17	UGG	
	OEOC	BENSLF				27-SEP-94	07-OCT-94	<	.62	UGG	
	OEOC	BENZID				27-SEP-94	07-OCT-94	<	.85	UGG	
	OEOC	BENZOA				27-SEP-94	07-OCT-94	<	6.1	UGG	
	OEOC	BGHIPY				27-SEP-94	07-OCT-94	<	.25	UGG	
	OEOC	BKFANT				27-SEP-94	07-OCT-94	<	.066	UGG	
	OEOC	BZALC				27-SEP-94	07-OCT-94	<	.19	UGG	
	OEOC	CARBAZ				27-SEP-94	07-OCT-94	<	.1	UGG	
	OEOC	CHRY				27-SEP-94	07-OCT-94	<	.12	UGG	
	OEOC	CL6BZ				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	CL6CP				27-SEP-94	07-OCT-94	<	6.2	UGG	
	OEOC	CL6ET				27-SEP-94	07-OCT-94	<	.15	UGG	
	OEOC	DBAHA				27-SEP-94	07-OCT-94	<	.21	UGG	
	OEOC	DBHC				27-SEP-94	07-OCT-94	<	.27	UGG	
	OEOC	DBZFUR				27-SEP-94	07-OCT-94	<	.035	UGG	
	OEOC	DEP				27-SEP-94	07-OCT-94	<	.24	UGG	
	OEOC	DLDRN				27-SEP-94	07-OCT-94	<	.31	UGG	
	OEOC	DMP				27-SEP-94	07-OCT-94	<	.17	UGG	
	OEOC	DNBP				27-SEP-94	07-OCT-94	<	.061	UGG	
	OEOC	DNOP				27-SEP-94	07-OCT-94	<	.19	UGG	
	OEOC	ENDRN				27-SEP-94	07-OCT-94	<	.45	UGG	
	OEOC	ENDRNA				27-SEP-94	07-OCT-94	<	.53	UGG	
	OEOC	ENDRNK				27-SEP-94	07-OCT-94	<	.53	UGG	

Chemical Quality Control Report
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Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM18	OEOC	ESFSO4				27-SEP-94	07-OCT-94	<	.62	UGG	
	OEOC	FANT				27-SEP-94	07-OCT-94	<	.068	UGG	
	OEOC	FLRENE				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	GCLDAN				27-SEP-94	07-OCT-94	<	.33	UGG	
	OEOC	HCBD				27-SEP-94	07-OCT-94	<	.23	UGG	
	OEOC	HPCL				27-SEP-94	07-OCT-94	<	.13	UGG	
	OEOC	HPCLE				27-SEP-94	07-OCT-94	<	.33	UGG	
	OEOC	ICDPYR				27-SEP-94	07-OCT-94	<	.29	UGG	
	OEOC	ISOPHR				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	LIN				27-SEP-94	07-OCT-94	<	.27	UGG	
	OEOC	MEXCLR				27-SEP-94	07-OCT-94	<	.33	UGG	
	OEOC	NAP				27-SEP-94	07-OCT-94	<	.037	UGG	
	OEOC	NB				27-SEP-94	07-OCT-94	<	.045	UGG	
	OEOC	NNDMEA				27-SEP-94	07-OCT-94	<	.14	UGG	
	OEOC	NNDNPA				27-SEP-94	07-OCT-94	<	.2	UGG	
	OEOC	NNDPA				27-SEP-94	07-OCT-94	<	.19	UGG	
	OEOC	PCB016				27-SEP-94	07-OCT-94	<	1.4	UGG	
	OEOC	PCB221				27-SEP-94	07-OCT-94	<	1.4	UGG	
	OEOC	PCB232				27-SEP-94	07-OCT-94	<	1.4	UGG	
	OEOC	PCB242				27-SEP-94	07-OCT-94	<	1.4	UGG	
	OEOC	PCB248				27-SEP-94	07-OCT-94	<	2	UGG	
	OEOC	PCB254				27-SEP-94	07-OCT-94	<	2.3	UGG	
	OEOC	PCB260				27-SEP-94	07-OCT-94	<	2.6	UGG	
	OEOC	PCP				27-SEP-94	07-OCT-94	<	1.3	UGG	
	OEOC	PHANTR				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	PHENOL				27-SEP-94	07-OCT-94	<	.11	UGG	
	OEOC	PPDDD				27-SEP-94	07-OCT-94	<	.27	UGG	
	OEOC	PPDDE				27-SEP-94	07-OCT-94	<	.31	UGG	
	OEOC	PPDDT				27-SEP-94	07-OCT-94	<	.31	UGG	
	OEOC	PYR				27-SEP-94	07-OCT-94	<	.033	UGG	
	OEOC	TXPHEN				27-SEP-94	07-OCT-94	<	2.6	UGG	
	OEOC	UNK521				27-SEP-94	07-OCT-94		.4	UGG	

Chemical Quality Control Report
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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM19	YGNC	111TCE				28-SEP-94	28-SEP-94	<	.0044	UGG	
	YGNC	112TCE				28-SEP-94	28-SEP-94	<	.0054	UGG	
	YGNC	11DCE				28-SEP-94	28-SEP-94	<	.0039	UGG	
	YGNC	11DCLE				28-SEP-94	28-SEP-94	<	.0023	UGG	
	YGNC	12DCE				28-SEP-94	28-SEP-94	<	.003	UGG	
	YGNC	12DCLE				28-SEP-94	28-SEP-94	<	.0017	UGG	
	YGNC	12DCLP				28-SEP-94	28-SEP-94	<	.0029	UGG	
	YGNC	2CLEVE				28-SEP-94	28-SEP-94	<	.01	UGG	
	YGNC	ACET				28-SEP-94	28-SEP-94	<	.017	UGG	
	YGNC	ACROLN				28-SEP-94	28-SEP-94	<	.1	UGG	
	YGNC	ACRYLO				28-SEP-94	28-SEP-94	<	.1	UGG	
	YGNC	BRDCLM				28-SEP-94	28-SEP-94	<	.0029	UGG	
	YGNC	C13DCP				28-SEP-94	28-SEP-94	<	.0032	UGG	
	YGNC	C2AVE				28-SEP-94	28-SEP-94	<	.032	UGG	
	YGNC	C2H3CL				28-SEP-94	28-SEP-94	<	.0062	UGG	
	YGNC	C2H5CL				28-SEP-94	28-SEP-94	<	.012	UGG	
	YGNC	C6H6				28-SEP-94	28-SEP-94	<	.0015	UGG	
	YGNC	CCL3F				28-SEP-94	28-SEP-94	<	.0059	UGG	
	YGNC	CCL4				28-SEP-94	28-SEP-94	<	.007	UGG	
	YGNC	CH2CL2				28-SEP-94	28-SEP-94	<	.012	UGG	
	YGNC	CH3BR				28-SEP-94	28-SEP-94	<	.0057	UGG	
	YGNC	CH3CL				28-SEP-94	28-SEP-94	<	.0088	UGG	
	YGNC	CHBR3				28-SEP-94	28-SEP-94	<	.0069	UGG	
	YGNC	CHCL3				28-SEP-94	28-SEP-94	<	.00087	UGG	
	YGNC	CL2BZ				28-SEP-94	28-SEP-94	<	.1	UGG	
	YGNC	CLC6H5				28-SEP-94	28-SEP-94	<	.00086	UGG	
	YGNC	CS2				28-SEP-94	28-SEP-94	<	.0044	UGG	
	YGNC	DBRCLM				28-SEP-94	28-SEP-94	<	.0031	UGG	
	YGNC	ETC6H5				28-SEP-94	28-SEP-94	<	.0017	UGG	
	YGNC	MEC6H5				28-SEP-94	28-SEP-94	<	.00078	UGG	
	YGNC	MEK				28-SEP-94	28-SEP-94	<	.07	UGG	
	YGNC	MIBK				28-SEP-94	28-SEP-94	<	.027	UGG	
	YGNC	MNBK				28-SEP-94	28-SEP-94	<	.032	UGG	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
LM19	YGNC	STYR				28-SEP-94	28-SEP-94	<	.0026	UGG	
	YGNC	T13DCP				28-SEP-94	28-SEP-94	<	.0028	UGG	
	YGNC	TCLEA				28-SEP-94	28-SEP-94	<	.0024	UGG	
	YGNC	TCLEE				28-SEP-94	28-SEP-94	<	.00081	UGG	
	YGNC	TRCLE				28-SEP-94	28-SEP-94	<	.0028	UGG	
	YGNC	XYLEN				28-SEP-94	28-SEP-94	<	.0015	UGG	
SB01	TCQC	HG				11-OCT-94	11-OCT-94	<	.243	UGL	
	TCSC	HG				15-OCT-94	16-OCT-94	<	.243	UGL	
SD09	UCCC	TL				13-OCT-94	14-OCT-94	<	6.99	UGL	
	UCDC	TL				17-OCT-94	21-OCT-94	<	6.99	UGL	
SD20	WCMC	PB				13-OCT-94	14-OCT-94	<	1.26	UGL	
	WCOC	PB				17-OCT-94	21-OCT-94	<	1.26	UGL	
SD21	XCHC	SE				13-OCT-94	19-OCT-94	<	3.02	UGL	
	XCJC	SE				17-OCT-94	27-OCT-94	<	3.02	UGL	
SD22	YCIC	AS				13-OCT-94	14-OCT-94	<	2.54	UGL	
	YCKC	AS				17-OCT-94	21-OCT-94	<	2.54	UGL	
SD28	NFPB	SB				13-OCT-94	21-OCT-94	<	3.03	UGL	
	NFQB	SB				17-OCT-94	24-OCT-94	<	3.03	UGL	
SS10	ZFDC	AG				06-OCT-94	11-OCT-94	<	4.6	UGL	
	ZFDC	AL				06-OCT-94	11-OCT-94	<	141	UGL	
	ZFDC	BA				06-OCT-94	11-OCT-94	<	5	UGL	
	ZFDC	BE				06-OCT-94	11-OCT-94	<	5	UGL	
	ZFDC	CA				06-OCT-94	11-OCT-94	<	500	UGL	
	ZFDC	CD				06-OCT-94	11-OCT-94	<	4.01	UGL	
	ZFDC	CO				06-OCT-94	11-OCT-94	<	25	UGL	
	ZFDC	CR				06-OCT-94	11-OCT-94	<	6.02	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
SS10	ZFDC	CU				06-OCT-94	11-OCT-94	<	8.09	UGL	
	ZFDC	FE				06-OCT-94	11-OCT-94	<	38.8	UGL	
	ZFDC	K				06-OCT-94	11-OCT-94	<	375	UGL	
	ZFDC	MG				06-OCT-94	11-OCT-94	<	500	UGL	
	ZFDC	MN				06-OCT-94	11-OCT-94	<	2.75	UGL	
	ZFDC	NA				06-OCT-94	11-OCT-94	<	500	UGL	
	ZFDC	NI				06-OCT-94	11-OCT-94	<	34.3	UGL	
	ZFDC	V				06-OCT-94	11-OCT-94	<	11	UGL	
	ZFDC	ZN				06-OCT-94	11-OCT-94	<	21.1	UGL	
	ZFFC	AG				11-OCT-94	12-OCT-94	<	4.6	UGL	
	ZFFC	AL				11-OCT-94	12-OCT-94	<	141	UGL	
	ZFFC	BA				11-OCT-94	12-OCT-94	<	5	UGL	
	ZFFC	BE				11-OCT-94	12-OCT-94	<	5	UGL	
	ZFFC	CA				11-OCT-94	12-OCT-94	<	500	UGL	
	ZFFC	CD				11-OCT-94	12-OCT-94	<	4.01	UGL	
	ZFFC	CO				11-OCT-94	12-OCT-94	<	25	UGL	
	ZFFC	CR				11-OCT-94	12-OCT-94	<	6.02	UGL	
	ZFFC	CU				11-OCT-94	12-OCT-94	<	8.09	UGL	
	ZFFC	FE				11-OCT-94	12-OCT-94	<	38.8	UGL	
	ZFFC	K				11-OCT-94	12-OCT-94	<	375	UGL	
	ZFFC	MG				11-OCT-94	12-OCT-94	<	500	UGL	
	ZFFC	MN				11-OCT-94	12-OCT-94	<	2.75	UGL	
	ZFFC	NA				11-OCT-94	12-OCT-94	<	500	UGL	
	ZFFC	NI				11-OCT-94	12-OCT-94	<	34.3	UGL	
	ZFFC	V				11-OCT-94	12-OCT-94	<	11	UGL	
	ZFFC	ZN				11-OCT-94	12-OCT-94	<	21.1	UGL	
TT10	PDSA	CL				03-OCT-94	03-OCT-94	<	2120	UGL	
	PDTA	CL				04-OCT-94	04-OCT-94	<	2120	UGL	
	PDUA	CL				11-OCT-94	11-OCT-94	<	2120	UGL	
UH02	SDKB	PCB016				26-SEP-94	01-OCT-94	<	.16	UGL	
	SDKB	PCB221				26-SEP-94	01-OCT-94	<	.16	UGL	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UH02	SDKB	PCB232				26-SEP-94	01-OCT-94	<	.16	UGL	
	SDKB	PCB242				26-SEP-94	01-OCT-94	<	.19	UGL	
	SDKB	PCB248				26-SEP-94	01-OCT-94	<	.19	UGL	
	SDKB	PCB254				26-SEP-94	01-OCT-94	<	.19	UGL	
	SDKB	PCB260				26-SEP-94	01-OCT-94	<	.19	UGL	
	SDMB	PCB016				27-SEP-94	04-OCT-94	<	.16	UGL	
	SDMB	PCB221				27-SEP-94	04-OCT-94	<	.16	UGL	
	SDMB	PCB232				27-SEP-94	04-OCT-94	<	.16	UGL	
	SDMB	PCB242				27-SEP-94	04-OCT-94	<	.19	UGL	
	SDMB	PCB248				27-SEP-94	04-OCT-94	<	.19	UGL	
	SDMB	PCB254				27-SEP-94	04-OCT-94	<	.19	UGL	
	SDMB	PCB260				27-SEP-94	04-OCT-94	<	.19	UGL	
UH13	TDWB	ABHC				26-SEP-94	02-OCT-94	<	.0385	UGL	
	TDWB	ACLDAN				26-SEP-94	02-OCT-94	<	.075	UGL	
	TDWB	AENSLF				26-SEP-94	02-OCT-94	<	.023	UGL	
	TDWB	ALDRN				26-SEP-94	02-OCT-94	<	.0918	UGL	
	TDWB	BBHC				26-SEP-94	02-OCT-94	<	.024	UGL	
	TDWB	BENSLF				26-SEP-94	02-OCT-94	<	.023	UGL	
	TDWB	DBHC				26-SEP-94	02-OCT-94	<	.0293	UGL	
	TDWB	DLDRN				26-SEP-94	02-OCT-94	<	.024	UGL	
	TDWB	ENDRN				26-SEP-94	02-OCT-94	<	.0238	UGL	
	TDWB	ENDRNA				26-SEP-94	02-OCT-94	<	.0285	UGL	
	TDWB	ENDRNK				26-SEP-94	02-OCT-94	<	.0285	UGL	
	TDWB	ESFSO4				26-SEP-94	02-OCT-94	<	.0786	UGL	
	TDWB	GCLDAN				26-SEP-94	02-OCT-94	<	.075	UGL	
	TDWB	HPCL				26-SEP-94	02-OCT-94	<	.0423	UGL	
	TDWB	HPCLE				26-SEP-94	02-OCT-94	<	.0245	UGL	
	TDWB	ISODR				26-SEP-94	02-OCT-94	<	.0562	UGL	
	TDWB	LIN				26-SEP-94	02-OCT-94	<	.0507	UGL	
	TDWB	MEXCLR				26-SEP-94	02-OCT-94	<	.057	UGL	
	TDWB	PPDDD				26-SEP-94	02-OCT-94	<	.0233	UGL	
	TDWB	PPDDE				26-SEP-94	02-OCT-94	<	.027	UGL	

Chemical Quality Control Report
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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UH13	TDWB	PPDDT				26-SEP-94	02-OCT-94	<	.034	UGL	
	TDWB	TXPHEN				26-SEP-94	02-OCT-94	<	1.35	UGL	
	TDYB	ABHC				27-SEP-94	01-OCT-94	<	.0385	UGL	
	TDYB	ACLDAN				27-SEP-94	01-OCT-94	<	.075	UGL	
	TDYB	AENSLF				27-SEP-94	01-OCT-94	<	.023	UGL	
	TDYB	ALDRN				27-SEP-94	01-OCT-94	<	.0918	UGL	
	TDYB	BBHC				27-SEP-94	01-OCT-94	<	.024	UGL	
	TDYB	BENSLF				27-SEP-94	01-OCT-94	<	.023	UGL	
	TDYB	DBHC				27-SEP-94	01-OCT-94	<	.0293	UGL	
	TDYB	DLDRN				27-SEP-94	01-OCT-94	<	.024	UGL	
	TDYB	ENDRN				27-SEP-94	01-OCT-94	<	.0238	UGL	
	TDYB	ENDRNA				27-SEP-94	01-OCT-94	<	.0285	UGL	
	TDYB	ENDRNK				27-SEP-94	01-OCT-94	<	.0285	UGL	
	TDYB	ESFSO4				27-SEP-94	01-OCT-94	<	.0786	UGL	
	TDYB	GCLDAN				27-SEP-94	01-OCT-94	<	.075	UGL	
	TDYB	HPCL				27-SEP-94	01-OCT-94	<	.0423	UGL	
	TDYB	HPCLE				27-SEP-94	01-OCT-94	<	.0245	UGL	
	TDYB	ISODR				27-SEP-94	01-OCT-94	<	.0562	UGL	
	TDYB	LIN				27-SEP-94	01-OCT-94	<	.0507	UGL	
	TDYB	MEXCLR				27-SEP-94	01-OCT-94	<	.057	UGL	
	TDYB	PPDDD				27-SEP-94	01-OCT-94	<	.0233	UGL	
	TDYB	PPDDE				27-SEP-94	01-OCT-94	<	.027	UGL	
	TDYB	PPDDT				27-SEP-94	01-OCT-94	<	.034	UGL	
	TDYB	TXPHEN				27-SEP-94	01-OCT-94	<	1.35	UGL	
UM18	WDPC	124TCB				22-SEP-94	28-SEP-94	<	1.8	UGL	
	WDPC	12DCLB				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	12DPH				22-SEP-94	28-SEP-94	<	2	UGL	
	WDPC	13DCLB				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	14DCLB				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	245TCP				22-SEP-94	28-SEP-94	<	5.2	UGL	
	WDPC	246TCP				22-SEP-94	28-SEP-94	<	4.2	UGL	
	WDPC	24DCLP				22-SEP-94	28-SEP-94	<	2.9	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDPC	24DMPN				22-SEP-94	28-SEP-94	<	5.8	UGL	
	WDPC	24DNP				22-SEP-94	28-SEP-94	<	21	UGL	
	WDPC	24DNT				22-SEP-94	28-SEP-94	<	4.5	UGL	
	WDPC	26DNT				22-SEP-94	28-SEP-94	<	.79	UGL	
	WDPC	2CLP				22-SEP-94	28-SEP-94	<	.99	UGL	
	WDPC	2CNAP				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	2MNAP				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	2MP				22-SEP-94	28-SEP-94	<	3.9	UGL	
	WDPC	2NANIL				22-SEP-94	28-SEP-94	<	4.3	UGL	
	WDPC	2NP				22-SEP-94	28-SEP-94	<	3.7	UGL	
	WDPC	33DCBD				22-SEP-94	28-SEP-94	<	12	UGL	
	WDPC	3NANIL				22-SEP-94	28-SEP-94	<	4.9	UGL	
	WDPC	46DN2C				22-SEP-94	28-SEP-94	<	17	UGL	
	WDPC	4BRPPE				22-SEP-94	28-SEP-94	<	4.2	UGL	
	WDPC	4CANIL				22-SEP-94	28-SEP-94	<	7.3	UGL	
	WDPC	4CL3C				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	4CLPPE				22-SEP-94	28-SEP-94	<	5.1	UGL	
	WDPC	4MP				22-SEP-94	28-SEP-94	<	.52	UGL	
	WDPC	4NANIL				22-SEP-94	28-SEP-94	<	5.2	UGL	
	WDPC	4NP				22-SEP-94	28-SEP-94	<	12	UGL	
	WDPC	ABHC				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	ACLDAN				22-SEP-94	28-SEP-94	<	5.1	UGL	
	WDPC	AENSLF				22-SEP-94	28-SEP-94	<	9.2	UGL	
	WDPC	ALDRN				22-SEP-94	28-SEP-94	<	4.7	UGL	
	WDPC	ANAPNE				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	ANAPYL				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	ANTRC				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	B2CEXM				22-SEP-94	28-SEP-94	<	1.5	UGL	
	WDPC	B2CIPE				22-SEP-94	28-SEP-94	<	5.3	UGL	
	WDPC	B2CLEE				22-SEP-94	28-SEP-94	<	1.9	UGL	
	WDPC	B2EHP				22-SEP-94	28-SEP-94	<	4.8	UGL	
	WDPC	BAANTR				22-SEP-94	28-SEP-94	<	1.6	UGL	
	WDPC	BAPYR				22-SEP-94	28-SEP-94	<	4.7	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDPC	BBFANT				22-SEP-94	28-SEP-94	<	5.4	UGL	
	WDPC	BBHC				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	BBZP				22-SEP-94	28-SEP-94	<	3.4	UGL	
	WDPC	BENSLF				22-SEP-94	28-SEP-94	<	9.2	UGL	
	WDPC	BENZID				22-SEP-94	28-SEP-94	<	10	UGL	
	WDPC	BENZOA				22-SEP-94	28-SEP-94	<	13	UGL	
	WDPC	BGHIPY				22-SEP-94	28-SEP-94	<	6.1	UGL	
	WDPC	BKFANT				22-SEP-94	28-SEP-94	<	.87	UGL	
	WDPC	BZALC				22-SEP-94	28-SEP-94	<	.72	UGL	
	WDPC	CARBAZ				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	CHRY				22-SEP-94	28-SEP-94	<	2.4	UGL	
	WDPC	CL6BZ				22-SEP-94	28-SEP-94	<	1.6	UGL	
	WDPC	CL6CP				22-SEP-94	28-SEP-94	<	8.6	UGL	
	WDPC	CL6ET				22-SEP-94	28-SEP-94	<	1.5	UGL	
	WDPC	DBAHA				22-SEP-94	28-SEP-94	<	6.5	UGL	
	WDPC	DBHC				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	DBZFUR				22-SEP-94	28-SEP-94	<	1.7	UGL	
	WDPC	DEP				22-SEP-94	28-SEP-94	<	2	UGL	
	WDPC	DLDRN				22-SEP-94	28-SEP-94	<	4.7	UGL	
	WDPC	DMP				22-SEP-94	28-SEP-94	<	1.5	UGL	
	WDPC	DNBP				22-SEP-94	28-SEP-94	<	3.7	UGL	
	WDPC	DNOP				22-SEP-94	28-SEP-94	<	15	UGL	
	WDPC	ENDRN				22-SEP-94	28-SEP-94	<	7.6	UGL	
	WDPC	ENDRNA				22-SEP-94	28-SEP-94	<	8	UGL	
	WDPC	ENDRNK				22-SEP-94	28-SEP-94	<	8	UGL	
	WDPC	ESFSO4				22-SEP-94	28-SEP-94	<	9.2	UGL	
	WDPC	FANT				22-SEP-94	28-SEP-94	<	3.3	UGL	
	WDPC	FLRENE				22-SEP-94	28-SEP-94	<	3.7	UGL	
	WDPC	GCLDAN				22-SEP-94	28-SEP-94	<	5.1	UGL	
	WDPC	HCBD				22-SEP-94	28-SEP-94	<	3.4	UGL	
	WDPC	HPCL				22-SEP-94	28-SEP-94	<	2	UGL	
	WDPC	HPCLE				22-SEP-94	28-SEP-94	<	5	UGL	
	WDPC	ICDPYR				22-SEP-94	28-SEP-94	<	8.6	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDPC	ISOPHR				22-SEP-94	28-SEP-94	<	4.8	UGL	
	WDPC	LIN				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	MESTOX				22-SEP-94	28-SEP-94		3	UGL	
	WDPC	MEXCLR				22-SEP-94	28-SEP-94	<	5.1	UGL	
	WDPC	NAP				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	NB				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	NNDMEA				22-SEP-94	28-SEP-94	<	2	UGL	
	WDPC	NNDNPA				22-SEP-94	28-SEP-94	<	4.4	UGL	
	WDPC	NNDPA				22-SEP-94	28-SEP-94	<	3	UGL	
	WDPC	PCB016				22-SEP-94	28-SEP-94	<	21	UGL	
	WDPC	PCB221				22-SEP-94	28-SEP-94	<	21	UGL	
	WDPC	PCB232				22-SEP-94	28-SEP-94	<	21	UGL	
	WDPC	PCB242				22-SEP-94	28-SEP-94	<	30	UGL	
	WDPC	PCB248				22-SEP-94	28-SEP-94	<	30	UGL	
	WDPC	PCB254				22-SEP-94	28-SEP-94	<	36	UGL	
	WDPC	PCB260				22-SEP-94	28-SEP-94	<	36	UGL	
	WDPC	PCP				22-SEP-94	28-SEP-94	<	18	UGL	
	WDPC	PHANTR				22-SEP-94	28-SEP-94	<	.5	UGL	
	WDPC	PHENOL				22-SEP-94	28-SEP-94	<	9.2	UGL	
	WDPC	PPDDD				22-SEP-94	28-SEP-94	<	4	UGL	
	WDPC	PPDDE				22-SEP-94	28-SEP-94	<	4.7	UGL	
	WDPC	PPDDT				22-SEP-94	28-SEP-94	<	9.2	UGL	
	WDPC	PYR				22-SEP-94	28-SEP-94	<	2.8	UGL	
	WDPC	TXPHEN				22-SEP-94	28-SEP-94	<	36	UGL	
	WDPC	UNK517				22-SEP-94	28-SEP-94		4	UGL	
	WDPC	UNK524				22-SEP-94	28-SEP-94		3	UGL	
	WDTC	124TCB				27-SEP-94	06-OCT-94	<	1.8	UGL	
	WDTC	12DCLB				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	12DPH				27-SEP-94	06-OCT-94	<	2	UGL	
	WDTC	13DCLB				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	14DCLB				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	245TCP				27-SEP-94	06-OCT-94	<	5.2	UGL	
	WDTC	246TCP				27-SEP-94	06-OCT-94	<	4.2	UGL	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDTC	24DCLP				27-SEP-94	06-OCT-94	<	2.9	UGL	
	WDTC	24DMPN				27-SEP-94	06-OCT-94	<	5.8	UGL	
	WDTC	24DNP				27-SEP-94	06-OCT-94	<	21	UGL	
	WDTC	24DNT				27-SEP-94	06-OCT-94	<	4.5	UGL	
	WDTC	26DNT				27-SEP-94	06-OCT-94	<	.79	UGL	
	WDTC	2CLP				27-SEP-94	06-OCT-94	<	.99	UGL	
	WDTC	2CNAP				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	2MNAP				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	2MP				27-SEP-94	06-OCT-94	<	3.9	UGL	
	WDTC	2NANIL				27-SEP-94	06-OCT-94	<	4.3	UGL	
	WDTC	2NP				27-SEP-94	06-OCT-94	<	3.7	UGL	
	WDTC	33DCBD				27-SEP-94	06-OCT-94	<	12	UGL	
	WDTC	3NANIL				27-SEP-94	06-OCT-94	<	4.9	UGL	
	WDTC	46DN2C				27-SEP-94	06-OCT-94	<	17	UGL	
	WDTC	4BRPPE				27-SEP-94	06-OCT-94	<	4.2	UGL	
	WDTC	4CANIL				27-SEP-94	06-OCT-94	<	7.3	UGL	
	WDTC	4CL3C				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	4CLPPE				27-SEP-94	06-OCT-94	<	5.1	UGL	
	WDTC	4MP				27-SEP-94	06-OCT-94	<	.52	UGL	
	WDTC	4NANIL				27-SEP-94	06-OCT-94	<	5.2	UGL	
	WDTC	4NP				27-SEP-94	06-OCT-94	<	12	UGL	
	WDTC	ABHC				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	ACLDAN				27-SEP-94	06-OCT-94	<	5.1	UGL	
	WDTC	AENSLF				27-SEP-94	06-OCT-94	<	9.2	UGL	
	WDTC	ALDRN				27-SEP-94	06-OCT-94	<	4.7	UGL	
	WDTC	ANAPNE				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	ANAPYL				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	ANTRC				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	B2CEXM				27-SEP-94	06-OCT-94	<	1.5	UGL	
	WDTC	B2CIPE				27-SEP-94	06-OCT-94	<	5.3	UGL	
	WDTC	B2CLEE				27-SEP-94	06-OCT-94	<	1.9	UGL	
	WDTC	B2EHP				27-SEP-94	06-OCT-94	<	4.8	UGL	
	WDTC	BAANTR				27-SEP-94	06-OCT-94	<	1.6	UGL	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDTC	BAPYR				27-SEP-94	06-OCT-94	<	4.7	UGL	
	WDTC	BBFANT				27-SEP-94	06-OCT-94	<	5.4	UGL	
	WDTC	BBHC				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	BBZP				27-SEP-94	06-OCT-94	<	3.4	UGL	
	WDTC	BENSLF				27-SEP-94	06-OCT-94	<	9.2	UGL	
	WDTC	BENZID				27-SEP-94	06-OCT-94	<	10	UGL	
	WDTC	BENZOA				27-SEP-94	06-OCT-94	<	13	UGL	
	WDTC	BGHIPY				27-SEP-94	06-OCT-94	<	6.1	UGL	
	WDTC	BKFANT				27-SEP-94	06-OCT-94	<	.87	UGL	
	WDTC	BZALC				27-SEP-94	06-OCT-94	<	.72	UGL	
	WDTC	CARBAZ				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	CHRY				27-SEP-94	06-OCT-94	<	2.4	UGL	
	WDTC	CL6BZ				27-SEP-94	06-OCT-94	<	1.6	UGL	
	WDTC	CL6CP				27-SEP-94	06-OCT-94	<	8.6	UGL	
	WDTC	CL6ET				27-SEP-94	06-OCT-94	<	1.5	UGL	
	WDTC	DBAHA				27-SEP-94	06-OCT-94	<	6.5	UGL	
	WDTC	DBHC				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	DBZFUR				27-SEP-94	06-OCT-94	<	1.7	UGL	
	WDTC	DEP				27-SEP-94	06-OCT-94	<	2	UGL	
	WDTC	DLDRN				27-SEP-94	06-OCT-94	<	4.7	UGL	
	WDTC	DMP				27-SEP-94	06-OCT-94	<	1.5	UGL	
	WDTC	DNBP				27-SEP-94	06-OCT-94	<	3.7	UGL	
	WDTC	DNOP				27-SEP-94	06-OCT-94	<	15	UGL	
	WDTC	ENDRN				27-SEP-94	06-OCT-94	<	7.6	UGL	
	WDTC	ENDRNA				27-SEP-94	06-OCT-94	<	8	UGL	
	WDTC	ENDRNK				27-SEP-94	06-OCT-94	<	8	UGL	
	WDTC	ESFSO4				27-SEP-94	06-OCT-94	<	9.2	UGL	
	WDTC	FANT				27-SEP-94	06-OCT-94	<	3.3	UGL	
	WDTC	FLRENE				27-SEP-94	06-OCT-94	<	3.7	UGL	
	WDTC	GCLDAN				27-SEP-94	06-OCT-94	<	5.1	UGL	
	WDTC	HCBD				27-SEP-94	06-OCT-94	<	3.4	UGL	
	WDTC	HPCL				27-SEP-94	06-OCT-94	<	2	UGL	
	WDTC	HPCLE				27-SEP-94	06-OCT-94	<	5	UGL	

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Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDTC	ICDPYR				27-SEP-94	06-OCT-94	<	8.6	UGL	
	WDTC	ISOPHR				27-SEP-94	06-OCT-94	<	4.8	UGL	
	WDTC	LIN				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	MEXCLR				27-SEP-94	06-OCT-94	<	5.1	UGL	
	WDTC	NAP				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	NB				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	NNDMEA				27-SEP-94	06-OCT-94	<	2	UGL	
	WDTC	NNDNPA				27-SEP-94	06-OCT-94	<	4.4	UGL	
	WDTC	NNDPA				27-SEP-94	06-OCT-94	<	3	UGL	
	WDTC	PCB016				27-SEP-94	06-OCT-94	<	21	UGL	
	WDTC	PCB221				27-SEP-94	06-OCT-94	<	21	UGL	
	WDTC	PCB232				27-SEP-94	06-OCT-94	<	21	UGL	
	WDTC	PCB242				27-SEP-94	06-OCT-94	<	30	UGL	
	WDTC	PCB248				27-SEP-94	06-OCT-94	<	30	UGL	
	WDTC	PCB254				27-SEP-94	06-OCT-94	<	36	UGL	
	WDTC	PCB260				27-SEP-94	06-OCT-94	<	36	UGL	
	WDTC	PCP				27-SEP-94	06-OCT-94	<	18	UGL	
	WDTC	PHANTR				27-SEP-94	06-OCT-94	<	.5	UGL	
	WDTC	PHENOL				27-SEP-94	06-OCT-94	<	9.2	UGL	
	WDTC	PPDDD				27-SEP-94	06-OCT-94	<	4	UGL	
	WDTC	PPDDE				27-SEP-94	06-OCT-94	<	4.7	UGL	
	WDTC	PPDDT				27-SEP-94	06-OCT-94	<	9.2	UGL	
	WDTC	PYR				27-SEP-94	06-OCT-94	<	2.8	UGL	
	WDTC	TXPHEN				27-SEP-94	06-OCT-94	<	36	UGL	
	WDUC	124TCB				27-SEP-94	05-OCT-94	<	1.8	UGL	
	WDUC	12DCLB				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	12DPH				27-SEP-94	05-OCT-94	<	2	UGL	
	WDUC	13DCLB				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	14DCLB				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	245TCP				27-SEP-94	05-OCT-94	<	5.2	UGL	
	WDUC	246TCP				27-SEP-94	05-OCT-94	<	4.2	UGL	
	WDUC	24DCLP				27-SEP-94	05-OCT-94	<	2.9	UGL	
	WDUC	24DMPN				27-SEP-94	05-OCT-94	<	5.8	UGL	

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USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDUC	24DNP				27-SEP-94	05-OCT-94	<	21	UGL	
	WDUC	24DNT				27-SEP-94	05-OCT-94	<	4.5	UGL	
	WDUC	26DNT				27-SEP-94	05-OCT-94	<	.79	UGL	
	WDUC	2CLP				27-SEP-94	05-OCT-94	<	.99	UGL	
	WDUC	2CNAP				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	2MNAP				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	2MP				27-SEP-94	05-OCT-94	<	3.9	UGL	
	WDUC	2NANIL				27-SEP-94	05-OCT-94	<	4.3	UGL	
	WDUC	2NP				27-SEP-94	05-OCT-94	<	3.7	UGL	
	WDUC	33DCBD				27-SEP-94	05-OCT-94	<	12	UGL	
	WDUC	3NANIL				27-SEP-94	05-OCT-94	<	4.9	UGL	
	WDUC	46DN2C				27-SEP-94	05-OCT-94	<	17	UGL	
	WDUC	4BRPPE				27-SEP-94	05-OCT-94	<	4.2	UGL	
	WDUC	4CANIL				27-SEP-94	05-OCT-94	<	7.3	UGL	
	WDUC	4CL3C				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	4CLPPE				27-SEP-94	05-OCT-94	<	5.1	UGL	
	WDUC	4MP				27-SEP-94	05-OCT-94	<	.52	UGL	
	WDUC	4NANIL				27-SEP-94	05-OCT-94	<	5.2	UGL	
	WDUC	4NP				27-SEP-94	05-OCT-94	<	12	UGL	
	WDUC	ABHC				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	ACLDAN				27-SEP-94	05-OCT-94	<	5.1	UGL	
	WDUC	AENSLF				27-SEP-94	05-OCT-94	<	9.2	UGL	
	WDUC	ALDRN				27-SEP-94	05-OCT-94	<	4.7	UGL	
	WDUC	ANAPNE				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	ANAPYL				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	ANTRC				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	B2CEXM				27-SEP-94	05-OCT-94	<	1.5	UGL	
	WDUC	B2CIPE				27-SEP-94	05-OCT-94	<	5.3	UGL	
	WDUC	B2CLEE				27-SEP-94	05-OCT-94	<	1.9	UGL	
	WDUC	B2EHP				27-SEP-94	05-OCT-94	<	4.8	UGL	
	WDUC	BAANTR				27-SEP-94	05-OCT-94	<	1.6	UGL	
	WDUC	BAPYR				27-SEP-94	05-OCT-94	<	4.7	UGL	
	WDUC	BBFANT				27-SEP-94	05-OCT-94	<	5.4	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDUC	BBHC				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	BBZP				27-SEP-94	05-OCT-94	<	3.4	UGL	
	WDUC	BENSLF				27-SEP-94	05-OCT-94	<	9.2	UGL	
	WDUC	BENZID				27-SEP-94	05-OCT-94	<	10	UGL	
	WDUC	BENZOA				27-SEP-94	05-OCT-94	<	13	UGL	
	WDUC	BGHIPY				27-SEP-94	05-OCT-94	<	6.1	UGL	
	WDUC	BKFANT				27-SEP-94	05-OCT-94	<	.87	UGL	
	WDUC	BZALC				27-SEP-94	05-OCT-94	<	.72	UGL	
	WDUC	CARBAZ				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	CHRY				27-SEP-94	05-OCT-94	<	2.4	UGL	
	WDUC	CL6BZ				27-SEP-94	05-OCT-94	<	1.6	UGL	
	WDUC	CL6CP				27-SEP-94	05-OCT-94	<	8.6	UGL	
	WDUC	CL6ET				27-SEP-94	05-OCT-94	<	1.5	UGL	
	WDUC	DBAHA				27-SEP-94	05-OCT-94	<	6.5	UGL	
	WDUC	DBHC				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	DBZFUR				27-SEP-94	05-OCT-94	<	1.7	UGL	
	WDUC	DEP				27-SEP-94	05-OCT-94	<	2	UGL	
	WDUC	DLDRN				27-SEP-94	05-OCT-94	<	4.7	UGL	
	WDUC	DMP				27-SEP-94	05-OCT-94	<	1.5	UGL	
	WDUC	DNBP				27-SEP-94	05-OCT-94	<	3.7	UGL	
	WDUC	DNOP				27-SEP-94	05-OCT-94	<	15	UGL	
	WDUC	ENDRN				27-SEP-94	05-OCT-94	<	7.6	UGL	
	WDUC	ENDRNA				27-SEP-94	05-OCT-94	<	8	UGL	
	WDUC	ENDRNK				27-SEP-94	05-OCT-94	<	8	UGL	
	WDUC	ESFSO4				27-SEP-94	05-OCT-94	<	9.2	UGL	
	WDUC	FANT				27-SEP-94	05-OCT-94	<	3.3	UGL	
	WDUC	FLRENE				27-SEP-94	05-OCT-94	<	3.7	UGL	
	WDUC	GCLDAN				27-SEP-94	05-OCT-94	<	5.1	UGL	
	WDUC	HCBD				27-SEP-94	05-OCT-94	<	3.4	UGL	
	WDUC	HPCL				27-SEP-94	05-OCT-94	<	2	UGL	
	WDUC	HPCLE				27-SEP-94	05-OCT-94	<	5	UGL	
	WDUC	ICDPYR				27-SEP-94	05-OCT-94	<	8.6	UGL	
	WDUC	ISOPHR				27-SEP-94	05-OCT-94	<	4.8	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDUC	LIN				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	MEXCLR				27-SEP-94	05-OCT-94	<	5.1	UGL	
	WDUC	NAP				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	NB				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	NNDMEA				27-SEP-94	05-OCT-94	<	2	UGL	
	WDUC	NNDNPA				27-SEP-94	05-OCT-94	<	4.4	UGL	
	WDUC	NNDPA				27-SEP-94	05-OCT-94	<	3	UGL	
	WDUC	PCB016				27-SEP-94	05-OCT-94	<	21	UGL	
	WDUC	PCB221				27-SEP-94	05-OCT-94	<	21	UGL	
	WDUC	PCB232				27-SEP-94	05-OCT-94	<	21	UGL	
	WDUC	PCB242				27-SEP-94	05-OCT-94	<	30	UGL	
	WDUC	PCB248				27-SEP-94	05-OCT-94	<	30	UGL	
	WDUC	PCB254				27-SEP-94	05-OCT-94	<	36	UGL	
	WDUC	PCB260				27-SEP-94	05-OCT-94	<	36	UGL	
	WDUC	PCP				27-SEP-94	05-OCT-94	<	18	UGL	
	WDUC	PHANTR				27-SEP-94	05-OCT-94	<	.5	UGL	
	WDUC	PHENOL				27-SEP-94	05-OCT-94	<	9.2	UGL	
	WDUC	PPDDD				27-SEP-94	05-OCT-94	<	4	UGL	
	WDUC	PPDDE				27-SEP-94	05-OCT-94	<	4.7	UGL	
	WDUC	PPDDT				27-SEP-94	05-OCT-94	<	9.2	UGL	
	WDUC	PYR				27-SEP-94	05-OCT-94	<	2.8	UGL	
	WDUC	TXPHEN				27-SEP-94	05-OCT-94	<	36	UGL	
	WDVC	124TCB				28-SEP-94	11-OCT-94	<	1.8	UGL	
	WDVC	12DCLB				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	12DPH				28-SEP-94	11-OCT-94	<	2	UGL	
	WDVC	13DCLB				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	14DCLB				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	245TCP				28-SEP-94	11-OCT-94	<	5.2	UGL	
	WDVC	246TCP				28-SEP-94	11-OCT-94	<	4.2	UGL	
	WDVC	24DCLP				28-SEP-94	11-OCT-94	<	2.9	UGL	
	WDVC	24DMPN				28-SEP-94	11-OCT-94	<	5.8	UGL	
	WDVC	24DNP				28-SEP-94	11-OCT-94	<	21	UGL	
	WDVC	24DNT				28-SEP-94	11-OCT-94	<	4.5	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDVC	26DNT				28-SEP-94	11-OCT-94	<	.79	UGL	
	WDVC	2CLP				28-SEP-94	11-OCT-94	<	.99	UGL	
	WDVC	2CNAP				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	2MNAP				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	2MP				28-SEP-94	11-OCT-94	<	3.9	UGL	
	WDVC	2NANIL				28-SEP-94	11-OCT-94	<	4.3	UGL	
	WDVC	2NP				28-SEP-94	11-OCT-94	<	3.7	UGL	
	WDVC	33DCBD				28-SEP-94	11-OCT-94	<	12	UGL	
	WDVC	3NANIL				28-SEP-94	11-OCT-94	<	4.9	UGL	
	WDVC	46DN2C				28-SEP-94	11-OCT-94	<	17	UGL	
	WDVC	4BRPPE				28-SEP-94	11-OCT-94	<	4.2	UGL	
	WDVC	4CANIL				28-SEP-94	11-OCT-94	<	7.3	UGL	
	WDVC	4CL3C				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	4CLPPE				28-SEP-94	11-OCT-94	<	5.1	UGL	
	WDVC	4MP				28-SEP-94	11-OCT-94	<	.52	UGL	
	WDVC	4NANIL				28-SEP-94	11-OCT-94	<	5.2	UGL	
	WDVC	4NP				28-SEP-94	11-OCT-94	<	12	UGL	
	WDVC	ABHC				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	ACLDAN				28-SEP-94	11-OCT-94	<	5.1	UGL	
	WDVC	AENSLF				28-SEP-94	11-OCT-94	<	9.2	UGL	
	WDVC	ALDRN				28-SEP-94	11-OCT-94	<	4.7	UGL	
	WDVC	ANAPNE				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	ANAPYL				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	ANTRC				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	B2CEXM				28-SEP-94	11-OCT-94	<	1.5	UGL	
	WDVC	B2CIPE				28-SEP-94	11-OCT-94	<	5.3	UGL	
	WDVC	B2CLEE				28-SEP-94	11-OCT-94	<	1.9	UGL	
	WDVC	B2EHP				28-SEP-94	11-OCT-94	<	4.8	UGL	
	WDVC	BAANTR				28-SEP-94	11-OCT-94	<	1.6	UGL	
	WDVC	BAPYR				28-SEP-94	11-OCT-94	<	4.7	UGL	
	WDVC	BBFANT				28-SEP-94	11-OCT-94	<	5.4	UGL	
	WDVC	BBHC				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	BBZP				28-SEP-94	11-OCT-94	<	3.4	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDVC	BENSLF				28-SEP-94	11-OCT-94	<	9.2	UGL	
	WDVC	BENZID				28-SEP-94	11-OCT-94	<	10	UGL	
	WDVC	BENZOA				28-SEP-94	11-OCT-94	<	13	UGL	
	WDVC	BGHIPY				28-SEP-94	11-OCT-94	<	6.1	UGL	
	WDVC	BKFANT				28-SEP-94	11-OCT-94	<	.87	UGL	
	WDVC	BZALC				28-SEP-94	11-OCT-94	<	.72	UGL	
	WDVC	CARBAZ				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	CHRY				28-SEP-94	11-OCT-94	<	2.4	UGL	
	WDVC	CL6BZ				28-SEP-94	11-OCT-94	<	1.6	UGL	
	WDVC	CL6CP				28-SEP-94	11-OCT-94	<	8.6	UGL	
	WDVC	CL6ET				28-SEP-94	11-OCT-94	<	1.5	UGL	
	WDVC	DBAHA				28-SEP-94	11-OCT-94	<	6.5	UGL	
	WDVC	DBHC				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	DBZFUR				28-SEP-94	11-OCT-94	<	1.7	UGL	
	WDVC	DEP				28-SEP-94	11-OCT-94	<	2	UGL	
	WDVC	DLDRN				28-SEP-94	11-OCT-94	<	4.7	UGL	
	WDVC	DMP				28-SEP-94	11-OCT-94	<	1.5	UGL	
	WDVC	DNBP				28-SEP-94	11-OCT-94	<	3.7	UGL	
	WDVC	DNOP				28-SEP-94	11-OCT-94	<	15	UGL	
	WDVC	ENDRN				28-SEP-94	11-OCT-94	<	7.6	UGL	
	WDVC	ENDRNA				28-SEP-94	11-OCT-94	<	8	UGL	
	WDVC	ENDRNK				28-SEP-94	11-OCT-94	<	8	UGL	
	WDVC	ESFSO4				28-SEP-94	11-OCT-94	<	9.2	UGL	
	WDVC	FANT				28-SEP-94	11-OCT-94	<	3.3	UGL	
	WDVC	FLRENE				28-SEP-94	11-OCT-94	<	3.7	UGL	
	WDVC	GCLDAN				28-SEP-94	11-OCT-94	<	5.1	UGL	
	WDVC	HCBD				28-SEP-94	11-OCT-94	<	3.4	UGL	
	WDVC	HPCL				28-SEP-94	11-OCT-94	<	2	UGL	
	WDVC	HPCLE				28-SEP-94	11-OCT-94	<	5	UGL	
	WDVC	ICDPYR				28-SEP-94	11-OCT-94	<	8.6	UGL	
	WDVC	ISOPHR				28-SEP-94	11-OCT-94	<	4.8	UGL	
	WDVC	LIN				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	MEXCLR				28-SEP-94	11-OCT-94	<	5.1	UGL	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook Method Blank Results - by Method

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM18	WDVC	NAP				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	NB				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	NNDMEA				28-SEP-94	11-OCT-94	<	2	UGL	
	WDVC	NNDNPA				28-SEP-94	11-OCT-94	<	4.4	UGL	
	WDVC	NNDPA				28-SEP-94	11-OCT-94	<	3	UGL	
	WDVC	PCB016				28-SEP-94	11-OCT-94	<	21	UGL	
	WDVC	PCB221				28-SEP-94	11-OCT-94	<	21	UGL	
	WDVC	PCB232				28-SEP-94	11-OCT-94	<	21	UGL	
	WDVC	PCB242				28-SEP-94	11-OCT-94	<	30	UGL	
	WDVC	PCB248				28-SEP-94	11-OCT-94	<	30	UGL	
	WDVC	PCB254				28-SEP-94	11-OCT-94	<	36	UGL	
	WDVC	PCB260				28-SEP-94	11-OCT-94	<	36	UGL	
	WDVC	PCP				28-SEP-94	11-OCT-94	<	18	UGL	
	WDVC	PHANTR				28-SEP-94	11-OCT-94	<	.5	UGL	
	WDVC	PHENOL				28-SEP-94	11-OCT-94	<	9.2	UGL	
	WDVC	PPDDD				28-SEP-94	11-OCT-94	<	4	UGL	
	WDVC	PPDDE				28-SEP-94	11-OCT-94	<	4.7	UGL	
	WDVC	PPDDT				28-SEP-94	11-OCT-94	<	9.2	UGL	
	WDVC	PYR				28-SEP-94	11-OCT-94	<	2.8	UGL	
	WDVC	TXPHEN				28-SEP-94	11-OCT-94	<	36	UGL	

TEXT

TABLE C-9

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
	1302	SBK94577	HARD	TEDY	22-SEP-94	0	<	1000	UGL	SBK-94-577	V1AW*577
		SBK94577	HARD	TEDY	22-SEP-94	0	<	1000	UGL	SBK-94-577	V1AW*577
	1602	SBK94577	TSS	TEAY	22-SEP-94	0	<	4000	UGL	SBK-94-577	V1AW*577
		SBK94577	TSS	TEAY	22-SEP-94	0	<	4000	UGL	SBK-94-577	V1AW*577
	3101	SBK94577	ALK	TEGY	22-SEP-94	0	<	5000	UGL	SBK-94-577	V1AW*577
		SBK94577	ALK	TEGY	22-SEP-94	0	<	5000	UGL	SBK-94-577	V1AW*577
	4151	SBK94578	TOC	TENY	23-SEP-94	0	<	1000	UGL	SBK-94-578	V1AW*578
		SBK94578	TOC	TENY	23-SEP-94	0	<	1000	UGL	SBK-94-578	V1AW*578
		SBK94579	TOC	TENY	23-SEP-94	0	<	1000	UGL	SBK-94-579	V1AW*579
		SBK94579	TOC	TENY	23-SEP-94	0	<	1000	UGL	SBK-94-579	V1AW*579
	4181	SBK94578	TPHC	TEFY	23-SEP-94	0	<	182	UGL	SBK-94-578	V1AW*578
		SBK94578	TPHC	TEFY	23-SEP-94	0	<	182	UGL	SBK-94-578	V1AW*578
		SBK94579	TPHC	TEFY	23-SEP-94	0	<	180	UGL	SBK-94-579	V1AW*579
		SBK94579	TPHC	TEFY	23-SEP-94	0	<	180	UGL	SBK-94-579	V1AW*579
HG IN WATER BY CVAA	SB01	SBK94577	HG	TCQC	22-SEP-94	0	<	.243	UGL	SBK-94-577	V1AW*577
HG IN WATER BY CVAA		SBK94577	HG	TCQC	22-SEP-94	0	<	.243	UGL	SBK-94-577	V1AF*577
HG IN WATER BY CVAA		SBK94577	HG	TCQC	22-SEP-94	0	<	.243	UGL	SBK-94-577	V1AF*577
HG IN WATER BY CVAA		SBK94579	HG	TCQC	23-SEP-94	0	<	.243	UGL	SBK-94-579	V1AW*579
HG IN WATER BY CVAA		SBK94578	HG	TCQC	23-SEP-94	0	<	.243	UGL	SBK-94-578	V1AW*578
HG IN WATER BY CVAA		SBK94577	HG	TCQC	22-SEP-94	0	<	.243	UGL	SBK-94-577	V1AW*577
HG IN WATER BY CVAA		SBK94579	HG	TCQC	23-SEP-94	0	<	.243	UGL	SBK-94-579	V1AW*579
HG IN WATER BY CVAA		SBK94578	HG	TCQC	23-SEP-94	0	<	.243	UGL	SBK-94-578	V1AW*578
TL IN WATER BY GFAA	SD09	SBK94577	TL	UCCC	22-SEP-94	0	<	6.99	UGL	SBK-94-577	V1AW*577
TL IN WATER BY GFAA		SBK94578	TL	UCCC	23-SEP-94	0	<	6.99	UGL	SBK-94-578	V1AW*578
TL IN WATER BY GFAA		SBK94577	TL	UCCC	22-SEP-94	0	<	6.99	UGL	SBK-94-577	V1AF*577
TL IN WATER BY GFAA		SBK94579	TL	UCCC	23-SEP-94	0	<	6.99	UGL	SBK-94-579	V1AW*579
TL IN WATER BY GFAA		SBK94577	TL	UCCC	22-SEP-94	0	<	6.99	UGL	SBK-94-577	V1AF*577
TL IN WATER BY GFAA		SBK94579	TL	UCCC	23-SEP-94	0	<	6.99	UGL	SBK-94-579	V1AW*579
TL IN WATER BY GFAA		SBK94578	TL	UCCC	23-SEP-94	0	<	6.99	UGL	SBK-94-578	V1AW*578
TL IN WATER BY GFAA		SBK94577	TL	UCCC	22-SEP-94	0	<	6.99	UGL	SBK-94-577	V1AW*577
PB IN WATER BY GFAA	SD20	SBK94577	PB	WCMC	22-SEP-94	0	<	1.26	UGL	SBK-94-577	V1AW*577
PB IN WATER BY GFAA		SBK94578	PB	WCMC	23-SEP-94	0	<	1.26	UGL	SBK-94-578	V1AW*578
PB IN WATER BY GFAA		SBK94578	PB	WCMC	23-SEP-94	0	<	1.26	UGL	SBK-94-578	V1AW*578
PB IN WATER BY GFAA		SBK94577	PB	WCMC	22-SEP-94	0	<	1.26	UGL	SBK-94-577	V1AF*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
PB IN WATER BY GFAA	SD20	SBK94579	PB	WCMC	23-SEP-94	0	<	1.26	UGL	SBK-94-579	V1AW*579
PB IN WATER BY GFAA		SBK94577	PB	WCMC	22-SEP-94	0	<	1.26	UGL	SBK-94-577	V1AW*577
PB IN WATER BY GFAA		SBK94577	PB	WCMC	22-SEP-94	0	<	1.26	UGL	SBK-94-577	V1AF*577
PB IN WATER BY GFAA		SBK94579	PB	WCMC	23-SEP-94	0	<	1.26	UGL	SBK-94-579	V1AW*579
SE IN WATER BY GFAA	SD21	SBK94579	SE	XCHC	23-SEP-94	0	<	3.02	UGL	SBK-94-579	V1AW*579
SE IN WATER BY GFAA		SBK94577	SE	XCHC	22-SEP-94	0	<	3.02	UGL	SBK-94-577	V1AF*577
SE IN WATER BY GFAA		SBK94578	SE	XCHC	23-SEP-94	0	<	3.02	UGL	SBK-94-578	V1AW*578
SE IN WATER BY GFAA		SBK94577	SE	XCHC	22-SEP-94	0	<	3.02	UGL	SBK-94-577	V1AW*577
SE IN WATER BY GFAA		SBK94579	SE	XCHC	23-SEP-94	0	<	3.02	UGL	SBK-94-579	V1AW*579
SE IN WATER BY GFAA		SBK94577	SE	XCHC	22-SEP-94	0	<	3.02	UGL	SBK-94-577	V1AF*577
SE IN WATER BY GFAA		SBK94578	SE	XCHC	23-SEP-94	0	<	3.02	UGL	SBK-94-578	V1AW*578
SE IN WATER BY GFAA		SBK94577	SE	XCHC	22-SEP-94	0	<	3.02	UGL	SBK-94-577	V1AW*577
AS IN WATER BY GFAA	SD22	SBK94577	AS	YCIC	22-SEP-94	0	<	2.54	UGL	SBK-94-577	V1AW*577
AS IN WATER BY GFAA		SBK94578	AS	YCIC	23-SEP-94	0	<	2.54	UGL	SBK-94-578	V1AW*578
AS IN WATER BY GFAA		SBK94577	AS	YCIC	22-SEP-94	0	<	2.54	UGL	SBK-94-577	V1AF*577
AS IN WATER BY GFAA		SBK94579	AS	YCIC	23-SEP-94	0	<	2.54	UGL	SBK-94-579	V1AW*579
AS IN WATER BY GFAA		SBK94577	AS	YCIC	22-SEP-94	0	<	2.54	UGL	SBK-94-577	V1AW*577
AS IN WATER BY GFAA		SBK94579	AS	YCIC	23-SEP-94	0	<	2.54	UGL	SBK-94-579	V1AW*579
AS IN WATER BY GFAA		SBK94578	AS	YCIC	23-SEP-94	0	<	2.54	UGL	SBK-94-578	V1AW*578
AS IN WATER BY GFAA		SBK94577	AS	YCIC	22-SEP-94	0	<	2.54	UGL	SBK-94-577	V1AF*577
SB IN WATER BY GFAA	SD28	SBK94577	SB	NFPB	22-SEP-94	0	<	3.03	UGL	SBK-94-577	V1AW*577
SB IN WATER BY GFAA		SBK94578	SB	NFPB	23-SEP-94	0	<	3.03	UGL	SBK-94-578	V1AW*578
SB IN WATER BY GFAA		SBK94579	SB	NFPB	23-SEP-94	0	<	3.03	UGL	SBK-94-579	V1AW*579
SB IN WATER BY GFAA		SBK94577	SB	NFPB	22-SEP-94	0	<	3.03	UGL	SBK-94-577	V1AF*577
SB IN WATER BY GFAA		SBK94577	SB	NFPB	22-SEP-94	0	<	3.03	UGL	SBK-94-577	V1AF*577
SB IN WATER BY GFAA		SBK94579	SB	NFPB	23-SEP-94	0	<	3.03	UGL	SBK-94-579	V1AW*579
SB IN WATER BY GFAA		SBK94578	SB	NFPB	23-SEP-94	0	<	3.03	UGL	SBK-94-578	V1AW*578
SB IN WATER BY GFAA		SBK94577	SB	NFPB	22-SEP-94	0	<	3.03	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP	SS10	SBK94577	AG	ZFDC	22-SEP-94	0	<	4.6	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	AG	ZFDC	23-SEP-94	0	<	4.6	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	AG	ZFDC	22-SEP-94	0	<	4.6	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	AG	ZFDC	23-SEP-94	0	<	4.6	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	AG	ZFDC	23-SEP-94	0	<	4.6	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	AG	ZFDC	22-SEP-94	0	<	4.6	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	AG	ZFDC	23-SEP-94	0	<	4.6	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	AG	ZFDC	22-SEP-94	0	<	4.6	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	AL	ZFDC	22-SEP-94	0	<	141	UGL	SBK-94-577	V1AW*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK94579	AL	ZFDC	23-SEP-94	0	<	141	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	AL	ZFDC	22-SEP-94	0	<	141	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	AL	ZFDC	23-SEP-94	0	<	141	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	AL	ZFDC	23-SEP-94	0	<	141	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	AL	ZFDC	22-SEP-94	0	<	141	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	AL	ZFDC	23-SEP-94	0	<	141	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	AL	ZFDC	22-SEP-94	0	<	141	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	BA	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	BA	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	BA	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	BA	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	BA	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	BA	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	BA	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	BA	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	BE	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	BE	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	BE	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	BE	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	BE	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	BE	ZFDC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	BE	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	BE	ZFDC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	CA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	CA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	CA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	CA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	CA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	CD	ZFDC	22-SEP-94	0	<	4.01	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	CD	ZFDC	22-SEP-94	0	<	4.01	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	CD	ZFDC	23-SEP-94	0	<	4.01	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	CD	ZFDC	23-SEP-94	0	<	4.01	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	CD	ZFDC	23-SEP-94	0	<	4.01	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	CD	ZFDC	23-SEP-94	0	<	4.01	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CD	ZFDC	22-SEP-94	0	<	4.01	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	CD	ZFDC	22-SEP-94	0	<	4.01	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	CO	ZFDC	22-SEP-94	0	<	25	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	CO	ZFDC	22-SEP-94	0	<	25	UGL	SBK-94-577	V1AF*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK94579	CO	ZFDC	23-SEP-94	0	<	25	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CO	ZFDC	22-SEP-94	0	<	25	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	CO	ZFDC	23-SEP-94	0	<	25	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	CO	ZFDC	22-SEP-94	0	<	25	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	CO	ZFDC	23-SEP-94	0	<	25	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	CO	ZFDC	23-SEP-94	0	<	25	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	CR	ZFDC	23-SEP-94	0	<	6.02	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CR	ZFDC	22-SEP-94	0	<	6.02	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	CR	ZFDC	22-SEP-94	0	<	6.02	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	CR	ZFDC	22-SEP-94	0	<	6.02	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	CR	ZFDC	23-SEP-94	0	<	6.02	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	CR	ZFDC	22-SEP-94	0	<	6.02	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	CR	ZFDC	23-SEP-94	0	<	6.02	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	CR	ZFDC	23-SEP-94	0	<	6.02	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	CU	ZFDC	22-SEP-94	0	<	8.09	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	CU	ZFDC	23-SEP-94	0	<	8.09	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	CU	ZFDC	22-SEP-94	0	<	8.09	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	CU	ZFDC	23-SEP-94	0	<	8.09	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	CU	ZFDC	22-SEP-94	0	<	8.09	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	CU	ZFDC	23-SEP-94	0	<	8.09	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	CU	ZFDC	23-SEP-94	0	<	8.09	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	CU	ZFDC	22-SEP-94	0	<	8.09	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	FE	ZFDC	23-SEP-94	0		64.5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94579	FE	ZFDC	23-SEP-94	0		64.5	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	FE	ZFDC	22-SEP-94	0	<	38.8	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	FE	ZFDC	23-SEP-94	0	<	38.8	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	FE	ZFDC	22-SEP-94	0	<	38.8	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	FE	ZFDC	22-SEP-94	0	<	38.8	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	FE	ZFDC	23-SEP-94	0	<	38.8	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	FE	ZFDC	22-SEP-94	0	<	38.8	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	K	ZFDC	22-SEP-94	0	<	375	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	K	ZFDC	22-SEP-94	0	<	375	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	K	ZFDC	23-SEP-94	0	<	375	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	K	ZFDC	23-SEP-94	0	<	375	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	K	ZFDC	22-SEP-94	0	<	375	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	K	ZFDC	23-SEP-94	0	<	375	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	K	ZFDC	22-SEP-94	0	<	375	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	K	ZFDC	23-SEP-94	0	<	375	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94579	MG	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	MG	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	MG	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK94577	MG	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	MG	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	MG	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	MG	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	MG	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	MN	ZFDC	23-SEP-94	0		12.9	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94579	MN	ZFDC	23-SEP-94	0		12.9	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	MN	ZFDC	22-SEP-94	0		6.26	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	MN	ZFDC	22-SEP-94	0		6.26	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	MN	ZFDC	22-SEP-94	0	<	2.75	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	MN	ZFDC	23-SEP-94	0	<	2.75	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94578	MN	ZFDC	23-SEP-94	0	<	2.75	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	MN	ZFDC	22-SEP-94	0	<	2.75	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94578	NA	ZFDC	23-SEP-94	0		562	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94578	NA	ZFDC	23-SEP-94	0		562	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	NA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	NA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	NA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	NA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	NA	ZFDC	23-SEP-94	0	<	500	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	NA	ZFDC	22-SEP-94	0	<	500	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	NI	ZFDC	22-SEP-94	0	<	34.3	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94577	NI	ZFDC	22-SEP-94	0	<	34.3	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	NI	ZFDC	23-SEP-94	0	<	34.3	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94578	NI	ZFDC	23-SEP-94	0	<	34.3	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94578	NI	ZFDC	23-SEP-94	0	<	34.3	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	NI	ZFDC	22-SEP-94	0	<	34.3	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94579	NI	ZFDC	23-SEP-94	0	<	34.3	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	NI	ZFDC	22-SEP-94	0	<	34.3	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	V	ZFDC	22-SEP-94	0	<	11	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	V	ZFDC	23-SEP-94	0	<	11	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	V	ZFDC	22-SEP-94	0	<	11	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	V	ZFDC	23-SEP-94	0	<	11	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94579	V	ZFDC	23-SEP-94	0	<	11	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	V	ZFDC	22-SEP-94	0	<	11	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	V	ZFDC	22-SEP-94	0	<	11	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	V	ZFDC	23-SEP-94	0	<	11	UGL	SBK-94-578	V1AW*578
METALS IN WATER BY ICAP		SBK94577	ZN	ZFDC	22-SEP-94	0	<	21.1	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94579	ZN	ZFDC	23-SEP-94	0	<	21.1	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	ZN	ZFDC	22-SEP-94	0	<	21.1	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	ZN	ZFDC	23-SEP-94	0	<	21.1	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date		Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK94579	ZN	ZFDC	23-SEP-94		0	<	21.1	UGL	SBK-94-579	V1AW*579
METALS IN WATER BY ICAP		SBK94577	ZN	ZFDC	22-SEP-94		0	<	21.1	UGL	SBK-94-577	V1AF*577
METALS IN WATER BY ICAP		SBK94577	ZN	ZFDC	22-SEP-94		0	<	21.1	UGL	SBK-94-577	V1AW*577
METALS IN WATER BY ICAP		SBK94578	ZN	ZFDC	23-SEP-94		0	<	21.1	UGL	SBK-94-578	V1AW*578
SO4 IN WATER	TT10	SBK94577	CL	PDTA	22-SEP-94		0	<	2120	UGL	SBK-94-577	V1AW*577
SO4 IN WATER		SBK94577	CL	PDTA	22-SEP-94		0	<	2120	UGL	SBK-94-577	V1AW*577
	UH02	SBK94579	PCB016	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB016	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB221	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB221	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB232	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB232	SDMB	23-SEP-94		0	<	.16	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB242	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB242	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB248	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB248	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB254	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB254	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB260	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
		SBK94579	PCB260	SDMB	23-SEP-94		0	<	.19	UGL	SBK-94-579	V1AW*579
	UH13	SBK94579	ABHC	TDYB	23-SEP-94		0	<	.0385	UGL	SBK-94-579	V1AW*579
		SBK94579	ABHC	TDYB	23-SEP-94		0	<	.0385	UGL	SBK-94-579	V1AW*579
		SBK94579	ACLDAN	TDYB	23-SEP-94		0	<	.075	UGL	SBK-94-579	V1AW*579
		SBK94579	ACLDAN	TDYB	23-SEP-94		0	<	.075	UGL	SBK-94-579	V1AW*579
		SBK94579	AENSLF	TDYB	23-SEP-94		0	<	.023	UGL	SBK-94-579	V1AW*579
		SBK94579	AENSLF	TDYB	23-SEP-94		0	<	.023	UGL	SBK-94-579	V1AW*579
		SBK94579	ALDRN	TDYB	23-SEP-94		0	<	.0918	UGL	SBK-94-579	V1AW*579
		SBK94579	ALDRN	TDYB	23-SEP-94		0	<	.0918	UGL	SBK-94-579	V1AW*579
		SBK94579	BBHC	TDYB	23-SEP-94		0	<	.024	UGL	SBK-94-579	V1AW*579
		SBK94579	BBHC	TDYB	23-SEP-94		0	<	.024	UGL	SBK-94-579	V1AW*579
		SBK94579	BENSLF	TDYB	23-SEP-94		0	<	.023	UGL	SBK-94-579	V1AW*579
		SBK94579	BENSLF	TDYB	23-SEP-94		0	<	.023	UGL	SBK-94-579	V1AW*579
		SBK94579	DBHC	TDYB	23-SEP-94		0	<	.0293	UGL	SBK-94-579	V1AW*579
		SBK94579	DBHC	TDYB	23-SEP-94		0	<	.0293	UGL	SBK-94-579	V1AW*579
		SBK94579	DLDRN	TDYB	23-SEP-94		0	<	.024	UGL	SBK-94-579	V1AW*579
		SBK94579	DLDRN	TDYB	23-SEP-94		0	<	.024	UGL	SBK-94-579	V1AW*579
		SBK94579	ENDRN	TDYB	23-SEP-94		0	<	.0238	UGL	SBK-94-579	V1AW*579
		SBK94579	ENDRN	TDYB	23-SEP-94		0	<	.0238	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
	UH13	SBK94579	ENDRNA	TDYB	23-SEP-94	0	<	.0285	UGL	SBK-94-579	V1AW*579
		SBK94579	ENDRNA	TDYB	23-SEP-94	0	<	.0285	UGL	SBK-94-579	V1AW*579
		SBK94579	ENDRNK	TDYB	23-SEP-94	0	<	.0285	UGL	SBK-94-579	V1AW*579
		SBK94579	ENDRNK	TDYB	23-SEP-94	0	<	.0285	UGL	SBK-94-579	V1AW*579
		SBK94579	ESFSO4	TDYB	23-SEP-94	0	<	.0786	UGL	SBK-94-579	V1AW*579
		SBK94579	ESFSO4	TDYB	23-SEP-94	0	<	.0786	UGL	SBK-94-579	V1AW*579
		SBK94579	GCLDAN	TDYB	23-SEP-94	0	<	.075	UGL	SBK-94-579	V1AW*579
		SBK94579	GCLDAN	TDYB	23-SEP-94	0	<	.075	UGL	SBK-94-579	V1AW*579
		SBK94579	HPCL	TDYB	23-SEP-94	0	<	.0423	UGL	SBK-94-579	V1AW*579
		SBK94579	HPCL	TDYB	23-SEP-94	0	<	.0423	UGL	SBK-94-579	V1AW*579
		SBK94579	HPCLE	TDYB	23-SEP-94	0	<	.0245	UGL	SBK-94-579	V1AW*579
		SBK94579	HPCLE	TDYB	23-SEP-94	0	<	.0245	UGL	SBK-94-579	V1AW*579
		SBK94579	ISODR	TDYB	23-SEP-94	0	<	.0562	UGL	SBK-94-579	V1AW*579
		SBK94579	ISODR	TDYB	23-SEP-94	0	<	.0562	UGL	SBK-94-579	V1AW*579
		SBK94579	LIN	TDYB	23-SEP-94	0	<	.0507	UGL	SBK-94-579	V1AW*579
		SBK94579	LIN	TDYB	23-SEP-94	0	<	.0507	UGL	SBK-94-579	V1AW*579
		SBK94579	MEXCLR	TDYB	23-SEP-94	0	<	.057	UGL	SBK-94-579	V1AW*579
		SBK94579	MEXCLR	TDYB	23-SEP-94	0	<	.057	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDD	TDYB	23-SEP-94	0	<	.0233	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDD	TDYB	23-SEP-94	0	<	.0233	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDE	TDYB	23-SEP-94	0	<	.027	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDE	TDYB	23-SEP-94	0	<	.027	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDT	TDYB	23-SEP-94	0	<	.034	UGL	SBK-94-579	V1AW*579
		SBK94579	PPDDT	TDYB	23-SEP-94	0	<	.034	UGL	SBK-94-579	V1AW*579
		SBK94579	TXPHEN	TDYB	23-SEP-94	0	<	1.35	UGL	SBK-94-579	V1AW*579
		SBK94579	TXPHEN	TDYB	23-SEP-94	0	<	1.35	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS	UM18	SBK94578	124TCB	WDTC	23-SEP-94	0	<	1.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	124TCB	WDTC	23-SEP-94	0	<	1.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	124TCB	WDTC	23-SEP-94	0	<	1.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	124TCB	WDTC	23-SEP-94	0	<	1.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	124TCB	WDUC	22-SEP-94	0	<	1.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	124TCB	WDUC	22-SEP-94	0	<	1.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	12DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	12DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	12DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	12DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	12DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	12DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	12DPH	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	12DPH	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94578	12DPH	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	12DPH	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	12DPH	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	12DPH	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	13DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	13DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	13DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	13DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	13DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	13DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	14DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	14DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	14DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	14DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	14DCLB	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	14DCLB	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	245TCP	WDUC	22-SEP-94	0	<	5.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	245TCP	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	245TCP	WDUC	22-SEP-94	0	<	5.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	245TCP	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	245TCP	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	245TCP	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	246TCP	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	246TCP	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	246TCP	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	246TCP	WDUC	22-SEP-94	0	<	4.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	246TCP	WDUC	22-SEP-94	0	<	4.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	246TCP	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	24DCLP	WDUC	22-SEP-94	0	<	2.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	24DCLP	WDUC	22-SEP-94	0	<	2.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	24DCLP	WDTC	23-SEP-94	0	<	2.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DCLP	WDTC	23-SEP-94	0	<	2.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	24DCLP	WDTC	23-SEP-94	0	<	2.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	24DCLP	WDTC	23-SEP-94	0	<	2.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	24DMPN	WDTC	23-SEP-94	0	<	5.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DMPN	WDTC	23-SEP-94	0	<	5.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	24DMPN	WDTC	23-SEP-94	0	<	5.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DMPN	WDTC	23-SEP-94	0	<	5.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	24DMPN	WDUC	22-SEP-94	0	<	5.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	24DMPN	WDUC	22-SEP-94	0	<	5.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	24DNP	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	24DNP	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	24DNP	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DNP	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	24DNP	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DNP	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	24DNT	WDTC	23-SEP-94	0	<	4.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DNT	WDTC	23-SEP-94	0	<	4.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	24DNT	WDTC	23-SEP-94	0	<	4.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	24DNT	WDTC	23-SEP-94	0	<	4.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	24DNT	WDUC	22-SEP-94	0	<	4.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	24DNT	WDUC	22-SEP-94	0	<	4.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	26DNT	WDUC	22-SEP-94	0	<	.79	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	26DNT	WDUC	22-SEP-94	0	<	.79	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	26DNT	WDTC	23-SEP-94	0	<	.79	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	26DNT	WDTC	23-SEP-94	0	<	.79	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	26DNT	WDTC	23-SEP-94	0	<	.79	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	26DNT	WDTC	23-SEP-94	0	<	.79	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2CLP	WDTC	23-SEP-94	0	<	.99	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	2CLP	WDUC	22-SEP-94	0	<	.99	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2CLP	WDTC	23-SEP-94	0	<	.99	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2CLP	WDTC	23-SEP-94	0	<	.99	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2CLP	WDTC	23-SEP-94	0	<	.99	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	2CLP	WDUC	22-SEP-94	0	<	.99	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	2CNAP	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	2CNAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	2CNAP	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2CNAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2CNAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2CNAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2MNAP	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	2MNAP	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2MNAP	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2MNAP	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2MNAP	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	2MNAP	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	2MP	WDUC	22-SEP-94	0	<	3.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	2MP	WDTC	23-SEP-94	0	<	3.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	2MP	WDUC	22-SEP-94	0	<	3.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2MP	WDTC	23-SEP-94	0	<	3.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2MP	WDTC	23-SEP-94	0	<	3.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2MP	WDTC	23-SEP-94	0	<	3.9	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94578	2NANIL	WDTC	23-SEP-94	0	<	4.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	2NANIL	WDUC	22-SEP-94	0	<	4.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2NANIL	WDTC	23-SEP-94	0	<	4.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2NANIL	WDTC	23-SEP-94	0	<	4.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2NANIL	WDTC	23-SEP-94	0	<	4.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	2NANIL	WDUC	22-SEP-94	0	<	4.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	2NP	WDUC	22-SEP-94	0	<	3.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	2NP	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	2NP	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	2NP	WDUC	22-SEP-94	0	<	3.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	2NP	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	2NP	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	33DCBD	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	33DCBD	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	33DCBD	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	33DCBD	WDUC	22-SEP-94	0	<	12	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	33DCBD	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	33DCBD	WDUC	22-SEP-94	0	<	12	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	3NANIL	WDUC	22-SEP-94	0	<	4.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	3NANIL	WDTC	23-SEP-94	0	<	4.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	3NANIL	WDTC	23-SEP-94	0	<	4.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	3NANIL	WDTC	23-SEP-94	0	<	4.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	3NANIL	WDTC	23-SEP-94	0	<	4.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	3NANIL	WDUC	22-SEP-94	0	<	4.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	46DN2C	WDTC	23-SEP-94	0	<	17	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	46DN2C	WDTC	23-SEP-94	0	<	17	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	46DN2C	WDTC	23-SEP-94	0	<	17	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	46DN2C	WDUC	22-SEP-94	0	<	17	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	46DN2C	WDTC	23-SEP-94	0	<	17	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	46DN2C	WDUC	22-SEP-94	0	<	17	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	4BRPPE	WDUC	22-SEP-94	0	<	4.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	4BRPPE	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4BRPPE	WDUC	22-SEP-94	0	<	4.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4BRPPE	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4BRPPE	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4BRPPE	WDTC	23-SEP-94	0	<	4.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4CANIL	WDTC	23-SEP-94	0	<	7.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4CANIL	WDUC	22-SEP-94	0	<	7.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4CANIL	WDTC	23-SEP-94	0	<	7.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4CANIL	WDTC	23-SEP-94	0	<	7.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4CANIL	WDTC	23-SEP-94	0	<	7.3	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	4CANIL	WDUC	22-SEP-94	0	<	7.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	4CL3C	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	4CL3C	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4CL3C	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4CL3C	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4CL3C	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4CL3C	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4CLPPE	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4CLPPE	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4CLPPE	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4CLPPE	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4CLPPE	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	4CLPPE	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	4MP	WDUC	22-SEP-94	0	<	.52	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	4MP	WDTC	23-SEP-94	0	<	.52	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4MP	WDUC	22-SEP-94	0	<	.52	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4MP	WDTC	23-SEP-94	0	<	.52	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4MP	WDTC	23-SEP-94	0	<	.52	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4MP	WDTC	23-SEP-94	0	<	.52	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4NANIL	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4NANIL	WDUC	22-SEP-94	0	<	5.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4NANIL	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	4NANIL	WDUC	22-SEP-94	0	<	5.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	4NANIL	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4NANIL	WDTC	23-SEP-94	0	<	5.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4NP	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	4NP	WDUC	22-SEP-94	0	<	12	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	4NP	WDUC	22-SEP-94	0	<	12	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	4NP	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	4NP	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	4NP	WDTC	23-SEP-94	0	<	12	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ABHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	ABHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ABHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ABHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ABHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ABHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ACLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	ACLDAN	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ACLDAN	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ACLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94578	ACLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ACLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	AENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	AENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	AENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	AENSLF	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	AENSLF	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	AENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ALDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ALDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ALDRN	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ALDRN	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ALDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ALDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ANAPNE	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ANAPNE	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ANAPNE	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ANAPNE	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ANAPNE	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	ANAPNE	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	ANAPYL	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ANAPYL	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ANAPYL	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ANAPYL	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ANAPYL	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ANAPYL	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ANTRC	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ANTRC	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	ANTRC	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ANTRC	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ANTRC	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ANTRC	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	B2CEXM	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	B2CEXM	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	B2CEXM	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	B2CEXM	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	B2CEXM	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	B2CEXM	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	B2CIPE	WDTC	23-SEP-94	0	<	5.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	B2CIPE	WDTC	23-SEP-94	0	<	5.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	B2CIPE	WDUC	22-SEP-94	0	<	5.3	UGL	SBK-94-577	V1AW*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	B2CIPE	WDUC	22-SEP-94	0	<	5.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	B2CIPE	WDTC	23-SEP-94	0	<	5.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	B2CIPE	WDTC	23-SEP-94	0	<	5.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	B2CLEE	WDTC	23-SEP-94	0	<	1.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	B2CLEE	WDTC	23-SEP-94	0	<	1.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	B2CLEE	WDTC	23-SEP-94	0	<	1.9	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	B2CLEE	WDTC	23-SEP-94	0	<	1.9	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	B2CLEE	WDUC	22-SEP-94	0	<	1.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	B2CLEE	WDUC	22-SEP-94	0	<	1.9	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	B2EHP	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	B2EHP	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	B2EHP	WDUC	22-SEP-94	0	<	4.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	B2EHP	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	B2EHP	WDUC	22-SEP-94	0	<	4.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	B2EHP	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BAANTR	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BAANTR	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BAANTR	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BAANTR	WDUC	22-SEP-94	0	<	1.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BAANTR	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	BAANTR	WDUC	22-SEP-94	0	<	1.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	BAPYR	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BAPYR	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BAPYR	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BAPYR	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BAPYR	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BAPYR	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BBFANT	WDTC	23-SEP-94	0	<	5.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BBFANT	WDTC	23-SEP-94	0	<	5.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BBFANT	WDUC	22-SEP-94	0	<	5.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BBFANT	WDUC	22-SEP-94	0	<	5.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BBFANT	WDTC	23-SEP-94	0	<	5.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BBFANT	WDTC	23-SEP-94	0	<	5.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BBHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BBHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BBZP	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BBZP	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	BBZP	WDUC	22-SEP-94	0	<	3.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BBZP	WDUC	22-SEP-94	0	<	3.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BBZP	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BBZP	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BENSLF	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BENSLF	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BENSLF	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BENZID	WDTC	23-SEP-94	0	<	10	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BENZID	WDTC	23-SEP-94	0	<	10	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BENZID	WDUC	22-SEP-94	0	<	10	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BENZID	WDUC	22-SEP-94	0	<	10	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BENZID	WDTC	23-SEP-94	0	<	10	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BENZID	WDTC	23-SEP-94	0	<	10	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BENZOA	WDTC	23-SEP-94	0	<	13	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BENZOA	WDTC	23-SEP-94	0	<	13	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	BENZOA	WDUC	22-SEP-94	0	<	13	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BENZOA	WDUC	22-SEP-94	0	<	13	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	BENZOA	WDTC	23-SEP-94	0	<	13	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BENZOA	WDTC	23-SEP-94	0	<	13	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BGHIPY	WDTC	23-SEP-94	0	<	6.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BGHIPY	WDTC	23-SEP-94	0	<	6.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BGHIPY	WDTC	23-SEP-94	0	<	6.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	BGHIPY	WDTC	23-SEP-94	0	<	6.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	BGHIPY	WDUC	22-SEP-94	0	<	6.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BGHIPY	WDUC	22-SEP-94	0	<	6.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	BKFANT	WDTC	23-SEP-94	0	<	.87	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BKFANT	WDUC	22-SEP-94	0	<	.87	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BKFANT	WDUC	22-SEP-94	0	<	.87	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BKFANT	WDTC	23-SEP-94	0	<	.87	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BKFANT	WDTC	23-SEP-94	0	<	.87	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	BKFANT	WDTC	23-SEP-94	0	<	.87	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BZALC	WDTC	23-SEP-94	0	<	.72	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	BZALC	WDTC	23-SEP-94	0	<	.72	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	BZALC	WDUC	22-SEP-94	0	<	.72	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	BZALC	WDUC	22-SEP-94	0	<	.72	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	BZALC	WDTC	23-SEP-94	0	<	.72	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	BZALC	WDTC	23-SEP-94	0	<	.72	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	CARBAZ	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	CARBAZ	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	CARBAZ	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	CARBAZ	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	CARBAZ	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	CARBAZ	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	CHRY	WDTC	23-SEP-94	0	<	2.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	CHRY	WDTC	23-SEP-94	0	<	2.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	CHRY	WDUC	22-SEP-94	0	<	2.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	CHRY	WDUC	22-SEP-94	0	<	2.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	CHRY	WDTC	23-SEP-94	0	<	2.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	CHRY	WDTC	23-SEP-94	0	<	2.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	CL6BZ	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	CL6BZ	WDUC	22-SEP-94	0	<	1.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	CL6BZ	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	CL6BZ	WDUC	22-SEP-94	0	<	1.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	CL6BZ	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	CL6BZ	WDTC	23-SEP-94	0	<	1.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	CL6CP	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	CL6CP	WDUC	22-SEP-94	0	<	8.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	CL6CP	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	CL6CP	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	CL6CP	WDUC	22-SEP-94	0	<	8.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	CL6CP	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	CL6ET	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	CL6ET	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	CL6ET	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	CL6ET	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	CL6ET	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	CL6ET	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	DBAHA	WDTC	23-SEP-94	0	<	6.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	DBAHA	WDUC	22-SEP-94	0	<	6.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DBAHA	WDTC	23-SEP-94	0	<	6.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DBAHA	WDUC	22-SEP-94	0	<	6.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	DBAHA	WDTC	23-SEP-94	0	<	6.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DBAHA	WDTC	23-SEP-94	0	<	6.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	DBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DBHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DBHC	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	DBHC	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94578	DBZFUR	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DBZFUR	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DBZFUR	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	DBZFUR	WDUC	22-SEP-94	0	<	1.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DBZFUR	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	DBZFUR	WDTC	23-SEP-94	0	<	1.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DEP	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DEP	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	DEP	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	DEP	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DEP	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DEP	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	DLDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DLDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DLDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	DLDRN	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DLDRN	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	DLDRN	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	DMP	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DMP	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	DMP	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DMP	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	DMP	WDUC	22-SEP-94	0	<	1.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DMP	WDTC	23-SEP-94	0	<	1.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	DNBP	WDTC	23-SEP-94	0		20	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	DNBP	WDTC	23-SEP-94	0		20	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DNBP	WDUC	22-SEP-94	0		18	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	DNBP	WDUC	22-SEP-94	0		18	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	DNBP	WDTC	23-SEP-94	0		17	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DNBP	WDTC	23-SEP-94	0		17	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DNOP	WDTC	23-SEP-94	0	<	15	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	DNOP	WDTC	23-SEP-94	0	<	15	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	DNOP	WDUC	22-SEP-94	0	<	15	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DNOP	WDTC	23-SEP-94	0	<	15	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	DNOP	WDUC	22-SEP-94	0	<	15	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	DNOP	WDTC	23-SEP-94	0	<	15	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ENDRN	WDTC	23-SEP-94	0	<	7.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ENDRN	WDTC	23-SEP-94	0	<	7.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ENDRN	WDUC	22-SEP-94	0	<	7.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ENDRN	WDUC	22-SEP-94	0	<	7.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ENDRN	WDTC	23-SEP-94	0	<	7.6	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94578	ENDRN	WDTC	23-SEP-94	0	<	7.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ENDRNA	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ENDRNA	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	ENDRNA	WDUC	22-SEP-94	0	<	8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ENDRNA	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ENDRNA	WDUC	22-SEP-94	0	<	8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	ENDRNA	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ENDRNK	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ENDRNK	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	ENDRNK	WDUC	22-SEP-94	0	<	8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	ENDRNK	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ENDRNK	WDTC	23-SEP-94	0	<	8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ENDRNK	WDUC	22-SEP-94	0	<	8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	ESFSO4	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ESFSO4	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	ESFSO4	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ESFSO4	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ESFSO4	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ESFSO4	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	FANT	WDTC	23-SEP-94	0	<	3.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	FANT	WDTC	23-SEP-94	0	<	3.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	FANT	WDTC	23-SEP-94	0	<	3.3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	FANT	WDTC	23-SEP-94	0	<	3.3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	FANT	WDUC	22-SEP-94	0	<	3.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	FANT	WDUC	22-SEP-94	0	<	3.3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	FLRENE	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	FLRENE	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	FLRENE	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	FLRENE	WDTC	23-SEP-94	0	<	3.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	FLRENE	WDUC	22-SEP-94	0	<	3.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	FLRENE	WDUC	22-SEP-94	0	<	3.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	GCLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	GCLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	GCLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	GCLDAN	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	GCLDAN	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	GCLDAN	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	HCBD	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	HCBD	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	HCBD	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	HCBD	WDUC	22-SEP-94	0	<	3.4	UGL	SBK-94-577	V1AW*577

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	HCBD	WDUC	22-SEP-94	0	<	3.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	HCBD	WDTC	23-SEP-94	0	<	3.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	HPCL	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	HPCL	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	HPCL	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	HPCL	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	HPCL	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	HPCL	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	HPCLE	WDTC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	HPCLE	WDTC	23-SEP-94	0	<	5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	HPCLE	WDUC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	HPCLE	WDTC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	HPCLE	WDUC	22-SEP-94	0	<	5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	HPCLE	WDTC	23-SEP-94	0	<	5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ICDPYR	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ICDPYR	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ICDPYR	WDUC	22-SEP-94	0	<	8.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ICDPYR	WDUC	22-SEP-94	0	<	8.6	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	ICDPYR	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ICDPYR	WDTC	23-SEP-94	0	<	8.6	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	ISOPHR	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ISOPHR	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	ISOPHR	WDUC	22-SEP-94	0	<	4.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	ISOPHR	WDUC	22-SEP-94	0	<	4.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	ISOPHR	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	ISOPHR	WDTC	23-SEP-94	0	<	4.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	LIN	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	LIN	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	LIN	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	LIN	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	LIN	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	LIN	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	MEXCLR	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	MEXCLR	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	MEXCLR	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	MEXCLR	WDUC	22-SEP-94	0	<	5.1	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	MEXCLR	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	MEXCLR	WDTC	23-SEP-94	0	<	5.1	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	NAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	NAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	NAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	NAP	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	NAP	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	NAP	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	NB	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	NB	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NB	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	NB	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NB	WDUC	22-SEP-94	0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	NB	WDTC	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	NNDMEA	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	NNDMEA	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94577	NNDMEA	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94577	NNDMEA	WDUC	22-SEP-94	0	<	2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	NNDMEA	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94579	NNDMEA	WDTC	23-SEP-94	0	<	2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94578	NNDNPA	WDTC	23-SEP-94	0	<	4.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	NNDNPA	WDTC	23-SEP-94	0	<	4.4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	NNDNPA	WDTC	23-SEP-94	0	<	4.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NNDNPA	WDUC	22-SEP-94	0	<	4.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	NNDNPA	WDTC	23-SEP-94	0	<	4.4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NNDNPA	WDUC	22-SEP-94	0	<	4.4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	NNDPA	WDTC	23-SEP-94	0	<	3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	NNDPA	WDTC	23-SEP-94	0	<	3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NNDPA	WDUC	22-SEP-94	0	<	3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	NNDPA	WDTC	23-SEP-94	0	<	3	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	NNDPA	WDUC	22-SEP-94	0	<	3	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	NNDPA	WDTC	23-SEP-94	0	<	3	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB016	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB016	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB016	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB016	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB016	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB016	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB221	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB221	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB221	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB221	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB221	WDUC	22-SEP-94	0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB221	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB232	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB232	WDTC	23-SEP-94	0	<	21	UGL	SBK-94-579	V1AW*579

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date		Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94577	PCB232	WDUC	22-SEP-94		0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB232	WDTC	23-SEP-94		0	<	21	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB232	WDUC	22-SEP-94		0	<	21	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB232	WDTC	23-SEP-94		0	<	21	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB242	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB242	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB242	WDUC	22-SEP-94		0	<	30	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB242	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB242	WDUC	22-SEP-94		0	<	30	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB242	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB248	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB248	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB248	WDUC	22-SEP-94		0	<	30	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB248	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB248	WDUC	22-SEP-94		0	<	30	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB248	WDTC	23-SEP-94		0	<	30	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB254	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB254	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB254	WDUC	22-SEP-94		0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB254	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB254	WDUC	22-SEP-94		0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB254	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCB260	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCB260	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB260	WDUC	22-SEP-94		0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCB260	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCB260	WDUC	22-SEP-94		0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCB260	WDTC	23-SEP-94		0	<	36	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PCP	WDTC	23-SEP-94		0	<	18	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PCP	WDTC	23-SEP-94		0	<	18	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCP	WDUC	22-SEP-94		0	<	18	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PCP	WDTC	23-SEP-94		0	<	18	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PCP	WDUC	22-SEP-94		0	<	18	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PCP	WDTC	23-SEP-94		0	<	18	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PHANTR	WDTC	23-SEP-94		0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PHANTR	WDTC	23-SEP-94		0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PHANTR	WDUC	22-SEP-94		0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PHANTR	WDTC	23-SEP-94		0	<	.5	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PHANTR	WDUC	22-SEP-94		0	<	.5	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PHANTR	WDTC	23-SEP-94		0	<	.5	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PHENOL	WDTC	23-SEP-94		0	<	9.2	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK94579	PHENOL	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PHENOL	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PHENOL	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PHENOL	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PHENOL	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PPDDD	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PPDDD	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDD	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PPDDD	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDD	WDUC	22-SEP-94	0	<	4	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PPDDD	WDTC	23-SEP-94	0	<	4	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PPDDE	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PPDDE	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDE	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PPDDE	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDE	WDUC	22-SEP-94	0	<	4.7	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PPDDE	WDTC	23-SEP-94	0	<	4.7	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PPDDT	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PPDDT	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDT	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PPDDT	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PPDDT	WDUC	22-SEP-94	0	<	9.2	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PPDDT	WDTC	23-SEP-94	0	<	9.2	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	PYR	WDTC	23-SEP-94	0	<	2.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	PYR	WDTC	23-SEP-94	0	<	2.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PYR	WDUC	22-SEP-94	0	<	2.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	PYR	WDTC	23-SEP-94	0	<	2.8	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	PYR	WDUC	22-SEP-94	0	<	2.8	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	PYR	WDTC	23-SEP-94	0	<	2.8	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94578	TXPHEN	WDTC	23-SEP-94	0	<	36	UGL	SBK-94-578	V1AW*578
BNA'S IN WATER BY GC/MS		SBK94579	TXPHEN	WDTC	23-SEP-94	0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	TXPHEN	WDUC	22-SEP-94	0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94579	TXPHEN	WDTC	23-SEP-94	0	<	36	UGL	SBK-94-579	V1AW*579
BNA'S IN WATER BY GC/MS		SBK94577	TXPHEN	WDUC	22-SEP-94	0	<	36	UGL	SBK-94-577	V1AW*577
BNA'S IN WATER BY GC/MS		SBK94578	TXPHEN	WDTC	23-SEP-94	0	<	36	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS	UM20	SBK94578	111TCE	XDRE	23-SEP-94	0		5.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	111TCE	XDRE	23-SEP-94	0		5.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	112TCE	XDRE	23-SEP-94	0	<	1.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	112TCE	XDRE	23-SEP-94	0	<	1.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	11DCE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	<	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK94578	11DCE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	11DCLE	XDRE	23-SEP-94	0	<	.68	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	11DCLE	XDRE	23-SEP-94	0	<	.68	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCLE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCLE	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCLP	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	12DCLP	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	2CLEVE	XDRE	23-SEP-94	0	<	.71	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	2CLEVE	XDRE	23-SEP-94	0	<	.71	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACET	XDRE	23-SEP-94	0	<	13	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACET	XDRE	23-SEP-94	0	<	13	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACROLN	XDRE	23-SEP-94	0	<	100	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACROLN	XDRE	23-SEP-94	0	<	100	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACRYLO	XDRE	23-SEP-94	0	<	100	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	ACRYLO	XDRE	23-SEP-94	0	<	100	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	BRDCLM	XDRE	23-SEP-94	0	<	.59	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	BRDCLM	XDRE	23-SEP-94	0	<	.59	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C13DCP	XDRE	23-SEP-94	0	<	.58	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C13DCP	XDRE	23-SEP-94	0	<	.58	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2AVE	XDRE	23-SEP-94	0	<	8.3	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2AVE	XDRE	23-SEP-94	0	<	8.3	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2H3CL	XDRE	23-SEP-94	0	<	2.6	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2H3CL	XDRE	23-SEP-94	0	<	2.6	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2H5CL	XDRE	23-SEP-94	0	<	1.9	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C2H5CL	XDRE	23-SEP-94	0	<	1.9	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C6H6	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	C6H6	XDRE	23-SEP-94	0	<	.5	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CCL3F	XDRE	23-SEP-94	0	<	1.4	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CCL3F	XDRE	23-SEP-94	0	<	1.4	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CCL4	XDRE	23-SEP-94	0	<	.58	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CCL4	XDRE	23-SEP-94	0	<	.58	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH2CL2	XDRE	23-SEP-94	0		3.1	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH2CL2	XDRE	23-SEP-94	0		3.1	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH3BR	XDRE	23-SEP-94	0	<	5.8	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH3BR	XDRE	23-SEP-94	0	<	5.8	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH3CL	XDRE	23-SEP-94	0	<	3.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CH3CL	XDRE	23-SEP-94	0	<	3.2	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CHBR3	XDRE	23-SEP-94	0	<	2.6	UGL	SBK-94-578	V1AW*578
VOC'S IN WATER BY GC/MS		SBK94578	CHBR3	XDRE	23-SEP-94	0	<	2.6	UGL	SBK-94-578	V1AW*578

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                                              Chemical Quality Control Report
                                             Installation: Fort Devens, MA (DV)
                                                     Cold Spring Brook

                                                      RINSATE BLANKS

                                    IRDMIS
                           USATHAMA Field
                           Method   Sample     Test             Sample              Spike                      IRDMIS     Lab
Method Description         Code     Number     Name       Lot   Date                Value <         Value Units Site ID    Number
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VOC'S IN WATER BY GC/MS    UM20     SBK94578   CHCL3      XDRE  23-SEP-94               0              1.1 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CHCL3      XDRE  23-SEP-94               0              1.1 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CL2BZ      XDRE  23-SEP-94               0 <             10 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CL2BZ      XDRE  23-SEP-94               0 <             10 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CLC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CLC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CS2        XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   CS2        XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   DBRCLM     XDRE  23-SEP-94               0 <            .67 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   DBRCLM     XDRE  23-SEP-94               0 <            .67 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   ETC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   ETC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MEC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MEC6H5     XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MEK        XDRE  23-SEP-94               0 <            6.4 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MEK        XDRE  23-SEP-94               0 <            6.4 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MIBK       XDRE  23-SEP-94               0 <              3 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MIBK       XDRE  23-SEP-94               0 <              3 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MNBK       XDRE  23-SEP-94               0 <            3.6 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   MNBK       XDRE  23-SEP-94               0 <            3.6 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   STYR       XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   STYR       XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   T13DCP     XDRE  23-SEP-94               0 <             .7 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   T13DCP     XDRE  23-SEP-94               0 <             .7 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TCLEA      XDRE  23-SEP-94               0 <            .51 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TCLEA      XDRE  23-SEP-94               0 <            .51 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TCLEE      XDRE  23-SEP-94               0 <            1.6 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TCLEE      XDRE  23-SEP-94               0 <            1.6 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TRCLE      XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   TRCLE      XDRE  23-SEP-94               0 <             .5 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   XYLEN      XDRE  23-SEP-94               0 <            .84 UGL   SBK-94-578 V1AW*578
VOC'S IN WATER BY GC/MS             SBK94578   XYLEN      XDRE  23-SEP-94               0 <            .84 UGL   SBK-94-578 V1AW*578

SQL> exit
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TABLE C-10

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	XDRE	111TCE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	112TCE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	1.2	UGL	TRP-94-800
	XDRE	11DCE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	11DCLE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.68	UGL	TRP-94-800
	XDRE	12DCE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	12DCLE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	12DCLP	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	2CLEVE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.71	UGL	TRP-94-800
	XDRE	ACET	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	13	UGL	TRP-94-800
	XDRE	ACROLN	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	100	UGL	TRP-94-800
	XDRE	ACRYLO	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	100	UGL	TRP-94-800
	XDRE	BRDCLM	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.59	UGL	TRP-94-800
	XDRE	C13DCP	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.58	UGL	TRP-94-800
	XDRE	C2AVE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	8.3	UGL	TRP-94-800
	XDRE	C2H3CL	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	2.6	UGL	TRP-94-800
	XDRE	C2H5CL	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	1.9	UGL	TRP-94-800
	XDRE	C6H6	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	CCL3F	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	1.4	UGL	TRP-94-800
	XDRE	CCL4	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.58	UGL	TRP-94-800
	XDRE	CH2CL2	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	2.3	UGL	TRP-94-800
	XDRE	CH3BR	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	5.8	UGL	TRP-94-800
	XDRE	CH3CL	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	3.2	UGL	TRP-94-800
	XDRE	CHBR3	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	2.6	UGL	TRP-94-800
	XDRE	CHCL3	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	CL2BZ	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	10	UGL	TRP-94-800
	XDRE	CLC6H5	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	CS2	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	DBRCLM	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.67	UGL	TRP-94-800
	XDRE	ETC6H5	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	MEC6H5	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	MEK	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	6.4	UGL	TRP-94-800
	XDRE	MIBK	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	3	UGL	TRP-94-800
	XDRE	MNBK	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	3.6	UGL	TRP-94-800

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	XDRE	STYR	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	T13DCP	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.7	UGL	TRP-94-800
	XDRE	TCLEA	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.51	UGL	TRP-94-800
	XDRE	TCLEE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	1.6	UGL	TRP-94-800
	XDRE	TRCLE	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.5	UGL	TRP-94-800
	XDRE	XYLEN	TRP94800	V1AW*800	23-SEP-94	26-SEP-94	26-SEP-94	<	.84	UGL	TRP-94-800

TABLE C-11

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
TOC IN SOIL	9060	TOC	DXCS0400	V1AS*540	ZEQE	19-SEP-94	06-OCT-94	15800	18300	UGG	115.8	8.9
TOC IN SOIL	9060	TOC	DXCS0400	V1AS*540	ZEQE	19-SEP-94	06-OCT-94	15800	18300	UGG	115.8	8.9
TOC IN SOIL	9060	TOC	DXCS0400	V1AS*540	ZEQE	19-SEP-94	06-OCT-94	16700	17700	UGG	106.0	8.9
TOC IN SOIL	9060	TOC	DXCS0400	V1AS*540	ZEQE	19-SEP-94	06-OCT-94	16700	17700	UGG	106.0	8.9
TOC IN SOIL	9060	TOC	DXCS2000	V1AS*556	ZEUE	22-SEP-94	10-OCT-94	10000	17100	UGG	171.0	67.2
TOC IN SOIL	9060	TOC	DXCS2000	V1AS*556	ZEUE	22-SEP-94	10-OCT-94	10000	17100	UGG	171.0	67.2
TOC IN SOIL	9060	TOC	DXCS2000	V1AS*556	ZEUE	22-SEP-94	10-OCT-94	8330	7080	UGG	85.0	67.2
TOC IN SOIL	9060	TOC	DXCS2000	V1AS*556	ZEUE	22-SEP-94	10-OCT-94	8330	7080	UGG	85.0	67.2
		**********									----------	
		avg									119.5	
		minimum									85.0	
		maximum									171.0	
	9071	TPHC	DXCS0400	V1AS*540	ZERE	19-SEP-94	13-OCT-94	2400	2210	UGG	92.1	2.8
	9071	TPHC	DXCS0400	V1AS*540	ZERE	19-SEP-94	13-OCT-94	2400	2210	UGG	92.1	2.8
	9071	TPHC	DXCS0400	V1AS*540	ZERE	19-SEP-94	13-OCT-94	2400	2150	UGG	89.6	2.8
	9071	TPHC	DXCS0400	V1AS*540	ZERE	19-SEP-94	13-OCT-94	2400	2150	UGG	89.6	2.8
	9071	TPHC	DXCS2000	V1AS*556	ZESE	22-SEP-94	14-OCT-94	2260	3000	UGG	132.7	40.0
	9071	TPHC	DXCS2000	V1AS*556	ZESE	22-SEP-94	14-OCT-94	2260	3000	UGG	132.7	40.0
	9071	TPHC	DXCS2000	V1AS*556	ZESE	22-SEP-94	14-OCT-94	2260	2000	UGG	88.5	40.0
	9071	TPHC	DXCS2000	V1AS*556	ZESE	22-SEP-94	14-OCT-94	2260	2000	UGG	88.5	40.0
		**********									----------	
		avg									100.7	
		minimum									88.5	
		maximum									132.7	
HG IN SOIL BY GFAA	JB01	HG	DXCS0400	V1AS*540	QHDC	19-SEP-94	06-OCT-94	.802	.816	UGG	101.7	6.7
HG IN SOIL BY GFAA	JB01	HG	DXCS0400	V1AS*540	QHDC	19-SEP-94	06-OCT-94	.802	.816	UGG	101.7	6.7
HG IN SOIL BY GFAA	JB01	HG	DXCS0400	V1AS*540	QHDC	19-SEP-94	06-OCT-94	.785	.747	UGG	95.2	6.7
HG IN SOIL BY GFAA	JB01	HG	DXCS0400	V1AS*540	QHDC	19-SEP-94	06-OCT-94	.785	.747	UGG	95.2	6.7
HG IN SOIL BY GFAA	JB01	HG	DXCS2000	V1AS*556	QHEC	22-SEP-94	13-OCT-94	.784	.6	UGG	76.5	.0
HG IN SOIL BY GFAA	JB01	HG	DXCS2000	V1AS*556	QHEC	22-SEP-94	13-OCT-94	.784	.6	UGG	76.5	.0
HG IN SOIL BY GFAA	JB01	HG	DXCS2000	V1AS*556	QHEC	22-SEP-94	13-OCT-94	.776	.594	UGG	76.5	.0
HG IN SOIL BY GFAA	JB01	HG	DXCS2000	V1AS*556	QHEC	22-SEP-94	13-OCT-94	.776	.594	UGG	76.5	.0
		**********									----------	
		avg									87.5	
		minimum									76.5	
		maximum									101.7	
SE IN SOIL BY GFAA	JD15	SE	DXCS0400	V1AS*540	MBBC	19-SEP-94	17-OCT-94	8.31	9.56	UGG	115.0	2.7

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
SE IN SOIL BY GFAA	JD15	SE	DXCS0400	V1AS*540	MBBC	19-SEP-94	17-OCT-94	8.31	9.56	UGG	115.0	2.7
SE IN SOIL BY GFAA	JD15	SE	DXCS0400	V1AS*540	MBBC	19-SEP-94	17-OCT-94	8.15	9.13	UGG	112.0	2.7
SE IN SOIL BY GFAA	JD15	SE	DXCS0400	V1AS*540	MBBC	19-SEP-94	17-OCT-94	8.15	9.13	UGG	112.0	2.7
SE IN SOIL BY GFAA	JD15	SE	DXCS2000	V1AS*556	MBCC	22-SEP-94	19-OCT-94	7.89	5.52	UGG	70.0	9.8
SE IN SOIL BY GFAA	JD15	SE	DXCS2000	V1AS*556	MBCC	22-SEP-94	19-OCT-94	7.89	5.52	UGG	70.0	9.8
SE IN SOIL BY GFAA	JD15	SE	DXCS2000	V1AS*556	MBCC	22-SEP-94	19-OCT-94	7.96	5.05	UGG	63.4	9.8
SE IN SOIL BY GFAA	JD15	SE	DXCS2000	V1AS*556	MBCC	22-SEP-94	19-OCT-94	7.96	5.05	UGG	63.4	9.8
		**********									----------	
		avg									90.1	
		minimum									63.4	
		maximum									115.0	
PB IN SOIL BY GFAA	JD17	PB	DXCS0400	V1AS*540	OBAC	19-SEP-94	13-OCT-94	8.15	8.1	UGG	99.4	8.3
PB IN SOIL BY GFAA	JD17	PB	DXCS0400	V1AS*540	OBAC	19-SEP-94	13-OCT-94	8.15	8.1	UGG	99.4	8.3
PB IN SOIL BY GFAA	JD17	PB	DXCS0400	V1AS*540	OBAC	19-SEP-94	13-OCT-94	8.31	7.6	UGG	91.5	8.3
PB IN SOIL BY GFAA	JD17	PB	DXCS0400	V1AS*540	OBAC	19-SEP-94	13-OCT-94	8.31	7.6	UGG	91.5	8.3
		**********									----------	
		avg									95.4	
		minimum									91.5	
		maximum									99.4	
AS IN SOIL BY GFAA	JD19	AS	DXCS0400	V1AS*540	QBBC	19-SEP-94	13-OCT-94	8.31	7.1	UGG	85.4	7.8
AS IN SOIL BY GFAA	JD19	AS	DXCS0400	V1AS*540	QBBC	19-SEP-94	13-OCT-94	8.31	7.1	UGG	85.4	7.8
AS IN SOIL BY GFAA	JD19	AS	DXCS0400	V1AS*540	QBBC	19-SEP-94	13-OCT-94	8.15	6.44	UGG	79.0	7.8
AS IN SOIL BY GFAA	JD19	AS	DXCS0400	V1AS*540	QBBC	19-SEP-94	13-OCT-94	8.15	6.44	UGG	79.0	7.8
AS IN SOIL BY GFAA	JD19	AS	DXCS2000	V1AS*556	QBCC	22-SEP-94	18-OCT-94	7.96	7.6	UGG	95.5	13.2
AS IN SOIL BY GFAA	JD19	AS	DXCS2000	V1AS*556	QBCC	22-SEP-94	18-OCT-94	7.96	7.6	UGG	95.5	13.2
AS IN SOIL BY GFAA	JD19	AS	DXCS2000	V1AS*556	QBCC	22-SEP-94	18-OCT-94	7.89	6.6	UGG	83.7	13.2
AS IN SOIL BY GFAA	JD19	AS	DXCS2000	V1AS*556	QBCC	22-SEP-94	18-OCT-94	7.89	6.6	UGG	83.7	13.2
		**********									----------	
		avg									85.9	
		minimum									79.0	
		maximum									95.5	
TL IN SOIL BY GFAA	JD24	TL	DXCS0400	V1AS*540	RBHA	19-SEP-94	13-OCT-94	8.15	7.95	UGG	97.5	4.1
TL IN SOIL BY GFAA	JD24	TL	DXCS0400	V1AS*540	RBHA	19-SEP-94	13-OCT-94	8.15	7.95	UGG	97.5	4.1
TL IN SOIL BY GFAA	JD24	TL	DXCS0400	V1AS*540	RBHA	19-SEP-94	13-OCT-94	8.31	7.78	UGG	93.6	4.1
TL IN SOIL BY GFAA	JD24	TL	DXCS0400	V1AS*540	RBHA	19-SEP-94	13-OCT-94	8.31	7.78	UGG	93.6	4.1
TL IN SOIL BY GFAA	JD24	TL	DXCS2000	V1AS*556	RBIA	22-SEP-94	19-OCT-94	7.89	9.12	UGG	115.6	2.2
TL IN SOIL BY GFAA	JD24	TL	DXCS2000	V1AS*556	RBIA	22-SEP-94	19-OCT-94	7.89	9.12	UGG	115.6	2.2

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
TL IN SOIL BY GFAA	JD24	TL	DXCS2000	V1AS*556	RBIA	22-SEP-94	19-OCT-94	7.96	9	UGG	113.1	2.2
TL IN SOIL BY GFAA	JD24	TL	DXCS2000	V1AS*556	RBIA	22-SEP-94	19-OCT-94	7.96	9	UGG	113.1	2.2
		**********									----------	
		avg									105.0	
		minimum									93.6	
		maximum									115.6	
SB IN SOIL BY GFAA	JD25	SB	DXCS0400	V1AS*540	SBTA	19-SEP-94	20-OCT-94	16.6	17.9	UGG	107.8	1.2
SB IN SOIL BY GFAA	JD25	SB	DXCS0400	V1AS*540	SBTA	19-SEP-94	20-OCT-94	16.6	17.9	UGG	107.8	1.2
SB IN SOIL BY GFAA	JD25	SB	DXCS0400	V1AS*540	SBTA	19-SEP-94	20-OCT-94	16.7	17.8	UGG	106.6	1.2
SB IN SOIL BY GFAA	JD25	SB	DXCS0400	V1AS*540	SBTA	19-SEP-94	20-OCT-94	16.7	17.8	UGG	106.6	1.2
SB IN SOIL BY GFAA	JD25	SB	DXCS2000	V1AS*556	SBUA	22-SEP-94	20-OCT-94	15.6	11.7	UGG	75.0	5.3
SB IN SOIL BY GFAA	JD25	SB	DXCS2000	V1AS*556	SBUA	22-SEP-94	20-OCT-94	15.6	11.7	UGG	75.0	5.3
SB IN SOIL BY GFAA	JD25	SB	DXCS2000	V1AS*556	SBUA	22-SEP-94	20-OCT-94	15.6	11.1	UGG	71.2	5.3
SB IN SOIL BY GFAA	JD25	SB	DXCS2000	V1AS*556	SBUA	22-SEP-94	20-OCT-94	15.6	11.1	UGG	71.2	5.3
		**********									----------	
		avg									90.1	
		minimum									71.2	
		maximum									107.8	
METALS IN SOIL BY ICAP	JS16	AG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	16.4	14	UGG	85.4	.7
METALS IN SOIL BY ICAP	JS16	AG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	16.4	14	UGG	85.4	.7
METALS IN SOIL BY ICAP	JS16	AG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	16.4	13.9	UGG	84.8	.7
METALS IN SOIL BY ICAP	JS16	AG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	16.4	13.9	UGG	84.8	.7
METALS IN SOIL BY ICAP	JS16	AG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	15.6	14.4	UGG	92.3	1.3
METALS IN SOIL BY ICAP	JS16	AG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	15.6	14.4	UGG	92.3	1.3
METALS IN SOIL BY ICAP	JS16	AG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	15.4	14.4	UGG	93.5	1.3
METALS IN SOIL BY ICAP	JS16	AG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	15.4	14.4	UGG	93.5	1.3
		**********									----------	
		avg									89.0	
		minimum									84.8	
		maximum									93.5	
METALS IN SOIL BY ICAP	JS16	AL	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	409	240	UGG	58.7	196.1
METALS IN SOIL BY ICAP	JS16	AL	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	409	240	UGG	58.7	196.1
METALS IN SOIL BY ICAP	JS16	AL	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	409	2.35	UGG	.6	196.1
METALS IN SOIL BY ICAP	JS16	AL	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	409	2.35	UGG	.6	196.1
METALS IN SOIL BY ICAP	JS16	AL	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	389	2.35	UGG	.6	1.0
METALS IN SOIL BY ICAP	JS16	AL	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	385	2.35	UGG	.6	1.0
METALS IN SOIL BY ICAP	JS16	AL	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	389	2.35	UGG	.6	1.0
METALS IN SOIL BY ICAP	JS16	AL	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	385	2.35	UGG	.6	1.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		**********									----------	
		avg									15.1	
		minimum									.6	
		maximum									58.7	
METALS IN SOIL BY ICAP	JS16	BA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	123	115	UGG	93.5	3.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	123	115	UGG	93.5	3.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	123	111	UGG	90.2	3.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	123	111	UGG	90.2	3.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	117	122	UGG	104.3	2.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	117	122	UGG	104.3	2.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	115	117	UGG	101.7	2.5
METALS IN SOIL BY ICAP	JS16	BA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	115	117	UGG	101.7	2.5
		**********									----------	
		avg									97.4	
		minimum									90.2	
		maximum									104.3	
METALS IN SOIL BY ICAP	JS16	BE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	101	UGG	99.0	1.5
METALS IN SOIL BY ICAP	JS16	BE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	101	UGG	99.0	1.5
METALS IN SOIL BY ICAP	JS16	BE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99.5	UGG	97.5	1.5
METALS IN SOIL BY ICAP	JS16	BE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99.5	UGG	97.5	1.5
METALS IN SOIL BY ICAP	JS16	BE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	.2
METALS IN SOIL BY ICAP	JS16	BE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	.2
METALS IN SOIL BY ICAP	JS16	BE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	103	UGG	107.2	.2
METALS IN SOIL BY ICAP	JS16	BE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	103	UGG	107.2	.2
		**********									----------	
		avg									102.7	
		minimum									97.5	
		maximum									107.2	
METALS IN SOIL BY ICAP	JS16	CA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9480	UGG	92.9	1.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9480	UGG	92.9	1.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9390	UGG	92.1	1.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9390	UGG	92.1	1.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10100	UGG	103.9	.6
METALS IN SOIL BY ICAP	JS16	CA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10100	UGG	103.9	.6
METALS IN SOIL BY ICAP	JS16	CA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9930	UGG	103.3	.6
METALS IN SOIL BY ICAP	JS16	CA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9930	UGG	103.3	.6
		**********									----------	
		avg									98.1	
		minimum									92.1	
		maximum									103.9	

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	CD	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99.2	UGG	97.3	.2
METALS IN SOIL BY ICAP	JS16	CD	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99.2	UGG	97.3	.2
METALS IN SOIL BY ICAP	JS16	CD	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99	UGG	97.1	.2
METALS IN SOIL BY ICAP	JS16	CD	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	99	UGG	97.1	.2
METALS IN SOIL BY ICAP	JS16	CD	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	1.8
METALS IN SOIL BY ICAP	JS16	CD	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	1.8
METALS IN SOIL BY ICAP	JS16	CD	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	101	UGG	105.1	1.8
METALS IN SOIL BY ICAP	JS16	CD	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	101	UGG	105.1	1.8
		**********									----------	
		avg									101.6	
		minimum									97.1	
		maximum									107.0	
METALS IN SOIL BY ICAP	JS16	CO	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	194	UGG	94.6	1.6
METALS IN SOIL BY ICAP	JS16	CO	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	194	UGG	94.6	1.6
METALS IN SOIL BY ICAP	JS16	CO	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	191	UGG	93.2	1.6
METALS IN SOIL BY ICAP	JS16	CO	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	191	UGG	93.2	1.6
METALS IN SOIL BY ICAP	JS16	CO	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	211	UGG	108.8	.4
METALS IN SOIL BY ICAP	JS16	CO	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	211	UGG	108.8	.4
METALS IN SOIL BY ICAP	JS16	CO	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	208	UGG	108.3	.4
METALS IN SOIL BY ICAP	JS16	CO	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	208	UGG	108.3	.4
		**********									----------	
		avg									101.2	
		minimum									93.2	
		maximum									108.8	
METALS IN SOIL BY ICAP	JS16	CR	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	204	UGG	99.5	.5
METALS IN SOIL BY ICAP	JS16	CR	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	204	UGG	99.5	.5
METALS IN SOIL BY ICAP	JS16	CR	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	203	UGG	99.0	.5
METALS IN SOIL BY ICAP	JS16	CR	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	203	UGG	99.0	.5
METALS IN SOIL BY ICAP	JS16	CR	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	218	UGG	112.4	2.2
METALS IN SOIL BY ICAP	JS16	CR	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	218	UGG	112.4	2.2
METALS IN SOIL BY ICAP	JS16	CR	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	211	UGG	109.9	2.2
METALS IN SOIL BY ICAP	JS16	CR	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	211	UGG	109.9	2.2
		**********									----------	
		avg									105.2	
		minimum									99.0	
		maximum									112.4	
METALS IN SOIL BY ICAP	JS16	CU	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	95.9	UGG	94.0	.6
METALS IN SOIL BY ICAP	JS16	CU	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	95.9	UGG	94.0	.6
METALS IN SOIL BY ICAP	JS16	CU	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	95.3	UGG	93.4	.6

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	CU	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	95.3	UGG	93.4	.6
METALS IN SOIL BY ICAP	JS16	CU	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	3.2
METALS IN SOIL BY ICAP	JS16	CU	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	104	UGG	107.0	3.2
METALS IN SOIL BY ICAP	JS16	CU	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	99.6	UGG	103.6	3.2
METALS IN SOIL BY ICAP	JS16	CU	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	99.6	UGG	103.6	3.2
		***********									----------	
		avg									99.5	
		minimum									93.4	
		maximum									107.0	
METALS IN SOIL BY ICAP	JS16	FE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	2050	888	UGG	43.3	66.5
METALS IN SOIL BY ICAP	JS16	FE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	2050	888	UGG	43.3	66.5
METALS IN SOIL BY ICAP	JS16	FE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	2050	445	UGG	21.7	66.5
METALS IN SOIL BY ICAP	JS16	FE	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	2050	445	UGG	21.7	66.5
METALS IN SOIL BY ICAP	JS16	FE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	1940	1470	UGG	75.8	122.8
METALS IN SOIL BY ICAP	JS16	FE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	1940	1470	UGG	75.8	122.8
METALS IN SOIL BY ICAP	JS16	FE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	1920	348	UGG	18.1	122.8
METALS IN SOIL BY ICAP	JS16	FE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	1920	348	UGG	18.1	122.8
		***********									----------	
		avg									39.7	
		minimum									18.1	
		maximum									75.8	
METALS IN SOIL BY ICAP	JS16	K	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9610	UGG	94.2	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9610	UGG	94.2	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9610	UGG	94.2	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9610	UGG	94.2	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	9980	UGG	102.7	.4
METALS IN SOIL BY ICAP	JS16	K	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	9980	UGG	102.7	.4
METALS IN SOIL BY ICAP	JS16	K	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9830	UGG	102.3	.4
METALS IN SOIL BY ICAP	JS16	K	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9830	UGG	102.3	.4
		***********									----------	
		avg									98.3	
		minimum									94.2	
		maximum									102.7	
METALS IN SOIL BY ICAP	JS16	MG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	10100	UGG	99.0	2.8
METALS IN SOIL BY ICAP	JS16	MG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	10100	UGG	99.0	2.8
METALS IN SOIL BY ICAP	JS16	MG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9820	UGG	96.3	2.8
METALS IN SOIL BY ICAP	JS16	MG	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9820	UGG	96.3	2.8
METALS IN SOIL BY ICAP	JS16	MG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10500	UGG	108.0	2.7
METALS IN SOIL BY ICAP	JS16	MG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10500	UGG	108.0	2.7
METALS IN SOIL BY ICAP	JS16	MG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	10100	UGG	105.1	2.7

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	MG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	10100	UGG	105.1	2.7
		**********									----------	
		avg									102.1	
		minimum									96.3	
		maximum									108.0	
METALS IN SOIL BY ICAP	JS16	MN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	85.7	UGG	84.0	190.7
METALS IN SOIL BY ICAP	JS16	MN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	85.7	UGG	84.0	190.7
METALS IN SOIL BY ICAP	JS16	MN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	2.05	UGG	2.0	190.7
METALS IN SOIL BY ICAP	JS16	MN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	2.05	UGG	2.0	190.7
METALS IN SOIL BY ICAP	JS16	MN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	102	UGG	104.9	5.8
METALS IN SOIL BY ICAP	JS16	MN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	102	UGG	104.9	5.8
METALS IN SOIL BY ICAP	JS16	MN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	95.2	UGG	99.1	5.8
METALS IN SOIL BY ICAP	JS16	MN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	95.2	UGG	99.1	5.8
		**********									----------	
		avg									72.5	
		minimum									2.0	
		maximum									104.9	
METALS IN SOIL BY ICAP	JS16	NA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9350	UGG	91.7	.5
METALS IN SOIL BY ICAP	JS16	NA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9350	UGG	91.7	.5
METALS IN SOIL BY ICAP	JS16	NA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9300	UGG	91.2	.5
METALS IN SOIL BY ICAP	JS16	NA	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	10200	9300	UGG	91.2	.5
METALS IN SOIL BY ICAP	JS16	NA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10100	UGG	103.9	.9
METALS IN SOIL BY ICAP	JS16	NA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9720	10100	UGG	103.9	.9
METALS IN SOIL BY ICAP	JS16	NA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9900	UGG	103.0	.9
METALS IN SOIL BY ICAP	JS16	NA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	9610	9900	UGG	103.0	.9
		**********									----------	
		avg									97.4	
		minimum									91.2	
		maximum									103.9	
METALS IN SOIL BY ICAP	JS16	NI	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	100	UGG	98.0	.0
METALS IN SOIL BY ICAP	JS16	NI	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	100	UGG	98.0	.0
METALS IN SOIL BY ICAP	JS16	NI	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	100	UGG	98.0	.0
METALS IN SOIL BY ICAP	JS16	NI	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	100	UGG	98.0	.0
METALS IN SOIL BY ICAP	JS16	NI	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	111	UGG	114.2	3.5
METALS IN SOIL BY ICAP	JS16	NI	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	111	UGG	114.2	3.5
METALS IN SOIL BY ICAP	JS16	NI	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	106	UGG	110.3	3.5
METALS IN SOIL BY ICAP	JS16	NI	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	106	UGG	110.3	3.5
		**********									----------	
		avg									105.1	
		minimum									98.0	

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MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		maximum									114.2	
METALS IN SOIL BY ICAP	JS16	PB	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	307	307	UGG	100.0	.7
METALS IN SOIL BY ICAP	JS16	PB	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	307	307	UGG	100.0	.7
METALS IN SOIL BY ICAP	JS16	PB	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	307	305	UGG	99.3	.7
METALS IN SOIL BY ICAP	JS16	PB	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	307	305	UGG	99.3	.7
METALS IN SOIL BY ICAP	JS16	PB	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	292	322	UGG	110.3	1.5
METALS IN SOIL BY ICAP	JS16	PB	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	292	322	UGG	110.3	1.5
METALS IN SOIL BY ICAP	JS16	PB	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	288	313	UGG	108.7	1.5
METALS IN SOIL BY ICAP	JS16	PB	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	288	313	UGG	108.7	1.5
		**********									----------	
		avg									104.6	
		minimum									99.3	
		maximum									110.3	
METALS IN SOIL BY ICAP	JS16	V	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	96.8	UGG	94.9	.3
METALS IN SOIL BY ICAP	JS16	V	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	96.8	UGG	94.9	.3
METALS IN SOIL BY ICAP	JS16	V	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	96.5	UGG	94.6	.3
METALS IN SOIL BY ICAP	JS16	V	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	102	96.5	UGG	94.6	.3
METALS IN SOIL BY ICAP	JS16	V	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	105	UGG	108.0	2.7
METALS IN SOIL BY ICAP	JS16	V	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	97.2	105	UGG	108.0	2.7
METALS IN SOIL BY ICAP	JS16	V	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	101	UGG	105.1	2.7
METALS IN SOIL BY ICAP	JS16	V	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	96.1	101	UGG	105.1	2.7
		**********									----------	
		avg									100.7	
		minimum									94.6	
		maximum									108.0	
METALS IN SOIL BY ICAP	JS16	ZN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	196	UGG	95.6	2.1
METALS IN SOIL BY ICAP	JS16	ZN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	196	UGG	95.6	2.1
METALS IN SOIL BY ICAP	JS16	ZN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	192	UGG	93.7	2.1
METALS IN SOIL BY ICAP	JS16	ZN	DXCS0400	V1AS*540	UBVC	19-SEP-94	06-OCT-94	205	192	UGG	93.7	2.1
METALS IN SOIL BY ICAP	JS16	ZN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	217	UGG	111.9	6.6
METALS IN SOIL BY ICAP	JS16	ZN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	194	217	UGG	111.9	6.6
METALS IN SOIL BY ICAP	JS16	ZN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	201	UGG	104.7	6.6
METALS IN SOIL BY ICAP	JS16	ZN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	192	201	UGG	104.7	6.6
		**********									----------	
		avg									101.5	
		minimum									93.7	
		maximum									111.9	
	LH10	AENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0544	UGG	136.0	7.4

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
	LH10	AENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0544	UGG	136.0	7.4
	LH10	AENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0505	UGG	126.3	7.4
	LH10	AENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0505	UGG	126.3	7.4
		**********									----------	
		avg									131.1	
		minimum									126.3	
		maximum									136.0	
	LH10	ALDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0494	UGG	123.5	10.9
	LH10	ALDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0494	UGG	123.5	10.9
	LH10	ALDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0443	UGG	110.8	10.9
	LH10	ALDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0443	UGG	110.8	10.9
		**********									----------	
		avg									117.1	
		minimum									110.8	
		maximum									123.5	
	LH10	BENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0545	UGG	136.3	6.8
	LH10	BENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0545	UGG	136.3	6.8
	LH10	BENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0509	UGG	127.3	6.8
	LH10	BENSLF	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0509	UGG	127.3	6.8
		**********									----------	
		avg									131.8	
		minimum									127.3	
		maximum									136.3	
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.032	UGG	48.0	9.6
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.032	UGG	48.0	9.6
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0297	UGG	44.5	9.6
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0297	UGG	44.5	9.6
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0291	UGG	43.6	9.6
	LH10	CL10BP	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0291	UGG	43.6	9.6
		**********									----------	
		avg									45.4	
		minimum									43.6	
		maximum									48.0	
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0683	UGG	102.4	3.3
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0683	UGG	102.4	3.3
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0673	UGG	100.9	3.3
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0673	UGG	100.9	3.3
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0661	UGG	99.1	3.3
	LH10	CL4XYL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.0667	.0661	UGG	99.1	3.3

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MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date		Spike Value	Value	Units	Percent Recovery	RPD
		**********										----------	
		avg										100.8	
		minimum										99.1	
		maximum										102.4	
	LH10	DLDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0312	UGG	78.0	3.9
	LH10	DLDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0312	UGG	78.0	3.9
	LH10	DLDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.03	UGG	75.0	3.9
	LH10	DLDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.03	UGG	75.0	3.9
		**********										----------	
		avg										76.5	
		minimum										75.0	
		maximum										78.0	
	LH10	ENDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0495	UGG	123.8	7.5
	LH10	ENDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0495	UGG	123.8	7.5
	LH10	ENDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0459	UGG	114.8	7.5
	LH10	ENDRN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0459	UGG	114.8	7.5
		**********										----------	
		avg										119.3	
		minimum										114.8	
		maximum										123.8	
	LH10	HPCL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0498	UGG	124.5	.8
	LH10	HPCL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0498	UGG	124.5	.8
	LH10	HPCL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0494	UGG	123.5	.8
	LH10	HPCL	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0494	UGG	123.5	.8
		**********										----------	
		avg										124.0	
		minimum										123.5	
		maximum										124.5	
	LH10	ISODR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.06	.0729	UGG	121.5	5.6
	LH10	ISODR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.06	.0729	UGG	121.5	5.6
	LH10	ISODR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.06	.0689	UGG	114.8	5.6
	LH10	ISODR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.06	.0689	UGG	114.8	5.6
		**********										----------	
		avg										118.2	
		minimum										114.8	
		maximum										121.5	
	LH10	LIN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0379	UGG	94.8	1.6
	LH10	LIN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94		.04	.0379	UGG	94.8	1.6

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
	LH10	LIN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0373	UGG	93.3	1.6
	LH10	LIN	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.0373	UGG	93.3	1.6
		**********									----------	
		avg									94.0	
		minimum									93.3	
		maximum									94.8	
	LH10	MEXCLR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.4	.362	UGG	90.5	8.6
	LH10	MEXCLR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.4	.362	UGG	90.5	8.6
	LH10	MEXCLR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.4	.332	UGG	83.0	8.6
	LH10	MEXCLR	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.4	.332	UGG	83.0	8.6
		**********									----------	
		avg									86.8	
		minimum									83.0	
		maximum									90.5	
	LH10	PPDDT	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.00707	UGG	17.7	.0
	LH10	PPDDT	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.00707	UGG	17.7	.0
	LH10	PPDDT	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.00707	UGG	17.7	.0
	LH10	PPDDT	DXCS2000	V1AS*556	UFCB	22-SEP-94	04-OCT-94	.04	.00707	UGG	17.7	.0
		**********									----------	
		avg									17.7	
		minimum									17.7	
		maximum									17.7	
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.019	UGG	28.5	10.1
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.019	UGG	28.5	10.1
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	05-OCT-94	.0667	.0174	UGG	26.1	10.1
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	05-OCT-94	.0667	.0174	UGG	26.1	10.1
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.0172	UGG	25.8	10.1
	LH16	CL10BP	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.0172	UGG	25.8	10.1
		**********									----------	
		avg									26.8	
		minimum									25.8	
		maximum									28.5	
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.0475	UGG	71.2	15.5
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.0475	UGG	71.2	15.5
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.043	UGG	64.5	15.5
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.0667	.043	UGG	64.5	15.5
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	05-OCT-94	.0667	.0407	UGG	61.0	15.5
	LH16	CL4XYL	DXCS2000	V1AS*556	NGHB	22-SEP-94	05-OCT-94	.0667	.0407	UGG	61.0	15.5

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		**********									----------	
		avg									65.6	
		minimum									61.0	
		maximum									71.2	
	LH16	PCB016	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.393	UGG	73.7	12.4
	LH16	PCB016	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.393	UGG	73.7	12.4
	LH16	PCB016	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.347	UGG	65.1	12.4
	LH16	PCB016	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.347	UGG	65.1	12.4
		**********									----------	
		avg									69.4	
		minimum									65.1	
		maximum									73.7	
	LH16	PCB260	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.46	UGG	86.3	25.8
	LH16	PCB260	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.46	UGG	86.3	25.8
	LH16	PCB260	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.355	UGG	66.6	25.8
	LH16	PCB260	DXCS2000	V1AS*556	NGHB	22-SEP-94	04-OCT-94	.533	.355	UGG	66.6	25.8
		**********									----------	
		avg									76.5	
		minimum									66.6	
		maximum									86.3	
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.2	UGG	101.4	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.2	UGG	101.4	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.2	UGG	101.4	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.2	UGG	101.4	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	66.7
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	66.7
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5	UGG	74.6	66.7
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5	UGG	74.6	66.7
		**********									----------	
		avg									106.7	
		minimum									74.6	
		maximum									149.3	
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	8.3	UGG	116.9	7.5
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	8.3	UGG	116.9	7.5
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.7	UGG	108.5	7.5
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7.7	UGG	108.5	7.5
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
		***********									----------	
		avg									131.0	
		minimum									108.5	
		maximum									149.3	
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	5.9	UGG	83.1	3.4
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	5.9	UGG	83.1	3.4
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	5.7	UGG	80.3	3.4
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	5.7	UGG	80.3	3.4
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	3	UGG	44.8	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	3	UGG	44.8	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	3	UGG	44.8	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	3	UGG	44.8	.0
		***********									----------	
		avg									63.2	
		minimum									44.8	
		maximum									83.1	
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	17	UGG	121.4	6.1
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	17	UGG	121.4	6.1
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	16	UGG	114.3	6.1
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	16	UGG	114.3	6.1
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	20	UGG	153.8	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	20	UGG	153.8	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	20	UGG	153.8	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	20	UGG	153.8	.0
		***********									----------	
		avg									135.9	
		minimum									114.3	
		maximum									153.8	
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	9	UGG	69.2	76.9
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	9	UGG	69.2	76.9
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	4	UGG	30.8	76.9
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	4	UGG	30.8	76.9
		***********									----------	
		avg									75.0	

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		minimum									30.8	
		maximum									100.0	
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	6.9
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	6.9
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	6.9
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	6.9
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
		**********									----------	
		avg									167.2	
		minimum									100.0	
		maximum									230.8	
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7	UGG	98.6	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7	UGG	98.6	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7	UGG	98.6	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	7	UGG	98.6	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	10	UGG	149.3	.0
		**********									----------	
		avg									123.9	
		minimum									98.6	
		maximum									149.3	
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.5	UGG	91.5	3.1
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.5	UGG	91.5	3.1
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	3.1
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	3.1
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7	.0
		**********									----------	
		avg									74.9	
		minimum									59.7	
		maximum									91.5	
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	18	UGG	128.6	18.2

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	18	UGG	128.6	18.2
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	18.2
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	18.2
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	30	UGG	230.8	.0
		**********									----------	
		avg									174.3	
		minimum									107.1	
		maximum									230.8	
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	6.9
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	15	UGG	107.1	6.9
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	6.9
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	14	14	UGG	100.0	6.9
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	10	UGG	76.9	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	10	UGG	76.9	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	10	UGG	76.9	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	13	10	UGG	76.9	.0
		**********									----------	
		avg									90.2	
		minimum									76.9	
		maximum									107.1	
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	7.1	6.3	UGG	88.7	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	9	UGG	134.3	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	9	UGG	134.3	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	9	UGG	134.3	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	9	UGG	134.3	.0
		**********									----------	
		avg									111.5	
		minimum									88.7	
		maximum									134.3	
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.09	UGG	90.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.09	UGG	90.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.084	UGG	84.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.084	UGG	84.0	6.9

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Sping Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		**********									----------	
		avg									87.0	
		minimum									84.0	
		maximum									90.0	
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.1	UGG	100.0	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.1	UGG	100.0	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.1	UGG	100.0	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.1	UGG	100.0	.0
		**********									----------	
		avg									100.0	
		minimum									100.0	
		maximum									100.0	
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.088	UGG	88.0	2.3
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.088	UGG	88.0	2.3
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.086	UGG	86.0	2.3
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.086	UGG	86.0	2.3
		**********									----------	
		avg									87.0	
		minimum									86.0	
		maximum									88.0	
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.12	UGG	120.0	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.12	UGG	120.0	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.12	UGG	120.0	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.12	UGG	120.0	.0
		**********									----------	
		avg									120.0	
		minimum									120.0	
		maximum									120.0	
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.074	UGG	74.0	9.9
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.074	UGG	74.0	9.9
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.067	UGG	67.0	9.9
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.1	.067	UGG	67.0	9.9
		**********									----------	
		avg									70.5	
		minimum									67.0	
		maximum									74.0	

MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
TL IN WATER BY GFAA	SD09	TL	WXCS0400	V1AW*504	UCCC	19-SEP-94	14-OCT-94	10	8.4	UGL	84.0	4.0
TL IN WATER BY GFAA	SD09	TL	WXCS0400	V1AW*504	UCCC	19-SEP-94	14-OCT-94	10	8.07	UGL	80.7	4.0
		**********									----------	
		avg									82.4	
		minimum									80.7	
		maximum									84.0	
PB IN WATER BY GFAA	SD20	PB	WXCS0400	V1AW*504	WCMC	19-SEP-94	14-OCT-94	40	39.9	UGL	99.8	2.8
PB IN WATER BY GFAA	SD20	PB	WXCS0400	V1AW*504	WCMC	19-SEP-94	14-OCT-94	40	38.8	UGL	97.0	2.8
		**********									----------	
		avg									98.4	
		minimum									97.0	
		maximum									99.8	
SE IN WATER BY GFAA	SD21	SE	WXCS0400	V1AW*504	XCHC	19-SEP-94	19-OCT-94	37.5	35.4	UGL	94.4	7.3
SE IN WATER BY GFAA	SD21	SE	WXCS0400	V1AW*504	XCHC	19-SEP-94	19-OCT-94	37.5	32.9	UGL	87.7	7.3
		**********									----------	
		avg									91.1	
		minimum									87.7	
		maximum									94.4	
AS IN WATER BY GFAA	SD22	AS	WXCS0400	V1AW*504	YCIC	19-SEP-94	14-OCT-94	37.5	45.8	UGL	122.1	1.8
AS IN WATER BY GFAA	SD22	AS	WXCS0400	V1AW*504	YCIC	19-SEP-94	14-OCT-94	37.5	45	UGL	120.0	1.8
		**********									----------	
		avg									121.1	
		minimum									120.0	
		maximum									122.1	
SB IN WATER BY GFAA	SD28	SB	WXCS0400	V1AW*504	NFPB	19-SEP-94	21-OCT-94	80	31.2	UGL	39.0	8.0
SB IN WATER BY GFAA	SD28	SB	WXCS0400	V1AW*504	NFPB	19-SEP-94	21-OCT-94	80	28.8	UGL	36.0	8.0
		**********									----------	
		avg									37.5	
		minimum									36.0	

MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		maximum									39.0	
METALS IN WATER BY ICAP	SS10	AG	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	50.5	UGL	101.0	7.2
METALS IN WATER BY ICAP	SS10	AG	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	47	UGL	94.0	7.2
		**********									----------	
		avg									97.5	
		minimum									94.0	
		maximum									101.0	
METALS IN WATER BY ICAP	SS10	AL	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	2000	1970	UGL	98.5	6.3
METALS IN WATER BY ICAP	SS10	AL	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	2000	1850	UGL	92.5	6.3
		**********									----------	
		avg									95.5	
		minimum									92.5	
		maximum									98.5	
METALS IN WATER BY ICAP	SS10	BA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	2000	1850	UGL	92.5	5.0
METALS IN WATER BY ICAP	SS10	BA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	2000	1760	UGL	88.0	5.0
		**********									----------	
		avg									90.3	
		minimum									88.0	
		maximum									92.5	
METALS IN WATER BY ICAP	SS10	BE	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	58.7	UGL	117.4	7.8
METALS IN WATER BY ICAP	SS10	BE	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	54.3	UGL	108.6	7.8
		**********									----------	
		avg									113.0	
		minimum									108.6	
		maximum									117.4	
METALS IN WATER BY ICAP	SS10	CA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	10800	UGL	108.0	9.9
METALS IN WATER BY ICAP	SS10	CA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	9780	UGL	97.8	9.9
		**********									----------	
		avg									102.9	
		minimum									97.8	
		maximum									108.0	
METALS IN WATER BY ICAP	SS10	CD	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	50.6	UGL	101.2	3.2

MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	CD	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	50	49	UGL	98.0	3.2
		**********									----------	
		avg									99.6	
		minimum									98.0	
		maximum									101.2	
METALS IN WATER BY ICAP	SS10	CO	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	567	UGL	113.4	5.6
METALS IN WATER BY ICAP	SS10	CO	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	536	UGL	107.2	5.6
		**********									----------	
		avg									110.3	
		minimum									107.2	
		maximum									113.4	
METALS IN WATER BY ICAP	SS10	CR	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	200	197	UGL	98.5	5.2
METALS IN WATER BY ICAP	SS10	CR	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	200	187	UGL	93.5	5.2
		**********									----------	
		avg									96.0	
		minimum									93.5	
		maximum									98.5	
METALS IN WATER BY ICAP	SS10	CU	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	250	253	UGL	101.2	4.9
METALS IN WATER BY ICAP	SS10	CU	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	250	241	UGL	96.4	4.9
		**********									----------	
		avg									98.8	
		minimum									96.4	
		maximum									101.2	
METALS IN WATER BY ICAP	SS10	FE	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	1000	742	UGL	74.2	16.6
METALS IN WATER BY ICAP	SS10	FE	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	1000	628	UGL	62.8	16.6
		**********									----------	
		avg									68.5	
		minimum									62.8	
		maximum									74.2	
METALS IN WATER BY ICAP	SS10	K	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	11300	UGL	113.0	2.7
METALS IN WATER BY ICAP	SS10	K	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	11000	UGL	110.0	2.7
		**********									----------	
		avg									111.5	
		minimum									110.0	

MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
		maximum									113.0	
METALS IN WATER BY ICAP	SS10	MG	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	10100	UGL	101.0	4.9
METALS IN WATER BY ICAP	SS10	MG	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	9620	UGL	96.2	4.9
		**********									----------	
		avg									98.6	
		minimum									96.2	
		maximum									101.0	
METALS IN WATER BY ICAP	SS10	MN	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	535	UGL	107.0	17.5
METALS IN WATER BY ICAP	SS10	MN	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	449	UGL	89.8	17.5
		**********									----------	
		avg									98.4	
		minimum									89.8	
		maximum									107.0	
METALS IN WATER BY ICAP	SS10	NA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	10800	UGL	108.0	11.5
METALS IN WATER BY ICAP	SS10	NA	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	10000	9630	UGL	96.3	11.5
		**********									----------	
		avg									102.2	
		minimum									96.3	
		maximum									108.0	
METALS IN WATER BY ICAP	SS10	NI	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	580	UGL	116.0	4.9
METALS IN WATER BY ICAP	SS10	NI	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	552	UGL	110.4	4.9
		**********									----------	
		avg									113.2	
		minimum									110.4	
		maximum									116.0	
METALS IN WATER BY ICAP	SS10	V	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	520	UGL	104.0	5.1
METALS IN WATER BY ICAP	SS10	V	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	494	UGL	98.8	5.1
		**********									----------	
		avg									101.4	
		minimum									98.8	
		maximum									104.0	
METALS IN WATER BY ICAP	SS10	ZN	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	512	UGL	102.4	6.2
METALS IN WATER BY ICAP	SS10	ZN	WXCS0400	V1AW*504	ZFDC	19-SEP-94	11-OCT-94	500	481	UGL	96.2	6.2

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                                              MS/MSD Quality Control Report
                                            Installation: Fort Devens, MA (DV)
                                              Group: 1A  Cold Spring Brook

                                           MATRIX SPIKES/MATRIX SPIKE DUPLICATES


                                             IRDMIS
                          USATHAMA           Field
                          Method   Test      Sample     Lab                Sample       Analysis                   Spike                         Percent
Method Description        Code     Name      Number     Number    Lot      Date         Date                       Value          Value Units    Recovery      RPD
------------------------- -------- ---------- ---------- -------- -----  ------------ ------------ ------------ ------------ ----- ---------- --------
                                   **********                                                                                                   ----------
                                   avg                                                                                                                99.3
                                   minimum                                                                                                            96.2
                                   maximum                                                                                                           102.4

SO4 IN WATER              TT10     CL         WXCS0400   V1AW*504 PDSA   19-SEP-94    03-OCT-94                  25000          22000 UGL            88.0       .0
SO4 IN WATER              TT10     CL         WXCS0400   V1AW*504 PDSA   19-SEP-94    03-OCT-94                  25000          22000 UGL            88.0       .0
                                   **********                                                                                                   ----------
                                   avg                                                                                                                88.0
                                   minimum                                                                                                            88.0
                                   maximum                                                                                                            88.0

BNA'S IN WATER BY GC/MS   UM18     124TCB     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             50 UGL            50.0       .0
BNA'S IN WATER BY GC/MS   UM18     124TCB     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             50 UGL            50.0       .0
                                   **********                                                                                                   ----------
                                   avg                                                                                                                50.0
                                   minimum                                                                                                            50.0
                                   maximum                                                                                                            50.0

BNA'S IN WATER BY GC/MS   UM18     14DCLB     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100            110 UGL           110.0      9.5
BNA'S IN WATER BY GC/MS   UM18     14DCLB     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100            100 UGL           100.0      9.5
                                   **********                                                                                                   ----------
                                   avg                                                                                                               105.0
                                   minimum                                                                                                           100.0
                                   maximum                                                                                                           110.0

BNA'S IN WATER BY GC/MS   UM18     246TBP     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             75 UGL            75.0      4.1
BNA'S IN WATER BY GC/MS   UM18     246TBP     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             74 UGL            74.0      4.1
BNA'S IN WATER BY GC/MS   UM18     246TBP     WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             72 UGL            72.0      4.1
                                   **********                                                                                                   ----------
                                   avg                                                                                                                73.7
                                   minimum                                                                                                            72.0
                                   maximum                                                                                                            75.0

BNA'S IN WATER BY GC/MS   UM18     24DNT      WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             88 UGL            88.0      2.3
BNA'S IN WATER BY GC/MS   UM18     24DNT      WXCS0400   V1AW*504 WDPC   19-SEP-94    28-SEP-94                    100             86 UGL            86.0      2.3
                                   **********                                                                                                   ----------
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MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 1A Cold Spring Brook

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date		Spike Value	Value	Units	Percent Recovery	RPD
		avg										87.0	
		minimum										86.0	
		maximum										88.0	
BNA'S IN WATER BY GC/MS	UM18	2CLP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	200	UGL	100.0	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	200	UGL	100.0	.0
		**********										----------	
		avg										100.0	
		minimum										100.0	
		maximum										100.0	
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		50	42	UGL	84.0	9.8
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		50	42	UGL	84.0	9.8
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		50	38	UGL	76.0	9.8
		**********										----------	
		avg										81.3	
		minimum										76.0	
		maximum										84.0	
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		100	130	UGL	130.0	16.2
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		100	130	UGL	130.0	16.2
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		100	110	UGL	110.0	16.2
		**********										----------	
		avg										123.3	
		minimum										110.0	
		maximum										130.0	
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	180	UGL	90.0	5.7
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	170	UGL	85.0	5.7
		**********										----------	
		avg										87.5	
		minimum										85.0	
		maximum										90.0	
BNA'S IN WATER BY GC/MS	UM18	4NP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	100	UGL	50.0	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94		200	100	UGL	50.0	.0
		**********										----------	
		avg										50.0	
		minimum										50.0	

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                                           MS/MSD Quality Control Report
                                        Installation: Fort Devens, MA (DV)
                                          Group: 1A  Cold Spring Brook

                                       MATRIX SPIKES/MATRIX SPIKE DUPLICATES


                                         IRDMIS
                           USATHAMA      Field
                           Method   Test         Sample     Lab                 Sample       Analysis                 Spike                         Percent
Method Description         Code     Name         Number     Number    Lot       Date         Date                     Value           Value Units   Recovery     RPD
-------------------------  -------- ----------   ---------- --------- -----     ------------ ------------ ----------- ----------- ----------- ----- ---------- ----------
BNA'S IN WATER BY GC/MS    UM18     PHENOL       WXCS0400   V1AW*504  WDPC      19-SEP-94    28-SEP-94                200               280 UGL        140.0       7.4
BNA'S IN WATER BY GC/MS    UM18     PHENOL       WXCS0400   V1AW*504  WDPC      19-SEP-94    28-SEP-94                200               260 UGL        130.0       7.4
                                    **********                                                                                                    ----------
                                    avg                                                                                                              135.0
                                    minimum                                                                                                          130.0
                                    maximum                                                                                                          140.0

BNA'S IN WATER BY GC/MS    UM18     PYR          WXCS0400   V1AW*504  WDPC      19-SEP-94    28-SEP-94                100                83 UGL         83.0       3.7
BNA'S IN WATER BY GC/MS    UM18     PYR          WXCS0400   V1AW*504  WDPC      19-SEP-94    28-SEP-94                100                80 UGL         80.0       3.7
                                    **********                                                                                                    ----------
                                    avg                                                                                                               81.5
                                    minimum                                                                                                           80.0
                                    maximum                                                                                                           83.0

BNA'S IN WATER BY GC/MS    UM18     TRPD14       WXCS0400   V1AW*504  WDPC      19-SEP-94    28-SEP-94                 50                46 UGL         92.0        .0
                                    **********                                                                                                    ----------
                                    avg                                                                                                               92.0
                                    minimum                                                                                                           92.0
                                    maximum                                                                                                           92.0





SQL> exit
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TABLE C-12

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

VOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.051	UGG	102.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.051	UGG	102.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.052	UGG	104.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.052	UGG	104.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.049	UGG	98.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.045	UGG	90.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.045	UGG	90.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.048	UGG	96.0
		**********									----------
		avg									97.6
		minimum									90.0
		maximum									104.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.039	UGG	78.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.039	UGG	78.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.034	UGG	68.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.034	UGG	68.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.043	UGG	86.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.043	UGG	86.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.037	UGG	74.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.037	UGG	74.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.037	UGG	74.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.037	UGG	74.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.035	UGG	70.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.035	UGG	70.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.031	UGG	62.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.031	UGG	62.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.04	UGG	80.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.04	UGG	80.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.039	UGG	78.0
VOC'S IN SOIL BY GC/MS	LM19	4BFB	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.039	UGG	78.0
		**********									----------
		avg									74.4

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

VOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
		minimum									62.0
		maximum									86.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.061	UGG	122.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1300	V1AS*549	YGNC	22-SEP-94	28-SEP-94	.05	.061	UGG	122.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.066	UGG	132.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1400	V1AS*550	YGNC	22-SEP-94	28-SEP-94	.05	.066	UGG	132.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.058	UGG	116.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1700	V1AS*553	YGNC	22-SEP-94	28-SEP-94	.05	.058	UGG	116.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.07	UGG	140.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS1900	V1AS*555	YGNC	22-SEP-94	28-SEP-94	.05	.07	UGG	140.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.069	UGG	138.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.069	UGG	138.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.068	UGG	136.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.068	UGG	136.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.063	UGG	126.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	.05	.063	UGG	126.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.059	UGG	118.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DXCS3500	V1AS*571	YGNC	22-SEP-94	28-SEP-94	.05	.059	UGG	118.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.065	UGG	130.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	.05	.065	UGG	130.0
		**********									----------
		avg									128.7
		minimum									116.0
		maximum									140.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	57	UGL	114.0
		**********									----------
		avg									114.0
		minimum									114.0
		maximum									114.0
VOC'S IN WATER BY GC/MS	UM20	4BFB	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	41	UGL	82.0
VOC'S IN WATER BY GC/MS	UM20	4BFB	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	41	UGL	82.0
VOC'S IN WATER BY GC/MS	UM20	4BFB	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	42	UGL	84.0
VOC'S IN WATER BY GC/MS	UM20	4BFB	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	42	UGL	84.0
		**********									----------
		avg									83.0
		minimum									82.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

VOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
		maximum									84.0
VOC'S IN WATER BY GC/MS	UM20	MEC6D8	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC6D8	SBK94578	V1AW*578	XDRE	23-SEP-94	26-SEP-94	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC6D8	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	45	UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MEC6D8	TRP94800	V1AW*800	XDRE	23-SEP-94	26-SEP-94	50	45	UGL	90.0
		**********									----------
		avg									89.0
		minimum									88.0
		maximum									90.0

TABLE C−13

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	6.7	5.7	UGG	85.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	4.1	UGG	61.2
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	4.1	UGG	61.2
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	5.9	UGG	88.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	5.9	UGG	88.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	5.7	UGG	85.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	5.7	UGG	85.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	5.5	UGG	82.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	5.5	UGG	82.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	4.8	UGG	71.6
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	4.8	UGG	71.6
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.5	UGG	82.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.5	UGG	82.1

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	3.6	UGG	53.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	3.6	UGG	53.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	4.6	UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	4.6	UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	4.6	UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	4.6	UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	.38	UGG	5.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	.38	UGG	5.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	1.8	UGG	26.9
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	1.8	UGG	26.9
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	2.2	UGG	32.8
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	2.2	UGG	32.8
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	4.7	UGG	70.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	4.7	UGG	70.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	4.2	UGG	62.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	4.2	UGG	62.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	5.1	UGG	76.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	4.7	UGG	70.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	4.7	UGG	70.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	1.6	UGG	23.9
BNA'S IN SOIL BY GC/MS	LM18	246TBP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	1.6	UGG	23.9
		**********									----------

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
		avg									75.9
		minimum									5.7
		maximum									104.5
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	3.8	UGG	115.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	3.8	UGG	115.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	3.8	UGG	115.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	3.8	UGG	115.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	4.2	UGG	127.3
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	4.2	UGG	127.3
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	4.1	UGG	124.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	4.1	UGG	124.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	2.8	UGG	84.8

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	4	UGG	121.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	4	UGG	121.2
		**********									----------
		avg									99.6
		minimum									72.7
		maximum									127.3
BNA'S IN SOIL BY GC/MS	LM18	2FP	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	7.8	UGG	116.4
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	7.8	UGG	116.4
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	9.3	UGG	138.8
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	9.3	UGG	138.8
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	6.5	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.8	UGG	86.6
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.8	UGG	86.6
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	8.3	UGG	123.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	8.3	UGG	123.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	8.7	UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	8.7	UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	9	UGG	134.3
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	9	UGG	134.3
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	8.3	UGG	123.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	8.3	UGG	123.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	8.5	UGG	126.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	8.5	UGG	126.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	8.2	UGG	122.4
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	8.2	UGG	122.4
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	9.1	UGG	135.8
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	9.1	UGG	135.8
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	9.4	UGG	140.3
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	9.4	UGG	140.3
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	2FP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	7.7	UGG	114.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	7.1	UGG	106.0
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
		**********									----------
		avg									114.7
		minimum									86.6
		maximum									140.3
BNA'S IN SOIL BY GC/MS	LM18	NBD5	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.6	UGG	109.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.6	UGG	109.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	4	UGG	121.2
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	4	UGG	121.2
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.5	UGG	106.1
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	3.4	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	3	UGG	90.9

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	NBD5	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	2.3	UGG	69.7
		**********									----------
		avg									87.0
		minimum									63.6
		maximum									121.2
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	6.7	6.8	UGG	101.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	6.7	6.9	UGG	103.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	5.8	UGG	86.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	6.7	5.8	UGG	86.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	5.9	UGG	88.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	6.7	5.9	UGG	88.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	5	UGG	74.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	6.7	5	UGG	74.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	6.7	7	UGG	104.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	6.7	6.2	UGG	92.5

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	8.6	UGG	128.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	6.7	8.6	UGG	128.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	6.7	6.2	UGG	92.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	6.8	UGG	101.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	6.7	6.8	UGG	101.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	5.6	UGG	83.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	6.7	5.6	UGG	83.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.2	UGG	77.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	5.2	UGG	77.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4.9	UGG	73.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	6.7	4	UGG	59.7
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	6.7	7.9	UGG	117.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	8.5	UGG	126.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	6.7	8.5	UGG	126.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	7.4	UGG	110.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	6.7	7.4	UGG	110.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	6.7	6.6	UGG	98.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	6.7	6.3	UGG	94.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	7.4	UGG	110.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	6.7	7.4	UGG	110.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	6.7	8.1	UGG	120.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	6.7	6.4	UGG	95.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	8	UGG	119.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	6.7	8	UGG	119.4
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	6.7	7.2	UGG	107.5
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	6.7	6.7	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	6.7	5.3	UGG	79.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	6.7	7.3	UGG	109.0
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	6.7	7.5	UGG	111.9
		**********									----------
		avg									99.8
		minimum									59.7
		maximum									128.4
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BXXG1527	DV7S*69	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0100	V1AS*537	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0200	V1AS*538	OENC	21-SEP-94	06-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0300	V1AS*539	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	29-SEP-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0400	V1AS*540	OEKC	19-SEP-94	04-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0600	V1AS*542	OEKC	19-SEP-94	29-SEP-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0700	V1AS*543	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0800	V1AS*544	OEKC	19-SEP-94	04-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS0900	V1AS*545	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1000	V1AS*546	OENC	20-SEP-94	06-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1100	V1AS*547	OENC	21-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1200	V1AS*548	OENC	21-SEP-94	06-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1300	V1AS*549	OENC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1400	V1AS*550	OENC	22-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1600	V1AS*552	OENC	22-SEP-94	10-OCT-94	3.3	3.7	UGG	112.1
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1700	V1AS*553	OENC	22-SEP-94	10-OCT-94	3.3	2.9	UGG	87.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1800	V1AS*554	OENC	22-SEP-94	10-OCT-94	3.3	2.8	UGG	84.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS1900	V1AS*555	OENC	22-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2100	V1AS*557	OEOC	20-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2200	V1AS*558	OEOC	20-SEP-94	10-OCT-94	3.3	3.3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2300	V1AS*559	OEOC	20-SEP-94	10-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2400	V1AS*560	OEOC	20-SEP-94	10-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2500	V1AS*561	OEOC	20-SEP-94	10-OCT-94	3.3	3	UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2600	V1AS*562	OEOC	20-SEP-94	07-OCT-94	3.3	2.7	UGG	81.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2700	V1AS*563	OEOC	20-SEP-94	07-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2800	V1AS*564	OEOC	22-SEP-94	07-OCT-94	3.3	3.1	UGG	93.9
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS2900	V1AS*565	OEOC	21-SEP-94	10-OCT-94	3.3	2.2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3000	V1AS*566	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3100	V1AS*567	OEOC	21-SEP-94	07-OCT-94	3.3	2.1	UGG	63.6
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3200	V1AS*568	OEOC	21-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3300	V1AS*569	OEOC	21-SEP-94	07-OCT-94	3.3	2.3	UGG	69.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3400	V1AS*570	OEOC	21-SEP-94	10-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXCS3500	V1AS*571	OEOC	22-SEP-94	10-OCT-94	3.3	2.6	UGG	78.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXGR0600	V1AS*575	OEKC	19-SEP-94	04-OCT-94	3.3	3.2	UGG	97.0
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DXGR0700	V1AS*576	OEKC	19-SEP-94	06-OCT-94	3.3	2.5	UGG	75.8
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	3.3	2.4	UGG	72.7
		**********									----------
		avg									81.5
		minimum									63.6
		maximum									112.1
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	37	UGL	37.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	37	UGL	37.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	53	UGL	53.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	53	UGL	53.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	51	UGL	51.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	51	UGL	51.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	75	UGL	75.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	75	UGL	75.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	72	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	72	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	75	UGL	75.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	75	UGL	75.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	71	UGL	71.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	71	UGL	71.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	64	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	64	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	58	UGL	58.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	58	UGL	58.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	63	UGL	63.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	63	UGL	63.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	68	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	68	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	54	UGL	54.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	54	UGL	54.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	48	UGL	48.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	48	UGL	48.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	63	UGL	63.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	63	UGL	63.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	56	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	56	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	60	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	60	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	50	UGL	50.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	50	UGL	50.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	48	UGL	48.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	48	UGL	48.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	44	UGL	44.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	59	UGL	59.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	59	UGL	59.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	52	UGL	52.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	52	UGL	52.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	45	UGL	45.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	45	UGL	45.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	56	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	56	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	45	UGL	45.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	45	UGL	45.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	50	UGL	50.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	50	UGL	50.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	43	UGL	43.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	43	UGL	43.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	71	UGL	71.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	71	UGL	71.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	42	UGL	42.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	42	UGL	42.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	66	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	66	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	67	UGL	67.0
BNA'S IN WATER BY GC/MS	UM18	246TBP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	67	UGL	67.0
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		avg									58.2
		minimum									37.0
		maximum									78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	33	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	33	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	43	UGL	86.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	45	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	45	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	28	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	28	UGL	56.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	33	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	33	UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	38	UGL	76.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FBP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	39	UGL	78.0
		**********									----------
		avg									75.9
		minimum									56.0
		maximum									90.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	97	UGL	97.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	97	UGL	97.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	99	UGL	99.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	99	UGL	99.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	130	UGL	130.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	130	UGL	130.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	130	UGL	130.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	130	UGL	130.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	110	UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	120	UGL	120.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	120	UGL	120.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	87	UGL	87.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	87	UGL	87.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	85	UGL	85.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	85	UGL	85.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	81	UGL	81.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	81	UGL	81.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	72	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	72	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	70	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	70	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	99	UGL	99.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	99	UGL	99.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	93	UGL	93.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	93	UGL	93.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	73	UGL	73.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	73	UGL	73.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	2FP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	81	UGL	81.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	81	UGL	81.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	85	UGL	85.0
BNA'S IN WATER BY GC/MS	UM18	2FP	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	85	UGL	85.0
		**********									----------
		avg									90.9
		minimum									70.0
		maximum									130.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	50	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	50	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	27	UGL	54.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	27	UGL	54.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	37	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	32	UGL	64.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	31	UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	36	UGL	72.0
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		avg									72.6
		minimum									54.0
		maximum									100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	94	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	100	94	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	100	88	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	160	UGL	160.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	160	UGL	160.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	140	UGL	140.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	140	UGL	140.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	96	UGL	96.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	100	96	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	86	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	100	86	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	100	100	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	100	78	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	80	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	100	80	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	100	84	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	100	90	UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	80	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	100	80	UGL	80.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	100	82	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	96	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	100	96	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	100	76	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	100	36	UGL	36.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	74	UGL	74.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	100	74	UGL	74.0
		**********									----------
		avg									80.1
		minimum									36.0
		maximum									160.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0100	V1AW*501	WDUC	20-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	51	UGL	102.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0200	V1AW*502	WDUC	21-SEP-94	05-OCT-94	50	51	UGL	102.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0300	V1AW*503	WDUC	20-SEP-94	05-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0400	V1AW*504	WDPC	19-SEP-94	28-SEP-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	54	UGL	108.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	50	54	UGL	108.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	49	UGL	98.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0600	V1AW*506	WDPC	19-SEP-94	28-SEP-94	50	49	UGL	98.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0700	V1AW*507	WDPC	19-SEP-94	28-SEP-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	50	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0800	V1AW*508	WDPC	19-SEP-94	28-SEP-94	50	50	UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS0900	V1AW*509	WDUC	20-SEP-94	05-OCT-94	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1000	V1AW*510	WDTC	20-SEP-94	06-OCT-94	50	40	UGL	80.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1100	V1AW*511	WDTC	21-SEP-94	06-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1200	V1AW*512	WDTC	21-SEP-94	06-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1300	V1AW*513	WDTC	22-SEP-94	06-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1400	V1AW*514	WDUC	22-SEP-94	05-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1600	V1AW*516	WDUC	22-SEP-94	05-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	52	UGL	104.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1700	V1AW*517	WDVC	22-SEP-94	12-OCT-94	50	52	UGL	104.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1800	V1AW*518	WDVC	22-SEP-94	12-OCT-94	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS1900	V1AW*519	WDVC	22-SEP-94	12-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2000	V1AW*520	WDVC	22-SEP-94	12-OCT-94	50	48	UGL	96.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2100	V1AW*521	WDUC	20-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2400	V1AW*524	WDUC	20-SEP-94	05-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2600	V1AW*526	WDUC	20-SEP-94	05-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2700	V1AW*527	WDUC	20-SEP-94	05-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS2800	V1AW*528	WDUC	22-SEP-94	05-OCT-94	50	42	UGL	84.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3000	V1AW*530	WDUC	21-SEP-94	05-OCT-94	50	34	UGL	68.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3100	V1AW*531	WDUC	21-SEP-94	06-OCT-94	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3200	V1AW*532	WDUC	21-SEP-94	06-OCT-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3300	V1AW*533	WDUC	21-SEP-94	06-OCT-94	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3400	V1AW*534	WDUC	21-SEP-94	06-OCT-94	50	41	UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	44	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WXCS3500	V1AW*535	WDUC	22-SEP-94	06-OCT-94	50	44	UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	43	UGL	86.0

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SVOC Surrogate Recoveries

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94577	V1AW*577	WDUC	22-SEP-94	06-OCT-94	50	43	UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94578	V1AW*578	WDTC	23-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	40	UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	SBK94579	V1AW*579	WDTC	23-SEP-94	06-OCT-94	50	40	UGL	80.0
		**********									----------
		avg									86.5
		minimum									68.0
		maximum									108.0

TABLE C-14

Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
TOC IN SOIL	9060	TOC	DDCS0500	V1AS*574	ZETE	19-SEP-94	07-OCT-94		199000	UGG	79.7
TOC IN SOIL	9060	TOC	DXCS0500	V1AS*541	ZEQE	19-SEP-94	06-OCT-94		85600	UGG	79.7
TOC IN SOIL	9060	TOC	DXCS2000	V1AS*556	ZEUE	22-SEP-94	10-OCT-94		63600	UGG	11.5
TOC IN SOIL	9060	TOC	DDCS2000	V1AS*580	ZETE	22-SEP-94	07-OCT-94		56700	UGG	11.5
HG IN SOIL BY GFAA	JB01	HG	DDCS0500	V1AS*574	QHEC	19-SEP-94	13-OCT-94	<	.05	UGG	.0
HG IN SOIL BY GFAA	JB01	HG	DXCS0500	V1AS*541	QHDC	19-SEP-94	06-OCT-94	<	.05	UGG	.0
HG IN SOIL BY GFAA	JB01	HG	DXCS2000	V1AS*556	QHEC	22-SEP-94	13-OCT-94	<	.05	UGG	.0
HG IN SOIL BY GFAA	JB01	HG	DDCS2000	V1AS*580	QHEC	22-SEP-94	13-OCT-94	<	.05	UGG	.0
SE IN SOIL BY GFAA	JD15	SE	DXCS0500	V1AS*541	MBBC	19-SEP-94	17-OCT-94		2.18	UGG	158.8
SE IN SOIL BY GFAA	JD15	SE	DDCS0500	V1AS*574	MBCC	19-SEP-94	19-OCT-94	<	.25	UGG	158.8
SE IN SOIL BY GFAA	JD15	SE	DXCS2000	V1AS*556	MBCC	22-SEP-94	19-OCT-94		.925	UGG	.1
SE IN SOIL BY GFAA	JD15	SE	DDCS2000	V1AS*580	MBCC	22-SEP-94	19-OCT-94		.924	UGG	.1
AS IN SOIL BY GFAA	JD19	AS	DDCS0500	V1AS*574	QBCC	19-SEP-94	18-OCT-94		38.4	UGG	1.3
AS IN SOIL BY GFAA	JD19	AS	DXCS0500	V1AS*541	QBBC	19-SEP-94	13-OCT-94		37.9	UGG	1.3
AS IN SOIL BY GFAA	JD19	AS	DDCS2000	V1AS*580	QBCC	22-SEP-94	18-OCT-94		22.3	UGG	6.0
AS IN SOIL BY GFAA	JD19	AS	DXCS2000	V1AS*556	QBCC	22-SEP-94	18-OCT-94		21	UGG	6.0
TL IN SOIL BY GFAA	JD24	TL	DXCS0500	V1AS*541	RBHA	19-SEP-94	13-OCT-94	<	.5	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	DDCS0500	V1AS*574	RBIA	19-SEP-94	19-OCT-94	<	.5	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	DXCS2000	V1AS*556	RBIA	22-SEP-94	19-OCT-94	<	.5	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	DDCS2000	V1AS*580	RBIA	22-SEP-94	19-OCT-94	<	.5	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	DDCS0500	V1AS*574	SBUA	19-SEP-94	20-OCT-94	<	1.09	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	DXCS0500	V1AS*541	SBTA	19-SEP-94	20-OCT-94	<	1.09	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	DXCS2000	V1AS*556	SBUA	22-SEP-94	20-OCT-94	<	1.09	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	DDCS2000	V1AS*580	SBUA	22-SEP-94	20-OCT-94	<	1.09	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94	<	.589	UGG	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS IN SOIL BY ICAP	JS16	AG	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94	<	.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	<	.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		13900	UGG	135.5
METALS IN SOIL BY ICAP	JS16	AL	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		2670	UGG	135.5
METALS IN SOIL BY ICAP	JS16	AL	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		21600	UGG	6.7
METALS IN SOIL BY ICAP	JS16	AL	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		20200	UGG	6.7
METALS IN SOIL BY ICAP	JS16	BA	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	5.18	UGG	190.2
METALS IN SOIL BY ICAP	JS16	BA	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		207	UGG	190.2
METALS IN SOIL BY ICAP	JS16	BA	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		84.2	UGG	6.6
METALS IN SOIL BY ICAP	JS16	BA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		78.8	UGG	6.6
METALS IN SOIL BY ICAP	JS16	BE	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		3.37	UGG	148.3
METALS IN SOIL BY ICAP	JS16	BE	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	.5	UGG	148.3
METALS IN SOIL BY ICAP	JS16	BE	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94	<	.5	UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94	<	.5	UGG	.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		6470	UGG	145.5
METALS IN SOIL BY ICAP	JS16	CA	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		1020	UGG	145.5
METALS IN SOIL BY ICAP	JS16	CA	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		4890	UGG	53.0
METALS IN SOIL BY ICAP	JS16	CA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		2840	UGG	53.0
METALS IN SOIL BY ICAP	JS16	CD	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		6.43	UGG	160.7
METALS IN SOIL BY ICAP	JS16	CD	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	.7	UGG	160.7
METALS IN SOIL BY ICAP	JS16	CD	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		2.96	UGG	1.3
METALS IN SOIL BY ICAP	JS16	CD	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		3	UGG	1.3
METALS IN SOIL BY ICAP	JS16	CO	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		20.6	UGG	139.7
METALS IN SOIL BY ICAP	JS16	CO	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		116	UGG	139.7
METALS IN SOIL BY ICAP	JS16	CO	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		9.12	UGG	13.1
METALS IN SOIL BY ICAP	JS16	CO	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		10.4	UGG	13.1
METALS IN SOIL BY ICAP	JS16	CR	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94	<	4.05	UGG	.0
METALS IN SOIL BY ICAP	JS16	CR	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	4.05	UGG	.0
METALS IN SOIL BY ICAP	JS16	CR	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		56.7	UGG	6.4

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS IN SOIL BY ICAP	JS16	CR	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		53.2	UGG	6.4
METALS IN SOIL BY ICAP	JS16	CU	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	.965	UGG	186.7
METALS IN SOIL BY ICAP	JS16	CU	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		28	UGG	186.7
METALS IN SOIL BY ICAP	JS16	CU	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		44.2	UGG	12.0
METALS IN SOIL BY ICAP	JS16	CU	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		39.2	UGG	12.0
METALS IN SOIL BY ICAP	JS16	FE	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		28300	UGG	142.1
METALS IN SOIL BY ICAP	JS16	FE	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		4790	UGG	142.1
METALS IN SOIL BY ICAP	JS16	FE	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		22800	UGG	5.4
METALS IN SOIL BY ICAP	JS16	FE	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		21600	UGG	5.4
METALS IN SOIL BY ICAP	JS16	K	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	100	UGG	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94	<	100	UGG	.0
METALS IN SOIL BY ICAP	JS16	K	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		1620	UGG	1.2
METALS IN SOIL BY ICAP	JS16	K	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		1600	UGG	1.2
METALS IN SOIL BY ICAP	JS16	MG	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		1390	UGG	173.2
METALS IN SOIL BY ICAP	JS16	MG	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	100	UGG	173.2
METALS IN SOIL BY ICAP	JS16	MG	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		5690	UGG	6.3
METALS IN SOIL BY ICAP	JS16	MG	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		5340	UGG	6.3
METALS IN SOIL BY ICAP	JS16	MN	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		5560	UGG	147.3
METALS IN SOIL BY ICAP	JS16	MN	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		843	UGG	147.3
METALS IN SOIL BY ICAP	JS16	MN	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		174	UGG	7.8
METALS IN SOIL BY ICAP	JS16	MN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		161	UGG	7.8
METALS IN SOIL BY ICAP	JS16	NA	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		1980	UGG	180.8
METALS IN SOIL BY ICAP	JS16	NA	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	100	UGG	180.8
METALS IN SOIL BY ICAP	JS16	NA	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		984	UGG	18.3
METALS IN SOIL BY ICAP	JS16	NA	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		819	UGG	18.3
METALS IN SOIL BY ICAP	JS16	NI	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		23.2	UGG	144.8
METALS IN SOIL BY ICAP	JS16	NI	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		145	UGG	144.8
METALS IN SOIL BY ICAP	JS16	NI	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		37.2	UGG	9.6
METALS IN SOIL BY ICAP	JS16	NI	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		33.8	UGG	9.6

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS IN SOIL BY ICAP	JS16	PB	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		248	UGG	11.1
METALS IN SOIL BY ICAP	JS16	PB	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		222	UGG	11.1
METALS IN SOIL BY ICAP	JS16	V	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94	<	3.39	UGG	153.4
METALS IN SOIL BY ICAP	JS16	V	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		25.7	UGG	153.4
METALS IN SOIL BY ICAP	JS16	V	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		41.2	UGG	7.0
METALS IN SOIL BY ICAP	JS16	V	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		38.4	UGG	7.0
METALS IN SOIL BY ICAP	JS16	ZN	DXCS0500	V1AS*541	UBVC	19-SEP-94	06-OCT-94		604	UGG	140.8
METALS IN SOIL BY ICAP	JS16	ZN	DDCS0500	V1AS*574	UBXC	19-SEP-94	10-OCT-94		105	UGG	140.8
METALS IN SOIL BY ICAP	JS16	ZN	DDCS2000	V1AS*580	UBXC	22-SEP-94	10-OCT-94		176	UGG	9.5
METALS IN SOIL BY ICAP	JS16	ZN	DXCS2000	V1AS*556	UBXC	22-SEP-94	10-OCT-94		160	UGG	9.5
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.04	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.04	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.11	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.11	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.13	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.13	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.098	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.098	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6

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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.18	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.18	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.9	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	9	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.69	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.69	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	60	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.7	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	7	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	26DNT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.085	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	26DNT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.085	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	26DNT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.4	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	26DNT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	4	UGG	163.6

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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.06	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.06	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2CLP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2MNAP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.049	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MNAP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.049	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MNAP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2MNAP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2MP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.029	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.029	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2MP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.062	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.062	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2NP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.7	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	2NP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	7	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	6.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	6.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	300	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.45	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.45	UGG	.0

Table: H-
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.55	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.55	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.81	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.81	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	40	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	4	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.095	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.095	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4MP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4MP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.41	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.41	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
. Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	4NP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	70	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	4NP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	7	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ABHC	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ABHC	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.059	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.059	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.21	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.21	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BBZP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BBZP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENZID	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.85	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.85	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	40	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENZID	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	4	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	6.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	6.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	300	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.066	UGG	151.6
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		.48	UGG	151.6
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	163.6

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BZALC	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	BZALC	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	C27	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		6.4	UGG	52.9
BNA'S IN SOIL BY GC/MS	LM18	C27	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		11	UGG	52.9
BNA'S IN SOIL BY GC/MS	LM18	C29	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		44	UGG	31.6
BNA'S IN SOIL BY GC/MS	LM18	C29	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		32	UGG	31.6
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CHRY	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		.94	UGG	154.7
BNA'S IN SOIL BY GC/MS	LM18	CHRY	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.12	UGG	154.7
BNA'S IN SOIL BY GC/MS	LM18	CHRY	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CHRY	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	6.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	6.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	300	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.15	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.15	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.21	UGG	.0

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.21	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBHC	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBHC	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.035	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.035	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DEP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DEP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DMP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DMP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	8	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.061	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.061	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	DNOP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNOP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNOP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	DNOP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.45	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.45	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.53	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.53	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.53	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.53	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ESFSO4	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ESFSO4	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ESFSO4	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	30	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ESFSO4	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	3	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	FANT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		1.7	UGG	26.7
BNA'S IN SOIL BY GC/MS	LM18	FANT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		1.3	UGG	26.7
BNA'S IN SOIL BY GC/MS	LM18	FANT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	3	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	FANT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94		1	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6

Table: H-
Quality Control Report
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Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.23	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.23	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.13	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.13	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.29	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.29	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	LIN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	LIN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NAP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.037	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.037	UGG	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	NAP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NAP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NB	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.045	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.045	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NB	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	1	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	50	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB221	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	50	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB221	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB232	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	50	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB232	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	5	UGG	163.6

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	PCB242	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	50	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB242	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	5	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB248	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	100	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB248	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB254	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	2.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	2.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	100	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB254	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	10	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB260	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	2.6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	2.6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	200	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCB260	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	1.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	1.3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	60	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PCP	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		.92	UGG	21.7
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		.74	UGG	21.7
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94		.8	UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.11	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.11	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	.6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	6	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDD	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.27	UGG	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	PPDDD	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDD	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDD	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	.31	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	2	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	PYR	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94		2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94	<	2.6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94	<	2.6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DDCS2000	V1AS*580	OEOC	22-SEP-94	10-OCT-94	<	200	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DXCS2000	V1AS*556	OENC	22-SEP-94	10-OCT-94	<	20	UGG	163.6
BNA'S IN SOIL BY GC/MS	LM18	UNK610	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK610	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK611	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		3	UGG	40.0
BNA'S IN SOIL BY GC/MS	LM18	UNK611	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		2	UGG	40.0
BNA'S IN SOIL BY GC/MS	LM18	UNK618	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		10	UGG	50.0
BNA'S IN SOIL BY GC/MS	LM18	UNK618	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		6	UGG	50.0
BNA'S IN SOIL BY GC/MS	LM18	UNK629	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		6	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	UNK629	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		2	UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	UNK632	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		6	UGG	18.2

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	UNK632	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		5	UGG	18.2
BNA'S IN SOIL BY GC/MS	LM18	UNK634	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		4	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	UNK634	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		2	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	UNK639	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK639	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		3	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK647	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		20	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK647	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		20	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK657	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		40	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK657	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		40	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK660	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		20	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	UNK660	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		10	UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	UNK661	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK661	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		6	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK663	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		4	UGG	28.6
BNA'S IN SOIL BY GC/MS	LM18	UNK663	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		3	UGG	28.6
BNA'S IN SOIL BY GC/MS	LM18	UNK664	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		4	UGG	28.6
BNA'S IN SOIL BY GC/MS	LM18	UNK664	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		3	UGG	28.6
BNA'S IN SOIL BY GC/MS	LM18	UNK669	DXCS0500	V1AS*541	OEKC	19-SEP-94	29-SEP-94		30	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK669	DDCS0500	V1AS*574	OEKC	19-SEP-94	04-OCT-94		30	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0054	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0054	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0039	UGG	.0

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0039	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0023	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCLE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0023	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.003	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.003	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.01	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.01	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94		.052	UGG	39.1
VOC'S IN SOIL BY GC/MS	LM19	ACET	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94		.035	UGG	39.1
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0062	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0062	UGG	.0

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0015	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0015	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94		.041	UGG	27.8
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94		.031	UGG	27.8
VOC'S IN SOIL BY GC/MS	LM19	CCL4	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.007	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.007	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0057	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0057	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0088	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0088	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0069	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0069	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0044	UGG	.0

Table: H-
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.00078	UGG	68.9
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94		.0016	UGG	68.9
VOC'S IN SOIL BY GC/MS	LM19	MEK	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0026	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0026	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0028	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0028	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0024	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0024	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.00081	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.00081	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0028	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0028	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	DDCS2000	V1AS*580	YGNC	22-SEP-94	28-SEP-94	<	.0015	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	DXCS2000	V1AS*556	YGNC	22-SEP-94	28-SEP-94	<	.0015	UGG	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
HG IN WATER BY CVAA	SB01	HG	WXCS0500	V1AW*505	TCQC	19-SEP-94	11-OCT-94	<	.243	UGL	.0
HG IN WATER BY CVAA	SB01	HG	WDCS0500	V1AW*573	TCQC	19-SEP-94	11-OCT-94	<	.243	UGL	.0
TL IN WATER BY GFAA	SD09	TL	WXCS0500	V1AW*505	UCCC	19-SEP-94	14-OCT-94	<	6.99	UGL	.0
TL IN WATER BY GFAA	SD09	TL	WDCS0500	V1AW*573	UCCC	19-SEP-94	14-OCT-94	<	6.99	UGL	.0
PB IN WATER BY GFAA	SD20	PB	WDCS0500	V1AW*573	WCMC	19-SEP-94	14-OCT-94		27.3	UGL	92.0
PB IN WATER BY GFAA	SD20	PB	WXCS0500	V1AW*505	WCMC	19-SEP-94	14-OCT-94		10.1	UGL	92.0
SE IN WATER BY GFAA	SD21	SE	WXCS0500	V1AW*505	XCHC	19-SEP-94	19-OCT-94	<	3.02	UGL	8.9
SE IN WATER BY GFAA	SD21	SE	WDCS0500	V1AW*573	XCHC	19-SEP-94	19-OCT-94		3.3	UGL	8.9
AS IN WATER BY GFAA	SD22	AS	WXCS0500	V1AW*505	YCIC	19-SEP-94	14-OCT-94		5.54	UGL	87.2
AS IN WATER BY GFAA	SD22	AS	WDCS0500	V1AW*573	YCIC	19-SEP-94	14-OCT-94		14.1	UGL	87.2
SB IN WATER BY GFAA	SD28	SB	WXCS0500	V1AW*505	NFPB	19-SEP-94	21-OCT-94	<	3.03	UGL	.0
SB IN WATER BY GFAA	SD28	SB	WDCS0500	V1AW*573	NFPB	19-SEP-94	21-OCT-94	<	3.03	UGL	.0
METALS IN WATER BY ICAP	SS10	AG	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	4.6	UGL	.0
METALS IN WATER BY ICAP	SS10	AG	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94	<	4.6	UGL	.0
METALS IN WATER BY ICAP	SS10	AL	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		4740	UGL	82.6
METALS IN WATER BY ICAP	SS10	AL	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		1970	UGL	82.6
METALS IN WATER BY ICAP	SS10	BA	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		136	UGL	70.6
METALS IN WATER BY ICAP	SS10	BA	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		65	UGL	70.6
METALS IN WATER BY ICAP	SS10	BE	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94	<	5	UGL	.0
METALS IN WATER BY ICAP	SS10	BE	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	5	UGL	.0
METALS IN WATER BY ICAP	SS10	CA	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		14500	UGL	15.6

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Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS IN WATER BY ICAP	SS10	CA	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		12400	UGL	15.6
METALS IN WATER BY ICAP	SS10	CD	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94	<	4.01	UGL	.0
METALS IN WATER BY ICAP	SS10	CD	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	4.01	UGL	.0
METALS IN WATER BY ICAP	SS10	CO	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		44.3	UGL	55.7
METALS IN WATER BY ICAP	SS10	CO	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	25	UGL	55.7
METALS IN WATER BY ICAP	SS10	CR	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94	<	6.02	UGL	.0
METALS IN WATER BY ICAP	SS10	CR	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	6.02	UGL	.0
METALS IN WATER BY ICAP	SS10	CU	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		8.94	UGL	10.0
METALS IN WATER BY ICAP	SS10	CU	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	8.09	UGL	10.0
METALS IN WATER BY ICAP	SS10	FE	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		14000	UGL	83.3
METALS IN WATER BY ICAP	SS10	FE	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		5770	UGL	83.3
METALS IN WATER BY ICAP	SS10	K	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		2500	UGL	31.5
METALS IN WATER BY ICAP	SS10	K	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		1820	UGL	31.5
METALS IN WATER BY ICAP	SS10	MG	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		1770	UGL	18.5
METALS IN WATER BY ICAP	SS10	MG	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		1470	UGL	18.5
METALS IN WATER BY ICAP	SS10	MN	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		6050	UGL	102.9
METALS IN WATER BY ICAP	SS10	MN	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		1940	UGL	102.9
METALS IN WATER BY ICAP	SS10	NA	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		15900	UGL	.6
METALS IN WATER BY ICAP	SS10	NA	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		15800	UGL	.6
METALS IN WATER BY ICAP	SS10	NI	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		42.1	UGL	20.4
METALS IN WATER BY ICAP	SS10	NI	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	34.3	UGL	20.4
METALS IN WATER BY ICAP	SS10	V	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94	<	11	UGL	.0
METALS IN WATER BY ICAP	SS10	V	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94	<	11	UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	WDCS0500	V1AW*573	ZFDC	19-SEP-94	11-OCT-94		187	UGL	50.2
METALS IN WATER BY ICAP	SS10	ZN	WXCS0500	V1AW*505	ZFDC	19-SEP-94	11-OCT-94		112	UGL	50.2

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SO4 IN WATER	TT10	CL	WXCS0500	V1AW*505	PDSA	19-SEP-94	03-OCT-94		31800	UGL	.0
SO4 IN WATER	TT10	CL	WDCS0500	V1AW*573	PDSA	19-SEP-94	03-OCT-94		31800	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	124TCB	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	124TCB	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.5	UGL	.0

Table: H-
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	24DNT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.79	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.79	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.99	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.99	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNAP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNAP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	12	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	12	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	17	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	17	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	7.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	7.3	UGL	.0

Table: H-
Quality Control Report
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SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4MP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.52	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4MP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.52	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	12	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	12	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0

Table: H-
Quality Control Report
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Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	B2CEXM	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CEXM	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94		6.1	UGL	23.9
BNA'S IN WATER BY GC/MS	UM18	B2EHP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.8	UGL	23.9
BNA'S IN WATER BY GC/MS	UM18	BAANTR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBZP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBZP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	10	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	10	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	13	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	13	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPY	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	6.1	UGL	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	BGHIPY	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	6.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.87	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.87	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.72	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.72	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	6.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	6.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	DMP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	15	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	15	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	7.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	7.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFSO4	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFSO4	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	HPCLE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCLE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	5.1	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	3	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0

Table: H-
Quality Control Report
Installation: Fort Devens, MA (DV)
Cold Spring Brook

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	PCB232	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	30	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	30	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	30	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	30	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	18	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	18	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDD	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDD	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	2.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	2.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	WDCS0500	V1AW*573	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	WXCS0500	V1AW*505	WDPC	19-SEP-94	28-SEP-94	<	36	UGL	.0

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                                        Table: H-
                                 Quality Control Report
                           Installation: Fort Devens, MA (DV)
                                    Cold Spring Brook

                                    SAMPLE DUPLICATES

                                            IRDMIS
                           USATHAMA                Field
                           Method    Test       Sample     Lab                 Sample        Analysis
Method Description         Code      Name       Number     Number   Lot   Sample Date   Date         <      Value Units      RPD
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BNA'S IN WATER BY GC/MS    UM18      UNK517     WXCS0500   V1AW*505 WDPC  19-SEP-94    28-SEP-94               8  UGL       66.7
BNA'S IN WATER BY GC/MS    UM18      UNK517     WDCS0500   V1AW*573 WDPC  19-SEP-94    28-SEP-94               4  UGL       66.7

SQL> exit
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TABLE C-15

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
	1602	TSS	ATVF	BL959031	17-JUL-95	17-JUL-95	<	4	UGL
	2340	HARD	ATRZ	BL959001	05-AUG-95	11-AUG-95	<	818	UGL
	3102	ALK	ATOG	BL959011	21-JUL-95	21-JUL-95	<	10000	UGL
	4151	TOC	ATPS	BL958721	20-JUL-95	20-JUL-95	<	1000	UGL
	4181	TPHC	ATRA	BL955451	19-JUL-95	26-JUL-95	<	10	UGG
		TPHC	ATRA	BL955452	19-JUL-95	26-JUL-95	<	10	UGG
		TPHC	ATRB	B955321	17-JUL-95	27-JUL-95	<	100	UGL
METALS/WATER/GFAA	AX8	AS	ATSA	BL954351	29-JUL-95	21-AUG-95	<	2.35	UGL
METALS/WATER/CVAA	CC8	HG	ATQH	BL957081	26-JUL-95	27-JUL-95	<	.1	UGL
METALS/SOIL/GFAA	JD20	SE	ATSZ	BL956221	07-AUG-95	22-AUG-95	<	.449	UGG
METALS/SOIL/GFAA	JD21	PB	ATSY	BL956231	07-AUG-95	09-AUG-95		.903	UGG
METALS/SOIL/ICP	JS12	AG	ATRX	BL956201	05-AUG-95	08-AUG-95	<	.803	UGG
METALS/SOIL/ICP		AL	ATRX	BL956201	05-AUG-95	08-AUG-95		482	UGG
METALS/SOIL/ICP		BA	ATRX	BL956201	05-AUG-95	08-AUG-95		8.59	UGG
METALS/SOIL/ICP		BE	ATRX	BL956201	05-AUG-95	08-AUG-95	<	.427	UGG
METALS/SOIL/ICP		CA	ATRX	BL956201	05-AUG-95	08-AUG-95		257	UGG
METALS/SOIL/ICP		CD	ATRX	BL956201	05-AUG-95	08-AUG-95	<	1.2	UGG
METALS/SOIL/ICP		CO	ATRX	BL956201	05-AUG-95	08-AUG-95	<	2.5	UGG
METALS/SOIL/ICP		CR	ATRX	BL956201	05-AUG-95	08-AUG-95	<	1.04	UGG
METALS/SOIL/ICP		CU	ATRX	BL956201	05-AUG-95	08-AUG-95	<	2.84	UGG
METALS/SOIL/ICP		FE	ATRX	BL956201	05-AUG-95	08-AUG-95		1070	UGG
METALS/SOIL/ICP		K	ATRX	BL956201	05-AUG-95	08-AUG-95		140	UGG
METALS/SOIL/ICP		MG	ATRX	BL956201	05-AUG-95	08-AUG-95		126	UGG
METALS/SOIL/ICP		MN	ATRX	BL956201	05-AUG-95	08-AUG-95		22.3	UGG
METALS/SOIL/ICP		NA	ATRX	BL956201	05-AUG-95	08-AUG-95	<	38.7	UGG

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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
METALS/SOIL/ICP	JS12	NI	ATRX	BL956201	05-AUG-95	08-AUG-95	<	2.74	UGG
METALS/SOIL/ICP		SB	ATRX	BL956201	05-AUG-95	08-AUG-95	<	19.6	UGG
METALS/SOIL/ICP		TL	ATRX	BL956201	05-AUG-95	08-AUG-95	<	34.3	UGG
METALS/SOIL/ICP		V	ATRX	BL956201	05-AUG-95	08-AUG-95		2.04	UGG
METALS/SOIL/ICP		ZN	ATRX	BL956201	05-AUG-95	08-AUG-95		3.18	UGG
PESTICIDES/SOIL/GCEC	LH17	ABHC	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0028	UGG
PESTICIDES/SOIL/GCEC		AENSLF	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.001	UGG
PESTICIDES/SOIL/GCEC		ALDRN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0014	UGG
PESTICIDES/SOIL/GCEC		BBHC	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0077	UGG
PESTICIDES/SOIL/GCEC		BENSLF	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0007	UGG
PESTICIDES/SOIL/GCEC		CLDAN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0684	UGG
PESTICIDES/SOIL/GCEC		DBHC	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0085	UGG
PESTICIDES/SOIL/GCEC		DLDRN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0016	UGG
PESTICIDES/SOIL/GCEC		ENDRN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0065	UGG
PESTICIDES/SOIL/GCEC		ENDRNA	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0005	UGG
PESTICIDES/SOIL/GCEC		HPCL	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0022	UGG
PESTICIDES/SOIL/GCEC		HPCLE	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0013	UGG
PESTICIDES/SOIL/GCEC		ISODR	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.003	UGG
PESTICIDES/SOIL/GCEC		LIN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.001	UGG
PESTICIDES/SOIL/GCEC		MEXCLR	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0359	UGG
PESTICIDES/SOIL/GCEC		PCB016	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.1	UGG
PESTICIDES/SOIL/GCEC		PCB221	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.1	UGG
PESTICIDES/SOIL/GCEC		PCB232	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.1	UGG
PESTICIDES/SOIL/GCEC		PCB242	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.1	UGG
PESTICIDES/SOIL/GCEC		PCB248	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.1	UGG
PESTICIDES/SOIL/GCEC		PCB254	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0479	UGG
PESTICIDES/SOIL/GCEC		PCB260	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0479	UGG
PESTICIDES/SOIL/GCEC		PPDDD	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0027	UGG
PESTICIDES/SOIL/GCEC		PPDDE	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0027	UGG
PESTICIDES/SOIL/GCEC		PPDDT	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.0035	UGG
PESTICIDES/SOIL/GCEC		TXPHEN	ATMG	BL958431	14-JUL-95	09-AUG-95	<	.226	UGG
	LKTC	TOC	ATOT	BL955481	21-JUL-95	21-JUL-95	<	1000	UGG

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Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
SEMIVOLATILES/SOIL/GCMS	LM25	124TCB	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.22	UGG
SEMIVOLATILES/SOIL/GCMS		12DCLB	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.042	UGG
SEMIVOLATILES/SOIL/GCMS		13DCLB	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.042	UGG
SEMIVOLATILES/SOIL/GCMS		14DCLB	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.034	UGG
SEMIVOLATILES/SOIL/GCMS		245TCP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.49	UGG
SEMIVOLATILES/SOIL/GCMS		246TCP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.061	UGG
SEMIVOLATILES/SOIL/GCMS		24DCLP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.065	UGG
SEMIVOLATILES/SOIL/GCMS		24DMPN	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	3	UGG
SEMIVOLATILES/SOIL/GCMS		24DNP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	4.7	UGG
SEMIVOLATILES/SOIL/GCMS		24DNT	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.4	UGG
SEMIVOLATILES/SOIL/GCMS		2CLP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.055	UGG
SEMIVOLATILES/SOIL/GCMS		2CNAP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.24	UGG
SEMIVOLATILES/SOIL/GCMS		2MNAP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.032	UGG
SEMIVOLATILES/SOIL/GCMS		2MP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.098	UGG
SEMIVOLATILES/SOIL/GCMS		2NANIL	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	3.1	UGG
SEMIVOLATILES/SOIL/GCMS		2NP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.1	UGG
SEMIVOLATILES/SOIL/GCMS		33DCBD	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.6	UGG
SEMIVOLATILES/SOIL/GCMS		3NANIL	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	3	UGG
SEMIVOLATILES/SOIL/GCMS		46DN2C	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.8	UGG
SEMIVOLATILES/SOIL/GCMS		4BRPPE	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.041	UGG
SEMIVOLATILES/SOIL/GCMS		4CL3C	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.93	UGG
SEMIVOLATILES/SOIL/GCMS		4CLPPE	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.17	UGG
SEMIVOLATILES/SOIL/GCMS		4MP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.24	UGG
SEMIVOLATILES/SOIL/GCMS		4NP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	3.3	UGG
SEMIVOLATILES/SOIL/GCMS		ANAPNE	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.041	UGG
SEMIVOLATILES/SOIL/GCMS		ANAPYL	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.033	UGG
SEMIVOLATILES/SOIL/GCMS		ANTRC	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.71	UGG
SEMIVOLATILES/SOIL/GCMS		B2CEXM	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.19	UGG
SEMIVOLATILES/SOIL/GCMS		B2EHP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.48	UGG
SEMIVOLATILES/SOIL/GCMS		BAANTR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.041	UGG
SEMIVOLATILES/SOIL/GCMS		BAPYR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.2	UGG
SEMIVOLATILES/SOIL/GCMS		BBFANT	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.31	UGG
SEMIVOLATILES/SOIL/GCMS		BBZP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.8	UGG

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Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
SEMIVOLATILES/SOIL/GCMS	LM25	BGHIPY	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.18	UGG
SEMIVOLATILES/SOIL/GCMS		BKFANT	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.13	UGG
SEMIVOLATILES/SOIL/GCMS		BZALC	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.032	UGG
SEMIVOLATILES/SOIL/GCMS		C16A	ATMJ	BL958331	14-JUL-95	26-JUL-95		1	UGG
SEMIVOLATILES/SOIL/GCMS		CHRY	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.032	UGG
SEMIVOLATILES/SOIL/GCMS		CL6BZ	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.08	UGG
SEMIVOLATILES/SOIL/GCMS		CL6CP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.52	UGG
SEMIVOLATILES/SOIL/GCMS		CL6ET	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.8	UGG
SEMIVOLATILES/SOIL/GCMS		DBAHA	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.31	UGG
SEMIVOLATILES/SOIL/GCMS		DBZFUR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.38	UGG
SEMIVOLATILES/SOIL/GCMS		DEP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.24	UGG
SEMIVOLATILES/SOIL/GCMS		DMP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.063	UGG
SEMIVOLATILES/SOIL/GCMS		DNBP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.3	UGG
SEMIVOLATILES/SOIL/GCMS		DNOP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.23	UGG
SEMIVOLATILES/SOIL/GCMS		FANT	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.032	UGG
SEMIVOLATILES/SOIL/GCMS		FLRENE	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.065	UGG
SEMIVOLATILES/SOIL/GCMS		HCBD	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.97	UGG
SEMIVOLATILES/SOIL/GCMS		ICDPYR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	2.4	UGG
SEMIVOLATILES/SOIL/GCMS		ISOPHR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.39	UGG
SEMIVOLATILES/SOIL/GCMS		NAP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.74	UGG
SEMIVOLATILES/SOIL/GCMS		NB	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.8	UGG
SEMIVOLATILES/SOIL/GCMS		NNDNPA	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	1.1	UGG
SEMIVOLATILES/SOIL/GCMS		NNDPA	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.29	UGG
SEMIVOLATILES/SOIL/GCMS		ODECA	ATMJ	BL958331	14-JUL-95	26-JUL-95		.3	UGG
SEMIVOLATILES/SOIL/GCMS		PCP	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.76	UGG
SEMIVOLATILES/SOIL/GCMS		PHANTR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.032	UGG
SEMIVOLATILES/SOIL/GCMS		PHENOL	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.052	UGG
SEMIVOLATILES/SOIL/GCMS		PYR	ATMJ	BL958331	14-JUL-95	26-JUL-95	<	.083	UGG
SEMIVOLATILES/SOIL/GCMS		UNK526	ATMJ	BL958331	14-JUL-95	26-JUL-95		.5	UGG
SEMIVOLATILES/SOIL/GCMS		UNK527	ATMJ	BL958331	14-JUL-95	26-JUL-95		.7	UGG
SEMIVOLATILES/SOIL/GCMS		UNK632	ATMJ	BL958331	14-JUL-95	26-JUL-95		.3	UGG
SEMIVOLATILES/SOIL/GCMS		UNK641	ATMJ	BL958331	14-JUL-95	26-JUL-95		4	UGG
SEMIVOLATILES/SOIL/GCMS		UNK650	ATMJ	BL958331	14-JUL-95	26-JUL-95		.6	UGG
SEMIVOLATILES/SOIL/GCMS		UNK680	ATMJ	BL958331	14-JUL-95	26-JUL-95		.7	UGG

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Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
METALS/WATER/GFAA	SD18	PB	ATSB	BL954371	29-JUL-95	21-AUG-95	<	4.47	UGL
METALS/WATER/GFAA	SD25	SE	ATSC	BL954361	29-JUL-95	22-AUG-95	<	2.53	UGL
METALS/WATER/ICP	SS12	AG	ATRY	BL954341	11-AUG-95	11-AUG-95	<	10	UGL
METALS/WATER/ICP		AL	ATRY	BL954341	11-AUG-95	11-AUG-95	<	112	UGL
METALS/WATER/ICP		BA	ATRY	BL954341	11-AUG-95	11-AUG-95	<	2.82	UGL
METALS/WATER/ICP		BE	ATRY	BL954341	11-AUG-95	11-AUG-95	<	1.12	UGL
METALS/WATER/ICP		CA	ATRY	BL954341	11-AUG-95	11-AUG-95	<	105	UGL
METALS/WATER/ICP		CD	ATRY	BL954341	11-AUG-95	11-AUG-95	<	6.78	UGL
METALS/WATER/ICP		CO	ATRY	BL954341	11-AUG-95	11-AUG-95	<	25	UGL
METALS/WATER/ICP		CR	ATRY	BL954341	11-AUG-95	11-AUG-95	<	16.8	UGL
METALS/WATER/ICP		CU	ATRY	BL954341	11-AUG-95	11-AUG-95	<	18.8	UGL
METALS/WATER/ICP		FE	ATRY	BL954341	11-AUG-95	11-AUG-95	<	77.5	UGL
METALS/WATER/ICP		K	ATRY	BL954341	11-AUG-95	11-AUG-95	<	1240	UGL
METALS/WATER/ICP		MG	ATRY	BL954341	11-AUG-95	11-AUG-95	<	135	UGL
METALS/WATER/ICP		MN	ATRY	BL954341	11-AUG-95	11-AUG-95	<	9.67	UGL
METALS/WATER/ICP		NA	ATRY	BL954341	11-AUG-95	11-AUG-95	<	279	UGL
METALS/WATER/ICP		NI	ATRY	BL954341	11-AUG-95	11-AUG-95	<	32.1	UGL
METALS/WATER/ICP		SB	ATRY	BL954341	11-AUG-95	11-AUG-95	<	60	UGL
METALS/WATER/ICP		TL	ATRY	BL954341	11-AUG-95	11-AUG-95	<	125	UGL
METALS/WATER/ICP		V	ATRY	BL954341	11-AUG-95	11-AUG-95	<	27.6	UGL
METALS/WATER/ICP		ZN	ATRY	BL954341	11-AUG-95	11-AUG-95	<	18	UGL
ANIONS/WATER/IONCHROM	TT09	CL	ATOB	BL959021	20-JUL-95	20-JUL-95	<	278	UGL
ANIONS/WATER/IONCHROM		SO4	ATOB	BL959021	20-JUL-95	20-JUL-95	<	175	UGL
PESTICIDES/WATER/GCEC	UH20	ABHC	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		ACLDAN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0312	UGL
PESTICIDES/WATER/GCEC		AENSLF	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		ALDRN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		BBHC	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0099	UGL
PESTICIDES/WATER/GCEC		BENSLF	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0077	UGL

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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
PESTICIDES/WATER/GCEC	UH20	DBHC	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0034	UGL
PESTICIDES/WATER/GCEC		DLDRN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		ENDRN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0176	UGL
PESTICIDES/WATER/GCEC		ENDRNA	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0504	UGL
PESTICIDES/WATER/GCEC		HPCL	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		HPCLE	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0063	UGL
PESTICIDES/WATER/GCEC		ISODR	ATMH	BL958671	14-JUL-95	01-AUG-95		.00702	UGL
PESTICIDES/WATER/GCEC		LIN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		MEXCLR	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.075	UGL
PESTICIDES/WATER/GCEC		PCB016	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		PCB221	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		PCB232	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		PCB242	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		PCB248	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		PCB254	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		PCB260	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		PPDDD	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0081	UGL
PESTICIDES/WATER/GCEC		PPDDE	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0039	UGL
PESTICIDES/WATER/GCEC		PPDDT	ATMH	BL958671	14-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		TXPHEN	ATMH	BL958671	14-JUL-95	01-AUG-95	<	1.64	UGL
ORGANICS/WATER/GCMS	UM25	123TCB	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		124TCB	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		12DCLB	ATML	BL958541	15-JUL-95	26-JUL-95	<	1.2	UGL
ORGANICS/WATER/GCMS		12DPH	ATML	BL958541	15-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		13DCLB	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.4	UGL
ORGANICS/WATER/GCMS		13DNB	ATML	BL958541	15-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		14DCLB	ATML	BL958541	15-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		236TCP	ATML	BL958541	15-JUL-95	26-JUL-95	<	1.7	UGL
ORGANICS/WATER/GCMS		245TCP	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		246TCP	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		24DCLP	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.4	UGL
ORGANICS/WATER/GCMS		24DMPN	ATML	BL958541	15-JUL-95	26-JUL-95	<	4.4	UGL
ORGANICS/WATER/GCMS		24DNP	ATML	BL958541	15-JUL-95	26-JUL-95	<	180	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	24DNT	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		26DNA	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.8	UGL
ORGANICS/WATER/GCMS		26DNT	ATML	BL958541	15-JUL-95	26-JUL-95	<	6.7	UGL
ORGANICS/WATER/GCMS		2CLP	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		2CNAP	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.6	UGL
ORGANICS/WATER/GCMS		2MNAP	ATML	BL958541	15-JUL-95	26-JUL-95	<	1.3	UGL
ORGANICS/WATER/GCMS		2MP	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		2NANIL	ATML	BL958541	15-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		2NP	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.2	UGL
ORGANICS/WATER/GCMS		33DCBD	ATML	BL958541	15-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		35DNA	ATML	BL958541	15-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		3NANIL	ATML	BL958541	15-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		3NT	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		46DN2C	ATML	BL958541	15-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		4BRPPE	ATML	BL958541	15-JUL-95	26-JUL-95	<	22	UGL
ORGANICS/WATER/GCMS		4CANIL	ATML	BL958541	15-JUL-95	26-JUL-95	<	1	UGL
ORGANICS/WATER/GCMS		4CL3C	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		4CLPPE	ATML	BL958541	15-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		4MP	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		4NANIL	ATML	BL958541	15-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		4NP	ATML	BL958541	15-JUL-95	26-JUL-95	<	96	UGL
ORGANICS/WATER/GCMS		ABHC	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		AENSLF	ATML	BL958541	15-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		ALDRN	ATML	BL958541	15-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		ANAPNE	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		ANAPYL	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		ANTRC	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.2	UGL
ORGANICS/WATER/GCMS		ATZ	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		B2CEXM	ATML	BL958541	15-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		B2CIPE	ATML	BL958541	15-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		B2CLEE	ATML	BL958541	15-JUL-95	26-JUL-95	<	.68	UGL
ORGANICS/WATER/GCMS		B2EHP	ATML	BL958541	15-JUL-95	26-JUL-95	<	7.7	UGL
ORGANICS/WATER/GCMS		BAANTR	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.8	UGL
ORGANICS/WATER/GCMS		BAPYR	ATML	BL958541	15-JUL-95	26-JUL-95	<	14	UGL

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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	BBFANT	ATML	BL958541	15-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		BBHC	ATML	BL958541	15-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		BBZP	ATML	BL958541	15-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		BENSLF	ATML	BL958541	15-JUL-95	26-JUL-95	<	42	UGL
ORGANICS/WATER/GCMS		BENZOA	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.1	UGL
ORGANICS/WATER/GCMS		BGHIPY	ATML	BL958541	15-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		BKFANT	ATML	BL958541	15-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		BRMCIL	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		BZALC	ATML	BL958541	15-JUL-95	26-JUL-95	<	4	UGL
ORGANICS/WATER/GCMS		CHRY	ATML	BL958541	15-JUL-95	26-JUL-95	<	7.4	UGL
ORGANICS/WATER/GCMS		CL6BZ	ATML	BL958541	15-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		CL6CP	ATML	BL958541	15-JUL-95	26-JUL-95	<	54	UGL
ORGANICS/WATER/GCMS		CL6ET	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.3	UGL
ORGANICS/WATER/GCMS		CLDAN	ATML	BL958541	15-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		CPMS	ATML	BL958541	15-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		CPMSO	ATML	BL958541	15-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		CPMSO2	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		DBAHA	ATML	BL958541	15-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		DBCP	ATML	BL958541	15-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		DBHC	ATML	BL958541	15-JUL-95	26-JUL-95	<	3	UGL
ORGANICS/WATER/GCMS		DBZFUR	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		DCPD	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.5	UGL
ORGANICS/WATER/GCMS		DDVP	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		DEP	ATML	BL958541	15-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		DIMP	ATML	BL958541	15-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		DITH	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.3	UGL
ORGANICS/WATER/GCMS		DLDRN	ATML	BL958541	15-JUL-95	26-JUL-95	<	26	UGL
ORGANICS/WATER/GCMS		DMMP	ATML	BL958541	15-JUL-95	26-JUL-95	<	130	UGL
ORGANICS/WATER/GCMS		DMP	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		DNBP	ATML	BL958541	15-JUL-95	26-JUL-95	<	33	UGL
ORGANICS/WATER/GCMS		DNOP	ATML	BL958541	15-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		ENDRN	ATML	BL958541	15-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		ENDRNA	ATML	BL958541	15-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		ENDRNK	ATML	BL958541	15-JUL-95	26-JUL-95	<	6	UGL

Chemical Quality Control Report
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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	ESFSO4	ATML	BL958541	15-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		FAMPHR	ATML	BL958541	15-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		FANT	ATML	BL958541	15-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		FLRENE	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.2	UGL
ORGANICS/WATER/GCMS		HCBD	ATML	BL958541	15-JUL-95	26-JUL-95	<	8.7	UGL
ORGANICS/WATER/GCMS		HPCL	ATML	BL958541	15-JUL-95	26-JUL-95	<	38	UGL
ORGANICS/WATER/GCMS		HPCLE	ATML	BL958541	15-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		ICDPYR	ATML	BL958541	15-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		ISODR	ATML	BL958541	15-JUL-95	26-JUL-95	<	7.8	UGL
ORGANICS/WATER/GCMS		ISOPHR	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		KEP	ATML	BL958541	15-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		LIN	ATML	BL958541	15-JUL-95	26-JUL-95	<	7.2	UGL
ORGANICS/WATER/GCMS		MEXCLR	ATML	BL958541	15-JUL-95	26-JUL-95	<	11	UGL
ORGANICS/WATER/GCMS		MIREX	ATML	BL958541	15-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		MLTHN	ATML	BL958541	15-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		NAP	ATML	BL958541	15-JUL-95	26-JUL-95	<	.5	UGL
ORGANICS/WATER/GCMS		NB	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		NNDMEA	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.7	UGL
ORGANICS/WATER/GCMS		NNDNPA	ATML	BL958541	15-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		NNDPA	ATML	BL958541	15-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		OXAT	ATML	BL958541	15-JUL-95	26-JUL-95	<	27	UGL
ORGANICS/WATER/GCMS		PCB016	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB221	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB232	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB242	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB248	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB254	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PCB260	ATML	BL958541	15-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		PCP	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		PHANTR	ATML	BL958541	15-JUL-95	26-JUL-95	<	9.9	UGL
ORGANICS/WATER/GCMS		PHENOL	ATML	BL958541	15-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		PPDDD	ATML	BL958541	15-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		PPDDE	ATML	BL958541	15-JUL-95	26-JUL-95	<	14	UGL
ORGANICS/WATER/GCMS		PPDDT	ATML	BL958541	15-JUL-95	26-JUL-95	<	18	UGL

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METHOD BLANKS

Method Description	IRDMIS Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	PRTHN	ATML	BL958541	15-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		PYR	ATML	BL958541	15-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SUPONA	ATML	BL958541	15-JUL-95	26-JUL-95	<	19	UGL
ORGANICS/WATER/GCMS		TXPHEN	ATML	BL958541	15-JUL-95	26-JUL-95	<	17	UGL
METALS/SOIL/CVAA	Y9	HG	ATQB	BL953461	25-JUL-95	26-JUL-95	<	.05	UGG

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Chemical Quality Control Report
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Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
	1602	SSW-95-09J	WR0910X1	UC02133	TSS	ATVF	10-JUL-95	17-JUL-95	<	4	UGL
	2340	SSW-95-09J	WR0910X1	UC02133	HARD	ATRZ	10-JUL-95	11-AUG-95	<	818	UGL
	3102	SSW-95-09J	WR0910X1	UC02133	ALK	ATOG	10-JUL-95	21-JUL-95	<	10000	UGL
	4151	SSW-95-09J	WR0910X1	UC02133	TOC	ATPS	10-JUL-95	20-JUL-95		19900	UGL
		SSD-95-09L	DR091200	UC02146	TOC	ATPS	10-JUL-95	20-JUL-95	<	1000	UGL
	4181	SSD-95-09L	DR091200	UC02146	TPHC	ATRB	10-JUL-95	27-JUL-95	<	100	UGL
		SSW-95-09J	WR0910X1	UC02133	TPHC	ATRB	10-JUL-95	27-JUL-95	<	100	UGL
METALS/WATER/GFAA	AX8	SSD-95-25A	DR250100	UC02132	AS	ATSA	10-JUL-95	21-AUG-95	<	2.35	UGL
METALS/WATER/GFAA		SSW-95-09J	WR0910X1	UC02133	AS	ATSA	10-JUL-95	21-AUG-95	<	2.35	UGL
METALS/WATER/GFAA		SSW-95-09J	WC0910X1	UC02134	AS	ATSA	10-JUL-95	21-AUG-95	<	2.35	UGL
METALS/WATER/CVAA	CC8	SSD-95-25A	DR250100	UC02132	HG	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL
METALS/WATER/CVAA		SSW-95-09J	WC0910X1	UC02134	HG	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL
METALS/WATER/CVAA		SSW-95-09J	WR0910X1	UC02133	HG	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL
METALS/WATER/GFAA	SD18	SSD-95-25A	DR250100	UC02132	PB	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL
METALS/WATER/GFAA		SSW-95-09J	WR0910X1	UC02133	PB	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL
METALS/WATER/GFAA		SSW-95-09J	WC0910X1	UC02134	PB	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL
METALS/WATER/GFAA	SD25	SSD-95-25A	DR250100	UC02132	SE	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL
METALS/WATER/GFAA		SSW-95-09J	WC0910X1	UC02134	SE	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL
METALS/WATER/GFAA		SSW-95-09J	WR0910X1	UC02133	SE	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL
METALS/WATER/ICP	SS12	SSD-95-25A	DR250100	UC02132	AG	ATRY	10-JUL-95	11-AUG-95	<	10	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	AG	ATRY	10-JUL-95	11-AUG-95	<	10	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	AG	ATRY	10-JUL-95	11-AUG-95	<	10	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	AL	ATRY	10-JUL-95	11-AUG-95	<	112	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	AL	ATRY	10-JUL-95	11-AUG-95	<	112	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	AL	ATRY	10-JUL-95	11-AUG-95	<	112	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	BA	ATRY	10-JUL-95	11-AUG-95	<	2.82	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	BA	ATRY	10-JUL-95	11-AUG-95	<	2.82	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	BA	ATRY	10-JUL-95	11-AUG-95	<	2.82	UGL

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Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
METALS/WATER/ICP	SS12	SSW-95-09J	WR0910X1	UC02133	BE	ATRY	10-JUL-95	11-AUG-95	<	1.12	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	BE	ATRY	10-JUL-95	11-AUG-95	<	1.12	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	BE	ATRY	10-JUL-95	11-AUG-95	<	1.12	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	CA	ATRY	10-JUL-95	11-AUG-95	<	105	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	CA	ATRY	10-JUL-95	11-AUG-95	<	105	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	CA	ATRY	10-JUL-95	11-AUG-95	<	105	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	CD	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	CD	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	CD	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	CO	ATRY	10-JUL-95	11-AUG-95	<	25	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	CO	ATRY	10-JUL-95	11-AUG-95	<	25	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	CO	ATRY	10-JUL-95	11-AUG-95	<	25	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	CR	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	CR	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	CR	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	CU	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	CU	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	CU	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	FE	ATRY	10-JUL-95	11-AUG-95		109	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	FE	ATRY	10-JUL-95	11-AUG-95	<	77.5	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	FE	ATRY	10-JUL-95	11-AUG-95	<	77.5	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	K	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	K	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	K	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	MG	ATRY	10-JUL-95	11-AUG-95	<	135	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	MG	ATRY	10-JUL-95	11-AUG-95	<	135	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	MG	ATRY	10-JUL-95	11-AUG-95	<	135	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	MN	ATRY	10-JUL-95	11-AUG-95	<	9.67	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	MN	ATRY	10-JUL-95	11-AUG-95	<	9.67	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	MN	ATRY	10-JUL-95	11-AUG-95	<	9.67	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	NA	ATRY	10-JUL-95	11-AUG-95	<	279	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	NA	ATRY	10-JUL-95	11-AUG-95	<	279	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	NA	ATRY	10-JUL-95	11-AUG-95	<	279	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	NI	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	NI	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	NI	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	SB	ATRY	10-JUL-95	11-AUG-95	<	60	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
METALS/WATER/ICP	SS12	SSW-95-09J	WC0910X1	UC02134	SB	ATRY	10-JUL-95	11-AUG-95	<	60	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	SB	ATRY	10-JUL-95	11-AUG-95	<	60	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	TL	ATRY	10-JUL-95	11-AUG-95	<	125	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	TL	ATRY	10-JUL-95	11-AUG-95	<	125	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	TL	ATRY	10-JUL-95	11-AUG-95	<	125	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	V	ATRY	10-JUL-95	11-AUG-95	<	27.6	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	V	ATRY	10-JUL-95	11-AUG-95	<	27.6	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	V	ATRY	10-JUL-95	11-AUG-95	<	27.6	UGL
METALS/WATER/ICP		SSW-95-09J	WR0910X1	UC02133	ZN	ATRY	10-JUL-95	11-AUG-95		85.6	UGL
METALS/WATER/ICP		SSW-95-09J	WC0910X1	UC02134	ZN	ATRY	10-JUL-95	11-AUG-95		19.4	UGL
METALS/WATER/ICP		SSD-95-25A	DR250100	UC02132	ZN	ATRY	10-JUL-95	11-AUG-95	<	18	UGL
ANIONS/WATER/IONCHROM	TT09	SSW-95-09J	WR0910X1	UC02133	CL	ATOB	10-JUL-95	20-JUL-95	<	278	UGL
ANIONS/WATER/IONCHROM		SSW-95-09J	WR0910X1	UC02133	SO4	ATOB	10-JUL-95	20-JUL-95	<	175	UGL
PESTICIDES/WATER/GCEC	UH20	SSD-95-25A	DR250100	UC02132	ABHC	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ABHC	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	ACLDAN	ATMH	10-JUL-95	01-AUG-95	<	.0312	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ACLDAN	ATMH	10-JUL-95	01-AUG-95	<	.0312	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	AENSLF	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	AENSLF	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	ALDRN	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ALDRN	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	BBHC	ATMH	10-JUL-95	01-AUG-95	<	.0099	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	BBHC	ATMH	10-JUL-95	01-AUG-95	<	.0099	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	BENSLF	ATMH	10-JUL-95	01-AUG-95	<	.0077	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	BENSLF	ATMH	10-JUL-95	01-AUG-95	<	.0077	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	DBHC	ATMH	10-JUL-95	01-AUG-95	<	.0034	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	DBHC	ATMH	10-JUL-95	01-AUG-95	<	.0034	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	DLDRN	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	DLDRN	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	ENDRN	ATMH	10-JUL-95	01-AUG-95	<	.0176	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ENDRN	ATMH	10-JUL-95	01-AUG-95	<	.0176	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	ENDRNA	ATMH	10-JUL-95	01-AUG-95	<	.0504	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ENDRNA	ATMH	10-JUL-95	01-AUG-95	<	.0504	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	HPCL	ATMH	10-JUL-95	01-AUG-95		.229	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	HPCL	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
PESTICIDES/WATER/GCEC	UH20	SSD-95-25A	DR250100	UC02132	HPCLE	ATMH	10-JUL-95	01-AUG-95	<	.0063	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	HPCLE	ATMH	10-JUL-95	01-AUG-95	<	.0063	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	ISODR	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	ISODR	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	LIN	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	LIN	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	MEXCLR	ATMH	10-JUL-95	01-AUG-95	<	.075	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	MEXCLR	ATMH	10-JUL-95	01-AUG-95	<	.075	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB016	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB016	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB221	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB221	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB232	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB232	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB242	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB242	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB248	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB248	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB254	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB254	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PCB260	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PCB260	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PPDDD	ATMH	10-JUL-95	01-AUG-95	<	.0081	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PPDDD	ATMH	10-JUL-95	01-AUG-95	<	.0081	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PPDDE	ATMH	10-JUL-95	01-AUG-95	<	.0039	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PPDDE	ATMH	10-JUL-95	01-AUG-95	<	.0039	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	PPDDT	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	PPDDT	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL
PESTICIDES/WATER/GCEC		SSW-95-09J	WR0910X1	UC02133	TXPHEN	ATMH	10-JUL-95	01-AUG-95	<	1.64	UGL
PESTICIDES/WATER/GCEC		SSD-95-25A	DR250100	UC02132	TXPHEN	ATMH	10-JUL-95	01-AUG-95	<	1.64	UGL
ORGANICS/WATER/GCMS	UM25	SSD-95-25A	DR250100	UC02132	123TCB	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	123TCB	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	124TCB	ATML	10-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	124TCB	ATML	10-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	12DCLB	ATML	10-JUL-95	26-JUL-95	<	1.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	12DCLB	ATML	10-JUL-95	26-JUL-95	<	1.2	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSD-95-25A	DR250100	UC02132	12DPH	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	12DPH	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	13DCLB	ATML	10-JUL-95	26-JUL-95	<	3.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	13DCLB	ATML	10-JUL-95	26-JUL-95	<	3.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	13DNB	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	13DNB	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	14DCLB	ATML	10-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	14DCLB	ATML	10-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	236TCP	ATML	10-JUL-95	26-JUL-95	<	1.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	236TCP	ATML	10-JUL-95	26-JUL-95	<	1.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	245TCP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	245TCP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	246TCP	ATML	10-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	246TCP	ATML	10-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	24DCLP	ATML	10-JUL-95	26-JUL-95	<	8.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	24DCLP	ATML	10-JUL-95	26-JUL-95	<	8.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	24DMPN	ATML	10-JUL-95	26-JUL-95	<	4.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	24DMPN	ATML	10-JUL-95	26-JUL-95	<	4.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	24DNP	ATML	10-JUL-95	26-JUL-95	<	180	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	24DNP	ATML	10-JUL-95	26-JUL-95	<	180	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	24DNT	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	24DNT	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	26DNA	ATML	10-JUL-95	26-JUL-95	<	8.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	26DNA	ATML	10-JUL-95	26-JUL-95	<	8.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	26DNT	ATML	10-JUL-95	26-JUL-95	<	6.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	26DNT	ATML	10-JUL-95	26-JUL-95	<	6.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	2CLP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2CLP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	2CNAP	ATML	10-JUL-95	26-JUL-95	<	2.6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2CNAP	ATML	10-JUL-95	26-JUL-95	<	2.6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2MNAP	ATML	10-JUL-95	26-JUL-95	<	1.3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	2MNAP	ATML	10-JUL-95	26-JUL-95	<	1.3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2MP	ATML	10-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	2MP	ATML	10-JUL-95	26-JUL-95	<	3.6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2NANIL	ATML	10-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	2NANIL	ATML	10-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	2NP	ATML	10-JUL-95	26-JUL-95	<	8.2	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSD-95-25A	DR250100	UC02132	2NP	ATML	10-JUL-95	26-JUL-95	<	8.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	33DCBD	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	33DCBD	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	35DNA	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	35DNA	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	3NANIL	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	3NANIL	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	3NT	ATML	10-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	3NT	ATML	10-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	46DN2C	ATML	10-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	46DN2C	ATML	10-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4BRPPE	ATML	10-JUL-95	26-JUL-95	<	22	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4BRPPE	ATML	10-JUL-95	26-JUL-95	<	22	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4CANIL	ATML	10-JUL-95	26-JUL-95	<	1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4CANIL	ATML	10-JUL-95	26-JUL-95	<	1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4CL3C	ATML	10-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4CL3C	ATML	10-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4CLPPE	ATML	10-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4CLPPE	ATML	10-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4MP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4MP	ATML	10-JUL-95	26-JUL-95	<	2.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4NANIL	ATML	10-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4NANIL	ATML	10-JUL-95	26-JUL-95	<	31	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	4NP	ATML	10-JUL-95	26-JUL-95	<	96	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	4NP	ATML	10-JUL-95	26-JUL-95	<	96	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ABHC	ATML	10-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ABHC	ATML	10-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	AENSLF	ATML	10-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	AENSLF	ATML	10-JUL-95	26-JUL-95	<	23	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ALDRN	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ALDRN	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ANAPNE	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ANAPNE	ATML	10-JUL-95	26-JUL-95	<	5.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ANAPYL	ATML	10-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ANAPYL	ATML	10-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ANTRC	ATML	10-JUL-95	26-JUL-95	<	5.2	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ANTRC	ATML	10-JUL-95	26-JUL-95	<	5.2	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSW-95-09J	WR0910X1	UC02133	ATZ	ATML	10-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ATZ	ATML	10-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	B2CEXM	ATML	10-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	B2CEXM	ATML	10-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	B2CIPE	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	B2CIPE	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	B2CLEE	ATML	10-JUL-95	26-JUL-95	<	.68	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	B2CLEE	ATML	10-JUL-95	26-JUL-95	<	.68	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	B2EHP	ATML	10-JUL-95	26-JUL-95	<	7.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	B2EHP	ATML	10-JUL-95	26-JUL-95	<	7.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BAANTR	ATML	10-JUL-95	26-JUL-95	<	9.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BAANTR	ATML	10-JUL-95	26-JUL-95	<	9.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BAPYR	ATML	10-JUL-95	26-JUL-95	<	14	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BAPYR	ATML	10-JUL-95	26-JUL-95	<	14	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BBFANT	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BBFANT	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BBHC	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BBHC	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BBZP	ATML	10-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BBZP	ATML	10-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BENSLF	ATML	10-JUL-95	26-JUL-95	<	42	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BENSLF	ATML	10-JUL-95	26-JUL-95	<	42	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BENZOA	ATML	10-JUL-95	26-JUL-95	<	3.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BENZOA	ATML	10-JUL-95	26-JUL-95	<	3.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BGHIPY	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BGHIPY	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BKFANT	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BKFANT	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BRMCIL	ATML	10-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BRMCIL	ATML	10-JUL-95	26-JUL-95	<	2.9	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	BZALC	ATML	10-JUL-95	26-JUL-95	<	4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	BZALC	ATML	10-JUL-95	26-JUL-95	<	4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CHRY	ATML	10-JUL-95	26-JUL-95	<	7.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CHRY	ATML	10-JUL-95	26-JUL-95	<	7.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CL6BZ	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CL6BZ	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CL6CP	ATML	10-JUL-95	26-JUL-95	<	54	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSD-95-25A	DR250100	UC02132	CL6CP	ATML	10-JUL-95	26-JUL-95	<	54	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CL6ET	ATML	10-JUL-95	26-JUL-95	<	8.3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CL6ET	ATML	10-JUL-95	26-JUL-95	<	8.3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CLDAN	ATML	10-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CLDAN	ATML	10-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CPMS	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CPMS	ATML	10-JUL-95	26-JUL-95	<	10	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CPMSO	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CPMSO	ATML	10-JUL-95	26-JUL-95	<	15	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	CPMSO2	ATML	10-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	CPMSO2	ATML	10-JUL-95	26-JUL-95	<	5.3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DBAHA	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DBAHA	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DBCP	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DBCP	ATML	10-JUL-95	26-JUL-95	<	12	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DBHC	ATML	10-JUL-95	26-JUL-95	<	3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DBHC	ATML	10-JUL-95	26-JUL-95	<	3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DBZFUR	ATML	10-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DBZFUR	ATML	10-JUL-95	26-JUL-95	<	5.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DCPD	ATML	10-JUL-95	26-JUL-95	<	5.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DCPD	ATML	10-JUL-95	26-JUL-95	<	5.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DDVP	ATML	10-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DDVP	ATML	10-JUL-95	26-JUL-95	<	8.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DEP	ATML	10-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DEP	ATML	10-JUL-95	26-JUL-95	<	5.9	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DIMP	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DIMP	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DITH	ATML	10-JUL-95	26-JUL-95	<	3.3	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DITH	ATML	10-JUL-95	26-JUL-95	<	3.3	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DLDRN	ATML	10-JUL-95	26-JUL-95	<	26	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DLDRN	ATML	10-JUL-95	26-JUL-95	<	26	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DMMP	ATML	10-JUL-95	26-JUL-95	<	130	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DMMP	ATML	10-JUL-95	26-JUL-95	<	130	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DMP	ATML	10-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DMP	ATML	10-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	DNBP	ATML	10-JUL-95	26-JUL-95	<	33	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DNBP	ATML	10-JUL-95	26-JUL-95	<	33	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSW-95-09J	WR0910X1	UC02133	DNOP	ATML	10-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	DNOP	ATML	10-JUL-95	26-JUL-95	<	1.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ENDRN	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ENDRN	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ENDRNA	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ENDRNA	ATML	10-JUL-95	26-JUL-95	<	5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ENDRNK	ATML	10-JUL-95	26-JUL-95	<	6	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ENDRNK	ATML	10-JUL-95	26-JUL-95	<	6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ESFSO4	ATML	10-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ESFSO4	ATML	10-JUL-95	26-JUL-95	<	50	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	FAMPHR	ATML	10-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	FAMPHR	ATML	10-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	FANT	ATML	10-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	FANT	ATML	10-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	FLRENE	ATML	10-JUL-95	26-JUL-95	<	9.2	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	FLRENE	ATML	10-JUL-95	26-JUL-95	<	9.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	HCBD	ATML	10-JUL-95	26-JUL-95	<	8.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	HCBD	ATML	10-JUL-95	26-JUL-95	<	8.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	HPCL	ATML	10-JUL-95	26-JUL-95	<	38	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	HPCL	ATML	10-JUL-95	26-JUL-95	<	38	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	HPCLE	ATML	10-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	HPCLE	ATML	10-JUL-95	26-JUL-95	<	28	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ICDPYR	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ICDPYR	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ISODR	ATML	10-JUL-95	26-JUL-95	<	7.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ISODR	ATML	10-JUL-95	26-JUL-95	<	7.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	ISOPHR	ATML	10-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	ISOPHR	ATML	10-JUL-95	26-JUL-95	<	2.4	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	KEP	ATML	10-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	KEP	ATML	10-JUL-95	26-JUL-95	<	20	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	LIN	ATML	10-JUL-95	26-JUL-95	<	7.2	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	LIN	ATML	10-JUL-95	26-JUL-95	<	7.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	MEXCLR	ATML	10-JUL-95	26-JUL-95	<	11	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	MEXCLR	ATML	10-JUL-95	26-JUL-95	<	11	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	MIREX	ATML	10-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	MIREX	ATML	10-JUL-95	26-JUL-95	<	24	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	MLTHN	ATML	10-JUL-95	26-JUL-95	<	21	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSD-95-25A	DR250100	UC02132	MLTHN	ATML	10-JUL-95	26-JUL-95	<	21	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	NAP	ATML	10-JUL-95	26-JUL-95	<	.5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	NAP	ATML	10-JUL-95	26-JUL-95	<	.5	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	NB	ATML	10-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	NB	ATML	10-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	NNDMEA	ATML	10-JUL-95	26-JUL-95	<	9.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	NNDMEA	ATML	10-JUL-95	26-JUL-95	<	9.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	NNDNPA	ATML	10-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	NNDNPA	ATML	10-JUL-95	26-JUL-95	<	6.8	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	NNDPA	ATML	10-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	NNDPA	ATML	10-JUL-95	26-JUL-95	<	3.7	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	OXAT	ATML	10-JUL-95	26-JUL-95	<	27	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	OXAT	ATML	10-JUL-95	26-JUL-95	<	27	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB016	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB016	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB221	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB221	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB232	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB232	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB242	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB242	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB248	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB248	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB254	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB254	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCB260	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCB260	ATML	10-JUL-95	26-JUL-95	<	13	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PCP	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PCP	ATML	10-JUL-95	26-JUL-95	<	9.1	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PHANTR	ATML	10-JUL-95	26-JUL-95	<	9.9	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PHANTR	ATML	10-JUL-95	26-JUL-95	<	9.9	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PHENOL	ATML	10-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PHENOL	ATML	10-JUL-95	26-JUL-95	<	2.2	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PPDDD	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PPDDD	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PPDDE	ATML	10-JUL-95	26-JUL-95	<	14	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PPDDE	ATML	10-JUL-95	26-JUL-95	<	14	UGL

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

RINSE BLANKS

Method Description	IRDMIS Method Code	IRDMIS Site ID	IRDMIS Field Sample Number	Lab Number	Test Name	Lot	Sample Date	Analysis Date	<	Value	Unit
ORGANICS/WATER/GCMS	UM25	SSW-95-09J	WR0910X1	UC02133	PPDDT	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PPDDT	ATML	10-JUL-95	26-JUL-95	<	18	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PRTHN	ATML	10-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PRTHN	ATML	10-JUL-95	26-JUL-95	<	37	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	PYR	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	PYR	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	SUPONA	ATML	10-JUL-95	26-JUL-95	<	19	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	SUPONA	ATML	10-JUL-95	26-JUL-95	<	19	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	TXPHEN	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	TXPHEN	ATML	10-JUL-95	26-JUL-95	<	17	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	UNK580	ATML	10-JUL-95	26-JUL-95		20	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	UNK588	ATML	10-JUL-95	26-JUL-95		10	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	UNK588	ATML	10-JUL-95	26-JUL-95		7	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	UNK595	ATML	10-JUL-95	26-JUL-95		5	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	UNK598	ATML	10-JUL-95	26-JUL-95		6	UGL
ORGANICS/WATER/GCMS		SSW-95-09J	WR0910X1	UC02133	UNK632	ATML	10-JUL-95	26-JUL-95		20	UGL
ORGANICS/WATER/GCMS		SSD-95-25A	DR250100	UC02132	UNK632	ATML	10-JUL-95	26-JUL-95		9	UGL

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SQL> @a2dupvu
drop table   a2dup_1
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TABLE C-17

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
METALS/WATER/GFAA	AX8	AS	WM0910X1	UC02139M	ATSA	10-JUL-95	22-AUG-95	25	58	UGL	232.0	7.0
METALS/WATER/GFAA	AX8	AS	WZ0910X1	UC02139M	ATSA	10-JUL-95	22-AUG-95	25	54.1	UGL	216.4	7.0
		**********									----------	
		avg									224.2	
		minimum									216.4	
		maximum									232.0	
METALS/SOIL/GFAA	B9	AS	DZ140100	UC02121M	ATSX	10-JUL-95	22-AUG-95	2.5	12.3	UGG	492.0	5.0
METALS/SOIL/GFAA	B9	AS	DM140100	UC02121M	ATSX	10-JUL-95	22-AUG-95	2.5	11.7	UGG	468.0	5.0
		**********									----------	
		avg									480.0	
		minimum									468.0	
		maximum									492.0	
METALS/WATER/CVAA	CC8	HG	WZ0910X1	UC02139M	ATQH	10-JUL-95	27-JUL-95	1	1.03	UGL	103.0	13.9
METALS/WATER/CVAA	CC8	HG	WM0910X1	UC02139M	ATQH	10-JUL-95	27-JUL-95	1	.896	UGL	89.6	13.9
		**********									----------	
		avg									96.3	
		minimum									89.6	
		maximum									103.0	
METALS/SOIL/GFAA	JD20	SE	DM140100	UC02121M	ATSZ	10-JUL-95	22-AUG-95	5	2.72	UGG	54.4	5.7
METALS/SOIL/GFAA	JD20	SE	DZ140100	UC02121M	ATSZ	10-JUL-95	22-AUG-95	5	2.57	UGG	51.4	5.7
		**********									----------	
		avg									52.9	
		minimum									51.4	
		maximum									54.4	
METALS/SOIL/GFAA	JD21	PB	DZ140100	UC02121M	ATSY	10-JUL-95	09-AUG-95	2.5	4.26	UGG	170.4	.7
METALS/SOIL/GFAA	JD21	PB	DM140100	UC02121M	ATSY	10-JUL-95	09-AUG-95	2.5	4.23	UGG	169.2	.7
		**********									----------	
		avg									169.8	
		minimum									169.2	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
		maximum									170.4	
METALS/SOIL/ICP	JS12	AG	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	3.3	UGG	66.0	1.5
METALS/SOIL/ICP	JS12	AG	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	3.25	UGG	65.0	1.5
		**********									----------	
		avg									65.5	
		minimum									65.0	
		maximum									66.0	
METALS/SOIL/ICP	JS12	AL	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	200	6200	UGG	3100.0	6.0
METALS/SOIL/ICP	JS12	AL	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	200	5840	UGG	2920.0	6.0
		**********									----------	
		avg									3010.0	
		minimum									2920.0	
		maximum									3100.0	
METALS/SOIL/ICP	JS12	BA	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	200	228	UGG	114.0	0.0
METALS/SOIL/ICP	JS12	BA	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	200	228	UGG	114.0	0.0
		**********									----------	
		avg									114.0	
		minimum									114.0	
		maximum									114.0	
METALS/SOIL/ICP	JS12	BE	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	5.16	UGG	103.2	1.2
METALS/SOIL/ICP	JS12	BE	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	5.1	UGG	102.0	1.2
		**********									----------	
		avg									102.6	
		minimum									102.0	
		maximum									103.2	
METALS/SOIL/ICP	JS12	CD	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	14.1	UGG	282.0	17.8
METALS/SOIL/ICP	JS12	CD	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	5	11.8	UGG	236.0	17.8
		**********									----------	
		avg									259.0	
		minimum									236.0	
		maximum									282.0	

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
METALS/SOIL/ICP	JS12	CO	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	53.3	UGG	106.6	.2
METALS/SOIL/ICP	JS12	CO	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	53.2	UGG	106.4	.2
		**********									----------	
		avg									106.5	
		minimum									106.4	
		maximum									106.6	
METALS/SOIL/ICP	JS12	CR	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	20	40.3	UGG	201.5	9.4
METALS/SOIL/ICP	JS12	CR	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	20	36.7	UGG	183.5	9.4
		**********									----------	
		avg									192.5	
		minimum									183.5	
		maximum									201.5	
METALS/SOIL/ICP	JS12	CU	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	25	53.8	UGG	215.2	10.4
METALS/SOIL/ICP	JS12	CU	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	25	48.5	UGG	194.0	10.4
		**********									----------	
		avg									204.6	
		minimum									194.0	
		maximum									215.2	
METALS/SOIL/ICP	JS12	FE	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	100	12100	UGG	12100.0	3.4
METALS/SOIL/ICP	JS12	FE	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	100	11700	UGG	11700.0	3.4
		**********									----------	
		avg									11900.0	
		minimum									11700.0	
		maximum									12100.0	
METALS/SOIL/ICP	JS12	MN	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	236	UGG	472.0	2.6
METALS/SOIL/ICP	JS12	MN	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	230	UGG	460.0	2.6
		**********									----------	
		avg									466.0	
		minimum									460.0	
		maximum									472.0	
METALS/SOIL/ICP	JS12	NI	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	81.5	UGG	163.0	4.5

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
METALS/SOIL/ICP	JS12	NI	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	77.9	UGG	155.8	4.5
		**********									----------	
		avg									159.4	
		minimum									155.8	
		maximum									163.0	
METALS/SOIL/ICP	JS12	SB	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	19.6	UGG	39.2	0.0
METALS/SOIL/ICP	JS12	SB	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	19.6	UGG	39.2	0.0
		**********									----------	
		avg									39.2	
		minimum									39.2	
		maximum									39.2	
METALS/SOIL/ICP	JS12	V	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	72.7	UGG	145.4	1.0
METALS/SOIL/ICP	JS12	V	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	72	UGG	144.0	1.0
		**********									----------	
		avg									144.7	
		minimum									144.0	
		maximum									145.4	
METALS/SOIL/ICP	JS12	ZN	DZ140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	259	UGG	518.0	12.3
METALS/SOIL/ICP	JS12	ZN	DM140100	UC02121M	ATRX	10-JUL-95	08-AUG-95	50	229	UGG	458.0	12.3
		**********									----------	
		avg									488.0	
		minimum									458.0	
		maximum									518.0	
PESTICIDES/SOIL/GCEC	LH17	AENSLF	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.07	.036	UGG	51.4	5.7
PESTICIDES/SOIL/GCEC	LH17	AENSLF	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.07	.034	UGG	48.6	5.7
		**********									----------	
		avg									50.0	
		minimum									48.6	
		maximum									51.4	
PESTICIDES/SOIL/GCEC	LH17	ALDRN	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.06	.05	UGG	83.3	4.9
PESTICIDES/SOIL/GCEC	LH17	ALDRN	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.06	.0476	UGG	79.3	4.9

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
		**********									----------	
		avg									81.3	
		minimum									79.3	
		maximum									83.3	
PESTICIDES/SOIL/GCEC	LH17	CLDAN	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.6	.0684	UGG	11.4	0.0
PESTICIDES/SOIL/GCEC	LH17	CLDAN	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.6	.0684	UGG	11.4	0.0
		**********									----------	
		avg									11.4	
		minimum									11.4	
		maximum									11.4	
PESTICIDES/SOIL/GCEC	LH17	DLDRN	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.0606	UGG	75.8	6.3
PESTICIDES/SOIL/GCEC	LH17	DLDRN	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.0569	UGG	71.1	6.3
		**********									----------	
		avg									73.4	
		minimum									71.1	
		maximum									75.8	
PESTICIDES/SOIL/GCEC	LH17	ENDRN	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.04	.036	UGG	90.0	11.8
PESTICIDES/SOIL/GCEC	LH17	ENDRN	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.04	.032	UGG	80.0	11.8
		**********									----------	
		avg									85.0	
		minimum									80.0	
		maximum									90.0	
PESTICIDES/SOIL/GCEC	LH17	HPCL	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.0601	UGG	75.1	.7
PESTICIDES/SOIL/GCEC	LH17	HPCL	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.0597	UGG	74.6	.7
		**********									----------	
		avg									74.9	
		minimum									74.6	
		maximum									75.1	
PESTICIDES/SOIL/GCEC	LH17	LIN	DZ140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.0625	UGG	78.1	4.1
PESTICIDES/SOIL/GCEC	LH17	LIN	DM140100	UC02121M	ATMG	10-JUL-95	09-AUG-95	.08	.06	UGG	75.0	4.1
		**********									----------	
		avg									76.6	

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                                   Chemical Quality Control Report
                                  Installation: Fort Devens, MA (DV)
                                 Lower Cold Spring Brook - ADL Samples

                                               MS/MSD


                                                   IRDMIS
                            IRDMIS                 Field
                            Method    Test         Sample     Lab               Sample        Analysis             Spike                          Percent
Method Description          Code      Name         Number     Number     Lot    Date          Date                 Value        Value Unit        Recovery       RPD
--------------------------- --------  ----------  ----------  --------  ----  ------------  ------------  ----------  ----------- ----  ----------  --------
                                      minimum                                                                                                      75.0
                                      maximum                                                                                                      78.1

PESTICIDES/SOIL/GCEC        LH17      MEXCLR       DM140100   UC02121M  ATMG  10-JUL-95     09-AUG-95             .8          .294 UGG          36.8        7.4
PESTICIDES/SOIL/GCEC        LH17      MEXCLR       DZ140100   UC02121M  ATMG  10-JUL-95     09-AUG-95             .8          .273 UGG          34.1        7.4
                                      **********                                                                                          ----------
                                      avg                                                                                                          35.4
                                      minimum                                                                                                      34.1
                                      maximum                                                                                                      36.8

PESTICIDES/SOIL/GCEC        LH17      PCB016       DZ140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            1.5            .1 UGG           6.7        0.0
PESTICIDES/SOIL/GCEC        LH17      PCB016       DM140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            1.5            .1 UGG           6.7        0.0
                                      **********                                                                                          ----------
                                      avg                                                                                                           6.7
                                      minimum                                                                                                       6.7
                                      maximum                                                                                                       6.7

PESTICIDES/SOIL/GCEC        LH17      PCB260       DZ140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            1.5         .0479 UGG           3.2        0.0
PESTICIDES/SOIL/GCEC        LH17      PCB260       DM140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            1.5         .0479 UGG           3.2        0.0
                                      **********                                                                                          ----------
                                      avg                                                                                                           3.2
                                      minimum                                                                                                       3.2
                                      maximum                                                                                                       3.2

PESTICIDES/SOIL/GCEC        LH17      PPDDT        DM140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            .08          .132 UGG         165.0       57.6
PESTICIDES/SOIL/GCEC        LH17      PPDDT        DZ140100   UC02121M  ATMG  10-JUL-95     09-AUG-95            .08          .073 UGG          91.3       57.6
                                      **********                                                                                          ----------
                                      avg                                                                                                         128.1
                                      minimum                                                                                                      91.3
                                      maximum                                                                                                     165.0

METALS/WATER/GFAA           SD18      PB           WZ0910X1   UC02139M  ATSB  10-JUL-95     21-AUG-95             25          52.2 UGL         208.8        1.2
METALS/WATER/GFAA           SD18      PB           WM0910X1   UC02139M  ATSB  10-JUL-95     21-AUG-95             25          51.6 UGL         206.4        1.2
                                      **********                                                                                          ----------
                                      avg                                                                                                         207.6
                                      minimum                                                                                                     206.4
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Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
		maximum									208.8	
METALS/WATER/GFAA	SD25	SE	WZ0910X1	UC02139M	ATSC	10-JUL-95	22-AUG-95	50	112	UGL	224.0	6.5
METALS/WATER/GFAA	SD25	SE	WM0910X1	UC02139M	ATSC	10-JUL-95	22-AUG-95	50	105	UGL	210.0	6.5
		**********									----------	
		avg									217.0	
		minimum									210.0	
		maximum									224.0	
METALS/WATER/ICP	SS12	AG	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	50	62.5	UGL	125.0	3.1
METALS/WATER/ICP	SS12	AG	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	50	60.6	UGL	121.2	3.1
		**********									----------	
		avg									123.1	
		minimum									121.2	
		maximum									125.0	
METALS/WATER/ICP	SS12	AL	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	2000	2100	UGL	105.0	.5
METALS/WATER/ICP	SS12	AL	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	2000	2090	UGL	104.5	.5
		**********									----------	
		avg									104.8	
		minimum									104.5	
		maximum									105.0	
METALS/WATER/ICP	SS12	BA	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	2000	2110	UGL	105.5	.5
METALS/WATER/ICP	SS12	BA	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	2000	2100	UGL	105.0	.5
		**********									----------	
		avg									105.3	
		minimum									105.0	
		maximum									105.5	
METALS/WATER/ICP	SS12	BE	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	50	59.6	UGL	119.2	1.4
METALS/WATER/ICP	SS12	BE	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	50	58.8	UGL	117.6	1.4
		**********									----------	
		avg									118.4	
		minimum									117.6	

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                                         Chemical Quality Control Report
                                        Installation: Fort Devens, MA (DV)
                                       Lower Cold Spring Brook - ADL Samples

                                                     MS/MSD


                                                 IRDMIS
                          IRDMIS                 Field
                          Method    Test         Sample       Lab                Sample        Analysis              Spike                     Percent
Method Description        Code      Name         Number       Number    Lot     Date          Date                  Value       Value Unit    Recovery       RPD
------------------------- --------  ----------  ----------   --------  ----   ------------   ------------  ----------  ----------  ----  ----------  --------
                                    maximum                                                                                                   119.2

METALS/WATER/ICP          SS12      CD          WM0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95               50        59.7 UGL         119.4       1.9
METALS/WATER/ICP          SS12      CD          WZ0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95               50        58.6 UGL         117.2       1.9
                                    **********                                                                                            ----------
                                    avg                                                                                                       118.3
                                    minimum                                                                                                   117.2
                                    maximum                                                                                                   119.4

METALS/WATER/ICP          SS12      CO          WM0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              500         570 UGL         114.0        .2
METALS/WATER/ICP          SS12      CO          WZ0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              500         569 UGL         113.8        .2
                                    **********                                                                                            ----------
                                    avg                                                                                                       113.9
                                    minimum                                                                                                   113.8
                                    maximum                                                                                                   114.0

METALS/WATER/ICP          SS12      CR          WM0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              200         230 UGL         115.0       1.3
METALS/WATER/ICP          SS12      CR          WZ0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              200         227 UGL         113.5       1.3
                                    **********                                                                                            ----------
                                    avg                                                                                                       114.3
                                    minimum                                                                                                   113.5
                                    maximum                                                                                                   115.0

METALS/WATER/ICP          SS12      CU          WM0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              250         272 UGL         108.8       1.5
METALS/WATER/ICP          SS12      CU          WZ0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95              250         268 UGL         107.2       1.5
                                    **********                                                                                            ----------
                                    avg                                                                                                       108.0
                                    minimum                                                                                                   107.2
                                    maximum                                                                                                   108.8

METALS/WATER/ICP          SS12      FE          WZ0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95             1000        1190 UGL         119.0       0.0
METALS/WATER/ICP          SS12      FE          WM0910X1     UC02139M ATRY  10-JUL-95      11-AUG-95             1000        1190 UGL         119.0       0.0
                                    **********                                                                                            ----------
                                    avg                                                                                                       119.0
                                    minimum                                                                                                   119.0
                                    maximum                                                                                                   119.0
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Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
METALS/WATER/ICP	SS12	MN	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	604	UGL	120.8	.3
METALS/WATER/ICP	SS12	MN	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	602	UGL	120.4	.3
		**********									----------	
		avg									120.6	
		minimum									120.4	
		maximum									120.8	
METALS/WATER/ICP	SS12	NI	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	577	UGL	115.4	.3
METALS/WATER/ICP	SS12	NI	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	575	UGL	115.0	.3
		**********									----------	
		avg									115.2	
		minimum									115.0	
		maximum									115.4	
METALS/WATER/ICP	SS12	SB	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	544	UGL	108.8	3.4
METALS/WATER/ICP	SS12	SB	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	526	UGL	105.2	3.4
		**********									----------	
		avg									107.0	
		minimum									105.2	
		maximum									108.8	
METALS/WATER/ICP	SS12	V	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	545	UGL	109.0	.7
METALS/WATER/ICP	SS12	V	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	541	UGL	108.2	.7
		**********									----------	
		avg									108.6	
		minimum									108.2	
		maximum									109.0	
METALS/WATER/ICP	SS12	ZN	WM0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	588	UGL	117.6	1.7
METALS/WATER/ICP	SS12	ZN	WZ0910X1	UC02139M	ATRY	10-JUL-95	11-AUG-95	500	578	UGL	115.6	1.7
		**********									----------	
		avg									116.6	
		minimum									115.6	
		maximum									117.6	
PESTICIDES/WATER/GCEC	UH20	AENSLF	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.0977	UGL	39.1	7.3

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

MS/MSD

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Unit	Percent Recovery	RPD
PESTICIDES/WATER/GCEC	UH20	AENSLF	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.0908	UGL	36.3	7.3
		**********									----------	
		avg									37.7	
		minimum									36.3	
		maximum									39.1	
PESTICIDES/WATER/GCEC	UH20	ALDRN	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.1	.0436	UGL	43.6	.2
PESTICIDES/WATER/GCEC	UH20	ALDRN	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.1	.0435	UGL	43.5	.2
		**********									----------	
		avg									43.6	
		minimum									43.5	
		maximum									43.6	
PESTICIDES/WATER/GCEC	UH20	DLDRN	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.176	UGL	70.4	8.9
PESTICIDES/WATER/GCEC	UH20	DLDRN	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.161	UGL	64.4	8.9
		**********									----------	
		avg									67.4	
		minimum									64.4	
		maximum									70.4	
PESTICIDES/WATER/GCEC	UH20	ENDRN	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.296	UGL	118.4	9.9
PESTICIDES/WATER/GCEC	UH20	ENDRN	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.268	UGL	107.2	9.9
		**********									----------	
		avg									112.8	
		minimum									107.2	
		maximum									118.4	
PESTICIDES/WATER/GCEC	UH20	HPCL	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.1	.0479	UGL	47.9	2.1
PESTICIDES/WATER/GCEC	UH20	HPCL	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.1	.0469	UGL	46.9	2.1
		**********									----------	
		avg									47.4	
		minimum									46.9	
		maximum									47.9	
PESTICIDES/WATER/GCEC	UH20	LIN	WM0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.0705	UGL	28.2	1.6
PESTICIDES/WATER/GCEC	UH20	LIN	WZ0911X1	UC02143M	ATMH	10-JUL-95	01-AUG-95	.25	.0694	UGL	27.8	1.6
		**********									----------	

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                                                    Chemical Quality Control Report
                                                   Installation: Fort Devens, MA (DV)
                                                  Lower Cold Spring Brook - ADL Samples

                                                                MS/MSD


                                                      IRDMIS
                               IRDMIS                 Field
                               Method    Test         Sample      Lab                Sample        Analysis                Spike                        Percent
Method Description             Code      Name         Number      Number    Lot      Date          Date                    Value       Value   Unit     Recovery      RPD
------------------------------ --------- ------------ ----------- --------- ----     ------------  ------------ ---------- ----------- ------- ---- ---------- ---------
                                         avg                                                                                                               28.0
                                         minimum                                                                                                           27.8
                                         maximum                                                                                                           28.2

PESTICIDES/WATER/GCEC          UH20      MEXCLR       WZ0911X1    UC02143M  ATMH     10-JUL-95     01-AUG-95                         2        1.45 UGL         72.5       7.1
PESTICIDES/WATER/GCEC          UH20      MEXCLR       WM0911X1    UC02143M  ATMH     10-JUL-95     01-AUG-95                         2        1.35 UGL         67.5       7.1
                                         **********                                                                                                   ----------
                                         avg                                                                                                               70.0
                                         minimum                                                                                                           67.5
                                         maximum                                                                                                           72.5

PESTICIDES/WATER/GCEC          UH20      PPDDT        WZ0911X1    UC02143M  ATMH     10-JUL-95     01-AUG-95                        .2       .0901 UGL         45.1       6.1
PESTICIDES/WATER/GCEC          UH20      PPDDT        WM0911X1    UC02143M  ATMH     10-JUL-95     01-AUG-95                        .2       .0848 UGL         42.4       6.1
                                         **********                                                                                                   ----------
                                         avg                                                                                                               43.7
                                         minimum                                                                                                           42.4
                                         maximum                                                                                                           45.1


METALS/SOIL/CVAA               Y9        HG           DM140100    UC02121M  ATQB     10-JUL-95     26-JUL-95                        .5         .65 UGG        130.0       7.2
METALS/SOIL/CVAA               Y9        HG           DZ140100    UC02121M  ATQB     10-JUL-95     26-JUL-95                        .5        .605 UGG        121.0       7.2
                                         **********                                                                                                   ----------
                                         avg                                                                                                              125.5
                                         minimum                                                                                                          121.0
                                         maximum                                                                                                          130.0






SQL> spool off;
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TABLE C-18

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SVOC SURROGATES

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	UNC_VALUE	Unit	Percent Recovery
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.48	UGG	9.6
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.52	UGG	10.4
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.49	UGG	9.8
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	2.3	UGG	46.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	2.5	UGG	50.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	4.6	UGG	92.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	2.4	UGG	48.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	2.2	UGG	44.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	2.3	UGG	46.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TBP	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	1.9	UGG	38.0
		**********									----------
		avg									39.4
		minimum									9.6
		maximum									92.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.49	UGG	9.8
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.47	UGG	9.4
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.47	UGG	9.4
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	2.1	UGG	42.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	2.4	UGG	48.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	4.4	UGG	88.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	2.3	UGG	46.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	1.9	UGG	38.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	2	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLPD4	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	1.6	UGG	32.0
		**********									----------
		avg									36.3
		minimum									9.4
		maximum									88.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.61	UGG	12.2
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.61	UGG	12.2
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.61	UGG	12.2
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	2.5	UGG	50.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	2.7	UGG	54.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	4.6	UGG	92.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	2.7	UGG	54.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	2.2	UGG	44.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	2.6	UGG	52.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FBP	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	2.4	UGG	48.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SVOC SURROGATES

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	UNC_VALUE	Unit	Percent Recovery
		**********									----------
		avg									43.1
		minimum									12.2
		maximum									92.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.36	UGG	7.2
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.34	UGG	6.8
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.33	UGG	6.6
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	1.6	UGG	32.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	1.8	UGG	36.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	3.8	UGG	76.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	1.7	UGG	34.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	1.5	UGG	30.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	1.5	UGG	30.0
SEMIVOLATILES/SOIL/GCMS	LM25	2FP	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	1.1	UGG	22.0
		**********									----------
		avg									28.1
		minimum									6.6
		maximum									76.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.44	UGG	8.8
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.42	UGG	8.4
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.44	UGG	8.8
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	1.9	UGG	38.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	1.9	UGG	38.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	3.7	UGG	74.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	1.8	UGG	36.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	1.6	UGG	32.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	1.7	UGG	34.0
SEMIVOLATILES/SOIL/GCMS	LM25	NBD5	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	1.6	UGG	32.0
		**********									----------
		avg									31.0
		minimum									8.4
		maximum									74.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.61	UGG	12.2
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.59	UGG	11.8
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.59	UGG	11.8
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	2.6	UGG	52.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	3	UGG	60.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SVOC SURROGATES

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	UNC_VALUE	Unit	Percent Recovery
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	5.3	UGG	106.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	2.9	UGG	58.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	2.4	UGG	48.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	2.6	UGG	52.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHEND6	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	2.2	UGG	44.0
		**********									----------
		avg									45.6
		minimum									11.8
		maximum									106.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	5	.55	UGG	11.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	5	.56	UGG	11.2
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95	5	.53	UGG	10.6
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX2101X1	UC02124	ATMJ	10-JUL-95	27-JUL-95	5	2.3	UGG	46.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX090400	UC02125	ATMJ	10-JUL-95	27-JUL-95	5	2.7	UGG	54.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX090800	UC02126	ATMJ	10-JUL-95	27-JUL-95	5	4.7	UGG	94.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95	5	2.7	UGG	54.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX091000	UC02128	ATMJ	10-JUL-95	27-JUL-95	5	2.3	UGG	46.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95	5	2.6	UGG	52.0
SEMIVOLATILES/SOIL/GCMS	LM25	TRPD14	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95	5	2.4	UGG	48.0
		**********									----------
		avg									42.7
		minimum									10.6
		maximum									94.0
ORGANICS/WATER/GCMS	UM25	246TBP	DR250100	UC02132	ATML	10-JUL-95	26-JUL-95	100	83	UGL	83.0
ORGANICS/WATER/GCMS	UM25	246TBP	WR0910X1	UC02133	ATML	10-JUL-95	26-JUL-95	100	93	UGL	93.0
ORGANICS/WATER/GCMS	UM25	246TBP	WX0908X1	UC02135	ATML	10-JUL-95	27-JUL-95	100	95	UGL	95.0
ORGANICS/WATER/GCMS	UM25	246TBP	WX0909X1	UC02137	ATML	10-JUL-95	27-JUL-95	100	92	UGL	92.0
ORGANICS/WATER/GCMS	UM25	246TBP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	100	85	UGL	85.0
ORGANICS/WATER/GCMS	UM25	246TBP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	100	95	UGL	95.0
ORGANICS/WATER/GCMS	UM25	246TBP	WX0911X1	UC02143	ATML	10-JUL-95	27-JUL-95	100	72	UGL	72.0
		**********									----------
		avg									87.9
		minimum									72.0
		maximum									95.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	DR250100	UC02132	ATML	10-JUL-95	26-JUL-95	100	79	UGL	79.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	WR0910X1	UC02133	ATML	10-JUL-95	26-JUL-95	100	87	UGL	87.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SVOC SURROGATES

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	UNC_VALUE	Unit	Percent Recovery
ORGANICS/WATER/GCMS	UM25	2CLPD4	WX0908X1	UC02135	ATML	10-JUL-95	27-JUL-95	100	90	UGL	90.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	WX0909X1	UC02137	ATML	10-JUL-95	27-JUL-95	100	85	UGL	85.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	100	83	UGL	83.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	100	86	UGL	86.0
ORGANICS/WATER/GCMS	UM25	2CLPD4	WX0911X1	UC02143	ATML	10-JUL-95	27-JUL-95	100	77	UGL	77.0
		**********									
		avg									83.9
		minimum									77.0
		maximum									90.0
ORGANICS/WATER/GCMS	UM25	2FBP	DR250100	UC02132	ATML	10-JUL-95	26-JUL-95	100	75	UGL	75.0
ORGANICS/WATER/GCMS	UM25	2FBP	WR0910X1	UC02133	ATML	10-JUL-95	26-JUL-95	100	85	UGL	85.0
ORGANICS/WATER/GCMS	UM25	2FBP	WX0908X1	UC02135	ATML	10-JUL-95	27-JUL-95	100	87	UGL	87.0
ORGANICS/WATER/GCMS	UM25	2FBP	WX0909X1	UC02137	ATML	10-JUL-95	27-JUL-95	100	86	UGL	86.0
ORGANICS/WATER/GCMS	UM25	2FBP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	100	80	UGL	80.0
ORGANICS/WATER/GCMS	UM25	2FBP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	100	87	UGL	87.0
ORGANICS/WATER/GCMS	UM25	2FBP	WX0911X1	UC02143	ATML	10-JUL-95	27-JUL-95	100	68	UGL	68.0
		**********									
		avg									81.1
		minimum									68.0
		maximum									87.0
ORGANICS/WATER/GCMS	UM25	2FP	DR250100	UC02132	ATML	10-JUL-95	26-JUL-95	100	41	UGL	41.0
ORGANICS/WATER/GCMS	UM25	2FP	WR0910X1	UC02133	ATML	10-JUL-95	26-JUL-95	100	50	UGL	50.0
ORGANICS/WATER/GCMS	UM25	2FP	WX0908X1	UC02135	ATML	10-JUL-95	27-JUL-95	100	51	UGL	51.0
ORGANICS/WATER/GCMS	UM25	2FP	WX0909X1	UC02137	ATML	10-JUL-95	27-JUL-95	100	48	UGL	48.0
ORGANICS/WATER/GCMS	UM25	2FP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	100	45	UGL	45.0
ORGANICS/WATER/GCMS	UM25	2FP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	100	48	UGL	48.0
ORGANICS/WATER/GCMS	UM25	2FP	WX0911X1	UC02143	ATML	10-JUL-95	27-JUL-95	100	45	UGL	45.0
		**********									
		avg									46.9
		minimum									41.0
		maximum									51.0
ORGANICS/WATER/GCMS	UM25	NBD5	DR250100	UC02132	ATML	10-JUL-95	26-JUL-95	100	76	UGL	76.0
ORGANICS/WATER/GCMS	UM25	NBD5	WR0910X1	UC02133	ATML	10-JUL-95	26-JUL-95	100	90	UGL	90.0
ORGANICS/WATER/GCMS	UM25	NBD5	WX0908X1	UC02135	ATML	10-JUL-95	27-JUL-95	100	91	UGL	91.0
ORGANICS/WATER/GCMS	UM25	NBD5	WX0909X1	UC02137	ATML	10-JUL-95	27-JUL-95	100	91	UGL	91.0
ORGANICS/WATER/GCMS	UM25	NBD5	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	100	85	UGL	85.0
ORGANICS/WATER/GCMS	UM25	NBD5	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	100	91	UGL	91.0

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                                                   Chemical Quality Control Report
                                                  Installation: Fort Devens, MA (DV)
                                                Lower Cold Spring Brook -  ADL Samples

                                                          SVOC SURROGATES

                                            IRDMIS
                           IRDMIS           Field
                           Method  Test     Sample     Lab                Sample      Analysis         Spike                     Percent
Method Description         Code    Name     Number     Number    Lot  Date        Date             Value UNC_VALUE Unit  Recovery
-------------------------- ------- -------- ---------- -------- ---- ----------- ------------ ---------- --------- ---- ----------
ORGANICS/WATER/GCMS        UM25    NBD5     WX0911X1   UC02143  ATML 10-JUL-95   27-JUL-95           100        72 UGL        72.0
                                   **********                                                                          ----------
                                   avg                                                                                       85.1
                                   minimum                                                                                   72.0
                                   maximum                                                                                   91.0

ORGANICS/WATER/GCMS        UM25    PHEND6   DR250100   UC02132  ATML 10-JUL-95   26-JUL-95           100        32 UGL        32.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WR0910X1   UC02133  ATML 10-JUL-95   26-JUL-95           100        38 UGL        38.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WX0908X1   UC02135  ATML 10-JUL-95   27-JUL-95           100        41 UGL        41.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WX0909X1   UC02137  ATML 10-JUL-95   27-JUL-95           100        37 UGL        37.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WX0910X1   UC02139  ATML 10-JUL-95   27-JUL-95           100        37 UGL        37.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WD0910X1   UC02141  ATML 10-JUL-95   27-JUL-95           100        39 UGL        39.0
ORGANICS/WATER/GCMS        UM25    PHEND6   WX0911X1   UC02143  ATML 10-JUL-95   27-JUL-95           100        35 UGL        35.0
                                   **********                                                                          ----------
                                   avg                                                                                       37.0
                                   minimum                                                                                   32.0
                                   maximum                                                                                   41.0

ORGANICS/WATER/GCMS        UM25    TRPD14   DR250100   UC02132  ATML 10-JUL-95   26-JUL-95           100        46 UGL        46.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WR0910X1   UC02133  ATML 10-JUL-95   26-JUL-95           100        61 UGL        61.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WX0908X1   UC02135  ATML 10-JUL-95   27-JUL-95           100        73 UGL        73.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WX0909X1   UC02137  ATML 10-JUL-95   27-JUL-95           100        71 UGL        71.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WX0910X1   UC02139  ATML 10-JUL-95   27-JUL-95           100        68 UGL        68.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WD0910X1   UC02141  ATML 10-JUL-95   27-JUL-95           100        69 UGL        69.0
ORGANICS/WATER/GCMS        UM25    TRPD14   WX0911X1   UC02143  ATML 10-JUL-95   27-JUL-95           100        55 UGL        55.0
                                   **********                                                                          ----------
                                   avg                                                                                       63.3
                                   minimum                                                                                   46.0
                                   maximum                                                                                   73.0

SQL> spool off;
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TABLE C-19

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/WATER/GFAA	AX8	AS	WD0910X1	UC02141	ATSA	10-JUL-95	22-AUG-95		4.38	UGL	90.4
METALS/WATER/GFAA	AX8	AS	WX0910X1	UC02139	ATSA	10-JUL-95	22-AUG-95		11.6	UGL	90.4
METALS/SOIL/GFAA	B9	AS	DD140100	UC02122	ATSX	10-JUL-95	22-AUG-95		17.7	UGG	16.5
METALS/SOIL/GFAA	B9	AS	DX140100	UC02121	ATSX	10-JUL-95	22-AUG-95		15	UGG	16.5
METALS/WATER/CVAA	CC8	HG	WX0910X1	UC02139	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL	0.0
METALS/WATER/CVAA	CC8	HG	WD0910X1	UC02141	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL	0.0
METALS/SOIL/GFAA	JD20	SE	DX140100	UC02121	ATSZ	10-JUL-95	22-AUG-95	<	.449	UGG	0.0
METALS/SOIL/GFAA	JD20	SE	DD140100	UC02122	ATSZ	10-JUL-95	22-AUG-95	<	.449	UGG	0.0
METALS/SOIL/GFAA	JD21	PB	DX140100	UC02121	ATSY	10-JUL-95	09-AUG-95		140	UGG	0.0
METALS/SOIL/GFAA	JD21	PB	DD140100	UC02122	ATSY	10-JUL-95	09-AUG-95		140	UGG	0.0
METALS/SOIL/ICP	JS12	AG	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95	<	.803	UGG	0.0
METALS/SOIL/ICP	JS12	AG	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95	<	.803	UGG	0.0
METALS/SOIL/ICP	JS12	AL	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		9990	UGG	1.3
METALS/SOIL/ICP	JS12	AL	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		9860	UGG	1.3
METALS/SOIL/ICP	JS12	BA	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		67.5	UGG	13.3
METALS/SOIL/ICP	JS12	BA	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		59.1	UGG	13.3
METALS/SOIL/ICP	JS12	BE	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95	<	.427	UGG	0.0
METALS/SOIL/ICP	JS12	BE	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95	<	.427	UGG	0.0
METALS/SOIL/ICP	JS12	CA	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		3910	UGG	31.7

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/SOIL/ICP	JS12	CA	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		2840	UGG	31.7
METALS/SOIL/ICP	JS12	CD	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		19.5	UGG	38.5
METALS/SOIL/ICP	JS12	CD	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		13.2	UGG	38.5
METALS/SOIL/ICP	JS12	CO	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		9.99	UGG	11.8
METALS/SOIL/ICP	JS12	CO	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		8.88	UGG	11.8
METALS/SOIL/ICP	JS12	CR	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		50.7	UGG	48.2
METALS/SOIL/ICP	JS12	CR	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		31	UGG	48.2
METALS/SOIL/ICP	JS12	CU	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		44.1	UGG	12.5
METALS/SOIL/ICP	JS12	CU	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		50	UGG	12.5
METALS/SOIL/ICP	JS12	FE	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		20700	UGG	3.9
METALS/SOIL/ICP	JS12	FE	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		19900	UGG	3.9
METALS/SOIL/ICP	JS12	K	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		1690	UGG	5.5
METALS/SOIL/ICP	JS12	K	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		1600	UGG	5.5
METALS/SOIL/ICP	JS12	MG	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		3790	UGG	3.8
METALS/SOIL/ICP	JS12	MG	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		3650	UGG	3.8
METALS/SOIL/ICP	JS12	MN	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		530	UGG	59.5
METALS/SOIL/ICP	JS12	MN	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		287	UGG	59.5
METALS/SOIL/ICP	JS12	NA	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		631	UGG	124.4
METALS/SOIL/ICP	JS12	NA	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		147	UGG	124.4
METALS/SOIL/ICP	JS12	NI	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		48.5	UGG	8.8
METALS/SOIL/ICP	JS12	NI	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		44.4	UGG	8.8
METALS/SOIL/ICP	JS12	SB	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95	<	19.6	UGG	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/SOIL/ICP	JS12	SB	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95	<	19.6	UGG	0.0
METALS/SOIL/ICP	JS12	TL	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95	<	34.3	UGG	0.0
METALS/SOIL/ICP	JS12	TL	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95	<	34.3	UGG	0.0
METALS/SOIL/ICP	JS12	V	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		41.7	UGG	2.9
METALS/SOIL/ICP	JS12	V	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		40.5	UGG	2.9
METALS/SOIL/ICP	JS12	ZN	DD140100	UC02122	ATRX	10-JUL-95	08-AUG-95		433	UGG	27.6
METALS/SOIL/ICP	JS12	ZN	DX140100	UC02121	ATRX	10-JUL-95	08-AUG-95		328	UGG	27.6
PESTICIDES/SOIL/GCEC	LH17	ABHC	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0028	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	ABHC	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0028	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	AENSLF	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.00616	UGG	2.5
PESTICIDES/SOIL/GCEC	LH17	AENSLF	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.00601	UGG	2.5
PESTICIDES/SOIL/GCEC	LH17	ALDRN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.0136	UGG	.7
PESTICIDES/SOIL/GCEC	LH17	ALDRN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.0135	UGG	.7
PESTICIDES/SOIL/GCEC	LH17	BBHC	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0077	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	BBHC	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0077	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	BENSLF	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.00184	UGG	16.5
PESTICIDES/SOIL/GCEC	LH17	BENSLF	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.00156	UGG	16.5
PESTICIDES/SOIL/GCEC	LH17	CLDAN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0684	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	CLDAN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0684	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	DBHC	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0085	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	DBHC	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0085	UGG	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
PESTICIDES/SOIL/GCEC	LH17	DLDRN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.00741	UGG	3.8
PESTICIDES/SOIL/GCEC	LH17	DLDRN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.0077	UGG	3.8
PESTICIDES/SOIL/GCEC	LH17	ENDRN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0065	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	ENDRN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0065	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	ENDRNA	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0005	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	ENDRNA	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0005	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	HPCL	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0022	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	HPCL	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0022	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	HPCLE	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.0112	UGG	158.4
PESTICIDES/SOIL/GCEC	LH17	HPCLE	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0013	UGG	158.4
PESTICIDES/SOIL/GCEC	LH17	ISODR	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.003	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	ISODR	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.003	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	LIN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.001	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	LIN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.001	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	MEXCLR	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0359	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	MEXCLR	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0359	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB016	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB016	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB221	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB221	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB232	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB232	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
PESTICIDES/SOIL/GCEC	LH17	PCB242	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB242	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB248	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB248	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.1	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB254	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		1.16	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB254	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		1.16	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB260	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.0479	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PCB260	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.0479	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	PPDDD	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.0354	UGG	.3
PESTICIDES/SOIL/GCEC	LH17	PPDDD	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.0353	UGG	.3
PESTICIDES/SOIL/GCEC	LH17	PPDDE	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.027	UGG	3.8
PESTICIDES/SOIL/GCEC	LH17	PPDDE	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.026	UGG	3.8
PESTICIDES/SOIL/GCEC	LH17	PPDDT	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95		.0876	UGG	18.1
PESTICIDES/SOIL/GCEC	LH17	PPDDT	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95		.105	UGG	18.1
PESTICIDES/SOIL/GCEC	LH17	TXPHEN	DD140100	UC02122	ATMG	10-JUL-95	09-AUG-95	<	.226	UGG	0.0
PESTICIDES/SOIL/GCEC	LH17	TXPHEN	DX140100	UC02121	ATMG	10-JUL-95	09-AUG-95	<	.226	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	124TCB	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	124TCB	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	12DCLB	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	12DCLB	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	13DCLB	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	13DCLB	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	14DCLB	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	14DCLB	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	245TCP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	245TCP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TCP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	246TCP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DCLP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DCLP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DMPN	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DMPN	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DNP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	50	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DNP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	50	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DNT	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	24DNT	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CLP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CNAP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2CNAP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2MNAP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		.6	UGG	66.7
SEMIVOLATILES/SOIL/GCMS	LM25	2MNAP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.3	UGG	66.7
SEMIVOLATILES/SOIL/GCMS	LM25	2MP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2MP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	1	UGG	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	2NANIL	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2NANIL	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2NP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	2NP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	33DCBD	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	33DCBD	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	3NANIL	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	3NANIL	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	46DN2C	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	46DN2C	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4BRPPE	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4BRPPE	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4CL3C	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	9	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4CL3C	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	9	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4CLPPE	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4CLPPE	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4MP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4MP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4NP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	4NP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	ANAPNE	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	66.7
SEMIVOLATILES/SOIL/GCMS	LM25	ANAPNE	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		2	UGG	66.7

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SEMIVOLATILES/SOIL/GCMS	LM25	ANAPYL	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		9	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	ANAPYL	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		7	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	ANTRC	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		20	UGG	96.3
SEMIVOLATILES/SOIL/GCMS	LM25	ANTRC	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	7	UGG	96.3
SEMIVOLATILES/SOIL/GCMS	LM25	B2CEXM	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	B2CEXM	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	B2EHP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	B2EHP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BAANTR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		60	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	BAANTR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		40	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	BAPYR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BAPYR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		30	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BBFANT	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		60	UGG	18.2
SEMIVOLATILES/SOIL/GCMS	LM25	BBFANT	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		50	UGG	18.2
SEMIVOLATILES/SOIL/GCMS	LM25	BBZP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BBZP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BGHIPY	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		30	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	BGHIPY	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		20	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	BKFANT	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BKFANT	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BZALC	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	BZALC	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.3	UGG	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	CHRY	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		50	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	CHRY	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		40	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	CL6BZ	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	CL6BZ	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	CL6CP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	CL6CP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	CL6ET	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	CL6ET	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DBAHA	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		6	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	DBAHA	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	DBZFUR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DBZFUR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DEP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DEP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DMP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DMP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DNBP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DNBP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DNOP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	DNOP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	2	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	FANT	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		60	UGG	187.1
SEMIVOLATILES/SOIL/GCMS	LM25	FANT	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		2	UGG	187.1

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	FLRENE	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		20	UGG	188.3
SEMIVOLATILES/SOIL/GCMS	LM25	FLRENE	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.6	UGG	188.3
SEMIVOLATILES/SOIL/GCMS	LM25	HCBD	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	HCBD	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	ICDPYR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	ICDPYR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	ISOPHR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	ISOPHR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NAP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NAP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NB	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NB	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	20	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NNDNPA	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NNDNPA	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	10	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NNDPA	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	NNDPA	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	PCP	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	PCP	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	8	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHANTR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		100	UGG	35.3
SEMIVOLATILES/SOIL/GCMS	LM25	PHANTR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		70	UGG	35.3
SEMIVOLATILES/SOIL/GCMS	LM25	PHENOL	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95	<	.5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	PHENOL	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95	<	.5	UGG	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	PYR	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		90	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	PYR	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		70	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK604	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		6	UGG	18.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK604	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		5	UGG	18.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		.7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		.7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		5	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		5	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	22.2
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK609	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK614	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK614	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK614	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK614	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK620	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK620	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK621	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		40	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK621	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		40	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK623	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		9	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK623	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		7	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK629	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	28.6

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	UNK629	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK630	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		9	UGG	11.8
SEMIVOLATILES/SOIL/GCMS	LM25	UNK630	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		8	UGG	11.8
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DX090900	UC02127	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		.7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		.7	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK631	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK632	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK632	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		5	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK637	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		5	UGG	50.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK637	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	50.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK637	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		7	UGG	33.3
SEMIVOLATILES/SOIL/GCMS	LM25	UNK637	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		5	UGG	33.3
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		6	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		5	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		5	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	40.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		9	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK639	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		7	UGG	25.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK640	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK640	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK640	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK640	DX250200	UC02120	ATMJ	10-JUL-95	28-JUL-95		4	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK641	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95		4	UGG	120.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SEMIVOLATILES/SOIL/GCMS	LM25	UNK641	DX091200	UC02130	ATMJ	10-JUL-95	27-JUL-95		1	UGG	120.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK641	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		7	UGG	54.5
SEMIVOLATILES/SOIL/GCMS	LM25	UNK641	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		4	UGG	54.5
SEMIVOLATILES/SOIL/GCMS	LM25	UNK644	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	30.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK644	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	30.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK644	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	30.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK646	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK646	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK650	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK650	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		3	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK666	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		8	UGG	13.3
SEMIVOLATILES/SOIL/GCMS	LM25	UNK666	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		7	UGG	13.3
SEMIVOLATILES/SOIL/GCMS	LM25	UNK680	DD250100	UC02118	ATMJ	10-JUL-95	27-JUL-95		4	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK680	DX250100	UC02119	ATMJ	10-JUL-95	27-JUL-95		3	UGG	28.6
SEMIVOLATILES/SOIL/GCMS	LM25	UNK692	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
SEMIVOLATILES/SOIL/GCMS	LM25	UNK692	DX091100	UC02129	ATMJ	10-JUL-95	27-JUL-95		1	UGG	0.0
METALS/WATER/GFAA	SD18	PB	WX0910X1	UC02139	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL	0.0
METALS/WATER/GFAA	SD18	PB	WD0910X1	UC02141	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL	0.0
METALS/WATER/GFAA	SD25	SE	WX0910X1	UC02139	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL	0.0
METALS/WATER/GFAA	SD25	SE	WD0910X1	UC02141	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL	0.0
METALS/WATER/ICP	SS12	AG	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	10	UGL	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/WATER/ICP	SS12	AG	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	10	UGL	0.0
METALS/WATER/ICP	SS12	AL	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	112	UGL	0.0
METALS/WATER/ICP	SS12	AL	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	112	UGL	0.0
METALS/WATER/ICP	SS12	BA	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		8.22	UGL	15.3
METALS/WATER/ICP	SS12	BA	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		7.05	UGL	15.3
METALS/WATER/ICP	SS12	BE	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		1.31	UGL	9.6
METALS/WATER/ICP	SS12	BE	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		1.19	UGL	9.6
METALS/WATER/ICP	SS12	CA	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		26900	UGL	12.2
METALS/WATER/ICP	SS12	CA	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		23800	UGL	12.2
METALS/WATER/ICP	SS12	CD	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL	0.0
METALS/WATER/ICP	SS12	CD	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL	0.0
METALS/WATER/ICP	SS12	CO	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	25	UGL	0.0
METALS/WATER/ICP	SS12	CO	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	25	UGL	0.0
METALS/WATER/ICP	SS12	CR	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL	0.0
METALS/WATER/ICP	SS12	CR	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL	0.0
METALS/WATER/ICP	SS12	CU	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL	0.0
METALS/WATER/ICP	SS12	CU	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL	0.0
METALS/WATER/ICP	SS12	FE	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	77.5	UGL	78.7
METALS/WATER/ICP	SS12	FE	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		178	UGL	78.7
METALS/WATER/ICP	SS12	K	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL	0.0
METALS/WATER/ICP	SS12	K	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL	0.0
METALS/WATER/ICP	SS12	MG	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		4010	UGL	11.3

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Installation: Fort Devens, MA (DV)
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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/WATER/ICP	SS12	MG	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		3580	UGL	11.3
METALS/WATER/ICP	SS12	MN	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		45.4	UGL	20.9
METALS/WATER/ICP	SS12	MN	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		56	UGL	20.9
METALS/WATER/ICP	SS12	NA	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95		22600	UGL	10.7
METALS/WATER/ICP	SS12	NA	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95		20300	UGL	10.7
METALS/WATER/ICP	SS12	NI	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL	0.0
METALS/WATER/ICP	SS12	NI	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL	0.0
METALS/WATER/ICP	SS12	SB	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	60	UGL	0.0
METALS/WATER/ICP	SS12	SB	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	60	UGL	0.0
METALS/WATER/ICP	SS12	TL	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	125	UGL	0.0
METALS/WATER/ICP	SS12	TL	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	125	UGL	0.0
METALS/WATER/ICP	SS12	V	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	27.6	UGL	0.0
METALS/WATER/ICP	SS12	V	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	27.6	UGL	0.0
METALS/WATER/ICP	SS12	ZN	WD0910X1	UC02141	ATRY	10-JUL-95	11-AUG-95	<	18	UGL	0.0
METALS/WATER/ICP	SS12	ZN	WX0910X1	UC02139	ATRY	10-JUL-95	11-AUG-95	<	18	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ABHC	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.00479	UGL	7.6
PESTICIDES/WATER/GCEC	UH20	ABHC	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95		.00444	UGL	7.6
PESTICIDES/WATER/GCEC	UH20	ACLDAN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0312	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ACLDAN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0312	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	AENSLF	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.00436	UGL	54.2
PESTICIDES/WATER/GCEC	UH20	AENSLF	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL	54.2

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
PESTICIDES/WATER/GCEC	UH20	ALDRN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ALDRN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	BBHC	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.0119	UGL	18.3
PESTICIDES/WATER/GCEC	UH20	BBHC	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0099	UGL	18.3
PESTICIDES/WATER/GCEC	UH20	BENSLF	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0077	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	BENSLF	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0077	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	DBHC	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95		.0037	UGL	8.5
PESTICIDES/WATER/GCEC	UH20	DBHC	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0034	UGL	8.5
PESTICIDES/WATER/GCEC	UH20	DLDRN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	DLDRN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0074	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ENDRN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ENDRN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ENDRNA	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95		.0639	UGL	23.6
PESTICIDES/WATER/GCEC	UH20	ENDRNA	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0504	UGL	23.6
PESTICIDES/WATER/GCEC	UH20	HPCL	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.0034	UGL	30.5
PESTICIDES/WATER/GCEC	UH20	HPCL	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL	30.5
PESTICIDES/WATER/GCEC	UH20	HPCLE	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0063	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	HPCLE	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0063	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ISODR	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	ISODR	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	LIN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.00553	UGL	26.6
PESTICIDES/WATER/GCEC	UH20	LIN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95		.00423	UGL	26.6

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
PESTICIDES/WATER/GCEC	UH20	MEXCLR	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.075	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	MEXCLR	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.075	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB016	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB016	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB221	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB221	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB232	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB232	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB242	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB242	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB248	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB248	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.385	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB254	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB254	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB260	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PCB260	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.176	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PPDDD	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.0178	UGL	74.9
PESTICIDES/WATER/GCEC	UH20	PPDDD	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0081	UGL	74.9
PESTICIDES/WATER/GCEC	UH20	PPDDE	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	.0039	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PPDDE	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0039	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	PPDDT	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95		.00314	UGL	22.7
PESTICIDES/WATER/GCEC	UH20	PPDDT	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	.0025	UGL	22.7

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
PESTICIDES/WATER/GCEC	UH20	TXPHEN	WD0911X1	UC02145	ATMH	10-JUL-95	01-AUG-95	<	1.64	UGL	0.0
PESTICIDES/WATER/GCEC	UH20	TXPHEN	WX0911X1	UC02143	ATMH	10-JUL-95	01-AUG-95	<	1.64	UGL	0.0
ORGANICS/WATER/GCMS	UM25	123TCB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	123TCB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	124TCB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	124TCB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	12DCLB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	12DCLB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	12DPH	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0
ORGANICS/WATER/GCMS	UM25	12DPH	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0
ORGANICS/WATER/GCMS	UM25	13DCLB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	13DCLB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	13DNB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	13DNB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	14DCLB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	14DCLB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	236TCP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	236TCP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	245TCP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	245TCP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	246TCP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	246TCP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.6	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	24DCLP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DCLP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DMPN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	4.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DMPN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	4.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DNP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	180	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DNP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	180	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DNT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	24DNT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	26DNA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	26DNA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	26DNT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	6.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	26DNT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	6.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2CLP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2CLP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2CNAP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2CNAP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2MNAP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2MNAP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2MP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2MP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2NANIL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	31	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2NANIL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	31	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	2NP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	2NP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	33DCBD	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	33DCBD	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	35DNA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	35DNA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	3NANIL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	3NANIL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	3NT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	3NT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	46DN2C	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	50	UGL	0.0
ORGANICS/WATER/GCMS	UM25	46DN2C	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	50	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4BRPPE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	22	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4BRPPE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	22	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CANIL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CANIL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CL3C	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CL3C	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CLPPE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	23	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4CLPPE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	23	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4MP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4MP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.8	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	4NANIL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	31	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4NANIL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	31	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4NP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	96	UGL	0.0
ORGANICS/WATER/GCMS	UM25	4NP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	96	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ABHC	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ABHC	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	AENSLF	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	23	UGL	0.0
ORGANICS/WATER/GCMS	UM25	AENSLF	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	23	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ALDRN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ALDRN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANAPNE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANAPNE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANAPYL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANAPYL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANTRC	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ANTRC	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ATZ	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ATZ	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2CEXM	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	6.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2CEXM	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	6.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2CIPE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2CIPE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	B2CLEE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	.68	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2CLEE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	.68	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2EHP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	7.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	B2EHP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	7.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BAANTR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BAANTR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BAPYR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	14	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BAPYR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	14	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBFANT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBFANT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBHC	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBHC	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBZP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	28	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BBZP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	28	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BENSLF	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	42	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BENSLF	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	42	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BENZOA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BENZOA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BGHIPY	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BGHIPY	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BKFANT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BKFANT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	BRMCIL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BRMCIL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BZALC	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	BZALC	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CHRY	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	7.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CHRY	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	7.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6BZ	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6BZ	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6CP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	54	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6CP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	54	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6ET	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CL6ET	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CLDAN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	37	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CLDAN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	37	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMS	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMS	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	10	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMSO	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMSO	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	15	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMSO2	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	CPMSO2	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBAHA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBAHA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	DBCP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBCP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	12	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBHC	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBHC	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBZFUR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DBZFUR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DCPD	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DCPD	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DDVP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DDVP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DEP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DEP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DIMP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DIMP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DITH	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DITH	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.3	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DLDRN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	26	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DLDRN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	26	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DMMP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	130	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DMMP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	130	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DMP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DMP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.2	UGL	0.0

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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	DNBP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	33	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DNBP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	33	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DNOP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	1.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	DNOP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	1.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRNA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRNA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRNK	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ENDRNK	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	6	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ESFSO4	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	50	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ESFSO4	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	50	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FAMPHR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	20	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FAMPHR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	20	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FANT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	24	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FANT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	24	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FLRENE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	FLRENE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	HCBD	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	8.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	HCBD	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	8.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	HPCL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	38	UGL	0.0
ORGANICS/WATER/GCMS	UM25	HPCL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	38	UGL	0.0

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Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	HPCLE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	28	UGL	0.0
ORGANICS/WATER/GCMS	UM25	HPCLE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	28	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ICDPYR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ICDPYR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ISODR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	7.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ISODR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	7.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ISOPHR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	ISOPHR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.4	UGL	0.0
ORGANICS/WATER/GCMS	UM25	KEP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	20	UGL	0.0
ORGANICS/WATER/GCMS	UM25	KEP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	20	UGL	0.0
ORGANICS/WATER/GCMS	UM25	LIN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	7.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	LIN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	7.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MEXCLR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	11	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MEXCLR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	11	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MIREX	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	24	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MIREX	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	24	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MLTHN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	MLTHN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	21	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NAP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NAP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	.5	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NB	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NB	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.7	UGL	0.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	NNDMEA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NNDMEA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NNDNPA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	6.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NNDNPA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	6.8	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NNDPA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	3.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	NNDPA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	3.7	UGL	0.0
ORGANICS/WATER/GCMS	UM25	OXAT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	27	UGL	0.0
ORGANICS/WATER/GCMS	UM25	OXAT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	27	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB016	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB016	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB221	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB221	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB232	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB232	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB242	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB242	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB248	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB248	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB254	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB254	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB260	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCB260	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	13	UGL	0.0

Chemical Quality Control Report
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SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
ORGANICS/WATER/GCMS	UM25	PCP	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PCP	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.1	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PHANTR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	9.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PHANTR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	9.9	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PHENOL	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	2.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PHENOL	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	2.2	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDD	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDD	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDE	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	14	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDE	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	14	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDT	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PPDDT	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	18	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PRTHN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	37	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PRTHN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	37	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PYR	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
ORGANICS/WATER/GCMS	UM25	PYR	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
ORGANICS/WATER/GCMS	UM25	SUPONA	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	19	UGL	0.0
ORGANICS/WATER/GCMS	UM25	SUPONA	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	19	UGL	0.0
ORGANICS/WATER/GCMS	UM25	TXPHEN	WD0910X1	UC02141	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
ORGANICS/WATER/GCMS	UM25	TXPHEN	WX0910X1	UC02139	ATML	10-JUL-95	27-JUL-95	<	17	UGL	0.0
METALS/SOIL/CVAA	Y9	HG	DX140100	UC02121	ATQB	10-JUL-95	26-JUL-95		.281	UGG	4.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (NON-FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/SOIL/CVAA	Y9	HG	DD140100	UC02122	ATQB	10-JUL-95	26-JUL-95		.27	UGG	4.0

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TABLE C-20

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/WATER/GFAA	AX8	AS	WJ0910X1	UC02140	ATSA	10-JUL-95	22-AUG-95		3.89	UGL	42.0
METALS/WATER/GFAA	AX8	AS	WE0910X1	UC02142	ATSA	10-JUL-95	22-AUG-95		2.54	UGL	42.0
METALS/WATER/CVAA	CC8	HG	WJ0910X1	UC02140	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL	0.0
METALS/WATER/CVAA	CC8	HG	WE0910X1	UC02142	ATQH	10-JUL-95	27-JUL-95	<	.1	UGL	0.0
METALS/WATER/GFAA	SD18	PB	WJ0910X1	UC02140	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL	0.0
METALS/WATER/GFAA	SD18	PB	WE0910X1	UC02142	ATSB	10-JUL-95	21-AUG-95	<	4.47	UGL	0.0
METALS/WATER/GFAA	SD25	SE	WJ0910X1	UC02140	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL	0.0
METALS/WATER/GFAA	SD25	SE	WE0910X1	UC02142	ATSC	10-JUL-95	22-AUG-95	<	2.53	UGL	0.0
METALS/WATER/ICP	SS12	AG	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	10	UGL	0.0
METALS/WATER/ICP	SS12	AG	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	10	UGL	0.0
METALS/WATER/ICP	SS12	AL	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	112	UGL	0.0
METALS/WATER/ICP	SS12	AL	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	112	UGL	0.0
METALS/WATER/ICP	SS12	BA	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		7.75	UGL	9.5
METALS/WATER/ICP	SS12	BA	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		7.05	UGL	9.5
METALS/WATER/ICP	SS12	BE	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		1.27	UGL	4.8
METALS/WATER/ICP	SS12	BE	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		1.21	UGL	4.8
METALS/WATER/ICP	SS12	CA	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		25900	UGL	6.4
METALS/WATER/ICP	SS12	CA	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		24300	UGL	6.4
METALS/WATER/ICP	SS12	CD	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL	0.0
METALS/WATER/ICP	SS12	CD	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	6.78	UGL	0.0

Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Lower Cold Spring Brook - ADL Samples

SAMPLE DUPLICATES (FILTERED SAMPLES)

Method Description	IRDMIS Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
METALS/WATER/ICP	SS12	CO	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	25	UGL	0.0
METALS/WATER/ICP	SS12	CO	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	25	UGL	0.0
METALS/WATER/ICP	SS12	CR	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL	0.0
METALS/WATER/ICP	SS12	CR	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	16.8	UGL	0.0
METALS/WATER/ICP	SS12	CU	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL	0.0
METALS/WATER/ICP	SS12	CU	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	18.8	UGL	0.0
METALS/WATER/ICP	SS12	FE	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	77.5	UGL	73.2
METALS/WATER/ICP	SS12	FE	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		167	UGL	73.2
METALS/WATER/ICP	SS12	K	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		1340	UGL	7.8
METALS/WATER/ICP	SS12	K	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	1240	UGL	7.8
METALS/WATER/ICP	SS12	MG	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		3850	UGL	5.9
METALS/WATER/ICP	SS12	MG	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		3630	UGL	5.9
METALS/WATER/ICP	SS12	MN	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		43.9	UGL	107.5
METALS/WATER/ICP	SS12	MN	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		146	UGL	107.5
METALS/WATER/ICP	SS12	NA	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95		21900	UGL	5.6
METALS/WATER/ICP	SS12	NA	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95		20700	UGL	5.6
METALS/WATER/ICP	SS12	NI	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL	0.0
METALS/WATER/ICP	SS12	NI	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	32.1	UGL	0.0
METALS/WATER/ICP	SS12	SB	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	60	UGL	0.0
METALS/WATER/ICP	SS12	SB	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	60	UGL	0.0
METALS/WATER/ICP	SS12	TL	WE0910X1	UC02142	ATRY	10-JUL-95	11-AUG-95	<	125	UGL	0.0
METALS/WATER/ICP	SS12	TL	WJ0910X1	UC02140	ATRY	10-JUL-95	11-AUG-95	<	125	UGL	0.0

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                                                         Chemical Quality Control Report
                                                       Installation: Fort Devens, MA (DV)
                                                      Lower Cold Spring Brook - ADL Samples

                                                      SAMPLE DUPLICATES (FILTERED SAMPLES)


                                               IRDMIS
                           IRDMIS              Field
                           Method   Test       Sample     Lab             Sample       Analysis
Method Description         Code     Name       Number     Number   Lot   Date         Date         <       Value Units      RPD
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METALS/WATER/ICP           SS12     V          WE0910X1   UC02142  ATRY  10-JUL-95    11-AUG-95    <        27.6 UGL        0.0
METALS/WATER/ICP           SS12     V          WJ0910X1   UC02140  ATRY  10-JUL-95    11-AUG-95    <        27.6 UGL        0.0

METALS/WATER/ICP           SS12     ZN         WE0910X1   UC02142  ATRY  10-JUL-95    11-AUG-95    <          18 UGL        0.0
METALS/WATER/ICP           SS12     ZN         WJ0910X1   UC02140  ATRY  10-JUL-95    11-AUG-95    <          18 UGL        0.0




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ABB Environmental Services, Inc., (ABB-ES), 1993e. *Final Project Operations Plan for Site Investigations and Remedial Investigations*, Fort Devens, Massachusetts. Prepared for U.S. Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland. Portland, Maine; July.

U.S. Environmental Protection Agency (USEPA), 1988. *Statement of Work for Organics Analysis, SOW No. 2/88.*

U.S. Environmental Protection Agency (USEPA), 1989. *Laboratory Data Validation Functional guidelines for Evaluating Inorganics Analysis*. Prepared for Hazardous Site Evaluation Division, U.S. Environmental Protection Agency. U.S. environmental Protection Agency Data Review Workgroup.

1.0 Introduction

The purpose of this Attachment is to summarize results for quality control samples collected during the July 1995 sampling event conducted at lower Cold Stream Brook, Fort Devens. Four surface water and five sediment samples were collected and analyzed for inorganics, SVOCs, and pesticides using USAEC procedures, and TSS, hardness, alkalinity, TOC, TPHC, and anions (Cl and SO4) using USEPA methods, outlined in Section 1.0 of Appendix C. Quality control samples included laboratory method blanks, rinse blanks, field duplicates, and matrix spikes.

2.0 Quality Control Blanks

Quality control blanks include laboratory method blanks, and field equipment rinse blanks.

2.1 Laboratory Method Blanks

A single lot of data was reported for each method and one method blank was analyzed for each lot/method. Method blank results are presented in Table C-15.

Inorganics:

No target elements were detected in any aqueous method blanks, indicating the laboratory was free of contamination during sample analyses.

Target elements were detected above CRLs in the soil method blank. Detected elements include lead, aluminum, barium, calcium, iron, potassium, magnesium, manganese, vanadium, and zinc. These elements are present in the blank soil used for method blank analyses under the USAEC program and detection of the above elements is not interpreted to indicate laboratory contamination.

Semivolatile Organics:

No target analytes were detected in water method blanks. Two non-target compounds were detected in soil method blanks. Compounds included hexadecanoic acid (C16A) and octadecanoic acid (ODECA). Several unknowns were also reported at low concentrations in soil blanks ranging from 0.3 μg/g to 0.7 μg/g. The presence of these compounds in soil samples is likely related to laboratory introduced contamination.

Pesticides:

No pesticide target compounds were detected in soil method blanks. Isodrin (ISODR) was detected in the water method blank at a very low concentration of 0.007 μg/L. Blank data indicate there was no significant laboratory related contamination in blanks.

USEPA Methods:

No positive detections were reported in TSS, hardness, alkalinity, TOC, of TPHC method blanks.

2.2 Rinse Blanks

Depending on the analytical method, one to three rinse blanks were collected during the July sampling event. Rinse blank results are presented in Table C-16.

Inorganics:

Rinse blanks indicate there was little carryover contamination during sample collection. The only elements detected include iron in one rinse blank at 109 μg/L and zinc in two blanks ranging from 19 μg/L to 86 μg/L.

Semivolatile organics:

No target compounds were detected in any rinse blanks indicating carry over of target analytes due to contaminated equipment did not occur during sample collection. Several unknowns were reported in rinse blanks at low concentrations ranging from 5 μg/L to 20 μg/L.

Pesticides:

The majority of pesticide target compounds were not detected in two rinse blanks. One compound, heptachlor (HPCL), was detected in the sediment rinse blank at 0.229 μg/L. However, heptachlor was not detected in any sample.

USEPA Methods:

No rinse blank contamination was reported in TSS, hardness, alkalinity, TOC, TPHC, or anion blanks.

3.0 Matrix Spike Results

Matrix spike analyses were conducted for inorganics and pesticides only. Results of matrix spike analyses are presented in Table C-17.

Inorganics:

One soil MS/MSD pair was analyzed. Only a small percent of results for target elements fell within the 75% - 125% control limit goals for the project. Recoveries for the majority of target analytes were high. This sample (Field Sample No. DZ140100) was collected from within a Storm Drain System No. 14 during the same field event that lower Cold Stream Brook samples were collected. Based on historic information, sediments in System No. 14 contain high concentrations of elements and some pesticides. The sediment matrix may be very different than sediments in lower Cold Stream Brook and data from DZ140100 will not be used to qualify the accuracy and precision of results of samples collected from lower Cold Stream Brook.

The surface water matrix spike sample (Field Sample No. WM0910X1) had the majority of water matrix spike element recoveries (87%) were within the 75% - 125% control limit goals for the project. High recoveries were reported for arsenic, selenium, and lead. Recoveries for arsenic, selenium, and lead were approximately 2 times the spike values. Based on these results arsenic observed in samples would be considered estimated and biased high. No lead or selenium was detected in surface water samples.

Pesticides:

One matrix spike sample was collected in association with sediments from lower Cold Stream Brook. As outlined above for inorganics, this sample was collected from a different area and may have different matrix characteristics. Fifty percent of spike compounds were within the 50% - 160% recovery control limit goals for the project. Low recoveries were observed for chlordane, methoxychlor, Aroclor 1016, and Aroclor 1260. High recoveries were observed for the MS for DDT. Acceptable recoveries for DDT were reported for the MSD. With the exception of DDT, these compounds were not detected in sediments at lower Cold Stream Brook and no qualification of the results is recommended.

Fifty percent of spike compounds in surface water samples were within spike recovery control limit goals. Low recoveries were reported for endosulfan I, aldrin, heptachlor, and DDT. Recoveries ranged from 36% to 48%. Positive results for endosulfan I, heptachlor, and DDT in surface water samples may be biased low. These compounds were detected in one sample (SSW-95-09K). Recoveries were greater than 30% indicating that usable data were obtained for all target compounds.

3.1 Semivolatile Surrogate Recoveries

Surrogate recovery goals for Fort Devens field investigations were discussed previously in Appendix C, Section 4.0. Surrogate recovery data are summarized for sediment and surface water samples collected from lower Cold Stream Brook in Table C-18. Table C-18 contains results for additional samples within the analytical lot which were collected from sites other than lower Cold Stream Brook; however, only the lower Cold Stream Brook samples are discussed. The first four digits of the Field Sample No. for lower Cold Brook Stream Samples are identified as DX09 for sediments and WX09 for surface waters.

Recoveries of surrogates in surface water samples were within USEPA control limits for all surrogates in all samples. Surrogate recoveries reported in soil samples were within USEPA control limits for 98% of the results. These data indicate that excellent accuracy of measurements were obtained for SVOCs in the sediment and surface water media.

4.0 Field Duplicate Results

Results of field duplicate sample analyses were used to evaluate the precision of the sampling and analysis process. A single surface water duplicate, and a single sediment duplicate were collected. The field duplicate associated with lower Cold Stream Brook sediment samples was collected from a different study area (Area 14 or Area 25) as discussed in Section 3.0 above for matrix spikes. Results from the sediment duplicates are presented below, however, qualification of lower Cold Stream Brook results are not recommended based on results from Area 14. Duplicate RPD goals of less than 50% were used for soils, and RPD goals of 30% were used for water samples. Table C-19 contains analytical results for field duplicate samples. Table C-20 contains analytical results for filtered field duplicate samples.

Inorganics:

Filtered and unfiltered surface water samples were collected from lower Cold Stream Brook. Eighty-seven percent of filtered results had RPDs less than 30%. Results for arsenic, iron, and manganese exceeded the 30% RPD goal. All three elements were detected at concentration just slightly greater than the analytical method CRL. No qualification of filtered data will be done based on these results. Ninety-one percent of unfiltered results had RPDs less than 30%. Results for arsenic and iron exceeded the RPD goals. Arsenic and iron results in unfiltered samples should be considered estimated values.

Ninety-one percent of sediment results met RPD goals indicating good precision of measurement in samples collected during the field effort at Area 14. Manganese and sodium results exceeded RPD goals of 50%. Low concentrations of these elements were present in these samples and no qualification of lower Cold Stream Brook Samples is recommended.

Semivolatile Organics:

All target compounds for method UM25 were non-detect for both the original and duplicate surface water sample indicating complete agreement of results.

The SVOC field duplicate sediment sample associated with lower Cold Stream Brook sediments was collected from Area 25. Ninety-one percent of target compound results met the 50% RPD goal. PAH compounds were the primary target compounds detected. Variability in detected concentrations was observed in four of fourteen (28%) of the detected PAH. These data suggest some variability in results for sediments collected at Area 25, however, the majority of PAH met RPD goals indicating good precision for the majority of PAH results.

Pesticides:

Eighty-eight percent of surface water pesticide results met RPD goals. The majority of detected pesticides were at low concentrations near the CRL. Many of the detected pesticides were not reported in the associated duplicate. These data suggest that surface water pesticide results should be considered estimated values.

Ninety-six percent of target compound RPDs in the sediment duplicate were within percent difference goals. An RPD of 158 was reported for heptachlor epoxide (HPCLE), however, this compound was not detected in any lower Cold Stream Brook samples, and no qualification of results is recommended.

SURVEY DATA

MEA

Civil-Environmental Engineers
& Land Surveyors

MARTINAGE ENGINEERING ASSOCIATES, INC.

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November 14, 1994

Mr. Stanley W. Reed, P.E.
ABB Environmental Services, Inc.
110 Free Street
P. O. Box 7050
Portland, ME 04112-7050

Subject: Multi-Task Work Order
Option #4, Cold Spring Brook
Fort Devens, Massachusetts

Dear Mr. Reed:

Enclosed please an AutoCAD .DWG file for the Cold Spring Brook sediment sampling locations and outfall data at Fort Devens. The following table contains the sediment sampling locations and outfall data for the project:

SEDIMENT LOCATION NUMBER	NORTH COORD.	EAST COORD.	ELEVATION
57D-92-02X	563339.3	578072.3	212.77
CSD-94-01X	560156.3	574498.9	225.73
CSD-94-02X	560110.8	574780.5	224.09
CSD-94-03X	560158.0	575070.9	222.80
CSD-94-04X	561397.1	574918.8	227.42
CSD-94-05X	561387.9	575224.1	224.99
CSD-94-06X	561288.4	575520.5	221.59
CSD-94-07X	561222.1	575653.0	220.28
CSD-94-08X	561218.9	575709.6	219.53
CSD-94-09X	561273.0	575839.8	219.02
CSD-94-11X	561424.8	576062.4	217.55
CSD-94-12X	561452.0	576169.4	217.95

SEDIMENT LOCATION NUMBER	NORTH COORD.	EAST COORD.	ELEVATION
CSD-94-13X	561595.5	576314.5	217.58
CSD-94-14X	561722.2	576460.2	217.75
CSD-94-16X	562008.3	577345.0	215.93
CSD-94-17X	561686.8	576516.2	218.21
CSD-94-18X	562075.6	577301.7	215.27
CSD-94-19X	561741.9	576799.3	217.20
CSD-94-20X	561766.9	576432.9	217.76
CSD-94-21X	563309.8	577509.9	221.73
CSD-94-22X	563387.3	577594.9	226.62
CSD-94-23X	563295.5	577578.0	222.01
CSD-94-24X	563262.3	577730.4	221.04
CSD-94-25X	563192.6	577802.9	221.16
CSD-94-26X	562447.6	577638.7	212.83
CSD-94-27X	562927.0	577861.8	214.00
CSD-94-28X	563481.8	578193.9	213.21
CSD-94-29X	564236.2	578481.5	219.99
CSD-94-30X	564152.6	578452.7	217.97
CSD-94-31X	563786.0	578517.9	215.04
CSD-94-32X	564176.5	578693.5	213.38
CSD-94-33X	564302.6	578869.0	214.60
GRD-94-06X	564622.8	575675.4	229.94
GRD-94-07X	564753.6	575619.8	217.83
INV-12" CONC	563391.9	577595.9	228.84
INV-24" CONC	563391.3	577593.6	227.83
INV-30" CONC SYS 2, 3 & 4	563332.1	577454.3	226.13
INV-12" VC-SYS5	564489.4	575746.6	240.85
INV-10" CLAY-SYS6	561742.3	575750.3	231.41
INV-10" CLAY-SYS6	561741.3	575750.9	230.43

SEDIMENT LOCATION NUMBER	NORTH COORD.	EAST COORD.	ELEVATION
INV-10" CLAY-SYS6	561741.3	575749.8	230.35
INV-12" PVC-SYS8	560397.5	574912.7	227.37
INV-20" CI-SYS7	561292.8	575354.7	222.47
INV-20" CI-SYS7	561331.9	575299.0	223.12
INV-21" CONC-SYS1	564405.4	578341.4	234.13
INV-21" CONC-SYS2	564402.7	578338.2	236.62
INV-60" CONC-SYS9	560271.3	574027.8	224.60
INV-12" CONC	561438.6	574768.9	229.48

In addition to this, you will find a Lotus .WK1 file containing the sediment sampling locations and outfall data for the project as requested. If you have any problems loading the .DWG file or should you have any questions, please feel free to call us.

Very truly yours,

MARTINAGE ENGINEERING ASSOCIATES, INC.

Glenn D. Sprague

Glenn D. Sprague

Enclosure

\GLENN\ABBDEV.OP4

DEVELOPMENT OF ECOLOGICAL SURFACE SOIL PROTECTIVE CONTAMINANT LEVELS

APPENDIX E
DEVELOPMENT OF ECOLOGICAL SURFACE SOIL PROTECTIVE CONTAMINANT LEVELS

No state or federal standards or guidelines exist for surface soil exposure; this medium has therefore been evaluated through comparison of maximum analyte concentrations in surface soils to protective contaminant levels (PCLs) obtained through a computer-generated chronic exposure food chain model. An acceptable level of risk (Hazard Quotient [HQ] equals 1) associated with chronic exposure to each surface soil analyte at Cold Spring Brook was established in order to develop conservative PCLs for the screening level PREs. The PCLs used at Cold Spring Brook are based on a methodology submitted by ABB-ES to the U.S. Army and reviewed by Massachusetts DEP and USEPA Region I. The Lower Cold Spring Brook Data Package PCLs include up-to-date references and regulatory guidance that was unavailable when earlier Fort Devens PREs were conducted.

The terrestrial food chain model was developed to estimate the potential dietary exposure levels of contaminants for several potential receptor species representing trophic levels within the ecological community that may exist at Cold Spring Brook. Indicator receptor species were chosen to represent various taxonomic groups and trophic levels. It was assumed that each species evaluated is representative of other species within a given trophic level at Cold Spring Brook (i.e., a trophic guilding approach was employed).

The following indicator species were selected to represent exposure to terrestrial organisms via ingestion of food and surface soil at Cold Spring Brook: short-tailed shrew (*Blarina brevicauda*), the American woodcock (*Scolopax minor*), the red fox (*Vulpes vulpes*), and the red-tailed hawk (*Buteo jamaicensis*). A site acreage (area of contaminated soil present at the Cold Spring Brook) of 2 acres was used in the PCL calculation. This area is approximately equal to the home range of the short-tailed shrew, and is smaller than the home ranges of the other indicator species evaluated.

Detailed information for each of the above-listed species regarding diet, home-range, and other biological exposure parameters used in the food web model, were obtained from the *Wildlife Exposure Factors Handbook* (USEPA, 1994) and other literature sources, and are provided in table E-1.

The food-chain model was used to estimate contaminant levels in various primary prey items (e.g., invertebrates and plants) consumed by each receptor species. Estimated contaminant tissue residues in each prey species were estimated using specific bioaccumulation factors (BAFs), as shown in the following equation:

$$\text{Prey Tissue Concentration (mg/kg)} = \text{Soil Concentration (mg/kg)} \times \text{Bioaccumulation Factor (BAF)}$$

Other BAFs were used to estimate tissue concentrations in secondary prey items such as small birds and rodents. The BAF data base is presented in Table E-2. For BAF derivation, when possible, chemical- and taxon-specific bioaccumulation data for plants, invertebrates, mammals, and birds were obtained from the literature. When these data were unavailable, BAFs were calculated using structure-activity relationships (SAR) or were obtained from empirical data or extrapolations, as described below.

- For plants, when literature values were unavailable, plant BAFs for semi-volatile organic chemicals and pesticides were calculated using a regression equation from Travis and Arms (1988) that is based on the uptake of organic contaminants into plant tissue. Log K_{ow}s ≥ 5 of the following classes of compounds were averaged to provide one BAF for that compound class: PAHs, phthalates, phenols, and furans. Based on evidence provided by Suter (1993) which suggests that compounds with log K_{ow}s less than 5 do not bioaccumulate in plants, BAFs for compounds or classes of compounds with log K_{ow}s less than 5 were conservatively assumed to be 0.02. Plant BAFs for inorganic chemicals were obtained from Baes et al. (1984).

- For terrestrial invertebrates, when literature values were unavailable, a single BAF for PAHs was calculated using data presented in Beyer (1990); dry weight was converted to wet weight assuming earthworms are 80% water. This value was used as a surrogate for all semivolatile compounds.

- For small mammals, when literature values were unavailable for semivolatile organic compounds, BAFs for small mammals were estimated using a regression equation based on the uptake of organic contaminants into beef tissue from Travis and Arms (1988). Log K_{ow}s ≥ 5 of the following classes of compounds were averaged to provide one BAF for that compound class: PAHs, phthalates, phenols, and furans. BAFs for inorganics were derived from ingestion-to-beef biotransfer factors (BTFs) presented in Baes et al. (1984)

- For small birds, when literature values were unavailable, the small mammal BAF value was used as a surrogate.

The potential dietary exposure (PDE) level, for each modeled receptor species, was calculated by multiplying each predicted prey species tissue concentration by the proportion of that prey type in the diet, summing these values, adding soil exposure, and multiplying by the Site Foraging Frequency (SFF) of the given receptor species. Incidental soil ingestion associated with foraging, preening, and cleaning activities, was conservatively assumed to represent five percent of total dietary intake. The PDE is represented by the following equation:

$$\boxed{PDE = [P_1 \times T_1 + P_2 \times T_2 + ... + P_n \times T_n + soil\ exposure] \times SFF}$$

where:

PDE = **Potential dietary exposure (mg/kg)**

P_n = **Percent of diet composed of prey item n**

T_n = Tissue concentration in prey item n (mg/kg)
Soil Exposure = (0.05)(Soil concentration in mg/kg)
SFF = Site Foraging Frequency; Area of Contaminated Soil (acres)/Home range (acres)

Finally, the potential dietary exposure for each receptor species was multiplied by the receptor-specific ingestion rate and divided by the estimated body weight to calculate a Total Body Dose (TBD):

$$\boxed{TBD = PDE \times IR \times \frac{1}{BW}}$$

where:

TBD = Total Body Dose (mg/kgBW-day)
PDE = Potential dietary exposure (mg/kg)
IR = Ingestion rate (kg/day)
BW = Body weight (kg)

Because the TBD estimates are normalized to the ingestion and body weight of the particular receptor being evaluated, they are directly comparable to estimated Reference Toxicity Values (RTVs) derived from the literature. The comparison of the TBD estimate with the appropriate RTV results in an index (the Hazard Index) of potential impact associated with exposure to that particular chemical.

Toxicity data evaluated for terrestrial receptors consists of acute and chronic oral ingestion studies which were preferentially chosen in the following order: 1) feeding studies, 2) gavage studies, 3) drinking water studies. Based on these data, RTVs were developed to represent a threshold dosage for effects to terrestrial organisms. RTVs are expressed in mg/kg BW (body weight)/day (dose normalized to body weight). From the toxicological data base (Table E-3), chemical-specific toxicity values for analytes detected in Cold Spring Brook surface soil were selected as the RTVs (Table E-4) for each type of receptor (indicator species) evaluated.

The RTV selection procedure included the following general guidelines:

- When taxon-specific data were unavailable, available toxicological data were used as surrogate toxicological benchmarks for various indicator species (e.g., a value from a sublethal avian study was used for an avian receptor RTV, regardless of avian species tested in the study). Acceptable canine toxicity values were preferentially chosen to represent red fox and raccoon RTVs.

- RTVs were generally based on the reported Lowest Observed Adverse Effect Level (LOAEL) for endpoints from chronic or subchronic studies (i.e., those lasting >14 days). When LOAEL data were unavailable, No Adverse Effect Level (NOAEL) data from subchronic or chronic studies were used. Sensitive endpoints such as reproductive toxicity, were preferentially selected as RTVs because they relate most directly to the selected assessment endpoints (e.g., population declines). Mortality data were generally not selected for RTVs because they do not represent the most sensitive endpoints (e.g., reproductive effects should occur at lower dose levels than those required to cause mortality), and were used only when chronic or sub-chronic studies which evaluated non-lethal endpoints were unavailable.

- When no chronic or sub-chronic duration studies were available for RTV derivation for any terrestrial receptor type, acute study values were used to estimate benchmark values. In these cases, a factor of 0.2 was applied to the acute mortality endpoint (e.g., the LD_{50}) and a factor of 0.1 was then applied to that value for conservatively extrapolating from acute to chronic values (the acute-chronic ratio for many chemicals is approximately 10 [Newell et al., 1987]).
- When acceptable study results were unavailable, the CPC was assigned an appropriate surrogate chemical for which adequate toxicological data exists (e.g., 4,4'-DDT was used as a surrogate for 4,4'-DDD and 4,4'-DDE).
- Efforts were made to avoid deriving RTVs based on carcinogenicity as an endpoint. For some PAHs, however, no other data were available. Therefore, all PAHs were assigned the RTV for benzo(a)pyrene, which is based on a reproductive endpoint, as a surrogate.

Development of Protective Contaminant Levels (PCLs)

In order to develop PCLs, an acceptable level of risk associated with exposure to each contaminant (Hazard Quotient [HQ] = 1) was multiplied by the particular contaminant-specific RTV to estimate a Target Intake Dosage (TID), expressed as mg/kgBW-day, as shown by the following equation:

$$\boxed{TR \times RTV = TID}$$

TR = **Target Risk (HQ = 1.0)**
RTV = **Reference Toxicity Value (mg/kgBW-day)**
TID = **Target Intake Dosage (mg/kgBW-day)**

The TID was multiplied by the Dietary Contribution Factor (DCF) (the inverse of the equation used to derive TBD) to estimate the PCL of the particular contaminant, as shown by the following equation:

$$\boxed{TID \times DCF = PCL}$$

TID = Target Intake Dosage (mg/kgBW-day)
DCF = Dietary Contribution Factor (kgBW-day/kg)
PCL = Protective Contaminant Level (mg/kg)

PCLs were developed for all analytes for each of the terrestrial receptor organisms evaluated through the food chain model; these PCLs are presented in Table E-5. The lowest resultant PCLs were selected as the PCL values for use in these PREs. For the majority of the contaminants evaluated, the short-tailed shrew (due to its small home range, voracious appetite, and insectivorous diet) was found to be the ecological receptor species with the lowest PCL. The PCL values used in the risk evaluation represent the concentration of each analyte in surface soil that, if not exceeded, is expected to be protective of all terrestrial organisms. The calculated PCL values for some higher trophic level receptors exceeded a soil level of 50% contaminant for some analytes, suggesting that the analyte poses no risk to the receptor. The PCL values for these analytes have been denoted as "No Effects Likely" (NEL) in Table E-5.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

American woodcock -- *Scolopax minor*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Territory size 7.9 to 187 acres.		63 acres [b]
Exposure duration (unitless)	Summer resident, migrant. Mar.- Nov.; Arrives in northern range in early March and leaves in late September		0.75
Diet	68% earthworms; 16% beetles, flies, and insects, 5% other animals, and 10% plants.		Invertebrates: 85% Plants: 10% Soil: 5%
Ingestion rate (kg/day)			0.13 kg fresh weight/day
Body weight (kg)			0.17 kg
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.1 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all birds: $L = 0.059 * BW(kg)^{0.67}$		0.018 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

American robin -- *Turdus migratorius*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Foraging home range for summer adults feeding nestlings = 0.15 ha, for fledglings = 0.81 ha		1.2 acres [b]
Exposure duration (unitless)	Summer resident, migrant. Mar.-Nov.		0.75
Diet	Adult birds in the eastern U.S.; diet is 32% invertebrates and 68% plants.		Invertebrates: 30% Plants: 65% Soil: 5%
Ingestion rate (kg/day)			0.097 kg fresh weight/day [b]
Body weight (kg)	0.0648 - 0.0842 kg		0.081 kg [b]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.059 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all birds: $L = 0.059 * BW(kg)^{0.67}$		0.011 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Short-tailed shrew -- *Blarina brevicauda*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)			0.9 acres [b]
Exposure duration (unitless)	Active year-round; longevity is less than 5 months to as much as 20 months.		1.0
Diet	Diet consists of 61% to 70.5% invertebrates, 11% to 13% vegetation, and approximately 15% "miscellaneous other".		Plants: 15% [c] Invertebrates: 80% [c] Soil: 5%
Ingestion rate (kg/day)	Reported values of 7.95 g/day and 0.49 to 0.62 g/BW-day		0.0087 kg fresh weight/day [b]
Body weight (kg)			0.017 kg [b]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.5458 * BW(kg)^{0.8}$		0.021 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.0025 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

[c] The 15% of the dietary intake that is "miscellaneous" was accounted for by including 5% soil ingestion, and adding an additional 5% intake to plant ingestion and an additional 4% intake to invertebrate ingestion.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Red fox -- *Vulpes vulpes*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)			2600 acres
Exposure duration (unitless)	Active year-round		1.0
Diet	Diet consists of 37% (summer) to 92% (spring) small mammals, 2% (spring) to 43% (summer) birds and eggs, up to 11% invertebrates, and up to 16% vegetation.		Plants: 16% Invertebrates: 4% Small mammals: 61% Birds: 14% Soil: 5%
Ingestion rate (kg/day)	Average of ingestion rates for free-ranging fox		0.41 kg fresh weight/day [b]
Body weight (kg)			4.3 kg [b]
Daily inhalation rate (m^3/day)			1.8 m^3/day [b]
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.37 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Red-tailed hawk -- *Buteo jamaicensis*

Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Range of reported values is 150 to 2512 ha		500 acres [b]
Exposure duration (unitless)	Active year-round		1.0
Diet	Small mammals, nesting birds, insects, carrion, domestic animals.		Plants: 2% Invertebrates: 1% Small mammals: 74% Birds: 18% Soil: 5%
Ingestion rate (kg/day)			0.11 kg fresh weight/day [c]
Body weight (kg)			1.1 kg [c]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.44 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.063 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Selected as conservative value. Actual range may be greater.

[c] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

American woodcock -- *Scolopax minor*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Territory size 7.9 to 187 acres.		63 acres [b]
Exposure duration (unitless)	Summer resident, migrant. Mar.- Nov.; Arrives in northern range in early March and leaves in late September		0.75
Diet	68% earthworms; 16% beetles, flies, and insects, 5% other animals, and 10% plants.		Invertebrates: 85% Plants: 10% Soil: 5%
Ingestion rate (kg/day)			0.13 kg fresh weight/day
Body weight (kg)			0.17 kg
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.1 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all birds: $L = 0.059 * BW(kg)^{0.67}$		0.0181/day

[a] All values derived from USEPA (1993) unles otherwise indicated.
[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

American robin -- *Turdus migratorius*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Foraging home range for summer adults feeding nestlings = 0.15 ha, for fledglings = 0.81 ha		1.2 acres [b]
Exposure duration (unitless)	Summer resident, migrant. Mar.-Nov.		0.75
Diet	Adult birds in the eastern U.S.; diet is 32% invertebrates and 68% plants.		Invertebrates: 30% Plants: 65% Soil: 5%
Ingestion rate (kg/day)			0.097 kg fresh weight/day [b]
Body weight (kg)	0.0648 - 0.0842 kg		0.081 kg [b]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.059 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all birds: $L = 0.059 * BW(kg)^{0.67}$		0.011 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.
[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Short-tailed shrew -- *Blarina brevicauda*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)			0.9 acres [b]
Exposure duration (unitless)	Active year-round; longevity is less than 5 months to as much as 20 months.		1.0
Diet	Diet consists of 61% to 70.5% invertebrates, 11% to 13% vegetation, and approximately 15% "miscellaneous other".		Plants: 15% [c] Invertebrates: 80% [c] Soil: 5%
Ingestion rate (kg/day)	Reported values of 7.95 g/day and 0.49 to 0.62 g/BW-day		0.0087 kg fresh weight/day [b]
Body weight (kg)			0.017 kg [b]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.5458 * BW(kg)^{0.8}$		0.021 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.0025 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

[c] The 15% of the dietary intake that is "miscellaneous" was accounted for by including 5% soil ingestion, and adding an additional 5% intake to plant ingestion and an additional 4% intake to invertebrate ingestion.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Red fox -- *Vulpes vulpes*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)			2600 acres
Exposure duration (unitless)	Active year-round		1.0
Diet	Diet consists of 37% (summer) to 92% (spring) small mammals, 2% (spring) to 43% (summer) birds and eggs, up to 11% invertebrates, and up to 16% vegetation.		Plants: 16% Invertebrates: 4% Small mammals: 61% Birds: 14% Soil: 5%
Ingestion rate (kg/day)	Average of ingestion rates for free-ranging fox		0.41 kg fresh weight/day [b]
Body weight (kg)			4.3 kg [b]
Daily inhalation rate (m^3/day)			1.8 m^3/day [b]
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.37 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.

[b] Average of reported values.

TABLE E-1
EXPOSURE PARAMETERS FOR INDICATOR SPECIES

Red-tailed hawk -- *Buteo jamaicensis*			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Range of reported values is 150 to 2512 ha		500 acres [b]
Exposure duration (unitless)	Active year-round		1.0
Diet	Small mammals, nesting birds, insects, carrion, domestic animals.		Plants: 2% Invertebrates: 1% Small mammals: 74% Birds: 18% Soil: 5%
Ingestion rate (kg/day)			0.11 kg fresh weight/day [c]
Body weight (kg)			1.1 kg [c]
Daily inhalation rate (m^3/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.44 m^3/day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.063 l/day

[a] All values derived from USEPA (1993) unles otherwise indicated.
[b] Selected as conservative value. Actual range may be greater.
[c] Average of reported values.

TABLE E-2
BIOACCUMULATION DATABASE

				BIOACCUMULATION FACTOR (BAF) [a							
CHEMICAL	log K_{ow} [Source] [b]			Invert [c]		Plant [d]		Small Mammal [e]		Small Bird [f]	
SEMIVOLATILES											
1,4-Dichlorobenzene	3.5		3.5	5.0E-02		2.0E-02		4.8E-03		4.8E-03	
2,4,6-Trichlorophenol	3.7		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
2,4-Dinitrotoluene	2.1		2.1	5.0E-02		2.0E-02		1.9E-04		1.9E-04	
2,6-Dinitrotoluene	2.1		2.1	5.0E-02		2.0E-02		1.9E-04		1.9E-04	
2-Methylnaphthalene	-1.9		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
2-Methyphenol	2		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
2-Nitrophenol	1.9		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
3-Nitroaniline	1.4		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
4-Chloroaniline	1.8		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
4-Chloro-3-methylphenol	3.1		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
4-Methyphenol	1.9		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
4-Nitroaniline	1.4		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
4-Nitrophenol	1.9		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
Acenaphthene	3.9		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Acenaphthylene	4.1		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Anthracene	4.5		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Benzo(a)anthracene	5.7		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Benzo(a)pyrene	6		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Benzo(b)fluoranthene	6.1		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Benzo(g,h,i)perylene	6.6		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Benzo(k)fluoranthene	6.1		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Bis(2-ethylhexyl)phthalate	5.1		5.5	5.0E-02		5.1E-03		4.8E-01		4.8E-01	
Butylbenzylphthalate	4.9		5.5	5.0E-02		5.1E-03		4.8E-01		4.8E-01	
Carbazole	3.76	[1]	5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Chrysene	5.7		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Dibenzofuran	4.1		4.1	5.0E-02		2.0E-02		1.9E-02		1.9E-02	
Dibenz(a,h)anthracene	6.5		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Diethylphthalate	3.2		5.5	5.0E-02		5.1E-03		4.8E-01		4.8E-01	
Di-n-butylphthalate	5.2		5.5	5.0E-02		5.1E-03		4.8E-01		4.8E-01	
Di-n-octylphthalate	9.2		5.5	5.0E-02		5.1E-03		4.8E-01		4.8E-01	
Fluoranthene	4.95	[2]	5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Fluorene	4.2		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Indeno(1,2,3-c,d)pyrene	6.6		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Naphthalene	3.6		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Nitrobenzene	1.9		1.9	5.0E-02		2.0E-02		1.2E-04		1.2E-04	
N-Nitrosodiphenylamine	3.1		3.1	5.0E-02		2.0E-02		1.9E-03		1.9E-03	
Phenanthrene	4.5		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
Phenol	1.5		1.7	5.0E-02		2.0E-02		7.6E-05		7.6E-05	
Pyrene	5.3		5.1	5.0E-02		8.7E-03		1.9E-01		1.9E-01	
2,4,6-Trinitrotoluene	1.6		1.6	5.0E-02		2.0E-02		6.0E-05		6.0E-05	
PESTICIDES/PCBs											
4,4'-DDD	6			3.3E+00	[g]	1.3E-03	[h]	1.2E+00	[j]	2.9E+00	[i]
4,4'-DDE	5.7			1.7E+00	[g]	2.0E-03	[h]	1.2E+00	[j]	2.9E+00	[i]
4,4'-DDT	6.4			5.7E-01	[g]	7.7E-04	[h]	1.2E+00	[j]	2.9E+00	[i]
Aldrin	3			5.6E-01	[k]	2.0E-02		2.9E+00	[i]	2.9E+00	
Aroclor-1254	6	[3]		5.8E+00	[l]	6.1E-03	[m]	3.8E+00	[n]	3.2E-01	[o]
Aroclor-1260	7.1	[3]		5.8E+00	[l]	6.1E-03	[m]	3.8E+00	[n]	3.2E-01	[o]
BHC-alpha	3.8			2.6E+00	[p]	2.0E-02		2.9E+00	[i]	2.9E+00	
BHC-beta	3.8			2.6E+00	[p]	2.0E-02		2.9E+00	[i]	2.9E+00	
BHC-delta	4.1			2.6E+00	[p]	2.0E-02		2.9E+00	[i]	2.9E+00	
BHC-gamma (Lindane)	4.1			2.6E+00	[k]	2.0E-02		2.9E+00	[i]	2.9E+00	
Chlordane-alpha	5.5			1.6E+00	[q]	5.1E-03		5.5E-01	[r]	1.8E+00	[s]
Chlordane-gamma	5.5			1.6E+00	[t]	5.1E-03		5.5E-01	[r]	1.8E+00	[s]
Dieldrin	4.6			5.5E+00	[k]	2.0E-02		1.5E+00	[u]	4.4E-01	[v]
Endosulfan I	3.6			5.5E+00	[w]	2.0E-02		2.9E+00	[i]	2.9E+00	
Endosulfan II	3.6			5.5E+00	[w]	2.0E-02		2.9E+00	[i]	2.9E+00	
Endosulfan sulfate	3.1			5.5E+00	[w]	2.0E-02		2.9E+00	[i]	2.9E+00	
Endrin	5.6			1.9E+00	[t]	4.5E-03		2.9E+00	[i]	2.9E+00	
Endrin aldehyde	3.14	[4]		1.9E+00	[x]	2.0E-02		2.9E+00	[i]	2.9E+00	
Endrin ketone	3.14	[4]		1.9E+00	[x]	2.0E-02		2.9E+00	[i]	2.9E+00	

TABLE E-2
BIOACCUMULATION DATABASE

CHEMICAL	log K_{ow} [Source] [b]	BIOACCUMULATION FACTOR (BAF) [a							
		Invert [c]		Plant [d]		Small Mammal [e]		Small Bird [f]	
Heptachlor	4.3	1.0E+00	[y]	2.0E-02		2.9E+00	[i]	2.9E+00	
Heptachlor epoxide	5.4	1.0E+00	[t]	5.9E-03		2.9E+00	[i]	2.9E+00	
Methoxychlor	4.8	5.7E-01	[z]	2.0E-02		2.9E+00	[i]	2.9E+00	
INORGANICS									
Aluminum	-	7.5E-02	[aa]	6.0E-03	[ab]	7.5E-02	[ac]	7.5E-02	
Antimony	-	5.0E-02	[aa]	4.0E-02	[ad]	5.0E-02	[ac]	5.0E-02	
Arsenic	-	6.6E-03	[ae]	2.5E-01	[ab]	1.0E-01	[ac]	1.0E-01	
Barium	-	7.5E-03	[aa]	2.5E-02	[ab]	7.5E-03	[ac]	7.5E-03	
Beryllium	-	5.0E-02	[aa]	2.0E-03	[ad]	5.0E-02	[af]	5.0E-02	
Cadmium	-	1.1E+01	[l]	4.0E-01	[ab]	2.1E+00	[ac]	3.8E-01	[ag]
Chromium	-	1.6E-01	[l]	6.3E-03	[ab]	2.8E-01	[ac]	2.8E-01	
Cobalt	-	1.0E+00	[aa]	9.3E-03	[ab]	1.0E+00	[ac]	1.0E+00	
Copper	-	1.6E-01	[l]	6.0E-02	[ab]	6.0E-01	[ah]	6.0E-01	
Cyanide	-	0.0E+00	[ai]	1.0E+00	[aj]	0.0E+00	[ai]	0.0E+00	
Lead	-	[ak]		5.6E-02	[al]	1.5E-02	[ac]	1.5E-02	
Manganese	-	2.0E-02	[aa]	1.3E-01	[ab]	2.0E-02	[ac]	2.0E-02	
Mercury	-	6.8E-02	[am]	4.9E-02	[ab]	1.0E-02	[an]	2.3E+00	[an]
Nickel	-	2.3E-01	[ao]	1.4E-02	[al]	3.0E-01	[ac]	3.0E-01	
Selenium	-	7.6E-01	[ae]	1.6E-01	[ab]	7.5E-01	[ac]	5.1E-01	[ap]
Silver	-	1.5E-01	[aa]	8.0E-02	[ad]	1.5E-01	[ac]	1.5E-01	
Thallium	-	2.0E+00	[aa]	8.0E-03	[ad]	2.0E+00	[ac]	2.0E+00	
Tin	-	1.5E+00	[aa]	6.0E-03	[ad]	1.5E+00	[ac]	1.5E+00	
Vanadium	-	1.3E-01	[aa]	1.1E-03	[ad]	1.3E-01	[ac]	1.3E-01	
Zinc	-	1.8E+00	[l]	9.3E-01	[ab]	2.1E+00	[aq]	2.1E+00	

Notes:

[a] Units for bioaccumulation factors (BAFs) are (mg/kg fresh wt tissue over mg/kg dry wt soil) for invertebrates and plants, and (mg/kg fresh wt tissue over mg/kg fresh wt. food) for small mammals and small birds. No BAFs were calculated for VOAs since available e suggests that these analytes do not bioaccumulate.

[b] From Superfund Chemical Data Matrix (USEPA, 1993) unless otherwise noted. Log Kšdow›s for classes of semivolatile compounds were averaged to provide an average BAF value. Compounds were grouped accordingly: PAHs (5.1), phthalates (5.5), phenols (1.7), 2,4/2,6-DNT (2.1), dibenzofuran (4.1), nitrobenzene (1.9), N-nitrosodiphenylamine (3.1), and 2,4,6-TNT (1.6).

- [1] Hansch and Leo (1979)
- [2] USEPA (1992), Dermal Exposure Guidance.
- [3] USEPA (1990) - Basics of Pump-and-Treat Ground-Water Remediation Technology
- [4] Arthur D. Little, Inc. (1981).

[c] Average of earthworm BAFs (Beyer, 1990) converted from dry weight to wet weight assuming earthworm is 80% water, unless otherwise noted.

[d] Plant BAF calclulated using the following equation presented by Travis and Arms (1988) unless otherwise noted: log (Plant Uptake Factor)=1.588-0.578 log Kow; if log Kow < 5, BAF assumed to be 0.02 assuming plants are 80% water.

[e] Calculated using the following equation by Travis and Arms (1988) unless otherwise noted: log (biotransfer factor) = log Kow-7.6. BTF converted to BAF by multiplying by average food ingestion rate of 12 kg/d. BAF converted from wet/dry wt to wet/wet wt assuming food is 80% water.

[f] Small mammal BAF value used unless otherwise noted.

[g] Geometric means of 4,4'-DDT [Davis (1968), Davis & Harrison (1966), Wheatley & Hardman (1968), Bailey et al. (1970), Cramp & Olney (1967), and Beyer & Gish (1980)], 4,4'-DDE [Davis (1968), Davis & Harrison (1966), Cramp & Olney (1967), Collett & Harrison (1968), Hunt & Sacho (1969), and Gish (1970)], and 4,4-DDD [Barker (1958), Davis (1968), Davis & Harrison (1966), Cramp & Olney (1967), Collett & Harrison (1968), Wheatley & Hardman (1968), Hunt & Sacho (1969), Bailey et al. (1970), Dimond et al. (1970), Gish (1970), and Beyer & Gish (1980)] reported for earthworms. Dry soil concentrations calculated assuming 10% moisture content in sandy-loam soils (Donahue et al., 1977).

[h] Geometric mean of 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE BAFs (fresh wt/dry wt) reported for roots (carrot, potato, sugar beet), grains (corn, oats), and legumes (alfalfa) derived from USEPA (1985) converted from dry weight to wet-weight per values provided by Suter (1993).

[i] Whole-body pheasant BAF for 4,4'-DDT presented in USEPA (1985); derived from Kenaga (1973). Used as surrogate for other pesticides for both birds and mammals.

[j] BAF for shrews and voles calculated using measured concentrations of DDTšdR› in stomach content and in whole body (Forsyth & Petrle, 1984).

[k] Geometric mean of reported BAFs for earthworms (Edwards & Thompson, 1973). Values provided by Gish (1970) were converted from dry weight to wet weight by multiplying by a conversion factor of 0.2 assuming 80% water composition of earthworms.

[l] BCF for earthworms from Diercxsens et al. (1985).

[m] Plant uptake factor for a PCB congener (2,5,4'-trichlorobiphenyl) from Crossland, Bennett, and Wolff (1987) for uptake from sediment into pondweed and starwort. Laboratory-derived value for 28 days used as representative of equilibrium conditions. Converted from dry weight plant tissue to wet weight by applying a factor of 0.2 (assuming plant is 80% water).

[n] BAF calculated from discussion in Eisler (1986) stating that Aroclor 1254 residues in subcutaneous fat of adult minks were up to 38 times dietary levels. Converted to whole body concentrations assuming 10% lipid content.

[o] BAF calculated from data presented in Eisler, 1986. Kestrels fed 33 mg PCB/kg diet for 62-69 days accumulated 107 mg PCB/kg lipid weight in muscle. Assuming muscle is 10% lipid content, the muscle concentration is about 10.7 mg/kg.

TABLE E-2
BIOACCUMULATION DATABASE

Notes, (cont):
[p] Value for gamma-BHC used as a surrogate
[q] Value for gamma-chlordane used as a surrogate
[r] BAF calculated from data presented in Eisler, 1990. Rats fed 20 mg/kg diet technical chlordane (equivalent to 3.6 mg/kg diet cis- and trans-chlordane) for 350 days accumulated 20 mg/kg in lipids. Assuming 10% lipid content, the whole body concentration is about 2 mg/kg.
[s] BAF calculated from data presented in Eisler, 1990. Red-winged blackbirds fed 10 mg/kg diet technical chlordane (equivalent to 1.8 mg/kg diet cis- and trans- chlordane) for 84 days accumulated 1.8 mg/kg wet weight whole body residue.
[t] Geometric mean of reported BAFs for earthworms (Gish, 1970) converted from dry weight to wet weight assuming 80% water composition of earthworms.
[u] BAF calculated from data presented by Potter et al (1974). Based on an average dieldrin concentration in cow muscle and fat of 0.17 mg/kg (dry weight) and a dieldrin concentration of 0.11 mg/kg in the diet (dry weight).
[v] Jeffries and Davis (1968).
[w] Value for dieldrin used as a surrogate.
[x] Value for endrin used as a surrogate.
[y] Value for heptachlor epoxide used as a surrogate.
[z] Value for 4,4'-DDT used as a surrogate.
[aa] Prey-specific value not available; value shown is small mammal BAF for this chemical.
[ab] Plant BAFs derived from an uptake study (Cherry & Guthrie, 1979) with two sedge species that were exposed to contaminated sediment. Converted from dry weight plant tissue to wet weight by applying a factor of 0.2 (assuming plants are 80% water).
[ac] Value derived from biotransfer factors (BTFs), presented in Baes et al. (1984) for uptake into cattle. BTF converted to BAF by multiplying by food ingestion rate of 50 kg/day wet weight.
[ad] Value from Baes et al. (1984) multiplied by 0.2 to represent 80% water composition of plants.
[ae] Average of values for industrial soils from Beyer and Cromartie (1987) multiplied by 0.2 to represent 80% water composition in earthworms.
[af] Mean of values reported for šiSorex araneus› in MacFadyen (1980).
[ag] Based on accumulation of cadmium in kidneys of European quail in Pimentel et al. (1984).
[ah] Mammal value for copper and plant value for cadmium from Levine et al., 1989. Lead does not accumulate in plant tissue, therefore, a BAF of zero was assigned.
[ai] Cyanide has not been shown to bioaccumulate in any organisms.
[aj] Cyanide is naturally occurring in some plants; the extent to which it is taken up from soil is unknown and therefore a BAF of 1 is conservatively assumed.
[ak] BAF from regression equation for worms derived from Corp and Morgan (1991):

$$\log Y = 1.16 + 0.916 \log(X) - 0.326 \log(Ca)$$

Where: tissue concentration.
X = average or maximum site soil lead concentration (mg/kg).
Ca = average site soil calcium concentration (mg/kg).

Y is converted from dry weight to wet weight by multiplying Y by 0.2 (assuming worm is 80% water). This value is then divided by the lead concentration.
[al] Values for lead and nickel from Mudroch & Capobianco (1979) represent an average of BAFs from sediment in several lakes, rivers, and bays into water lilies. Values converted from dry weight plant tissue to wet weight by applying a factor of 0.2 (assuming plants are 80% water).
[am] Uptake value (fresh wt./dry wt.) for earthworms from USEPA (1985c) sludge document. Fresh weight tissue concentrations calculated assuming 80% body water content.
[an] USEPA, 1985c.
[ao] Value from nickel sludge document (USEPA, 1985) multiplied by 0.2 to represent 80% water composition of earthworms.
[ap] Based on average of reported ratio of selenium in diet to liver, kidney, and breast tissue of chickens (Eisler, 1985a).
[aq] Mean of values for šiMicrotus agrestis› and šiApodemus sylvaticus› in MacFadyen (1980).
NC = Not Calculated
NA = Not Available

TABLE E-3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
VOLATILE ORGANIC COMPOUNDS									
1,1,1-Trichloroethane (surrogate for 1,1,2-TCA)			90		Guinea Pig	Oral (subchronic)	90 days	Hepatotoxicity	IRIS, 1991
	10300	2060 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
1,1,2,2-Tetrachloroethane		250			Rat	Single oral dose		Mortality	ATSDR, 1988
			3.2		Rat	Oral (subchronic)	27 weeks	Irreversible testicular damage	ATSDR, 1988
1,1-Dichloroethene (surrogate for 1,2-DCE)	200	40 [a]			Rat	Single oral dose		Mortality	IRIS, 1988
			9		Rat	Oral (chronic)	2 years	Liver lesions	IRIS, 1988
1,2-Dichloroethane (surrogate for 1,1-dichloroethane)	670	130 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
	489	100 [a]			Mouse	Single oral dose		Mortality	NIOSH, 1985
			120		Rat	Oral (subchronic)	13 weeks	NOAEL for reproductive effects	ATSDR, 1992
2-Butanone (surrogate for 2-hexanone and 4-methyl-2-pentanone)				173	Rat	Oral (subchronic)	13 weeks	NOAEL for neurological effects	ATSDR, 1990
	2737	550 [a]			Rat	Single oral dose		Mortality	ATSDR, 1990
Acetone	9750	1950 [a]			Rat	Single oral dose		Mortality	Sax, 1984
			500		Rat	Oral (subchronic)	90 days	Increased liver/kidney weight; nephrotoxicity	IRIS, 1993
Benzene	3800	760 [a]			Rat	Single oral dose		Mortality	TDB, 1984
			10		Rat	Oral (chronic)	187 days	Hematopoietic effects	USEPA, 1984
Carbon disulfide				11	Rabbit	Converted inhalation	34 weeks	NOAEL for Fetotoxicity/malformations	IRIS, 1991
Carbon tetrachloride			7.1		Rat	Oral (chronic)	12 weeks	Liver lesions	IRIS,1991
	2800	560 [a]			Rat	Single oral dose		Mortality	Sax, 1984
Chlorobenzene			100		Rat	Oral (subchronic)	93-99 days	Increased liver and kedney weight	USEPA, 1984
			136.3		Dog	Oral (subchronic)	13 weeks	Histopathological changes in liver	IRIS, 1991
			89.3		Mouse	Oral (subchronic)	13 weeks	Increased liver weight, hepatic necrosis	USEPA, 1984
Chloroform			12.9		Dog (beagle)	Oral (chronic)	7.5 years	Liver cyst formation	IRIS,1991
Ethylbenzene			291		Rat	Oral (subchronic)	182 days	Liver and kidney toxicity	IRIS, 1991
	3500	700 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
Methylene chloride			52.6	5.9	Rat	Oral (chronic)	2 years	Liver toxicity	IRIS,1991
				12.5	Rat	Oral (subchronic)	3 months	Mortality, blood chemistry, histopathology	USEPA, 1984
	1900	380 [a]			Rabbit	Single oral dose		Mortality	Sax, 1984
Styrene			285	95	Rat	Oral (chronic)	120 weeks	Reduced growth; increased liver/kidney weights	IRIS, 1991
			400	200	Dog	Oral (subchronic)	19 months	Histopathologic liver effects; RBC effects	IRIS, 1991
	>5000	1000 [a]			Rat	Single oral dose		Mortality	USEPA, 1982
Tetrachloroethene	8850				Rat	Single oral dose		Mortality	NIOSH, 1985
	8100	1620 [a]			Mouse	Single oral dose		Mortality	TDB, 1984
			100		Mouse	Oral (subchronic)	6 weeks	Hepatotoxicity	Buben and O'Flaherty, 1985
Toluene			446		Rat	Oral (subchronic)	13 weeks	Increased liver and kidney weight	IRIS, 1991
	5000	1000 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
			76		Rat	Oral (subchronic)	13 weeks	Decreasd open field activity	ATSDR, 1992
Trichloroethene	2402	480 [a]	48 [b]		Mouse	Single oral dose		Mortality	NIOSH, 1985
	7193	1440 [a]	144 [b]		Rat	Single oral dose		Mortality	NIOSH, 1985
Vinyl chloride			130		Rat	Oral (subchronic)	13 weeks	Hematological/biochemical/organ weight effects	USEPA, 1980
	500	100 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
Xylenes (total)	4300	860 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
			500	250	Rat	Oral (chronic)	103 weeks	Hyperactivity, decreased BW, mortality	IRIS, 1991
	20000	2014 [c]			Japanese quail	Oral (acute)	5 days	Mortality	Hill and Camardese, 1986

TA -3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW–day) ORAL		CHRONIC (mg/kgBW–day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
SEMI–VOLATILE ORGANIC COMPOUNDS									
1,4–Dichlorobenzene (surrogate for 1,2–dichlorobenzene)			300		Mouse	Oral (chronic)	2 years	Nephropathy; renal tubular degeneration	NTP, 1987
			150		Rat	Oral (chronic)	2 years	Increased incidence of nephropathy	NTP, 1987
	21.6	4 [a]			Rat	Single oral dose		Mortality	NTP, 1987
2,4–Dimethylphenol	400	80 [a]	8 [b]		Mouse	Single oral dose		Mortality	Sax, 1984
2,4–DNT (also surrogate for 2,6–DNT)			40		Rat	Oral (chronic)	24 months	Anemia	ATSDR, 1988
	268	54 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
			10		Dog	Oral (chronic)	24 months	Biliary hyperplasia	ATSDR, 1988
			95		Mouse	Oral (chronic)	24 months	Liver dysplasia	ATSDR, 1988
	25	5 [a]			Dog	Oral (subchronic)	13 weeks	Mortality	ATSDR, 1988
	790	158 [a]			Mouse	Single oral dose		Mortality	NIOSH, 1985
	1300				Guinea pig	Single oral dose		Mortality	NIOSH, 1985
4–Chloroaniline			12.5		Rat	Oral (chronic)	102 weeks	Fibrosis of the splenic capsule	IRIS, 1993
4–Methylphenol (surrogate for 2–methylphenol)	1800				Rat	Single oral dose		Mortality	Verschueren, 1983
			175		Rat	Oral		Decreased RBC counts	ATSDR, 1990
	1100	220 [a]			Rabbit	Single oral dose		Mortality	Verschueren, 1983
			50		Rat	Oral (subchronic)	13 weeks	CNS stimulation	ATSDR, 1990
				50	Rat	Single oral dose	90 days	Loss in body weight/neurotoxicity	USEPA, 1991
4–Nitrophenol		400			Mouse	Oral (acute)	8 days	19% mortality during gestation period	ATSDR, 1990
		220			Rabbit	Single oral dose		3/8 of individuals died	ATSDR, 1990
Acenaphthene			350	175	Mouse	Oral (chronic)	90 days	Liver weight increase	IRIS, 1990
			2000		Rat	Oral (chronic)	32 days	Physiological changes	USEPA, 1984
Acenaphthylene			600		Rat	Oral (chronic)	40 days	Physiological changes	USEPA, 1984
Anthracene			3300		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987
				1000	Mouse	Oral (chronic)	90 days	Clinical and pathological effects	IRIS, 1990
Benzoic acid			40		Rat	Oral (chronic)	17 months	Decreased resistance to stress	IRIS, 1990
Benzo(a)anthracene			2		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987
Benzo(a)pyrene (also used as surrogate for dibenz(a,h)anthracene)		40			Rat	Oral (acute)	Pregnancy	Sterility in offspring	USEPA, 1984
			10		Rat	Oral (chronic)	Pregnancy	Decreased gonad weight	USEPA, 1984
			50		Rat	Oral (chronic)	3.5 months	Reproductive effects	USEPA, 1984
			4.7		Mouse	Oral (chronic)	110 days	Tumor growth	Neal and Rigdon, 1967
		10 [c]			Mouse	Gavage	9 days	Decreased fertility and litter size	MacKenzie and Angevine, 1981
			2.5		Rat	Oral (chronic)	NS	Papillomas in stomach	USEPA, 1985
Benzo(b)fluoranthene			40		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987
Benzo(g,h,i)perylene			99		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987

TABLE E-3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Bis(2-ethylhexyl)phthalate			19	3.8	Guinea pig	Oral (chronic)	1 year	Increased liver weight	IRIS, 1992
	30600				Rat	Oral LD_{50}	NR	Mortality	RTECS, 1993
		7140			Rat	Oral	NR	Reproductive effects	RTECS, 1993
		35			Rat	Oral	NR	Reproductive effects	RTECS, 1993
		6000			Rat	Oral	NR	Reproductive effects	RTECS, 1993
		17200			Rat	Oral	NR	Reproductive effects	RTECS, 1993
		10000			Rat	Oral	NR	Reproductive effects	RTECS, 1993
		9766			Rat	Oral	NR	Reproductive effects	RTECS, 1993
	30000				Mouse	Oral LD_{50}	NR	Mortality	RTECS, 1993
		78880			Mouse	Oral	NR	Reproductive effects	RTECS, 1993
		4200			Mouse	Oral	NR	Reproductive effects	RTECS, 1993
		50			Mouse	Oral	NR	Reproductive effects	RTECS, 1993
		1000			Mouse	Oral	NR	Reproductive effects	RTECS, 1993
		2040			Mouse	Oral	NR	Reproductive effects	RTECS, 1993
	34000				Rabbit	Oral LD_{50}	NR	Mortality	RTECS, 1993
	26000				Guinea pig	Oral LD_{50}	NR	Mortality	RTECS, 1993
		20000			Guinea pig	Oral	NR	Reproductive effects	RTECS, 1993
		20000			Mammal	Oral	NR	Reproductive effects	RTECS, 1993
		509000			Mammal	Oral	NR	Reproductive effects	RTECS, 1993
	800				Mouse	Oral LD_{50}		Mortality	RTECS, 1993 and NIOSH, 1985
		125			Mouse	Oral (subchronic)	13 weeks	Renal effects	RTECS, 1993
	8600	1720 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
Butylbenzylphthalate				1858	Dog	Oral (subchronic)	90 days	Hematological effects; liver/kidney function	IRIS, 1991
				159	Rat	Oral (subchronic)	6 month	Increased liver weight	IRIS, 1991
Carbazole	500	100 [a]	10 [b]		Rat	Single oral dose		Mortality	USEPA, 1986
Chrysene			99		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987
Dibenzofuran		500			Rodents	Single oral dose		LC20	ATSDR, 1991
			125		Rodents	Oral (chronic)	13 weeks	LC10	ATSDR, 1991
				60	Mouse	Oral (chronic)	103 weeks	Multinuclear hepatocytes	ATSDR, 1991
Diethylphthalate			3160	750	Rat	Oral (subchronic)	16 weeks	Decreased body weight gain, decreased food utilization	IRIS, 1993
	8600	1720 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
Diphenylamine			25		Dog	Oral (chronic)	2 year	Low body weight gain, high liver/kidney weights	IRIS, 1992
			31		Rat	Oral (chronic)	2 year	Kidney lesions	IRIS, 1992
			125		Rat	Oral (chronic)	2 generation	Reduced litter size and weight of young	IRIS, 1992
Di-n-butylphthalate (surrogate for di-n-octylphthalate)			125		Rat	Oral (subchronic)	48 days	LOAEL for reproductive effects	ATSDR, 1989
			600	125	Rat	Oral (chronic)	1 year	Mortality	IRIS, 1991
	6513	1302 [a]			Mouse	Single oral dose		Mortality	Sax, 1984
Fluoranthene			250	125	Mouse	Oral (subchronic)	90 days	Nephropathy; clinical and pathological effects	IRIS, 1990
	2000	400 [a]			Rodents	Single oral dose		Mortality	Eisler, 1987
Fluorene			250	125	Mouse	Oral (chronic)	13 weeks	Hematological changes	IRIS, 1990
Hexachlorobenzene	57	10 [a]	1 [b]		Japanese quail	Oral (acute)	5 days	Mortality	Hill et al., 1975
	32	6.5 [a]	0.65 [b]		Rat	Single oral dose		Mortality	Allen et al., 1979
Indeno(1,2,3-cd)pyrene			72		Rodents	Oral (chronic)	NS	Carcinogenicity	Eisler, 1987
Isophorone	3450	690 [b]			Rat	Oral (acute)		Mortality	ATSDR, 1988
			179		Rat	Oral (chronic)	2 years	Kidney disorders	IRIS, 1991

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INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW–day) ORAL		CHRONIC (mg/kgBW–day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Naphthalene (surrogate			41		Rat	Oral (chronic)	100 weeks	Ocular lesions	USEPA, 1990
for 2–methylnaphthalene)			35.7		Rat	Oral (subchronic)	. 13 weeks	Decreased body weight gain	USEPA, 1990
	533	110 [a]			Mouse	Single oral dose		Mortality	ATSDR, 1990
Nitrobenzene	640	128 [a]	13 [b]		Rat	Single oral dose		Mortality	Sax, 1984
Nitrocellulose				1800	Rat	Oral (chronic)		NOAEL	Ellis et al., 1978
				1800	dog	Oral (chronic)		NOAEL	Ellis et al., 1978
N–Nitrosodiphenylamine	1650	330 [a]	33 [b]		Rat	Single oral dose		Mortality	Sax, 1984
Pentachlorophenol	380	76 [a]			Mallard	Single oral dose		Mortality	Eisler, 1989
	138				Chipmunk (Eastern	Single oral dose		Mortality	Eisler, 1989
				10	Mouse	Oral (chronic)	2 years	NOAEL for histopathological/hematological changes	Eisler, 1989
			30	6	Rat	Oral (chronic)	8 months	Decrease in body weight	Eisler, 1989
	27	5.4 [a]			Rat	Single oral dose		Mortality	Eisler, 1989
	504	100 [a]	10 [b]		Pheasant	Single oral dose		Mortality	Eisler, 1989
	65				Mouse	Single oral dose		Mortality	Eisler, 1989
				3	Rat	Oral (chronic)	2 year	NOAEL for effects on growth, survival, and reproduction	Eisler, 1989
			3	1.5	Rat	Oral (subchronic)	12 weeks	Effects to kidney, liver, and blood chemistry	Eisler, 1989
	150	30 [a]			Dog	Single oral dose		Mortality	Eisler, 1989
Phenanthrene			120		Rat	Oral (subchronic)	6 months	Increased liver weight	ATSDR, 1989
	700	140 [a]			Rodents	Single oral dose		Mortality	Eisler, 1987
Phenol	530				Rat	Single oral dose		Mortality	USEPA, 1980
	414	80 [a]			Rat	Single oral dose		Mortality	TDB, 1984
			120		Rat	Oral (subchronic)	Gestational	Reduced fetal body weights	IRIS, 1993
	600				Rabbit	Single oral dose		Mortality	USEPA, 1980
	400				Rabbit	Single oral dose		Mortality	USEPA, 1980
	500	100 [a]			Dog	Single oral dose		Mortality	USEPA, 1980
	100				Cat	Single oral dose		Mortality	USEPA, 1980
	340				Rat	Single oral dose		Mortality	USEPA, 1980
Pyrene			125	75	Mouse	Oral (chronic)	13 weeks	Renal effects	IRIS, 1990
	800	160 [a]			Mouse	Single oral dose		Mortality	NIOSH, 1985
	2700				Rat	Single oral dose		Mortality	NIOSH, 1985
Trinitroglycerin (surrogate			31.5		Rat	Oral (chronic)	24 months	Hepatotoxicity	Ellis et al., 1978
for nitroglycerine)				115	Mouse	Oral (chronic)	24 months	NOAEL	Ellis et al., 1978
		25			Dog	Oral (acute)	5 days	Methemoglobinemia	Ellis et al., 1978
				1	Dog	Oral (subchronic)	4 months	NOAEL	Ellis et al., 1978

TABLE E-3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
PESTICIDES/PCBs									
DDT (also used as surrogate for DDE and DDD)	200				Mouse	Single oral dose		Mortality	USEPA, 1985
			0.75	0.15	Mouse	Oral (chronic)	24 month	Hepatocellular swelling and necrosis (males)	IRIS, 1991
	100	20 [a]			Rat	Single oral dose		Mortality	USEPA, 1985
			10		Rat	Oral (chronic)	27 weeks	Kidney necrosis	ATSDR, 1992
			0.5		Rat	Oral (chronic)	2 year	Liver lesions	IRIS, 1991
			0.2		Rat	Oral (chronic)	3 generations	Reproductive effects	IRIS, 1991
			91.4 [d]		Chicken	Oral (subchronic)	10 weeks	Decreased reproductive success; toxic symptoms	USEPA, 1985
	4000				Rock dove	Single oral dose		Mortality	USFWS, 1984
			0.14 [d]		Black duck	Oral (chronic)	2 years	Reduced eggshell thickness	Longcore and Stendell, 1977
	2240				Mallard	Single oral dose		Mortality	USFWS, 1984
			7.2 [d]		Mallard	Oral (chronic)	43–417 days	Mortality	USFWS, 1984
			2.8 [d]		Mallard	Oral (chronic)	96 days	Reduced eggshell thickness	Longcore and Stendell, 1977
	595	120 [a]			California quail	Single oral dose		Mortality	USFWS, 1984
	841				Japanese quail	Single oral dose		Mortality	USFWS, 1984
	1334				Pheasant	Single oral dose		Mortality	USFWS, 1984
	1200				Sandhill crane	Single oral dose		Mortality	USFWS, 1984
			0.56 [d]		Kestrel	Oral (chronic)	7 wk – 1 year	Reduced eggshell thickness	USEPA, 1985
			0.16 [d]		Kestrel	Oral (chronic)	1 year	Reduced eggshell thickness	Wiemeyer, et al., 1986
			0.14 [d]		Barn Owl	Oral (chronic)	2 years	Reduced eggshell thickness	Longcore and Stendell, 1977
	2000				Bullfrog	Single oral dose		Mortality	USEPA, 1985
			7.6		Frog (Rana tempor	Oral (subchronic)	20 days	Mortality	Harri et al., 1979
	60	12 [a]			Dog	Single oral dose		Mortality	USEPA, 1985
			5.0		Dog	Oral (chronic)	3 generations	Premature puberty	ATSDR, 1992
			80		Dog	Oral (chronic)	40 months	Liver damage	ATSDR, 1992
PCBs		6	1		Mouse	Oral (acute)	2 weeks	Increased liver weight	Sanders and Kirkpatrick, 1975
			13–65		Mouse	Oral (chronic)	6–11 months	Hepatomegaly	USEPA 1985
(Aroclor 1254)	500	100 [a]			Rat	Single oral dose		Mortality	Eisler, 1986
(Aroclor 1260)	1300				Rat	Single oral dose		Mortality	Eisler, 1986
(Aroclor 1254)			7.6		Rat	Oral (chronic)	2 generations	Reduced litter size	USEPA 1985
			6.4		Rat	Oral (chronic)	9 weeks	Fetal mortality/maternal toxicity	ATSDR, 1987
			0.08		Rat	Oral (chronic)	NS	Increase in F1 male liver weights	USEPA, 1976
			0.9		Chicken	Oral (chronic)	NS	Embryonic mortality	USEPA, 1976
			0.9		Rock dove	Oral (chronic)	NS	Parental incubation behavior	Peakall and Peakall, 1973
(Aroclor 1254)			5.0		Japanese quail	Oral (chronic)	NS	Reproduction unimpaired	Eisler, 1986
			9		American kestrel	Oral (chronic)	69 days	Reduced sperm concentration	Eisler, 1986
(Aroclor 1254)	4000				Mink	Single oral dose		Mortality	Eisler, 1986
(Aroclor 1242)	3000				Mink	Single oral dose		Mortality	Eisler, 1986
(Aroclor 1221)	750				Mink	Single oral dose		Mortality	Eisler, 1986
			0.0075		Mink	Oral (chronic)	4 months	Impaired reproduction	Newell, et al., 1987
			0.37		Dog (beagle)	Oral (chronic)	2 years	LOAEL	USEPA, 1976
Atrazine			400		Rat	Oral (subchronic)	14 days	Liver and growth effects	Eisler, 1989
				100	Chicken	Oral (acute)	7 days	NOAEL	Eisler, 1989
			37.5		Dog	Oral (chronic)	2 years	Reduced hemoglobin	Eisler, 1989

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INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
BHC-alpha			2.5		Rat	Oral (chronic)	56 weeks	Liver necrosis	ATSDR, 1992
			32.5		Mouse	Oral (chronic)	24 wks	Hepatocellular carcinoma	ATSDR, 1992
			65		Mouse	Oral (chronic)	50 wks	Hepatomegaly	ATSDR, 1992
	177	35 [a]			Rat	Single oral dose		Mortality	Sax, 1984
BHC-beta			40		Rat	Oral (acute)	2-14 days	Renal hypertrophy	ATSDR, 1992
				2.5	Rat	Oral (chronic)	13 wks.	Mortality, comatose, ovary atrophy	ATSDR, 1992
	6000	1200 [a]			Rat	Single oral dose		Mortality	Sax, 1984
BHC-delta				50	Rat	Oral (chronic)	24, 48 weeks	Hepatic necrosis	ATSDR, 1992
	1000	200 [a]			Rat	Single oral dose		Mortality	Sax, 1984
BHC-gamma (lindane)				5.0	[Rat	Oral (chronic)	15 weeks	NOAEL for reproductive effects	ATSDR, 1992
				0.33	Rat	Oral (chronic)	18 weeks	Liver and kidney toxicity	IRIS, 1991
			1.55		Rat	Oral (chronic)	2 years	Liver and kidney toxicity	IRIS, 1991
		25			Mouse	Single oral dose	Gestation	Increased resorptions	ATSDR, 1992
	78	16 [a]			Bobwhite	Oral (acute)	5 days	Mortality	Hill et al., 1975
	360				Mallard	Oral (acute)	5 days	Mortality	Hill et al., 1975
				12.5	Dog	Oral (chronic)	32 weeks	Hepatic effects	ATSDR, 1992
Chlordanes			0.47		Mouse	Oral (chronic)	2 years	Hepatocelluar hypertrophy and necrosis	ATSDR, 1992
(alpha + gamma)	335				Rat (male)	Single oral dose		Mortality	Allen et al., 1979
	430				Rat (female)	Single oral dose		Mortality	Allen et al., 1979
			0.273	0.055	Mouse	Oral (chronic)	30 months	Regional liver hypertrophy (females)	ATSDR, 1992
	300				Rabbit	Single oral dose		Mortality	Allen et al., 1979
			16		Rat	Oral (chronic)	Mult-generational	Decreased fertility	ATSDR, 1992
				0.031 [d]	Young chicken	Oral (subchronic)	4 weeks	NOAEL for egg hatchability	Eisler, 1990
	100	20 [a]			Rabbit	Single oral dose		Mortality	Allen et al., 1979
	180				Goat	Single oral dose		Mortality	Allen et al., 1979
		130			Cattle	Single oral dose		Minimum Lethal Dose (MLD)	Allen et al., 1979
	35				Japanese quail	Oral (acute)	5 days	Mortality	Hill et al., 1975
	29				Bobwhite	Oral (acute)	5 days	Mortality	Hill et al., 1975
	62				Mallard	Oral (acute)	5 days	Mortality	Hill et al., 1975
	24	5 [a]			Pheasant	Single oral dose		Mortality	USFWS, 1984
	200				Dog	Single oral dose		Mortality	Allen et al., 1979
		200			Dog	Single oral dose		Minimum Lethal Dose (MLD)	Allen et al., 1979
			0.375		Dog	Oral (chronic)	2 years	Histologic changes	USEPA, 1988
Diazinon	76	15.2 [a]	1.52 [b]		Rat	Single oral dose		Mortality	Sax, 1984
	250				Guinea pig	Single oral dose		Mortality	Sax, 1984
	8400				Chicken	Single oral dose		Mortality	Sax, 1984
	3.54				Mallard	Single oral dose		Mortality	USFWS, 1984
	4.33	0.86 [a]	0.086 [b]		Pheasant	Single oral dose		Mortality	USFWS, 1984
	2000	400 [a]	40 [b]		Bullfrog	Single oral dose		Mortality	USFWS, 1984

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	LD_{50}	LOAEL	LOAEL	NOAEL					
Dieldrin (surrogate for Aldrin)	38				Mouse	Single oral dose		Mortality	Allen et al., 1979
			0.1		Mouse	Oral (chronic)	2 year	Liver enlargement w/ histopathology	IRIS, 1991
			1.3		Mouse	Oral (chronic)	2 year	Hepatic cancer	ATSDR, 1993
			0.33		Mouse	Oral (chronic)	80 weeks	Body tremors	ATSDR, 1993
	46				Rat	Single oral dose		Mortality	Allen et al., 1979
			2		Rat	Oral (chronic)	2 year	Histologic changes	ATSDR, 1993
			0.05	0.005	Rat	Oral (chronic)	2 year	Liver lesions	IRIS, 1991
	25				Guinea pig	Single oral dose		Mortality	Allen et al., 1979
	45				Rabbit	Single oral dose		Mortality	Allen et al., 1979
	48				House sparrow	Single oral dose		Mortality	USFWS, 1984
	20				Chicken	Single oral dose		Mortality	Allen et al., 1979
	27	5 [a]			Rock dove	Single oral dose		Mortality	USFWS, 1984
	9				Gray partridge	Single oral dose		Mortality	USFWS, 1984
	25				Chukar	Single oral dose		Mortality	USFWS, 1984
	6				Japanese quail	Oral (acute)	5 days	Mortality	Hill et al., 1975
	70				Japanese quail	Single oral dose		Mortality	USFWS, 1984
	9				California quail	Single oral dose		Mortality	USFWS, 1984
	3				Bobwhite	Oral (acute)	5 days	Mortality	Hill et al., 1975
	79				Pheasant	Single oral dose		Mortality	USFWS, 1984
	12				Mallard	Oral (acute)	5 days	Mortality	Hill et al., 1975
	11				Mallard	Oral (acute)	5 days	Mortality	Hill et al., 1975
	381				Mallard	Single oral dose		Mortality	USFWS, 1984
		5			Mallard	Oral (subchronic)	30 days	Minimum Lethal Dose (MLD)	USFWS, 1984
	100				Whistling duck	Single oral dose		Mortality	USFWS, 1984
	141				Canada goose	Single oral dose		Mortality	USFWS, 1984
		35			Monkey	Single oral dose		Minimum Lethal Dose (MLD)	Allen et al., 1979
	100				Goat	Single oral dose		Mortality	Allen et al., 1979
	50				Sheep	Single oral dose		Mortality	Allen et al., 1979
	60				Cattle	Single oral dose		Mortality	Allen et al., 1979
	75				Mule deer	Single oral dose		Mortality	Allen et al., 1979
	300				Cat	Single oral dose		Mortality	Allen et al., 1979
	65				Dog	Single oral dose		Mortality	Allen et al., 1979
		35			Dog	Single oral dose		Minimum Lethal Dose (MLD)	Allen et al., 1979
			0.05	0.005	Dog	Oral (chronic)	2 year	Increased liver weight; liver/body weight	IRIS, 1991
			0.5		Dog	Oral (chronic)	25 months	Hepatocyte degeneration	ATSDR, 1993
			0.1		Monkey	Oral (chronic)	120 days	Tremors and Convusions	Smith et al., 1976
			0.65		Mouse	Oral (subchronic)	4 wks	Decreased pup survival	Virgo Bellward., 1975
		0.25			Rat	Oral (subchronic)	120 days	Operant behavior	Burt, 1976
			0.025		Rat	Oral (subchronic)	120 days	Operant behavior	Smith, 1976
	15				Mouse	Single oral dose	1 day	Malformations	Ottolenghi, 1974

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INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Endosulfan (surrogate for Endosulfan I, Endosulfan II, and Endosulfan sulfate)			0.9		Mouse	Oral (chronic)	78 weeks	Mortality	ATSDR, 1990
			0.26		Mouse	Oral (chronic)	78 weeks	Ovarian cyst development	ATSDR, 1990
	24	4.8 [a]			Rat	Single oral dose		Mortality	ATSDR, 1990
			100		Rat	Oral (chronic)	2 years	Renal tubular damage	USEPA, 1980
			10		Rat	Oral (chronic)	2 years	Reduced testes weight	USEPA, 1980
			0.15		Rat	Oral (chronic)	2 generations	Kidney toxicity	IRIS, 1991
	33				Mallard	Single oral dose		Mortality	USFWS, 1984
	31.2	6.24 [a]			Mallard	Single oral dose		Mortality	USFWS, 1984
	80				Pheasant	Single oral dose		Mortality	USFWS, 1984
Endrin (surrogate for aldehyde and ketone forms)			0.53		Mouse	Oral (chronic)	80 wks	Mortality	ATSDR 1989
			0.1		Dog	Oral (chronic)	19 months	Decreased weight gain	USEPA, 1985
	3	0.6 [a]			Rat	Single oral dose		Mortality	Sax, 1984
	1.8	0.36 [a]			Bird	Single oral dose		Mortality	Sax, 1984
Heptachlor (surrogate for heptachlor epoxide)			0.013		Dog	Oral (chronic)	60 weeks	Increased liver to body weight ratio	IRIS, 1993
			0.25		Rat	Oral (chronic)	2 year	Increased liver/BW ratio	IRIS, 1991
			0.35		Rat	Oral (chronic)	1 generation	Increased pup death	IRIS, 1991
			0.15		Cat	Oral (chronic)	2 year	Increased liver weight	USEPA, 1987
	40	8 [a]			Rat	Single oral dose		Mortality	Sax, 1984
	62	12 [a]			Chicken	Single oral dose		Mortality	Sax, 1984
Malathion			1000		Rat	Oral (chronic)	2 years	Decreased food intake and growth	Arthur D. Little, Inc., 1987
	403	80.6 [a]	8.06 [b]		Horned lark	Single oral dose		Mortality	USFWS, 1984
Methoxychlor			10		Rat	Oral (chronic)	2 years	Growth retardation	USEPA, 1985
			60		Rat	Oral (chronic)	6 wks	Early onset of puberty and decreased litter size	Harris et al., 1975
		200			Rat	Oral (acute)	6-20 days	Increased in percent dead and early onset of puberty	Khera et al., 1978 & Gray, 1989
Parathion			2.3		Rat	Oral (subchronic)	16 days	Reproductive effects	NIOSH, 1985
				6	Rat	Oral (chronic)	2 years	NOAEL (feeding, growth)	Wier and Hazelton, 1982
		9			Quail	Oral (acute)	6 days	Decreased cholinesterase activity; food avoidance	Bussiere, et al., 1989
Pyrethrins	1500				Rat	Single oral dose		Mortality	Farm Chemicals Handbook, 1991
	200				Rat	Single oral dose		Mortality	Sax, 1984
	1200				Rat	Single oral dose		Mortality	Sax, 1984
	370	74 [a]	7 [b]		Muskrat	Single oral dose		Mortality	Sax, 1984
Rotenone	132				Rat	Single oral dose		Mortality	Sax, 1984
	350	70 [a]	7 [b]		Muskrat	Single oral dose		Mortality	Sax, 1984
	50				Hamster	Single oral dose		Mortality	Sax, 1984
	1680				Pheasant	Single oral dose		Mortality	USFWS, 1984

TABLE E–3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW–day) ORAL		CHRONIC (mg/kgBW–day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD$_{50}$	LOAEL	LOAEL	NOAEL					
METALS									
Aluminum			425		Mouse	Oral (chronic)	2–3 genrtns	Reduced body weight gain of newborns	NIOSH, 1985
			100		Rat	Oral (subchronic)	15 days	Reduced growth	Bernuzzi, et al., 1989
Ammonia		48.4			Rat	Dermal (acute)	. 60 min.	Mortality	ATSDR, 1989
	1000	200 [a]	20 [b]		Rat, Rabbit, Cat	Oral (acute)		Mortality	ATSDR, 1989
		2245	224.5 [b]		Rabbit	Oral (subchronic)	36 days	Renal damage	ATSDR, 1989
			318		Dog	Oral (subchronic)	11 weeks	Bone deformity and softening	ATSDR, 1989
			936		Rat	Oral (chronic)	330 days	Bone loss, reduced body weight	ATSDR, 1989
Antimony		4 [b]	0.35 (water)		Rat	Oral (chronic)	NS	Longevity; blood glucose; cholesterol	IRIS, 1993
			41.8 (food)		Rat	Oral (subchronic)	24 weeks	Decreased RBC, swelling of hepatic cords	ATSDR, 1990
Arsenic			7.5		Rat	Oral (chronic)	NS	Weight loss	USEPA, 1984
		14			Hamster	Single oral dose	Gestation	7–36% Fetal mortality	ATSDR, 1991
	323	64.6 [a]			Mallard	Single oral dose		Mortality	Eisler, 1988
	386				Pheasant	Single oral dose		Mortality	Eisler, 1988
			3.1		Dog	Oral (chronic)	2 years	Mortality	ATSDR, 1991
Barium				0.825	Mouse	Oral (chronic)	lifetime	NOEL	IRIS, 1990
				5.1	Rat	Oral (chronic)	16 months	NOEL	IRIS, 1990
				0.25	Rat	Oral (chronic)	lifetime	NOEL	IRIS, 1990
				31.5	Rat	Oral (chronic)	13 weeks	NOEL	IRIS, 1990
			142		Rat	Oral (chronic)	68 weeks	Renal ultrastructure changes	IRIS, 1993
			91		Rat	Oral (subchronic)	13 weeks	LOAEL for renal effects	Dietz et al., 1992
		198			Rat	Oral (acute)	10 days	Decreased ovarian weight	ATSDR, 1990
		430			Rat	Oral (subchronic)	13 weeks	20% population mortality	Dietz et al., 1992
Beryllium	10	2 [a]			Rat	Single oral dose		Mortality	USEPA, 1985
			0.22		Rat	Oral (chronic)	NS	Increase in lung sarcomas	USEPA, 1985
			10		Rat	Oral (subchronic)	24 – 28 days	Rickets	ATSDR, 1991
			0.85		Rat	Oral (chronic)	3.2 years	NOAEL	ATSDR, 1987
Cadmium			1.75		Mouse	Oral (chronic)	18 months	Histopathological effects	ATSDR, 1993
			0.32		Mouse	Oral (subchronic)	28 days	Alteration in blood chemistry	Eisler, 1985
				1.8	Mouse (young)	Oral (chronic)	28 days	Blood chemistry altered	Eisler, 1985
	250				Rat	Single oral dose		Mortality	Eisler, 1985
				100	Rat	Single oral dose		Testicular damage	Eisler, 1985
			14		Rat	Oral (subchronic)	12 weeks	Hepatic and renal effects	ATSDR, 1993
				12.5	Rat	Oral (subchronic)	Gest., days 6–15	NOAEL for reproductive effects	Machener & Lorke, 1981
	150	30 [a]			Guinea pig	Single oral dose		Mortality	Eisler, 1985
			7.6		Japanese quail	Oral (subchronic)	6 weeks	Bone marrow hypoplasia	Eisler, 1985
				200	Mallard	Oral (chronic)	90 days	Egg production suppressed	Eisler, 1985
				200	Mallard	Oral (chronic)	90 days	NOEL	Eisler, 1985
				20	Mallard (young)	Oral (chronic)	12 weeks	Kidney lesions	Eisler, 1985
				0.75	Dog	Oral (subchronic)	3 months	NOAEL	ATSDR, 1993
Chromium (III)		-------[b]	1400		Rat	Oral (subchronic)	90 days	NOAEL for histopathologic and reproductive effects	Ivankovic and Preussman, 1975
		2000 [b]	200		Black Duck	Oral (subchronic)	5 months	NOAEL for reproductive effects	Outridge and Scheuhammer, 1993

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INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Cobalt	91	18 [a]			Rat	Single oral dose		Mortality	ATSDR, 1990
		157			Rat	Single oral dose		Hepatic/renal hyperemia	ATSDR, 1990
			4.2		Rat	Oral (subchronic)	8 weeks	Decreased body weight gain	ATSDR, 1990
			20		Rat	Oral (chronic)	69 days	Testicular atrophy	ATSDR, 1990
		20			Guinea pig	Oral (subchronic)	5 week	Mortality	ATSDR, 1990
			5		Dog	Oral (subchronic)	4 weeks	Increased red blood cell count	ATSDR, 1990
Copper		152			Rat	Single oral dose		TDlo for reproductive effects	NIOSH, 1985
			100		Mice	Oral (chronic)	30 days	Decreased litter sizes with teratogenic effects	Lecyk, 1980
			152		Rat	Oral (chronic)	22 weeks	Fetotoxicity; CNS abnormalities	NIOSH, 1985
			1.4		Swine	Oral (chronic)	9 months	Mortality	USEPA, 1980
		2.09			Mallard	Oral (acute)	29 days	No effect on survivorship	Demayo et al., 1982
			29		Mallard	Oral (subchronic)	NS	LOAEL	NRC, 1977
Cyanide			30		Rat	Oral (subchronic)	11.5 months	Increased thyroid weight, myelin degeneration	IRIS, 1993
	8.5				Mouse	Single oral dose		Mortality	Arthur D. Little, Inc., 1987
			11		Young chickens	Oral	20 days	Decreased growth and food intake	Elzubier and Davis, 1988
			11		Pig	Oral	110 days	Thyroid hypofunction during pregnancy	Tewe and Maner, 1981b
		12	11.9		Hamsters	Oral	12 days	Decreased fetal weight and delayed ossification	Frakes et al., 1986
		1.1			Mallard duck	Single oral dose		Mortality in 6% of population	Eisler, 1991
Lead			1.5		Mouse	Oral (chronic)	NS	Reduced sucess of implanted ova	Eisler, 1988
	12				Rat	Single oral dose		Mortality	Eisler, 1988
	17				Rat	Single oral dose		LDLO	Eisler, 1988
		2.5			Rat	Oral (acute)	Days 12–14 (preg)	Increased fetal resorption rate; decreased fetal BW	McClain and Becker, 1972
		1			Rat	Oral (acute)	Days 5–15 (preg)	Increased resorptions/dam	Kennedy et al., 1975
		1.5			Rat	Oral (subchronic)	3 weeks	Increased locomotor activity	Eisler, 1988
				7	Rat	Oral (chronic)	2 generations	NOAEL for developmental effects	Kimmel et al., 1980 and Grant et al., 1980
			2.16		Rat	Oral (chronic)	2 years	Decreased ALAD synthesis	ATSDR, 1988
			25		Rat	Oral (chronic)	NS	Increased locomotor activity	Eisler, 1988
	300	60 [a]			Guinea pig	Single oral dose		Mortality	Sax, 1984
			0.51		Rabbit	Oral (chronic)	NS	Mortality	USEPA, 1988
			169		Chicken	Oral (subchronic)	4 weeks	Growth rate suppressed	Eisler, 1988
			6.25		Rock dove	Oral (chronic)	NS	Kidney pathology; learning deficiences	Anders et al., 1982 and Dietz et al., 1979
		75			Rock dove	Single oral dose		Mortality	Kendall and Scanlon, 1985
	151				Mallard	Oral (subchronic)	NS	Some mortality and ALAD decrease	Eisler, 1988
			1.75		Mallard	Oral (chronic)	12 weeks	Decrease in ALAD activity	Eisler, 1988
	24.6				Japanese quail	Single oral dose		Mortality	Eisler, 1988
			2.8		Starling	Oral (acute)	11 days	Reduced food consumption	Eisler, 1988
		125			Kestrel (nestlings)	Oral (acute)	10 days	Abnormal development	Eisler, 1988
		25			Kestrel (nestlings)	Oral (acute)	10 days	ALAD depression	Eisler, 1988
		625			Kestrel (nestlings)	Oral (acute)	10 days	Mortality and developmental effects	Eisler, 1988
				0.89	Kestrel	Oral (chronic)	5 months	NOEL	Eisler, 1988
			4.4		Kestrel	Oral (chronic)	5 months	Blood ALAD reduced 80%	Eisler, 1988
			6		Cattle (calves)	Oral (subchronic)	105 days	Mortality	Eisler, 1988
			2.4		Horse	Oral (chronic)	NS	Mortality	Eisler, 1988
		300			Dog	Oral (acute)	NS	LDLO	ATSDR, 1988
			3		Dog	Oral (subchronic)	180 days	Anorexia and convulsions	Eisler, 1988

TABLE E-3
INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL LD50	LOAEL	CHRONIC (mg/kgBW-day) LOAEL	NOAEL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
Manganese				2300	Mouse	Oral (subchronic)	6 months	Mortality	ATSDR, 1990
			140		Mouse	Oral (subchronic)	90 days	Delayed growth of testes	ATSDR, 1990
				810	Mouse	Oral (chronic)	103 weeks	Mortality	ATSDR, 1990
	410				Rat	Single oral dose		Mortality	ATSDR, 1990
	225				Rat	Oral (acute)	20 day	Mortality	ATSDR, 1990
				12	Rat	Oral (subchronic)	10 weeks	Hepatic effects	ATSDR, 1990
		1240		620	Rat	Oral (subchronic)	20 days	Decreased litter weight during gestation	ATSDR, 1990
			930		Rat	Oral (chronic)	103 weeks	Mortality	ATSDR, 1990
	400				Guinea pig	Single oral dose		Mortality	USEPA, 1984
			25		Monkey	Oral (chronic)	18 months	Weakness, rigidity	ATSDR, 1990
			250		Rodents/livestock	Oral (subchronic)	10 days – 2 months	Decreased growth rate	Cunningham et al., 1966
		2300			Mouse	Oral (subchronic)	180 days	NOAEL for mortality	Giantsos and Murray, 1982
Mercury	22				Mouse	Single oral dose		Mortality	NIOSH, 1985
			6.3		Mouse	Oral (subchronic)	18 days	Mortality; neurological symptoms	Suzuki, 1979
			5		Mouse	Oral (subchronic)	38 days	Mortality; neurological symptoms	Suzuki, 1979
			0.9		Mouse	Oral (subchronic)	50 days	Embryotoxicity and teratogenicity	Suzuki, 1979
			1		Mouse	Oral (subchronic)	45 days	Hypophagia, weight loss, weakness of hind legs	Suzuki, 1979
			4		Mouse	Oral (subchronic)	Day 6–17 (gest)	Stillbirths and neonatal death	Suzuki, 1979
			0.7		Mouse	Oral (subchronic)	Day 0–18 (gest)	Embryolethality and teratogenicity	Suzuki, 1979
			4		Rat	Oral (subchronic)	Day 6–14 (gest)	Retarded fetus growth and teratogenicity	Suzuki, 1979
			0.12 [d]		Rat	Oral (subchronic)	Gest.+ 16 days	Behavioral changes in offspring	Suzuki, 1979
			0.5		Rat	Oral (chronic)	NS	Reduced fertility	Eisler, 1987
			0.16 [d]		Rat	Oral (chronic)	38 days	Adverse behavioral change	Eisler, 1987
	18	3.6 [a]			Rat	Single oral dose		Mortality	NIOSH, 1985
			0.5		Pig	Oral (chronic)	Pregnancy	High incidence of stillbirths	Eisler, 1987
	12.6				House sparrow	Single oral dose		Mortality	Eisler, 1987
	22.8				Rock dove	Single oral dose		Mortality	Eisler, 1987
			3		Pigeon	Oral (subchronic)	17 days	Behavioral alterations	Eisler, 1987
			1		Pigeon	Oral (subchronic)	5 weeks	Behavioral alterations	Eisler, 1987
			0.25 [d]		Starling	Oral (chronic)	8 weeks	Kidney lesions	Eisler, 1987
	20				Chicken	Single oral dose		Mortality	Fimreite, 1979
	190				Bantam chicken	Single oral dose		Mortality	Fimreite, 1979
	11.5				Prairie chicken	Single oral dose		Mortality	Eisler, 1987
	26.9				Chukar	Single oral dose		Mortality	Eisler, 1987
	11	2 [a]			Coturnix	Single oral dose		Mortality	Eisler, 1987
			0.22 [d]		Black duck	Oral (chronic)	28 weeks	Reproduction inhibited, brain lesions	Eisler, 1987
	37.8				Fulvous whistling du	Single oral dose		Mortality	Eisler, 1987
	23.8				Northern bobwhite	Single oral dose		Mortality	Eisler, 1987
	523				Bobwhite quail	Oral (acute	5 days	Mortality	Hill et al., 1975
	14.4				Japanese quail	Single oral dose		Mortality	Eisler, 1987
			0.81		Japanese quail	Oral (subchronic)	3 weeks	Depressed gonad weights	Eisler, 1987
			0.10		Japanese quail	Oral (subchronic)	9 weeks	Alterations in brain and plasma enzyme activities	Eisler, 1987
			5.0		Japanese quail	Oral (chronic)	NS	Reproductive effects	Fimreite, 1979
	17.6				Gray partridge	Single oral dose		Mortality	Eisler, 1987
			0.64		Gray pheasant	Oral (chronic)	30 days	Reduced reproductive ability	Eisler, 1987
	11.5				Ring–necked pheas	Single oral dose		Mortality	Eisler, 1987
	17.9				Mule deer	Single oral dose		Mortality	Eisler, 1987
			0.5		Rhesus monkey	Oral (chronic)	Pregnancy	Maternally toxic and abortient	Eisler, 1987

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INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW–day) ORAL		CHRONIC (mg/kgBW–day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Mercury cont.	2				River otter	Single oral dose		Mortality	Eisler, 1987
	1				Mink	Single oral dose		Mortality	Eisler, 1987
			0.029		Mink	Oral (subchronic)	2 months	Mortality	Eisler, 1987
			0.25		Cat	Oral (chronic)	Day 10–58 (gest)	Increased incidence of anomalous fetuses	Eisler, 1987
			0.1		Dog	Oral (chronic)	Pregnancy	High incidence of stillbirths	Eisler, 1987
Nickel	67	13.4 [a]			Rat	Single oral dose		Mortality	ATSDR, 1991
			50		Rat	Oral (chronic)	2 years	Decreased body weight gain	ATSDR, 1991
	504 [c	100 [a]	10 [b]		Japanese quail	Oral (acute)	5 days	NOAEL	Hill and Camardese, 1986
			62.5		Dog	Oral (chronic)	2 years	Histological lesions in bone marrow	ATSDR, 1991
Nitrate		1330 [b]	133		Mouse	Oral (subchronic)	3 weeks	Elevated methemoglobin levels	USEPA, 1985
				88	Mouse	Oral (subchronic)	3 weeks	NOAEL	USEPA, 1985
		2500 [b]	250		Rat	Oral (chronic)	6 months	Spleen hemorrhages	USEPA, 1985
Selenium			0.4		Rat	Oral (chronic)	2 years	Decrease in breeding	ATSDR, 1988
			0.045		Rat	Oral (chronic)	NS	Histological changes in heart and kidney	Eisler, 1985
			0.6		Japanese quail	Oral (chronic)	NS	Reduced egg hatching	Eisler, 1985
			0.72		Mallard	Oral (subchronic)	3 months	NOAEL for teratogenic effects	Eisler, 1985
	3.3				Horse	Single oral dose		MLD	Eisler, 1985
		0.5			Rat	Single oral dose		Mortality	ATSDR, 1988
Silver	34	6.8 [a]			Mouse	Intraperitoneal (acute)		Mortality	NIOSH, 1985
		181			Rat	Oral (acute)	2 week	Mortality	ATSDR, 1990
			222.2		Rat	Oral (chronic)	37 week	Weight gain	ATSDR, 1990
			18.1		Mouse	Oral (chronic)	125 days	Hypoactivity	ATSDR, 1990
Sulfate (magnesium)		3000	300 [b]		Mouse	Single oral dose		Mortality	NIOSH, 1985
(sodium)		1198	120 [b]		Rabbit	Single oral dose		Mortality	NIOSH, 1985
Thallium				0.61	Heron	Oral	NR	NOEAL for egg–hatchability	Smith et al., 1968
			0.7		Rat	Oral (subchronic)	30–60 days	Adverse testicular effects	IRIS, 1993
	35				Rat	Single oral dose		Mortality	Sax, 1984
	23.7				Pheasant	Single oral dose		Mortality	USFWS, 1984
Tin (inorganic)	188	37.6 [a]	3.76 [b]		Rat	Single oral dose		Mortality	Eisler, 1989
(inorganic)				20	Rat	Oral (chronic)	13 weeks	NOEL	Eisler, 1989
(dibutyltin)			0.1		Rat	Oral (chronic)	12 weeks	Kidney damage	Eisler, 1989
(dibutyltin)				2	Rat	Oral (subchronic)	90 days	NOEL	Eisler, 1989
(triethyltin)		35 [b]	3.5		Mallard	Oral (subchronic)	NS	Vacuolization of spinal chord	Eisler, 1989
(triethyltin)			12.9		Chicken	Oral (chronic)	15 weeks	Muscular weakness	Eisler, 1989
(dialkytin)				15.1	Japanese quail	Oral (subchronic)	2 weeks	NOEL	Eisler, 1989
Vanadium				0.89	Rat	Oral (chronic)	2.5 years	Decreased hair cystine	IRIS, 1989
			2.87		Rat	Oral (subchronic)	3 months	Adverse renal effects	ATSDR, 1990
			2.5		Rat	Oral (chronic)	103 days	Decreased hair cystine, hemoglobin	IRIS, 1989
	96	20 [a]			Japanese quail	Oral (acute)	5 days	Mortality	Hill and Camardese, 1986
			15		Rat	Oral (subchronic)	2 months	Hypertension	Susic and Kentera, 1986
		16			Rat	Single oral dose		NOAEL for mortality	Llobet and Domingo, 1984
			11		Chicken	Oral (subchronic)	6 weeks	Decrease in egg–laying	USEPA, 1988

TABLE E-3

INGESTION TOXICITY DATABASE

ANALYTE	ACUTE (mg/kgBW-day) ORAL		CHRONIC (mg/kgBW-day)		TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
	LD_{50}	LOAEL	LOAEL	NOAEL					
Zinc	2510				Rat	Single oral dose		Mortality	Sax, 1984
			160		Rat	Oral (subchronic)	NS	Kidney toxicity	Llobet, et al., 1988
			200		Rat	Oral	Gestation	Fetal resorptions in 4 to 20% of population	Shlicker and Cox, 1968
				300	Mink	Oral	144 days	No adverse effects	Aulerich et al., 1991
		390			Ferret	Oral	3-13 days	Mortality and gastrointestinal effects	Straube et al., 1980

NOTES:

[a] For chemicals lacking LOAEL or NOAEL data, an Acute Oral Criterion (AOC) is calculated by applying a factor of 0.2 to the acute LD50; this value is expected to protect 99.9% of the exposed population from acute effects (USEPA, 1986).

[b] Estimated by applying an acute-chronic ratio of 10.

[c] Value for benzo(a)pyrene chosen as a surrogate for all PAHs. Chemical-specific toxicity studies for ecologically significant endpoints are lacking for other PAHs.

[d] Converted to dose per kilogram body weight by multiplying by ingestion rate and dividing by body weight.

The following ingestion rate and body weight data were used:

Species	Ingestion Rate (kg/day)	ody Weight (kg)	Reference
Rat (Male)	0.025	0.35	USEPA, 1988
Rat (Female)	0.02	0.25	USEPA, 1988
Mouse	0.0035	0.03	USEPA, 1988
Rabbit	0.059	2.2	USEPA, 1988
Hamster	--	0.12	USEPA, 1988
Guinea pig	--	0.875	USEPA, 1988
Chicken	0.106	1.16	USEPA, 1988
Pig	--	150	USEPA, 1988
Dog	0.5	12.7	USEPA, 1988
Beagle dog		14	USEPA, 1988
Mink	0.0465	1.613	USEPA, 1988
Ferret	--	1.35	USEPA, 1988
Bird		1	Sax, 1984
Bobwhite	0.015	0.17	Kenaga, 1973
California quail	0.014 [f]	0.139	USEPA, 1988
Japanese quail		see California quail	
Corturnix		see California quail	
Grey partridge		0.39	Dunning, 1984
Pheasant (ring-necked)		1.135	Dunning, 1984
Rock dove		0.542	Dunning, 1984
Starling	0.01	0.0437	USEPA, 1988
Mallard Duck	0.09	1.25	Terres, 1987
Duck	0.112 [f]	1.6	USEPA, 1988
Black duck	--	1.25	USEPA, 1988
Young chickens	--	0.07	USEPA, 1988
Kestrel	0.01	0.179	USEPA, 1988
Screech Owl	0.0086	0.169	USEPA, 1988
Barn owl	--	0.466	USEPA, 1988

[e] Value for gamma-BHC used as a surrogate for all other BHC isomers.

NS = Not Stated

BW = Body Weight

LOAEL = Lowest Observed Adverse Effect Level

NOAEL = No Observed Adverse Effect Level

TABLE E-4
REFERENCE TOXICITY VALUES FOR ANALYTES DETECTED IN SURFACE SOIL AT COLD SPRING BROOK

Chemical	Short-tailed Shrew	American Woodcock	Red Fox	Red-tailed Hawk
PAL METALS ($\mu g/gBW-day$)				
Aluminum	425	425	425	425
Arsenic	3.1	3.1	3.1	3.1
Barium	198	198	198	198
Beryllium	10	10	10	10
Cadmium	12.5	12.5	12.5	12.5
Calcium	NA	NA	NA	NA
Chromium	1400	200	1400	200
Cobalt	20	20	20	20
Copper	100	100	100	100
Iron	NA	NA	NA	NA
Lead	7	6.25	7	6.25
Magneseium	NA	NA	NA	NA
Manganese	250	250	250	250
Mercury	0.7	0.22	0.1	0.22
Nickel	50	10	62.5	10
Potassium	NA	NA	NA	NA
Sodium	NA	NA	NA	NA
Tin	20	12.9	20	12.9
Vanadium	15	11	15	11
Zinc	200	200	200	200
PAL SEMIVOLATILE ORGANICS ($\mu g/gBW-day$)				
2-Methylnaphthalene	10	10	10	10
Acenaphthene	10	10	10	10
Acenaphthylene	10	10	10	10
Anthracene	10	10	10	10
Benzo(a)anthracene	10	10	10	10
Benzo(a)pyrene	10	10	10	10
Benzo(b)fluoranthene	10	10	10	10
Benzo(g,h,i)perylene	10	10	10	10
Benzo(k)fluoranthene	10	10	10	10
Bis(2-ethylhexyl)phthalate	35	35	35	35
Chrysene	10	10	10	10
Dibenz(a,h)anthracene	10	10	10	10
Di-n-butylphthalate	125	125	125	125
Fluoranthene	10	10	10	10
Fluorene	10	10	10	10
Indeno(1,2,3-cd)pyrene	10	10	10	10
Phenanthrene	10	10	10	10
Phenol	120	120	120	120
Pyrene	10	10	10	10

Reference Toxicity Values are derived from the Toxicity Database (Table E-3)
NA: Not Available/Not Applicable

TABLE E-5
ECOLOGICAL PROTECTIVE CONTAMINANT LEVELS FOR ANALYTES DETECTED IN SURFACE SOILS AT COLD SPRING BROOK

Analyte	Shrew	Woodcock	Fox	Hawk
Semivolatile Organic Compounds (mg/kg)				
2-Methylnaphthalene	2.1E+02	4.4E+03	NEL	3.9E+05
Acenaphthene	2.1E+02	4.4E+03	NEL	3.9E+05
Acenaphthylene	2.1E+02	4.4E+03	NEL	3.9E+05
Anthracene	2.1E+02	4.4E+03	NEL	3.9E+05
Benzo(a)anthracene	2.1E+02	4.4E+03	NEL	3.9E+05
Benzo(a)pyrene	2.1E+02	4.4E+03	NEL	3.9E+05
Benzo(b)fluoranthene	2.1E+02	4.4E+03	NEL	3.9E+05
Benzo(g,h,i)perylene	2.1E+02	4.4E+03	NEL	3.9E+05
Benzo(k)fluoranthene	2.1E+02	4.4E+03	NEL	3.9E+05
Bis(2-ethylhexyl)phthalate	7.5E+02	1.6E+04	NEL	3.9E+05
Chrysene	2.1E+02	4.4E+03	NEL	3.9E+05
Dibenz(a,h)anthracene	2.1E+02	4.4E+03	NEL	3.9E+05
Di-n-butylphthalate	2.7E+03	5.5E+04	NEL	NEL
Fluoranthene	2.1E+02	4.4E+03	NEL	3.9E+05
Fluorene	2.1E+02	4.4E+03	NEL	3.9E+05
Indeno(1,2,3-cd)pyrene	2.1E+02	4.4E+03	NEL	3.9E+05
Phenanthrene	2.1E+02	4.4E+03	NEL	3.9E+05
Phenol	2.5E+03	5.2E+04	NEL	NEL
Pyrene	2.1E+02	4.4E+03	NEL	3.9E+05
Inorganics (mg/kg)				
Aluminum	7.5E+03	1.5E+05	9.8E+07	1.9E+07
Arsenic	6.5E+01	1.6E+03	4.4E+05	1.3E+05
Barium	6.5E+03	1.4E+05	4.9E+07	9.7E+06
Berylium	2.2E+02	4.4E+03	2.5E+06	4.6E+05
Cadmium	2.9E+00	5.7E+01	1.5E+04	2.3E+03
Calcium	NA	NA	NA	NA
Chromium	1.5E+04	4.4E+04	2.2E+08	5.6E+06
Cobalt	4.6E+01	9.1E+02	4.4E+05	7.2E+04
Copper	1.0E+03	2.1E+04	1.0E+07	1.8E+06
Iron	NA	NA	NA	NA
Lead	1.9E+02	3.8E+03	1.6E+06	3.0E+05
Magnesium	NA	NA	NA	NA
Manganese	5.7E+03	1.3E+05	4.7E+07	1.2E+07
Mercury	1.2E+01	8.0E+01	2.2E+04	1.0E+04
Nickel	4.1E+02	1.7E+03	8.1E+06	2.4E+05
Potassium	NA	NA	NA	NA
Selenium	1.1E+00	3.5E+01	1.3E+04	3.4E+03
Sodium	NA	NA	NA	NA
Tin	3.1E+01	4.0E+02	2.2E+05	2.2E+04
Vanadium	2.0E+02	3.0E+03	3.1E+06	4.3E+05
Zinc	2.4E+02	5.0E+03	1.2E+06	1.9E+05

NOTES:

NA = Not Available. No bioaccumulation or benchmark data are available for calculating PCLs.

NEL = No Effects Likely. Due to the exposure assumptions incorporated in the food chain models, (i.e., PAHs and phthalates are not anticipated to accumulate in the food chain), the concentrations of analytes detected at the site are not likely to have adverse effects on higher trophic level receptors.

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PRELIMINARY BIOASSESSMENT OF LOWER COLD SPRING BROOK

PRELIMINARY BIOASSESSMENT
OF COLD SPRING BROOK
AT
FORT DEVENS, MASSACHUSETTS

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1.0 INTRODUCTION

This report describes results of the Cold Spring Brook bioassessment in Fort Devens, Massachusetts. The bioassessment involved measurement of habitat characteristics and macroinvertebrate abundance and diversity at eight potentially impacted ("experimental") stations and two upstream "reference" stations. Macroinvertebrate subsamples from each station were identified to family. Habitat and biological metrics were analyzed according to USEPA's Rapid Bioassessment Protocol II (Plafkin et al. 1989).

2.0 METHODS

2.1 HABITAT ASSESSMENT

Physical habitat characteristics were assessed using metrics described in Plafkin et al. (1989). This assessment quantified nine physical habitat parameters designated primary, secondary, or tertiary depending upon their relative contribution to habitat quality, and points are assigned accordingly. The greater the point total assigned to a station, the better the habitat quality within that station. Primary parameters characterize the various micro-habitats available within a station. The parameters are: 1) bottom substrate and available cover, 2) substrate embeddedness, and 3) stream flow at representative low flow. Primary parameters can receive up to 20 points each. Secondary parameters describe stream channel configuration and evaluate the degree of channel alteration. These parameters are: 1) channel alteration, 2) bottom scouring and deposition, and 3) pool/riffle ratio. Secondary parameters can receive up to 15 points each. Tertiary parameters describe stream bank structure and include: 1) bank stability, 2) bank vegetative stability, and 3) streamside cover. Each tertiary parameter can be awarded a maximum of 10 points.

Once totaled at each station the values assigned to each of the nine parameters are used to compare the degree of habitat similarity between the upstream and downstream stations. The degree of similarity is expressed as a percent.

2.2 SAMPLE COLLECTION

Macroinvertebrate samples were collected at ten locations along Cold Spring Brook in Fort Devens, Massachusetts during 26 and 28 September 1994 (Figure 1). Duplicate benthic samples were collected using a 6" by 6" pole-mounted Ekman grab. In addition, one kick sample, using a 600μ mesh dip net was collected from the epiphytic habitat at each station. After collection, each sample was washed through a 600μ sieve-bottomed bucket, placed in a labeled sample container, and preserved with 10% formalin.

Figure 1. (Provided by Client)

2.3 SAMPLE PROCESSING

In the laboratory, samples were evenly distributed in a white enamel pan and a 100 organism subsample was removed for analysis. Subsampling procedures followed guidelines described in Plafkin et al. (1989). The remaining sample was archived for future analysis, if necessary.

All organisms were identified to the family taxonomic level when possible. Organisms that were damaged or could not be reliably be identified to the family taxonomic level (e.g., Oligochaeta, Nematoda, Hirudinea) were identified to higher taxonomic levels.

2.4 DATA ANALYSIS

Analytical metrics described in Plafkin et al. (1989) for RBP II were used to analyze the data from each station. These metrics included:

1) Taxonomic Richness - reflects the health of the community through a measurement of the variety of taxa. This metric generally increases with water quality.

2) Hilsenhoff Biotic Index - assigns a tolerance value to each taxon ranging from 0 (pollution sensitive) to 10 (pollution tolerant). The formula for calculating the Biotic Index is:

$$BI = \frac{\Sigma x_i t_i}{n}$$

where x: = number of individuals within species i
t: = tolerance value of species i
n: = total number of organisms within a sample

Severely polluted sites will have biotic index values of 8.51-10.00, moderately polluted sites have values of 5.51-6.50, and sites with little or no pollution have values of 0.00-3.50 (Hilsenhoff 1987).

3) Scraper/Filterer Ratio - organically enriched sites produce a large amount of filamentous algae and increase the percentage of filterers.

4,5) EPT Index and EPT/Chironomidae Ratio - the number of EPT taxa observed in a sample, when compared to the total number of taxa, indicates whether a substantial portion of the community is comprised of taxa sensitive to environmental stress. The number of EPT taxa is determined by totaling taxa within the mayfly (Ephemeroptera), stonefly (Plecoptera), and caddisfly (Trichoptera) insect orders. Taxa within these groups are considered intolerant of most forms of pollution and are often poorly represented in samples from stressed environments.

Conversely, the midge family Chironomidae is considered tolerant of environmental stress. Comparing the relative abundance of sensitive taxa with the relative abundance of tolerant (Chironomidae) taxa provides an estimate of the balance between a sample's sensitive and tolerant organisms referred to as the EPT/Chironomidae ratio.

6) Percent contribution of the dominant taxon - the percent of the numerically dominant taxon compared to the total number of organisms. A community dominated by relatively few species would indicate environmental stress.

7) Community Loss Index - Measures the loss of benthic taxa between a reference station and the station of comparison. The Community Loss Index was developed by Courtemanch and Davies (1987) and is an index of compositional dissimilarity, with values increasing as the degree of dissimilarity with the reference station increases. Values range from 0 to "infinity."

The biological condition of each experimental station was evaluated by comparing reference stations to experimental stations. Cumulative scoring criteria were based upon similarity to reference stations, expressed as a percent. Stations were grouped into four biological condition categories termed non-impaired (>83%), slightly impaired (54-79%), moderately impaired (21-50%), and severely impaired (<17%).

Mean values of the two benthic samples at each station were analyzed separately from the epiphytic sample data. Comparison between reference and experimental stations was conducted separately for benthic data and epiphytic data.

3.0 RESULTS AND DISCUSSION

3.1 STREAM HABITAT

Cold Spring Brook is a low gradient stream with slow current velocity, sand and mud substrate, and an abundance of aquatic vegetation; habitat characteristics at all stations, except Station 3, were similar. In general, the stream was approximately 1-5 ft deep, 5-20 ft wide, had a current velocity of about 0.1 ft. per second, and had a substrate comprised primarily of sand, mud, and detritus. Station 3 was originally chosen as a lotic reference station for comparison with Stations 8 and 11, however, the results of the field work indicated that Station 2 was more suitable as a reference station for all stations including Stations 8 and 11 because the habitat at Station 2 was more comparable. Habitat data for all stations are presented in Appendix A and summarized in Tables 1 and 2.

As shown in Table 1, the habitat score at reference Station 2 was 41. Scores for other experimental stations ranged from 23 to 39. Most of the experimental stations had habitats categorized as "comparable" or "supporting" when compared to reference Station 2 (Plafkin et al. 1989). These two categories indicate that the available habitat could support a biological community similar to the reference station. Station 20 was the only experimental station that had a habitat categorized as "non-supporting" relative to reference Station 2 (Plafkin et al. 1989); Station 20 had much poorer habitat than the reference station. Station 3 had habitat that was much better than the reference station or any other station, therefore its use as a reference station is inappropriate (equivalent to "non-supporting").

3.2 MACROINVERTEBRATES

The benthic biological communities at all stations, except Station 18, were similar; epiphytic communities were similar at all Stations (Appendix B). Most stations were dominated by the amphipod family Talitridae. The abundance of taxa (richness) representing Ephemeroptera, Plecoptera, and Trichoptera (EPT) was low at all stations. The low EPT richness is expected, given the habitat quality in Cold Spring Creek. Most EPT taxa are

TABLE 1. HABITAT SCORES FOR MACROINVERTEBRATE SAMPLING STATIONS FOR THE COLD SPRING BROOK BIOASSESSMENT.

	PARAMETER VALUE									RESULT		
STATION	SUBSTRATE	EMBEDDEDNESS	AVAILABLE HABITAT	CHANNEL ALTERATION	SCOOPING/ DEPOSITION	POOL/ RIFFLE	BANK STABILITY	VEGETATIVE STABILITY	COVER	HABITAT SCORE	% COMP TO STA. 2	ASSESSMENT CATEGORY
2	2	0	2	4	7	0	10	10	6	41	100	REFERENCE
3	6	16	11	7	8	11	9	10	10	88	215	*
8	1	0	2	4	7	3	6	9	6	38	93	COMPARABLE
11	0	0	0	7	7	4	8	8	5	39	95	COMPARABLE
13	0	0	0	1	2	0	8	9	5	25	61	PARTIALLY SUPPORTING
18	3	0	1	0	7	1	9	9	3	33	80	SUPPORTING
20	0	0	0	1	7	0	6	6	3	23	56	NON-SUPPORTING
27	5	0	1	1	7	0	9	9	3	35	85	SUPPORTING
32	5	0	2	1	5	0	9	9	3	34	83	SUPPORTING
34	5	0	2	0	7	0	9	9	5	37	90	COMPARABLE

*Macroinvertebrate habitat quality at Station 3 was much higher than at any other station. Therefore, use of this station as a reference station and comparing habitat data with any other station would be inappropriate.

TABLE 2. WATER QUALITY DATA FOR COLD SPRING BROOK, FORT DEVENS, MA, MACROINVERTEBRATE SAMPLING STATIONS. DATA COLLECTED 26 AND 28 SEPTEMBER 1994.

Station	Temp(°C)	DO (mg/l)	pH	Conductivity
2	16.0	10.2	6.0	270
3	17.6	12.5	6.2	261
8	16.0	8.1	5.9	236
11	14.0	7.4	6.0	264
13	15.9	5.5	6.1	258
18	17.5	4.3	5.8	161
20	18.5	9.2	5.6	190
27	17.1	3.2	5.8	163
32	15.9	1.9	5.8	228
34	16.0	2.2	5.7	227

normally found in riffle areas of swift streams with coarse (cobble, gravel) substrates and little sedimentation. However, the presence of Ephemeridae, a burrowing ephemeropteran, was not surprising since this family normally burrows into mud substrates in lakes, ponds, and slowly moving rivers and streams. The abundance of Talitridae (probably *Hyalella azteca*) was also expected. This amphipod is commonly found in benthic and kick samples from ponds and slowly moving streams. The presence of the mayflies Baetidae and Leptophlebiidae was somewhat unexpected. Most members of these families usually prefer quiet areas downstream of rocks in clean swept streams with faster current.

The biological condition scoring for each station showed that no impairment was seen in any of the epiphytic samples when data were compared between the experimental stations and reference Station 2 (Table 3). Benthic data showed moderate impairment at Station 3, severe impairment at Station 18, and no impairment at the other stations. The severe impairment designation at Station 18 is due to the absence of organisms from either of the two benthic samples from this station (Appendix B). Benthic samples from Stations 3, 11, 27, and 34 also had very low numbers of organisms from at least one of the duplicate benthic samples, including zero organisms in one replicate at Station 34 (Table 4). Stations 27 and 32 had highly variable numbers of organisms between the two benthic samples. For example at Station 27, only 13 organisms were found in the replicate A benthic sample after 100% of the sample was processed, whereas in the replicate B benthic sample, 99 organisms were found and only 33% of the sample was processed. Similarly, it appears that there were lower numbers of epiphytic organisms at some stations which also had low numbers of benthic organisms (e.g. Station 3, 8, 32).

These data indicate that Cold Spring Brook generally has a depauperate macroinvertebrate community with a patchy distribution. Given the low numbers and patchy distribution of benthic organisms throughout the Cold Spring Brook system, having one station with no organisms in either benthic sample is statistically possible but unusual. Additional sampling would be required to confirm the absence of benthic organisms at this station.

TABLE 3. BIOLOGICAL SCORES FOR BENTHIC AND EPIPHYTIC SAMPLES COLLECTED FROM COLD SPRING BROOK, FT. DEVENS, MA, SEPTEMBER 1994.

STATION	HABITAT TYPE	TAXA RICHNESS	HBI	S/F	EPT/CHIR	% DOM	EPT RICHNESS	COMM. LOSS INDEX	SCORE	% COMPARABILITY WITH STATION 2	BIOLOGICAL CONDITION CATEGORY
3	Benthic	3	6	6	6	0	0	3	24	67	Moderately impaired
3	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
8	Benthic	6	6	6	6	3	6	6	39	108	Non-impaired
8	Epiphytic	6	6	6	6	0	0	6	30	83	Non-impaired
11	Benthic	6	6	6	6	3	6	6	39	108	Non-impaired
11	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
13	Benthic	6	6	6	6	0	6	3	33	92	Non-impaired
13	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
18	Benthic	0	0	0	0	0	0	0	0	0	Severely impaired
18	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
20	Benthic	6	6	6	6	6	6	6	42	117	Non-impaired
20	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
27	Benthic	6	6	6	6	0	6	3	33	92	Non-impaired
27	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
32	Benthic	6	6	6	6	0	0	3	27	75	Non-impaired
32	Epiphytic	6	6	6	6	0	6	6	36	100	Non-impaired
34	Benthic	6	6	6	6	3	0	3	30	83	Non-impaired
34	Epiphytic	6	6	6	6	0	0	6	30	83	Non-impaired

HBI = Hilsenhoff Biotic Index
S/F = Scraper/Filterer Ratio
EPT/CHIR = EPT/Chironomid Ratio
% DOM = % Contribution of dominant taxon
Comm. Loss Index = Community Loss Index (Courtemanch and Davies 1987)

TABLE 4. NUMBER OF ORGANISMS AND AMOUNT OF SAMPLE PROCESSED FROM MACROINVERTEBRATE SAMPLES COLLECTED FROM COLD SPRING BROOK, FORT DEVENS, MA IN SEPTEMBER 1994.

	BENTHIC REP. A		BENTHIC REP. B		EPIPHYTIC	
Station	Number of Grids Processed	Number of Organisms	Number of Grids Processed	Number of Organisms	Number of Grids Processed	Number of Organisms
2	46/48	88	48/48	78	3/48	99
3	48/48	12	48/48	6	48/48	21
8	44/48	98	48/48	69	41/48	83
11	45/48	99	48/48	9	36/48	100
13	40/48	102	48/48	52	16/48	106
18	80/80	0	80/80	0	7/48	102
20	46/48	101	38/48	104	13/48	97
27	48/48	13	16/48	99	24/48	102
32	8/48	99	48/48	40	48/48	98
34	48/48	0	48/48	33	26/48	100

The biological metric values, in general, reflected the low habitat quality found in Cold Spring Brook. Taxa richness and EPT richness were both low compared to that expected from a faster stream with a cobble and gravel substrate. Biotic index values were mostly in the 6.0-8.0 range indicating the abundance of moderately tolerant organisms. The scraper/filterer ratio and EPT/Chironomidae ratio were both very low at most stations. These low values can be attributed to the physical habitat limitations of Cold Spring Brook. Scrapers and filterers as well as EPT taxa prefer faster water with coarse substrates and little sedimentation.

Even though biological condition scores were low at most stations, they were comparable to scores found at the reference station. Scores for several stations were actually higher than at the reference station. These increased scores may be due to minor differences in habitat quality, although Station 20 had the highest benthic biological condition score (117) but the lowest habitat score (23). The increased scores may also be reflecting natural variability of the biological community. Even if two sections of a stream appear to have identical physical habitats, their biological communities may be slightly different due to differences at the microhabitat level. Macroinvertebrates are attuned to these microhabitat differences which may not be apparent at the macrohabitat level. These differences at the microhabitat level could cause a change in the total abundance or in the taxonomic composition between two sites.

The abundance of data indicating that the macroinvertebrate community in Cold Spring Brook was not impaired by degraded water quality is somewhat expected given the poor habitat quality in Cold Spring Brook. Macroinvertebrate communities from sluggish unpolluted streams, with sand and mud substrates, are typically dominated by chironomids, oligochaetes, and other pollution tolerant taxa (high biotic index values). The presence of pollution tolerant organisms, by itself, does not indicate degraded or impaired conditions; the presence of pollution tolerant organisms in both experimental and reference stations is not indicative of pollution unless pollution-intolerant organisms occur more frequently in the reference station than in the experimental stations. Since few pollution intolerant organisms were found at any site (including the reference site), no impairment is indicated by the biotic index score. The low numbers of pollution intolerant organisms is most likely due to physical habitat limitations.

The precision of a bioassessment is greatly influenced by the taxonomic level to which the organisms are identified. For example, the true fly family Chironomidae is comprised of approximately 670 species in North America (Borror et al. 1976). In general, most species are pollution tolerant or moderately tolerant. However, some species are pollution intolerant. When chironomids are identified to the family taxonomic level (Chironomidae) their biotic index value is 6 (moderately tolerant). If these same organisms were identified to the genus or species level, their individual biotic index values could be much higher or lower, and would provide a more accurate biotic index score for that station. Taxa richness, percent dominance by a single taxon, EPT richness, and community loss index are also influenced by the level of taxonomy used. When lower taxonomic levels are determined, taxa richness and EPT richness increase, while percent dominance by a single taxon decreases. Community loss index values may increase, decrease, or remain the same depending on how many taxa are unique to the experimental and control sites.

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APPENDIX A

HABITAT DATA

PHYSICAL CHARACTERIZATION/WATER QUALITY
FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

1 of 3

PROJECT NAME Ft Devens PROJECT # 14067 DATE 9/28/94 STATION 2 (ref)

Completed by: WRA

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use: Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion: None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

open water/swamp

Estimated Stream Width____m Estimated Stream Depth: 1.0' Riffle____m Run____m Pool____m

High Water Mark____m Velocity____ Dam Present: Yes___ No X Channelized: Yes___ No X

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other organic

Sediment Oils: [✓ Absent] Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other________

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	50%
Muck-Mud	Black, Very Fine Organic (FPOM)	50%
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 16.0°C C Dissolved Oxygen 10.2 ppm pH 6.0 Conductivity 270 Other________

Instruments Used________

Stream Type: Coldwater Warmwater

Water Odors: Normal Sewage Petroleum Chemical None Other________

Water Surface Oils: Slick Sheen Globs Flecks None

Turbidity: Clear Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS sunny

Photograph Number Pict 15 + 16

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 2

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover (a)	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	2
2. Embeddedness (b)	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5	
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5	2
4. * Channel alteration (a)	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks [✓ 4-7]	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	4
5. Bottom scouring and deposition (a)	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. [✓ 4-7]	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	7

14

(a) From Ball 1982.
(b) From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/96 STATION 2

3 of 3

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio [a] (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occasional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3	0
7. Bank Stability [a]	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	10
8. Bank Vegetative Stability [b]	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	10
9. Streamside cover [b]	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2	6
Column Totals	___	___	___	___	24

Score 41

PHYSICAL CHARACTERIZATION/WATER QUALITY
FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. D PROJECT # 14063 DATE 9/28/94 STATION 3 ref

. 1 of 3

completed by: WRA

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural [✓ Residential] Commercial Industrial Other Army Base

Local Watershed Erosion:
None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

shallow riffle areas

Estimated Stream Width 20 m Estimated Stream Depth: 0.8' foot Riffle ___ m Run ___ m Pool ___ m

High Water Mark ___ m Velocity 0.8-1.0 ft/s (estimated) Dam Present: Yes ___ No X Channelized: Yes ___ No X

Canopy Cover: Open Partly Open Partly Shaded [✓ Shaded]

SEDIMENT/SUBSTRATE:

Sediment Odors: [✓ Normal] Sewage Petroleum Chemical Anaerobic None Other ___

Sediment Oils: [✓ Absent] Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other ___

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	10%
Muck-Mud	Black, Very Fine Organic (FPOM)	
Marl	Gray, Shell Fragments	90% Sand/Gravel

Gravel 10-20%

WATER QUALITY

17.9°C pH meter

Temperature 17.6 °C DO meter Dissolved Oxygen 12.5 ppm pH 6.2 Conductivity 261 Other ___

Instruments Used ___

rechecked DO read 12.2 ppm

DO meter check

Temp 22 °C

DO 8.6 °C should be 9.1 °C readjust

Stream Type: Coldwater [✓ Warmwater]

Water Odors: [✓ Normal] Sewage Petroleum Chemical None Other ___

Water Surface Oils: Slick Sheen Globs Flecks None

Turbidity: Clear Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number

Observations and/or Sketch Pictures 13 + 14

Small water fall could cause supersaturation

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 3

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover (a)	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. [✓ 6]-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	6
2. Embeddedness (b)	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment [✓ 16]-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	16
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 10-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5	
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). [✓ 11]-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5	11
4. * Channel alteration (a)	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-[✓ 7]	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	7
5. Bottom scouring and deposition (a)	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. [✓ 8]-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	8

48

(a) From Ball 1982.
(b) From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

3 of 3

PROJECT NAME Ft Devens PROJECT # 14067 DATE 9/28/94 STATION 3

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio [a] (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occasional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3	11
7. Bank Stability [a]	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	9
8. Bank Vegetative Stability [b]	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9-10, 10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	10
9. Streamside cover [b]	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2	10
Column Totals	___	___	___	___	40

Score 88

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft [illegible] [illegible] PROJECT # 14067 DATE 9/28/94 STATION 8 dwnstr of swale 7

Sta 2 (cont)

1 of 3
Completed by: WRA

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural Residential Commercial [✓ Industrial] Other [illegible] Rose

Local Watershed Erosion:
[✓ None] Moderate Heavy

Local Watershed NPS Pollution: No Evidence [✓ Some Potential Sources] Obvious Sources

Estimated Stream Width 2.5 m Estimated Stream Depth: .5 ft - .8 ft Riffle ___ m Run X m Pool ___ m No Riffles

ponded area 1.0' deep open

High Water Mark ___ m Velocity 0.1-0.5 ft/s Dam Present: Yes ___ No X Channelized: Yes ___ No X

Canopy Cover: Open Partly Open [✓ Partly Shaded] Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: [✓ Normal] Sewage Petroleum Chemical Anaerobic None Other ___

Sediment Oils: [✓ Absent] Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other ___

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	> 20%
Muck-Mud	Black, Very Fine Organic (FPOM)	> 40% Mud
Marl	Gray, Shell Fragments	> 40% Sand

50% M
50% S

WATER QUALITY

Temperature 16.0 C Dissolved Oxygen 8.1 pH 5.9 Conductivity 236 Other ___

Cond 270
pH 6.0
Temp 16.0°C
DO 10.2 ppm

Instruments Used ___

Stream Type: Coldwater [✓ Warmwater]

Water Odors: [✓ Normal] Sewage Petroleum Chemical None Other ___

Water Surface Oils: Slick Sheen Globs Flocks [✓ None]

Turbidity: Clear Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS partly cloudy, 60-70°s

Photograph Number

Observations and/or Sketch Pict. 11 + 12

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 7/28/94 STATION 4

Habitat Parameter	Excellent	Good	Fair	Poor		2
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	1	0
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow or 0.15 cms (5 cfs) Velocity, Depth	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 16-20 Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15 Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10 Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5 Dominated by one velocity/depth category (usually pool). 0-5	2	0
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks [✓ 4]-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	4	11
5. Bottom scooping and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. [✓ 4-7] 7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	7	15
					14	20

(a) From Ball 1982.
(b) From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
3 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 8

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio (a) (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3	3
7. Bank Stability (a)	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6 [✓ 6-8]	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	6
8. Bank Vegetative Stability (b)	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. [✓ 9-10] 9	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	9
9. Streamside cover (b)	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. [✓ 6-8]	Dominant vegetation is grass or forbes. 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2	6
Column Totals	___	___	___	___	24

Score 38

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Fort Devens Cold Brook PROJECT # 14067 DATE 9/26/94 STATION 11 Downstream of Swale #6

1 of 3
Completed by: DJM

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural Residential Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion:
[✓ None] Moderate Heavy

Local Watershed NPS Pollution: No Evidence [✓ Some Potential Sources] Obvious Sources

Estimated Stream Width 20' ~~m~~ Estimated Stream Depth: 1' Riffle____m Run____m Pool____m

High Water Mark____m Velocity 1'/sec Dam Present: Yes__ No X Channelized: Yes__ No X

Canopy Cover: Open [✓ Partly Open] Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical [✓ Anaerobic] None Other ________

Sediment Oils: [✓ Absent] Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other none

Are there undersides of stones which are not deeply embedded black? Yes No no stones

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	10%
Muck-Mud	Black, Very Fine Organic (FPOM)	90%
Marl	Gray, Shell Fragments	

WATER QUALITY

Temperature 14.0 C Dissolved Oxygen 7.4 pH 6.0 Conductivity 264 umhos Other ________

Instruments Used ________

Stream Type: Coldwater [✓ Warmwater]
Water Odors: [✓ Normal] Sewage Petroleum Chemical None Other ________
Water Surface Oils: Slick Sheen Globs Flecks [✓ None]
Turbidity: Clear [✓ Slightly Turbid] Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number pict 1,2,3 panorama

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 26 Sept 94 STATION 11

Habitat Parameter	Excellent	Good	Fair	Poor
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat. adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0 0-5
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0 0-5
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 10-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0 0-5
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 7 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3
5. Bottom scooping and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 7 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
3 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 26 Sept 94 STATION U

Habitat Parameter	Excellent	Good	Fair	Poor
6. Pool/Riffle, run/bend ratio [a] (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3
7. Bank Stability [a]	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 8 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2
8. Bank Vegetative Stability [b]	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 8 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2
9. Streamside cover [b]	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 5 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2
Column Totals	0	16	16	0

Score 39

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

1 of 3

Completed by: TPM

Fort Devens

PROJECT NAME Cold Brook PROJECT # 11067 DATE 9/26/94 STATION 13

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use: Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion: [✓ None] Moderate Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources] Landfill

Estimated Stream Width 15-20 m Estimated Stream Depth: Riffle ___ m Run ___ m Pool 1' m

High Water Mark ___ m Velocity <0.1 fps 1'/ Dam Present: Yes ✓ No ___ Channelized: Yes ___ No ✓

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: [✓ Normal] slightly anaerobic Sewage Petroleum Chemical [✓ Anaerobic] None Other ___

Sediment Oils: [✓ Absent] Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other none

Are there undersides of stones which are not deeply embedded black? Yes No no stones

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64-mm (0.1-2.5 in.)	
Sand	0.06-2.00-mm (gritty)	10
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM) decaying cattails,...	5
Muck-Mud	Black, Very Fine Organic (FPOM)	85
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 15.9 C Dissolved Oxygen 5.5 pH 6.1 Conductivity 258 Other ___

Instruments Used ___

Stream Type: Coldwater [✓ Warmwater]

Water Odors: Normal Sewage Petroleum Chemical [✓ None] Other ___

Water Surface Oils: Slick Sheen Globe Flecks [✓ None]

Turbidity: [✓ Clear] [✓ Slightly Turbid] Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 26Sept94 STATION 13

2 of 3

Habitat Parameter	Excellent	Good	Fair	Poor
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat. adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5 0
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5 0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 10-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0 0-5
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3 1
5. Bottom scouring and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3 2

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

3 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 26Sept94 STATION 13

Habitat Parameter	Excellent	Good	Fair	Poor
6. Pool/Riffle, run/bend ratio (a) (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3 0
7. Bank Stability (a)	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 8 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2
8. Bank Vegetative Stability (b)	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2
9. Streamside cover (b)	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 5 3-5	Over 50% of the Streambank has no vegetation and dominant material is soil, rock, bridge materials, culverts or mine tailings. 0-2
Column Totals	9	8	5	3

Score 25

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

1 of 3
Completed by: WRA

PROJECT NAME Fort Devens PROJECT # 14067 DATE 9/28/94 STATION 18

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use: Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion: None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

Estimated Stream Width ____ m Estimated Stream Depth: 3.6 Riffle ____ m Run X m Pool ____ m Open Channel ≈ 10'

High Water Mark ____ m Velocity <0.1 ft/s Dam Present: Yes ___ No X Channelized: Yes ___ No X

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other ________

Sediment Oils: Absent Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other ________

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	75% [illegible]
Muck-Mud	Black, Very Fine Organic (FPOM)	~25%
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 17.5 °C Dissolved Oxygen 4.3 ppm pH 5.8 Conductivity 161 Other ________

Instruments Used ________

Stream Type: Coldwater Warmwater

Water Odors: Normal Sewage Petroleum Chemical None Other Organic

Water Surface Oils: Slick Sheen Globs Flecks [✓ None]

Turbidity: Clear Slightly Turbid Turbid Opaque Water Color Iron Stained

WEATHER CONDITIONS

Photograph Number — pict. 7 & 8 - looking Downstream

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
2 of 3

PROJECT NAME Ft.Devens PROJECT # 14067 DATE 9/28/94 STATION 18

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	3
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5	
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5	1
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	0
5. Bottom scooping and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 7 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	-

7 4

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 28Sept94 STATION 18

3 of 3

Habitat Parameter	Excellent	Good	Fair	Poor
6. Pool/Riffle, run/bend ratio (a) (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3 1
7. Bank Stability (a)	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2
8. Bank Vegetative Stability (b)	Over 80% of the streambank surfaces 9 covered by vegetation or boulders and cobble. 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2
9. Streamside cover (b)	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2
Column Totals	18	0	3	1

Score 33

22
11
33

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft Devens PROJECT # 14067 DATE 9/28/94 STATION 20 SA-57 Area 1of3

sampled approx 30' offshore

Completed by: WRA

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion:
None Moderate Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

Estimated Stream Width 5-6' m Estimated Stream Depth: Riffle ____ m Run X m Pool ____ m

High Water Mark ____ m Velocity <0.1 ft/s Dam Present: Yes __ No __ Channelized: Yes __ No X

Ponded/Swamp above Dam

No Defined Channel

Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE;

Sediment Odors: Normal Sewage [✓ Petroleum] Chemical Anaerobic None Other organic

Sediment Oils: Absent Slight [✓ Moderate] Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other ________

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	
Gravel	2-64-mm (0.1-2.5 in.)	
Sand	0.06-2.00-mm (gritty)	
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	> 85 %
Muck-Mud	Black, Very Fine Organic (FPOM)	> 15 %
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 18.5 C Dissolved Oxygen 9.2 pH 6.6 Conductivity 190 mV/cm @25°C Other ________

Instruments Used ________

Stream Type: Coldwater [✓ Warmwater]
Water Odors: Normal Sewage Petroleum Chemical None Other ________
Water Surface Oils: Slick [✓ Sheen] Globs Flecks None
Turbidity: Clear Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number Pictures 9 + 10

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 20

2 of 3

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	0
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow or 0.15 cms (5 cfs) Velocity, Depth	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 10-20 Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15 Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10 Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5 Dominated by one velocity/depth category (usually pool). 0-5	0
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	1
5. Bottom scouping and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	7
					8

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 20

3 of 3

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio [a] (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3 0	backwater area
7. Bank Stability [a]	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. [✓ 6]-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	6 Recent soil Removal just up from bank
8. Bank Vegetative Stability [b]	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. [✓ 6]-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	6
9. Streamside cover [b]	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3 [✓ 3]-5	Over 50% of the Streambank has no vegetation and dominant material is soil, rock, bridge materials, culverts or mine tailings. 0-2	3
Column Totals	___	___	___	___	15 8 23

Score 23

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

1 of 3
Completed by: WRA

PROJECT NAME Fort Devins PROJECT # 14067 DATE 9/28/94 STATION 27

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion:
None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

open water ≈ 20'
channel ≈ 10'

Estimated Stream Width ____ m Estimated Stream Depth: 4.6 feet Riffle ____ m Run X m Pool ____ m

High Water Mark ____ m Velocity 0.1 ft/s Dam Present: Yes ___ No ✓ Channelized: Yes ___ No ✓

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic [✓ None] Other ________

Sediment Oils: Absent Slight [✓ Moderate] Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other mud/sand/Detritus

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	>35% Autochthonous
Muck-Mud	Black, Very Fine Organic (FPOM)	/ 25% Mud
Marl	Grey, Shell Fragments	40% Sand,

WATER QUALITY

Temperature 17.1 °C Dissolved Oxygen 3.2 ppm pH 5.8 Conductivity 163 Other ________

Instruments Used DO-YSI 2914 - Orion pH - TKC

Stream Type: Coldwater [✓ Warmwater]
Water Odors: Normal Sewage Petroleum Chemical [✓ None] Other ________
Water Surface Oils: Slick Sheen Globs Flecks [✓ None]
Turbidity: [✓ Clear] Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number pict 5 & 6 No Pictures @ sta 34

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 27

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover (a)	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	5 for plant mat'l
2. Embeddedness (b)	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5	
or 0.15 cms (5 cfs) Velocity, Depth	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 0-5	1
4. * Channel alteration (a)	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	1
5. Bottom scouping and deposition (a)	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 7 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	
	0	0	7	7	

(a) From Ball 1982.
(b) From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/29/94 STATION 27

Habitat Parameter	Excellent	Good	Fair	Poor
6. Pool/Riffle, run/bend ratio (a) (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3 0
7. Bank Stability (a)	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9-10 9	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2
8. Bank Vegetative Stability (b)	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9-10 9	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2
9. Streamside cover (b)	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2
Column Totals	18	0	3	0

Score 35

21
14
3

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

PROJECT NAME Fort Devens Cold Brk PROJECT # 14067 DATE 9/28/94 STATION 94-32Y

1 of 3

Completed by: WRA

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:
Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion:
None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

Estimated Stream Width 1 m Estimated Stream Depth: 5.5 feet Riffle____m [✓ Run____m] Pool____m No riffle

High Water Mark____m Velocity 0.5 ft/s Dam Present: Yes__ No X Channelized: Yes__ No X

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic [✓ None] Other________

Sediment Oils: Absent Slight [✓ Moderate] Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other muck

Are there undersides of stones which are not deeply embedded black? Yes No no stones

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	45% Sand
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	20% Mud
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	35% Detritus

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, [✓ Coarse Plant Materials (CPOM)]	
[✓ Muck-Mud]	[✓ Black, Very Fine Organic (FPOM)]	
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 15.9°C Dissolved Oxygen 1.9 pH 5.8 Conductivity 228 Other________

Instruments Used________________

Stream Type: Coldwater [✓ Warmwater]
Water Odors: Normal Sewage Petroleum Chemical [✓ None] Other________
Water Surface Oils: Slick Sheen Globs Flecks [✓ None]
Turbidity: [✓ Clear] Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS

Photograph Number Pict 4 sk , 5 - panorama to US

Observations and/or Sketch

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
2 of 3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 9/28/94 STATION 32

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat, adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	5
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow or 0.15 cms (5 cfs) Velocity, Depth	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 16-20 Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/S), deep; fast, shallow habitats all present. 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15 Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10 Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5 Dominated by one velocity/depth category (usually pool). 0-5	4x2
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	1
5. Bottom scooping and deposition [a]	Less Than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 5 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
3of3

PROJECT NAME Ft. Devens PROJECT # 14067 DATE 28Sept94 STATION 32

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio (a) (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3	0
7. Bank Stability (a)	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9 [✓ 9-10]	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	9
8. Bank Vegetative Stability (b)	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9 [✓ 9-10]	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	9
9. Streamside cover (b)	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. [✓ 3-5]	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2	3
Column Totals	18	0	3	0	21

Score 34

PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

1 of 3

Completed by: WRA

PROJECT NAME Ft Devens **PROJECT #** 14067 **DATE** 9/28/94 **STATION** 34

PHYSICAL CHARACTERIZATIONS

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use: Forest Field/Pasture Agricultural [✓ Residential] Commercial [✓ Industrial] Other Army Base

Local Watershed Erosion: None [✓ Moderate] Heavy

Local Watershed NPS Pollution: No Evidence Some Potential Sources [✓ Obvious Sources]

Estimated Stream Width 1.0 m **Estimated Stream Depth:** 5.0' **Riffle** ___ m **Run** ✓ m **Pool** ___ m

Open Water ≈ 50 ft
channel ≈ 4 ft

High Water Mark ___ m **Velocity** 0.5 ft/s **Dam Present:** Yes ___ No Y **Channelized:** Yes ___ No X

Canopy Cover: [✓ Open] Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic [✓ None] Other ______

Sediment Oils: Absent Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other ______

Are there undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition In Sampling Area
Bedrock		
Boulder	>256 mm (10 in.)	
Cobble	64-256 mm (2.5-10 in.)	
Gravel	2-64 mm (0.1-2.5 in.)	
Sand	0.06-2.00 mm (gritty)	
Silt	.004-.06 mm	
Clay	<.004 mm (slick)	

Organic Substrate Components

Substrate Type	Characteristics	Percent Composition In Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	60%
Muck-Mud	Black, Very Fine Organic (FPOM)	20%
Marl	Grey, Shell Fragments	20% Sand

WATER QUALITY

Temperature 16.0 °C **Dissolved Oxygen** 2.2 ppm **pH** 5.7 **Conductivity** 227 **Other** ______

Instruments Used ______

Stream Type: Coldwater [✓ Warmwater]

Water Odors: Normal Sewage Petroleum Chemical [✓ None] Other ______

Water Surface Oils: Slick Sheen Globs Flecks [✓ None]

Turbidity: Clear Slightly Turbid Turbid [✓ Opaque] **Water Color** Brown/Orange - Iron - Same as upstream

WEATHER CONDITIONS

Photograph Number

Observations and/or Sketch

Grab Samples ~~[illegible]~~ mostly plant material

HABITAT ASSESSMENT FIELD DATA SHEET

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS
2 of 3

PROJECT NAME Eli Devers PROJECT # 14067 DATE 9/28/94 STATION 34

Habitat Parameter	Excellent	Good	Fair	Poor	
1. * Bottom substrate/ Available cover [a]	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other habitat 16-20	30-50% rubble, gravel or other stable habitat. adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5	5
2. Embeddedness [b]	Gravel, cobble, and boulder particles are between 0 and 25 % surrounded by fine sediment 16-20	Gravel, cobble, and boulder particles are between 25 and 50 % surrounded by fine sediment 11-15	Gravel, cobble, and boulder particles are between 50 and 75 % surrounded by fine sediment 6-10	Gravel, cobble, and boulder particles are over 75 % surrounded by fine sediment 0-5	0
3. 0.15 cms (5 cfs) *Flow, at rep. low flow or 0.15 cms (5 cfs) Velocity, Depth	Cold >0.05 cms (2cfs) Warm > 0.15 cms (5 cfs) 10-20 Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/3), deep; fast, shallow habitats all present. 16-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15 Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10 Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5 Dominated by one velocity/depth category (usually pool). 0-5	2
4. * Channel alteration [a]	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 0-3	0
5. Bottom scooping and deposition [a]	Less Then 5% of the bottom affected by scouring and deposition. x ~~12~~-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 7 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3	~~12~~ 7

[a] From Ball 1982.
[b] From Platts et al 1983.
Note: *-Habitat parameters not currently incorporated into BIOS

HABITAT ASSESSMENT FIELD DATA SHEET (cont.)

NORMANDEAU ASSOCIATES INC.
ENVIRONMENTAL CONSULTANTS

3 of 3

PROJECT NAME Fl. Duvals PROJECT # 14067 DATE 9/28/94 STATION 34

Habitat Parameter	Excellent	Good	Fair	Poor	
6. Pool/Riffle, run/bend ratio [a] (distance between riffles divided by stream width)	5-7. Variety of habitat. Deep riffles and pools 12-15	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8-11	15-25. Occassional riffle or bend. Bottom contours provide some habitat. 4-7	> 25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 0-3	0
7. Bank Stability [a]	Stable. No evidence of erosion or bank failure. Side slopes generally <30%. Little potential for future problem 9 9-10	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40% on one bank. Slight potential in extreme floods. 6-8	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60% on some banks. High erosion potential during extreme high flow. 3-5	Unstable. Many eroded areas. Side slopes >60% common. "raw" areas frequent along straight sections and bends. 0-2	9
8. Bank Vegetative Stability [b]	Over 80% of the streambank surfaces covered by vegetation or boulders and cobble. 9 9-10	50-79% of the streambank surfaces covered by vegetation, gravel or larger material. 6-8	25-49% of the streambank surfaces covered by vegetation, gravel, or larger material. 3-5	Less than 25% of the streambank surfaces covered by vegetation, gravel or larger material. 0-2	9
9. Streamside cover [b]	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 6 3-5	Over 50% of the Streambank has no vegetation and dominat material is soil, rock, bridge materials, culverts or mine tailings. 0-2	
Column Totals	____	____	____	____	

Score 37

APPENDIX B

BIOLOGICAL DATA

STATION: 2
DATE: 28 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 46/48 grids	REP. B 48/48 grids	MEAN
EPHEMEROPTERA (mayflies)					
Baetidae	CG	4	0	1	0.5
ODONATA (dragonflies)					
Corduliidae	P	5	1	0	0.5
NEMATODA			0	1	0.5
OLIGOCHAETA (worms)	CG	9	56	23	39.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	30	53	41.5
MOLLUSCA					
Sphaeriidae (clams)	CF	8	1	0	0.5
TOTAL			88	78	83

Taxa Richness =	6
Hilsenhoff Biotic Index =	8.39
Scraper/Filterer Ratio =	0
EPT/Chironomidae Ratio =	0
% Dominant Taxon (Talitridae) =	50.00
EPT Richness =	1
Community Loss Index =	Reference Station

STATION: 2 HABITAT TYPE: EPIPHYTIC
DATE: 28 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 3/48 grids
EPHEMEROPTERA (mayflies)			
Baetidae	CG	4	4
ODONATA (dragonflies)			
Coenagrionidae	P	9	1
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	94
TOTAL			99

Taxa Richness = 3
Hilsenhoff Biotic Index = 7.85
Scraper/Filterer Ratio = 0
EPT/Chironomidae Ratio = 0
% Dominant Taxon (Talitridae) = 94.95
EPT Richness = 1
Community Loss Index = Reference Station

STATION: 3
DATE: 28 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 48/48 grids	REP. B 48/48 grids	MEAN
DIPTERA (true flies)					
Chironomidae	CG	6	0	2	1
OLIGOCHAETA (worms)	CG	9	0	1	0.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	11	3	7
MOLLUSCA					
Sphaeriidae (clams)	CF	8	1	0	0.5
TOTAL			12	6	9

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	4	66.67
Hilsenhoff Biotic Index =	7.83	107.05
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0	100.00
% Dominant Taxon (Talitridae) =	77.78	77.78
EPT Richness =	0	0
Community Loss Index =	1.25	1.25

STATION: 3	HABITAT TYPE: EPIPHYTIC
DATE: 28 SEPT 1994	PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 48/48 grids
EPHEMEROPTERA (mayflies)			
Leptophlebiidae	CG	2	1
ODONATA (dragonflies)			
Coenagrionidae	P	9	1
MEGALOPTERA (fishflies)			
Corydalidae	P	0	1
TRICHOPTERA (caddisflies)			1
Leptoceridae	P	4	1
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	15
Isopoda (sowbugs)			
Asellidae	CG	8	1
TOTAL			21

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	7	233.33
Hilsenhoff Biotic Index =	6.81	115.26
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0	100.00
% Dominant Taxon (Talitridae) =	71.43	71.43
EPT Richness =	3	300.00
Community Loss Index =	0.14	0.14

STATION: 8 HABITAT TYPE: BENTHIC
DATE: 28 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 44/48 grids	REP. B 48/48 grids	MEAN
EPHEMEROPTERA (mayflies)					
Ephemeridae	CG	4	1	0	0.5
Leptophlebiidae	CG	2	0	1	0.5
MEGALOPTERA (fishflies)					
Corydalidae	P	0	8	2	5
TRICHOPTERA (caddisflies)					
Phryganeidae	Sh	4	4	4	4
Polycentropodidae	CF	6	5	3	4
DIPTERA (true flies)					
Chironomidae	CG	6	12	2	7
Ptychopteridae			10	2	6
Tipulidae	SH	3	2	4	3
OLIGOCHAETA (worms)	CG	9	6	4	5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	32	27	29.5
Isopoda (sowbugs)					
Asellidae	CG	8	1	0	0.5
MOLLUSCA					
Ancylidae (limpets)	Sc	6			
Planorbidae (snails)	Sc	6			
Sphaeriidae (clams)	CF	8	17	20	18.5
TOTAL			98	69	83.5

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	12	200.00
Hilsenhoff Biotic Index =	6.31	132.86
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	1.29	100.00
% Dominant Taxon (Talitridae) =	35.33	35.33
EPT Richness =	4	400.00
Community Loss Index =	0.33	0.33

STATION: 8
DATE: 28 SEPT 1994

HABITAT TYPE: EPIPHYTIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 41/48 grids
TRICHOPTERA (caddisflies)			
Glossosomatidae	Sc	0	1
Phryganeidae	Sh	4	2
Polycentropodidae	CF	6	2
DIPTERA (true flies)			
Chironomidae	CG	6	2
Ptychopteridae			2
Tabanidae	P	5	1
Tipulidae	Sh	3	1
OLIGOCHAETA (worms)	CG	9	1
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	56
Isopoda (sowbugs)			
Asellidae	CG	8	1
DECAPODA (crawfish)			
Cambaridae	CG	6	1
MOLLUSCA			
Sphaeriidae (clams)	CF	8	13
TOTAL			83

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	12	400.00
Hilsenhoff Biotic Index =	7.41	105.92
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	2.50	100.00
% Dominant Taxon (Talitridae) =	67.47	67.47
EPT Richness =	0	0
Community Loss Index =	0.17	0.17

STATION: 11
DATE: 26 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 45/48 grids	REP. B 48/48 grids	MEAN
EPHEMEROPTERA (mayflies)					
Ephemeridae	CG	4	2	1	1.5
MEGALOPTERA (fishflies)					
Corydalidae	P	0	9	2	5.5
TRICHOPTERA (caddisflies)					
Leptoceridae	P	4	1	0	0.5
Polycentropodidae	CF	6	14	0	7
DIPTERA (true flies)					
Chironomidae	CG	6	43	1	22
OLIGOCHAETA (worms)	CG	9	2	1	1.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	28	4	16
TOTAL			99	9	54

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	7	116.67
Hilsenhoff Biotic Index =	5.99	139.98
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0.41	100.00
% Dominant Taxon (Chironomidae) =	40.74	40.80
EPT Richness =	3	300.00
Community Loss Index =	0.71	0.71

STATION: 11
DATE: 26 SEPT 1994

HABITAT TYPE: EPIPHYTIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 36/48 grids
EPHEMEROPTERA (mayflies)			
Baetidae	CG	4	1
Leptophlebiidae	CG	2	4
ODONATA (dragonflies)			
Aeshnidae	P	3	6
Calopterygidae	P	5	1
HEMIPTERA (water bugs)			
Corixidae	P	5	2
MEGALOPTERA (fishflies)			
Corydalidae	P	0	1
TRICHOPTERA (caddisflies)			
Phryganeidae	Sh	4	1
DIPTERA (true flies)			
Chironomidae	CG	6	2
Tipulidae	SH	3	1
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	79
Gammaridae	CG	4	1
Isopoda (sowbugs)			
Asellidae	CG	8	1
TOTAL			100

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	12	400.00
Hilsenhoff Biotic Index =	7.08	110.85
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	3	100.00
% Dominant Taxon (Talitridae) =	79.00	79.00
EPT Richness =	3	300.00
Community Loss Index =	0.08	0.08

STATION: 13 HABITAT TYPE: BENTHIC
DATE: 26 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 40/48 grids	REP. B 48/48 grids	MEAN
MEGALOPTERA (fishflies)					
Corydalidae	P	0	6	0	3
TRICHOPTERA (caddisflies)					
Polycentropodidae	CF	6	1	0	0.5
DIPTERA (true flies)					
Chironomidae	CG	6	18	0	9
Tabanidae	P	5	0	5	2.5
Tipulidae	SH	3	1	0	0.5
OLIGOCHAETA (worms)	CG	9	0	1	0.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	76	46	61
TOTAL			102	52	77

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	7	116.67
Hilsenhoff Biotic Index =	7.32	114.59
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0.06	100.00
% Dominant Taxon (Talitridae) =	79.22	79.22
EPT Richness =	1	100.00
Community Loss Index =	0.71	0.71

STATION: 13 HABITAT TYPE: EPIPHYTIC
DATE: 26 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 16/48 grids
EPHEMEROPTERA (mayflies)			
Baetidae	CG	4	2
Leptophlebiidae	CG	2	2
ODONATA (dragonflies)			
Corduliidae	P	5	1
HEMIPTERA (water bugs)			
Belostomatidae	P		4
MEGALOPTERA (fishflies)			
Corydalidae	P	0	1
TRICHOPTERA (caddisflies)			
Polycentropodidae	CF	6	1
DIPTERA (true flies)			
Chironomidae	CG	6	2
Tabanidae	P	5	1
CRUSTACEA			
Amphipoda (scuds)			
Gammaridae	CG	4	2
Talitridae	CG	8	90
TOTAL			106

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	10	333.33
Hilsenhoff Biotic Index =	7.25	108.33
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	2.50	100.00
% Dominant Taxon (Talitridae) =	84.91	84.91
EPT Richness =	3	300.00
Community Loss Index =	0.10	0.10

STATION: 18
DATE: 28 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 80/80 grids	REP. B 80/80 grids	MEAN
		NO ANIMALS FOUND IN SAMPLES			
TOTAL			0	0	0

Taxa Richness =	0	0.00
Hilsenhoff Biotic Index =	0.00	0.00
Scraper/Filterer Ratio =	0	0.00
EPT/Chironomidae Ratio =	0.00	0.00
% Dominant Taxon =	0.00	0
EPT Richness =	0	0
Community Loss Index =	--	--

STATION: 18
DATE: 28 SEPT 1994

HABITAT TYPE: EPIPHYTIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 7/48 grids
EPHEMEROPTERA (mayflies)			
Leptophlebiidae	CG	2	3
ODONATA (dragonflies)			
Coenagrionidae	P	9	6
HEMIPTERA (water bugs)			
Corixidae	P	5	4
COLEOPTERA (beetles)			
Dytiscidae	P	5	2
Elmidae	Sc	4	1
TRICHOPTERA (caddisflies)			
Phryganeidae	SH	4	1
DIPTERA (true flies)			
Chironomidae	CG	6	3
OLIGOCHAETA (worms)	CG	9	2
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	59
Isopoda (sowbugs)			
Asellidae	CG	8	3
TURBELLARIA (flatworms)	CG	6	3
MOLLUSCA			
Hydrobiidae (snails)	Sc	8	6
Planorbidae (snails)	Sc	6	9
TOTAL			102

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	13	433.33
Hilsenhoff Biotic Index =	7.35	106.74
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	1.33	100.00
% Dominant Taxon (Planorbidae) =	57.84	57.84
EPT Richness =	2	200.00
Community Loss Index =		0.23

STATION: 20
DATE: 28 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 46/48 grids	REP. B 38/48 grids	MEAN
TRICHOPTERA (caddisflies)					
Phryganeidae	Sh	3	0	4	2
DIPTERA (true flies)					
Chironomidae	CG	6	0	23	11.5
Tabanidae	P	6	3	12	7.5
OLIGOCHAETA (worms)	CG	9	22	6	14
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	32	40	36
MOLLUSCA					
Hydrobiidae (snails)	Sc	8	32	7	19.5
Planorbidae (snails)	Sc	6	6	0	3
Sphaeriidae (clams)	CF	8	6	12	9
TOTAL			101	104	102.5

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	8	133.33
Hilsenhoff Biotic Index =	7.61	110.19
Scraper/Filterer Ratio =	6.33	100.00
EPT/Chironomidae Ratio =	0.17	100.00
% Dominant Taxon (Hydrobiidae) =	19.02	19.02
EPT Richness =	1	100.00
Community Loss Index =	0.50	0.50

STATION: 20
DATE: 28 SEPT 1994

HABITAT TYPE: EPIPHYTIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 13/48 grids
ODONATA (dragonflies)			
Aeshnidae	P	3	1
Coenagrionidae	P	9	13
TRICHOPTERA (caddisflies)			
Limnephilidae	Sh	4	1
DIPTERA (true flies)			
Chironomidae	CG	6	2
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	50
MOLLUSCA			
Gastropoda			4
Hydrobiidae (snails)	Sc	8	18
Lymnaeidae (snails)	CG	6	2
Planorbidae (snails)	Sc	6	4
Sphaeriidae (clams)	CF	8	2
TOTAL			97

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	10	333.33
Hilsenhoff Biotic Index =	6.14	127.74
Scraper/Filterer Ratio =	11	100.00
EPT/Chironomidae Ratio =	0.50	100.00
% Dominant Taxon (Talitridae) =	51.55	51.55
EPT Richness =	1	100.00
Community Loss Index =	0.10	0.10

STATION: 27 HABITAT TYPE: BENTHIC
DATE: 28 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 48/48 grids	REP. B 16/48 grids	MEAN
ODONATA (dragonflies)					
Coenagrionidae	P	9	0	1	0.5
TRICHOPTERA (caddisflies)					
Polycentropodidae	CF	6	1	1	1
DIPTERA (true flies)					
Chironomidae	CG	6	1	2	1.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	8	95	51.5
Isopoda (sowbugs)					
Asellidae	CG	8	1	0	0.5
HIRUDINEA (leeches)	P	10	1	0	0.5
MOLLUSCA					
Hydrobiidae (snails)	Sc	8	1	0	0.5
TOTAL			13	99	56

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	7	116.67
Hilsenhoff Biotic Index =	7.94	105.64
Scraper/Filterer Ratio =	1	100.00
EPT/Chironomidae Ratio =	0.67	100.00
% Dominant Taxon (Talitridae) =	91.96	91.96
EPT Richness =	1	100.00
Community Loss Index =	0.71	0.71

STATION: 27 HABITAT TYPE: EPIPHYTIC
DATE: 28 SEPT 1994 PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 24/48 grids
EPHEMEROPTERA (mayflies)			
Leptophlebiidae	CG	2	1
ODONATA (dragonflies)			
Coenagrionidae	P	9	10
Corduliidae	P	5	1
HEMIPTERA (water bugs)			
Belostomatidae	P		2
TRICHOPTERA (caddisflies)			
Phryganeidae	Sh	4	1
Polycentropodidae	CF	6	1
DIPTERA (true flies)			
Chironomidae	CG	6	2
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	77
Isopoda (sowbugs)			
Asellidae	CG	8	2
TURBELLARIA (flatworms)	CG	6	1
MOLLUSCA			
Hydrobiidae (snails)	Sc	8	2
Lymnaeidae (snails)	CG	6	2
TOTAL			102

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	12	400.00
Hilsenhoff Biotic Index =	7.70	101.98
Scraper/Filterer Ratio =	2	100.00
EPT/Chironomidae Ratio =	1.50	100.00
% Dominant Taxon (Talitridae) =	77.00	77.00
EPT Richness =	3	300.00
Community Loss Index =	0.08	0.08

STATION: 32
DATE: 28 SEPT 1994

HABITAT TYPE: BENTHIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	REP. A 8/48 grids	REP. B 48/48 grids	MEAN
DIPTERA (true flies)					
Chironomidae	CG	6	13	8	10.5
NEMATODA			5	7	6
OLIGOCHAETA (worms)	CG	9	1	0	0.5
CRUSTACEA					
Amphipoda (scuds)					
Talitridae	CG	8	79	25	52
Isopoda (sowbugs)					
Asellidae	CG	8	1	0	0.5
TOTAL			99	40	69.5

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	5	83.33
Hilsenhoff Biotic Index =	7.01	119.55
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0.00	100.00
% Dominant Taxon (Talitridae) =	74.82	74.82
EPT Richness =	0	0
Community Loss Index =	0.80	0.80

STATION: 32
DATE: 28 SEPT 1994

HABITAT TYPE: EPIPHYTIC
PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 48/48 grids
EPHEMEROPTERA (mayflies)			
Leptophlebiidae	CG	2	4
DIPTERA (true flies)			
Chironomidae	CG	6	5
OLIGOCHAETA (worms)	CG	9	4
CRUSTACEA			
Amphipoda (scuds)			
Talitridae	CG	8	81
Isopoda (sowbugs)			
Asellidae	CG	8	4
TOTAL			98

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	5	166.67
Hilsenhoff Biotic Index =	7.69	102.01
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0.80	100.00
% Dominant Taxon (Talitridae) =	82.65	82.65
EPT Richness =	1	100.00
Community Loss Index =	0.40	0.40

STATION: 34 | HABITAT TYPE: EPIPHYTIC
DATE: 28 SEPT 1994 | PROJECT: FT. DEVENS

TAXON	FUNCTIONAL GROUP	HBI	NUMBER 26/48 grids
ODONATA (dragonflies)			
Coenagrionidae	P	9	1
COLEOPTERA (beetles)			
Elmidae	Sc	4	3
DIPTERA (true flies)			
Chironomidae	CG	6	5
OLIGOCHAETA (worms)	CG	9	2
CRUSTACEA			
Amphipoda (scuds)			
Gammaridae	CG	4	1
Talitridae	CG	8	51
Isopoda (sowbugs)			
Asellidae	CG	8	37
TOTAL			100

		% COMPARISON WITH REFERENCE STATION
Taxa Richness =	7	233.33
Hilsenhoff Biotic Index =	7.77	101.01
Scraper/Filterer Ratio =	0	100.00
EPT/Chironomidae Ratio =	0	100.00
% Dominant Taxon (Talitridae) =	51.00	51.00
EPT Richness =	0	0
Community Loss Index =	0.14	0.14

APPENDIX G

TOXICITY EVALUATION OF THE SEDIMENT COLLECTED FROM LOWER COLD SPRING BROOK

TOXICITY EVALUATION OF THE SEDIMENT COLLECTED FROM COLD SPRING BROOK, FORT DEVENS, MASSACHUSETTS

ABB Environmental Services, Inc.
Corporate Place 128
107 Audubon Road
Wakefield, MA 01880

SLI Report #94-11-5529

SLI Study #13109.0994.6127.121/101

PROGRAM MANAGER : Krzysztof M. Jop
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6 February 1995

FINAL REPORT

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1.0 INTRODUCTION

Decisions regarding the need for remediation and efficacy of remedial alternatives at sites containing waste materials often depend on information concerning the environmental risks posed by conditions at the site. As part of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remedial alternatives or removal actions for hazardous waste sites should include an an assessment of potential effects. An essential part of this is an evaluation of the degree and spatial extent of contamination at the site.

The environmental program at Fort Devens, Massachusetts, has been designed to address environmental degradation and the risk to ecological receptors within several aquatic systems. The Cold Spring Brook system was one of these potentially contaminated sites. A laboratory testing program was incorporated into the environmental program at Cold Spring Brook to assess the potential toxicity of sediments to aquatic organisms. Information derived from the testing program will be used as a "weight-of-evidence" approach to evaluate ecological risk in aquatic systems and may also be used to help derive preliminary remedial goals and/or target cleanup levels for contaminated sites.

The hazards posed by a chemical when released into the environment are a function of the concentration achieved in the water column and sediment as a result of its use in addition to the environmental conditions that determine its bioavailability. The process of environmental assessment combines the knowledge of the properties which influence the behavior of a chemical in the environment with an understanding of the acute and chronic toxicity of the chemical and its potential for bioaccumulation. Bioavailability of sediment-associated contaminants can be defined as the fraction of the total contaminant in the interstitial water and on the sediment particles that is available to the organism. Analytical measurement of contaminant concentration in the sediment does not always reflect the bioavailable fraction of sediment-associated contaminants; therefore, a simple measure of the sediment residue is insufficient to define the exposure concentration. Further, because feeding by benthic organisms is generally limited to the fine grain material which sorbs most contaminants, the potential exposure could be much greater than anticipated from the whole sediment concentration when ingestion is a route of exposure. The assessment of the effects of contaminants in sediment environments is complicated because organisms can be simultaneously exposed to multiple toxicants with different modes of action and routes of effects. In recognition of these concerns, ABB Environmental Services, Inc. in Wakefield, Massachusetts included a battery of screening evaluation assays as a part of the site characterization of Cold Spring Brook, Fort Devens, Massachusetts.

The objective of this testing program was to evaluate the toxicity of ten sediments to two freshwater species. Toxicity of the bulk sediment samples was measured using epibenthic and benthic organisms, *Hyallela azteca* and *Chironomus tentans*, respectively. Each species selected for this program is ecologically important and subject to contaminant exposure through various routes. Toxicity of the bulk sediment samples was evaluated using an acute test with *Hyallela azteca* and a subchronic test with *Chironomus tentans*. All sediment samples were collected from the area within Cold Spring Brook in Fort Devens, Massachusetts. The use of a set of assays using organisms with a range of sensitivities enables rapid identification of toxic versus nontoxic sediments and facilitates the prioritization of further investigations like determination of the potential causes of the observed effects.

All testing was conducted at Springborn Laboratories, Inc. (SLI), Environmental Sciences Division, Wareham, Massachusetts. All original raw data and the final report produced during this study are stored at Springborn.

2.0 MATERIALS AND METHODS

2.1 Test Samples

The toxicity tests were conducted using sediment collected from Cold Spring Brook, Fort Devens, Massachusetts. Approximately 4 liters of sediment was collected from each location by

ABB Environmental Services, Inc. personnel. Sample IDs and sample collection dates are as follows: sample 08X was collected on 19 September 1994, samples 03X and 27X were collected on 20 September 1994, samples 02X, 11X, 18X, 32X and 34X were collected on 21 September 1994, and samples 13X and 20X were collected on 22 September. All samples were received at Springborn on 23 September 1994. Following receipt at Springborn, any samples that were not immediately tested were stored refrigerated at approximately 4 ± 2 °C. Refrigerated samples were warmed to room temperature before use in the toxicity tests.

2.2 Toxicity Tests

This testing program included acute toxicity tests with *Hyallela azteca* and subchronic toxicity tests with *Chironomus tentans* conducted with the bulk sediment samples.

The bulk sediment samples were used to estimate the effect on survival of amphipods (*Hyallela azteca*) and survival and growth of midges (*Chironomus tentans*). Test organisms (each species separately) were placed in beakers containing the sediment and clean overlying water and were incubated under standard conditions for 10 days. After the exposure period, the surviving organisms were counted. Sediment toxicity was estimated by comparing the response of exposed organisms in the test sediment with the reference sediment.

2.2.1 Preparation of the Sediments

Prior to use in the toxicity tests, each sediment sample was passed through a 2 mm stainless steel sieve. Eight-hundred mL of the sediment was used to initiate the acute test with *Hyallela azteca* and 100 mL of the sediment was used initiate the subchronic test with *Chironomus tentans*. The reference sediment used during this test was collected from Strohs Folly Brook, Wareham, Massachusetts. The site of collection of the reference sediment is known to be relatively free of contaminants and is frequently used by Springborn as reference sediment for benthic testing.

2.2.2 Acute Toxicity Test with Amphipods

2.2.2.1 Study Protocol and Conduct

Procedures used in the acute toxicity test followed those described in the Springborn protocol entitled "Protocol for Conduct of a Static-Renewal Toxicity Test with Amphipods *Hyallela azteca* to Meet U.S. EPA Guidelines for Bioassessment of Hazardous Waste Site Sediment", Springborn Laboratories Protocol #:080994/SED-Ha-121. The methods described in this protocol meet the standard procedures described in the ASTM Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates (ASTM, 1992). The 10-day static renewal toxicity tests were conducted from 23 September to 3 October 1994 and 28 September to 8 October 1994.

2.2.2.2 Test Organism

The test organism, *Hyallela azteca* ($\leq$ one week old), was obtained from cultures maintained at Springborn. The culture system was maintained under flow-through conditions and consisted of three 5.5 gallon glass aquaria which contained approximately 10 L of culture water. The culture water was well water which had been supplemented with untreated water from the town of Wareham, Massachusetts. The culture water had a total hardness within the range of 20 to 40 mg/L as $CaCO_3$, a pH range of 6.9 to 7.2, a specific conductivity within the range of 120 to 150 μmhos/cm and a temperature of 20 ± 2 °C. The culture area received a regulated photoperiod of 16 hours of light and 8 hours of darkness. Light at an intensity of 30 to 100 footcandles was provided at the culture solutions' surface by Durotest Vitalite® fluorescent bulbs.

The *H. azteca* cultures were fed with Trout Chow Suspension supplemented with Tetramin flake fish food. The Trout Chow Suspension was a combination of Salmon Starter trout food (50 g) and dehydrated alfalfa (10 g) mixed with dilution water (2 L). Both suspensions were prepared at Springborn.

Seven to ten days before test initiation, adult amphipods were removed from the culture tanks and placed in 5.5-gallon glass aquaria containing 10 L of dilution water. The resulting offspring were then removed daily from the aquaria using a glass pipet and transferred to 1-L glass beakers where they were held until test initiation.

2.2.2.3 Test Procedures

The overlying water used during this study was from the same source as the culture water. During the study period, this water was characterized as being "soft" with a total hardness range as $CaCO_3$ of 20 to 40 mg/L, a pH range of 6.9 to 7.5, and a specific conductivity range of 80 to 150 μmhos/cm (Gravity Feed Tank Water Quality Analysis Logbook, Volume 9). Representative samples of the water source were analyzed monthly for total organic carbon (TOC) concentration. The TOC concentration of the water source for the months of September and October 1994 were 0.45 and 0.56 mg/L, respectively (TOC and TSS Master Log, Volume II). Several species of daphnids (a representative freshwater invertebrate generally recognized to be sensitive) are maintained in water from the same source as the water utilized in this study and have successfully survived and reproduced over several generations. This, in combination with the previously mentioned analyses, confirms the acceptability of this water for bioassays.

The test vessels used during this test were 1000-mL beakers. Four replicate test vessels were maintained for each sediment sample. The test was conducted in a temperature controlled water bath designed to maintain the temperature of the test solutions at 20 ± 1 °C. The test area had a photoperiod of 16 hours of light and 8 hours of darkness, with a light intensity range of 80 to 100 footcandles. Lighting was provided by Sylvania Growlux® and Cool White® fluorescent bulbs.

Prior to use in the toxicity tests, all sediment samples were passed through a 2.0 mm stainless steel sieve to remove rocks, debris and large clumps of sediment. Each sediment sample was then divided between the replicate test vessels so that each test vessel contained 200 mL of the respective sediment. The resultant sediment layer in each test vessel was 2 cm deep. Overlying water (800 mL) was then gently added to each replicate. The test was initiated when 20 amphipods were added to each replicate exposure vessel (80 amphipods per test sample and control). Test vessels were covered with plastic wrap and aeration was provided to each test vessel throughout the exposure period.

Renewal of the overlying water in each replicate test vessel was performed three times weekly by carefully siphoning off 75% (approximately 600 mL) of the existing overlying water and gently replacing it with fresh overlying water. Amphipods were fed a combination of Tetramin Flake Fish Food and Trout Chow Suspension daily at rates of 100 and 300 μL, respectively, per test vessel. Survival was determined at test termination by sieving the sediment from each replicate test vessel to remove the amphipods for observation.

At test initiation and at each subsequent 24-hour interval, biological observations and the physical characteristics of the test solutions were observed and recorded. The dissolved oxygen concentration, pH and temperature were measured in each replicate test vessel at test initiation (day 0) and at test termination (day 10). On the remaining days of the exposure, these measurements were recorded in alternating test vessels of the test samples and the control. On renewal days, water quality measurements were made on old and new test sample solutions and the controls. At test initiation and termination, hardness, total alkalinity, and specific conductivity were measured on composite samples of overlying water from each test sample and control. Dissolved oxygen concentrations were measured using a Yellow Springs Instrument (YSI) Model #57 dissolved oxygen meter and probe; pH was measured with a Jenco Model 601A pH meter and combination electrode; and daily temperature was measured with an Ertco alcohol thermometer. Total hardness concentration was measured by the EDTA titrimetric method (APHA *et al.*, 1985). Total alkalinity concentration was determined by potentiometric titration to an endpoint of pH 4.5 (APHA *et al.*, 1985). Specific conductance was measured using a YSI Model #33 conductivity meter. In addition, temperature of the test solutions was continuously monitored throughout the study using a Fisher Min/Max thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.2.2.4 Statistical Analysis

At test termination, mean survival of amphipods from each test sample was statistically compared (Student's t-test) to the performance of the reference control organisms to establish significant effects. All statistical analyses were performed at the 95% level of certainty.

2.2.3. Subchronic Toxicity Test with Midges

2.2.3.1 Study Protocol and Conduct

Procedures used in the subchronic toxicity test followed those described in the Springborn protocol entitled "Protocol for Conduct of a Static-Renewal Partial Life-Cycle Toxicity Test with Midge (*Chironomus tentans*) to Meet U.S. EPA Guidelines for Bioassessment of Hazardous Waste Site Sediment", Springborn Laboratories Protocol #: 081294/SED-Ct-101. The methods described in this protocol meet the standard procedures described in the ASTM Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates (ASTM, 1992). The 10-day toxicity tests were conducted from 27 September to 7 October 1994.

2.2.3.2 Test Organism

The test organism, *Chironomus tentans*, 8-12 days old, was obtained from cultures maintained at Springborn. The culture system was maintained under static conditions and consisted of several 5-L glass aquaria which contained approximately 3 L of culture water. The culture water was well water which had been supplemented with untreated water from the Town of Wareham, Massachusetts. The culture water was characterized as being "soft" with a total hardness within the range of 20 to 40 mg/L as $CaCO_3$, a pH range of 6.9 to 7.5, a specific conductivity within the range of 80 to 150 μmhos/cm and a temperature of 22 ± 1 °C. The culture area received a regulated photoperiod of 16 hours of light and 8 hours of darkness. Light at an intensity of 30 to 100 footcandles was provided at the culture solutions' surface by Durotest Vitalite® fluorescent bulbs. The midge cultures were fed a finely ground Tetramin suspension prepared at Springborn.

Second instar larvae was collected from the separate egg masses 8 to 10 days after hatching and were transferred to the 250 mL beakers containing approximately 150 mL of dilution water. Each container contained 15 midge larvae.

2.2.3.3 Test Procedures

The test was initiated when one midge larvae was introduced to each test vessel (polypropylene centrifuge tubes). Each tube contained 7.5 g (wet weight) of sediment and 47 mL of overlying water. Fifteen replicate test vessels were maintained for each sediment sample. The overlying water used during this study was from the same source as the culture water. During the study period, this water was characterized as being "soft" with a total hardness range as $CaCO_3$ of 20 to 40 mg/L, a pH range of 6.9 to 7.5 and a specific conductivity range of 80 to 150 μmhos/cm (Gravity Feed Tank Water Quality Analysis Logbook, Volume 9). Representative samples of the water source were analyzed monthly for TOC concentration. The TOC concentration of the water source for the months of September and October 1994 were 0.45 and 0.56 mg/L, respectively (TOC and TSS Master Log, Volume II). Several species of daphnids (a representative freshwater invertebrate generally recognized to be sensitive) are maintained in water from the same source as the water utilized in this study and have successfully survived and reproduced over several generations. This, in combination with the previously mentioned analyses, confirms the acceptability of this water for bioassays.

The test was conducted in a temperature controlled water bath designed to maintain the temperature of the test solutions at 22 ± 1 °C. The test area had a photoperiod of 16 hours of light and 8 hours of darkness, with a light intensity range of 80 to 100 footcandles. Lighting was provided by Sylvania Growlux® and Cool White® fluorescent bulbs.

Prior to use in the toxicity tests all sediment samples were passed through a 2.0 mm stainless steel sieve to remove rocks, debris and large clumps of sediment. Each sediment sample was then divided between the replicate test vessels so that each test vessel contained 3 mL (7.5 grams wet weight) of the respective sediment. The resultant sediment layer in each test vessel was 1.5 cm deep. Test vessels were covered with plastic wrap and aeration was provided to each test vessel throughout the exposure period.

Renewal of the overlying water in each replicate test vessel was performed daily by carefully siphoning off 75% (approximately 35 mL) of the existing overlying water and gently replacing it with fresh overlying water. Midge larvae were fed a 0.1 mL suspension of finely ground flaked fish food (60 mg/mL) per test vessel, daily. Survival was determined at test termination by sieving the sediment from each replicate test vessel to remove the midges for observation. Surviving midges were then dried in an oven at 60°C fro 24 hours. Collective weight of the dried organisms for each sample was determined using an analytical balance. Growth was evaluated by comparing average dry weights of test organisms for each sample site to the reference control.

At test initiation and at each subsequent 24-hour interval, biological observations and the physical characteristics of the test solutions were observed and recorded. The dissolved oxygen concentration, pH and temperature were measured daily in each replicate test vessel. At test initiation and termination, hardness, total alkalinity and specific conductivity were measured on composite samples of overlying water from each test sample and control. Dissolved oxygen concentrations were measured using a Yellow Springs Instrument (YSI) Model #57 dissolved oxygen meter and probe; pH was measured with a Jenco Model 601A pH meter and combination electrode; and daily temperature was measured with an Ertco alcohol thermometer. Total hardness concentration was measured by the EDTA titrimetric method (APHA *et. al.*, 1985). Total alkalinity concentration was determined by potentiometric titration to an endpoint of pH 4.5 (APHA *et. al.*, 1985). Specific conductance was measured using a YSI Model #33 conductivity meter. In addition, temperature of the test solutions was continuously monitored throughout the study using a Fisher Min/Max thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.2.3.4 Statistical Analysis

At test termination, survival of midge from each test sample was statistically compared (Student's t-test) to the performance of the reference control organisms to establish significant effects. All statistical analyses were performed at the 95% level of certainty.

3.0 RESULTS

3.1 Acute Toxicity Tests with Amphipods

A summary of the water quality parameters measured during the acute tests with the sediment samples from Cold Spring Brook and *Hyalella azteca* is presented in Table 1, and a summary of the biological results (percent mortality) from these tests is presented in Table 2. According to the Student's t-test, amphipod survival was significantly different in two sediment samples tested (03X and 08X) compared to the survival of the control organisms. Mean survival of amphipods in these samples (03X and 08X) was 65 to 79%, respectively, compared to 93% survival recorded in the control sediment. Surviving organisms from samples 03X, 08X and 27X were visually observed to be reduced in size when compared to the size of the control organisms. Survival among organisms exposed to the remaining sediment samples tested (27X, 11X, 13X, 32X, 20X, 021X, 34X and 18X) was 66, 85, 87, 89, 89, 90 and 91%, respectively and survival was not statistically reduced compared to the control sample. The evaluation of amphipod survival showed a statistically significant difference compared to the control amphipod survival in only two samples (03X and 08X). A third sample, 27X, with a mean survival of 66% was not statistically different from the control (i.e., 93%) because of the variability, i.e., 35 to 90%, in survival between the four replicates. It is our opinion that the reduction in survival and growth in samples 03X, 08X and 27X resulted from the contaminants present these three sediment samples.

3.2 Subchronic Toxicity Tests with Midges

A summary of the water quality parameters measured during the subchronic toxicity tests conducted with the sediment samples and *Chironomus tentans* is presented in Table 3 and a summary of the biological results (percent mortality) is presented in Table 4. According to the Student's t-test, midge survival was not statistically different in any sediment samples compared to the survival of organisms in the reference control sample. Similarly, no reduction in dry weight was observed in any sediment sample compared with the dry weight of the organisms in the reference control sample.

4.0 CONCLUSION

The amphipod, *H. azteca* and the midge, *C. tentans* are benthic organisms commonly used for testing freshwater sediments. Both species are ecologically important and may respond to contaminants differently since they are subject to exposure through various routes. The test methods used enable examination of a variety of endpoints, including traditionally-used measures such as survival, growth and reproduction. Although used extensively in sediment testing, the sensitivity of both species (*H. azteca* and *C. tentans*) has never been directly compared. Evaluation of the response of both *H. azteca* and *C. tentans* to sediments collected from Cold Spring Brook show that amphipods were more sensitive. This is supported by current literature, *i.e.*, Ankley *et al.* (1991), that compared the sensitivity of *H. azteca* to several species of freshwater organisms, including *Ceriodaphnia dubia*. He concluded that the sensitivity of both species, *C. dubia* and *H. azteca,* is comparable.

The results of this testing program indicated that at three locations (03X, 08X and 27X) the concentrations of contaminants in the sediment affected survival and/or growth of *H. azteca*, while none of the sediments from any of the locations affected survival and growth of *C. tentans*. A statistically significant reduction in amphipod survival was observed in sediment samples 03X and 08X, while all three sediment samples showed a visual reductions in growth compared to the control. No relationship could be established between any one measured chemical parameter and the observed amphipod response. Therefore, it is reasonable to conclude that the contaminant or group of contaminants responsible for the observed toxicity to *H. azteca* was not included in the array of chemical parameters measured during this program. Review of the total organic carbon (TOC) concentration at these three sites revealed that TOC concentrations were generally lower than several of the surrounding locations. The reduction of 1.5 to 6 times of the TOC concentration in the sediments could substantially increase the bioavailability of the contaminant or group of contaminants responsible for the toxicity.

To clearly define site implications of these contaminated sediments at Cold Spring Brook, further evaluation of the toxicity in sediments is needed to determine site clean-up and/or remediation goals. The extent of toxicity and the sources of toxicity would need to be addressed prior to establishing further plans. Both these questions could be answered by testing sediments diluted with reference sediment combined with a toxicity identification evaluation program. The knowledge of the source of toxicity would aid in decision-making process by using the most cost-effective and environmentally protective remediation or disposal technique available.

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TABLES

Table 1. Water quality parameters (dissolved oxygen, pH, temperature, total alkalinity, total hardness and specific conductivity) measured in the overlying water during 10-day static acute renewal toxicity tests with *Hyallela azteca*.

Sample ID	Dissolved Oxygen Concentration (mg/L)	pH	Temperature (°C)	Total Hardness (mg/L as $CaCO_3$)	Total Alkalinity (mg/L as $CaCO_3$)	Specific Conductivity (µmhos/cm)
Test Dates: 23 September to 3 October 1994						
Control	7.0 - 9.3	7.0 - 8.2	20 - 21	48 - 104	46 - 94	180 - 280
27X	5.0 - 8.9	6.6 - 7.9	20 - 21	32 - 36	20 - 26	150 - 160
08X	6.8 - 9.2	6.9 - 7.9	20 - 21	32	20 - 24	150 - 160
11X	7.9 - 9.0	6.8 - 7.5	20 - 21	36	20 - 24	150 - 170
03X	7.7 - 9.2	6.9 - 7.6	20 - 21	36 - 40	26	150 - 170
Test Dates: 28 September to 8 October 1994						
Control	5.4 - 9.4	7.1 - 8.2	20	72	40 - 62	120
13X	5.1 - 9.1	6.8 - 7.6	20	40 - 44	26	160
32X	5.3 - 9.2	6.7 - 7.4	20	36	24	150 - 160
20X	5.9 - 9.7	6.8 - 8.2	20	40 - 56	26 - 48	170 - 190
02X	5.2 - 9.4	6.8 - 7.5	20	36 - 40	26 - 30	160 - 170
34X	5.3 - 9.5	6.4 - 7.3	20	32 - 36	20	150 - 160
18X	6.6 - 9.5	6.6 - 7.3	20	32 - 36	22 - 24	150 - 160

Table 2. **Percent mortality observed for each sediment sample at the termination of the 10-day static acute renewal toxicity tests with *Hyallela azteca*.**

Sample ID	Percent Mortality				
	Rep A	Rep B	Rep C	Rep D	Mean
Test Dates: 23 September to 3 October 1994					
Control	0	5	10	15	8
27X	65	50	10	10	34
08X	25	20	15	25	21[a]
11X	20	10	15	15	15
03X	60	40	35	5	35[a]
Test Dates: 28 September to 8 October 1994					
Control	10	10	10	0	8
13X	5	20	0	25	13
32X	10	10	20	5	11
20X	0	15	20	10	11
02X	0	5	5	5	4
34X	5	10	10	15	10
18X	15	10	5	5	9

[a] Statistically different as compared to the reference control (test dates 23 September to 3 October 1994).

Table 3. Water quality parameters (dissolved oxygen, pH, temperature, total alkalinity, total hardness and specific conductivity) measured in the overlying water during 10-day static renewal subchronic toxicity tests with *Chironomus tentans*.

Sample ID	Dissolved Oxygen Concentration (mg/L)	pH	Temperature (°C)	Total Hardness (mg/L as $CaCO_3$)	Total Alkalinity (mg/L as $CaCO_3$)	Specific Conductivity (µmhos/cm)
Test Dates: 27 September to 7 October 1994						
Control #1	2.7 - 9.3	6.9 - 7.8	20 - 22	36 - 92	24 - 92	160 - 260
Control #2	3.8 - 9.3	6.9 - 7.8	20 - 22	36 - 92	24 - 100	160 - 260
13X	3.4 - 9.3	6.9 - 7.5	20 - 22	36 - 48	24 - 52	160 - 190
18X	3.5 - 9.3	6.5 - 7.4	20 - 22	36	24 - 38	160 - 190
20X	4.1 - 9.3	6.6 - 7.6	20 - 22	36 - 40	24 - 52	160 - 190
02X	2.0 - 9.3	6.9 - 7.4	20 - 22	36 - 48	24 - 54	160 - 200
08X	2.4 - 9.3	6.8 - 7.4	20 - 22	36 - 48	24 - 62	160 - 210
03X	4.1 - 9.3	6.9 - 7.4	20 - 22	36 - 48	24 - 48	160 - 190
32X	3.9 - 9.3	6.9 - 7.5	20 - 22	36 - 48	24 - 42	160 - 170
34X	3.8 - 9.3	6.6 - 7.5	20 - 22	36 - 40	24 - 44	160 - 170
11X	4.2 - 9.3	5.8 - 7.6	20 - 22	36 - 40	24 - 38	160 - 200
27X	3.6 - 9.3	6.6 - 7.5	20 - 22	36 - 40	24 - 40	160 - 190

Table 4. Mean percent mortality of *Chironomus tentans* at the termination of 10-day static renewal subchronic toxicity tests.

Sample ID	Mean Mortality (%)	Average Dry Weight (mg)
Test Dates: 27 September to 7 October 1994		
Control #1	13	2.14
Control #2	0	1.97
13X	13	3.30
18X	7	3.01
20X	13	3.82
02X	27	2.65
08X	7	2.67
03X	20	2.73
32X	13	2.70
34X	13	2.60
11X	13	2.07
27X	7	2.23

Table 5. **Concentrations of selected parameters measured in the water and sediment of Cold Spring Brook.**

		Site ID									
Chemical Analysis	Matrix[a]	02X	03X	08X	11X	13X	18X	20X	27X	32X	34X
Total Organic Carbon	Sediment	120	22	75.7	149	124	113	60.2	32.5	42.4	64.7
Total Hardness	Water	71.6	69.6	67.6	67.6	71.6	56.4	61.6	51.6	51.2	50.4
Total Alkalinity	Water	49	48	46	41	51	34	22	35	35	27
Total Suspended Solids	Water	4	–	–	6	–	–	133	–	4	352
Total Petroleum Hydrocarbons	Sediment	2120	103	734	534	460	203	2230	–	71.9	110
Arsenic	Sediment	62	14	20.7	47.4	65	63	22	9.37	11.4	25
	Water	4.5	4.2	4.7	3.9	3.6	3.0	–	–	–	5.2
Lead	Sediment	241	30.8	141	273	240	–	235	–	23.5	52
	Water	2.39	–	1.41	–	–	–	1.41	–	5.97	4.56
Nickel	Sediment	33.5	8.98	24.6	35.2	35.9	26.4	35.5	13.2	10.4	15.7
Barium	Sediment	117	15.7	61.2	83.7	90.1	97.3	81.5	35.3	39.8	42.7
	Water	10.1	5.37	7.38	7.29	8.39	12	16.7	8.86	7.79	10.6
Chromium	Sediment	48	8.53	26.1	44.5	30.9	–	55	14.9	11.7	–
Copper	Sediment	48.8	6.39	16.4	35.7	28.5	21.8	41.7	7.83	6.86	13.9
Zinc	Sediment	332	6.45	143	336	305	193	168	31.4	39.7	83.6

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[a] Values presented in this table for total organic carbon, total hardness and total alkalinity are presented as either mg/g (sediment) or mg/L (water). All remaining values for sediment and water analyses are presented in this table as μg/g (sediment) and μg/L (water), respectively.

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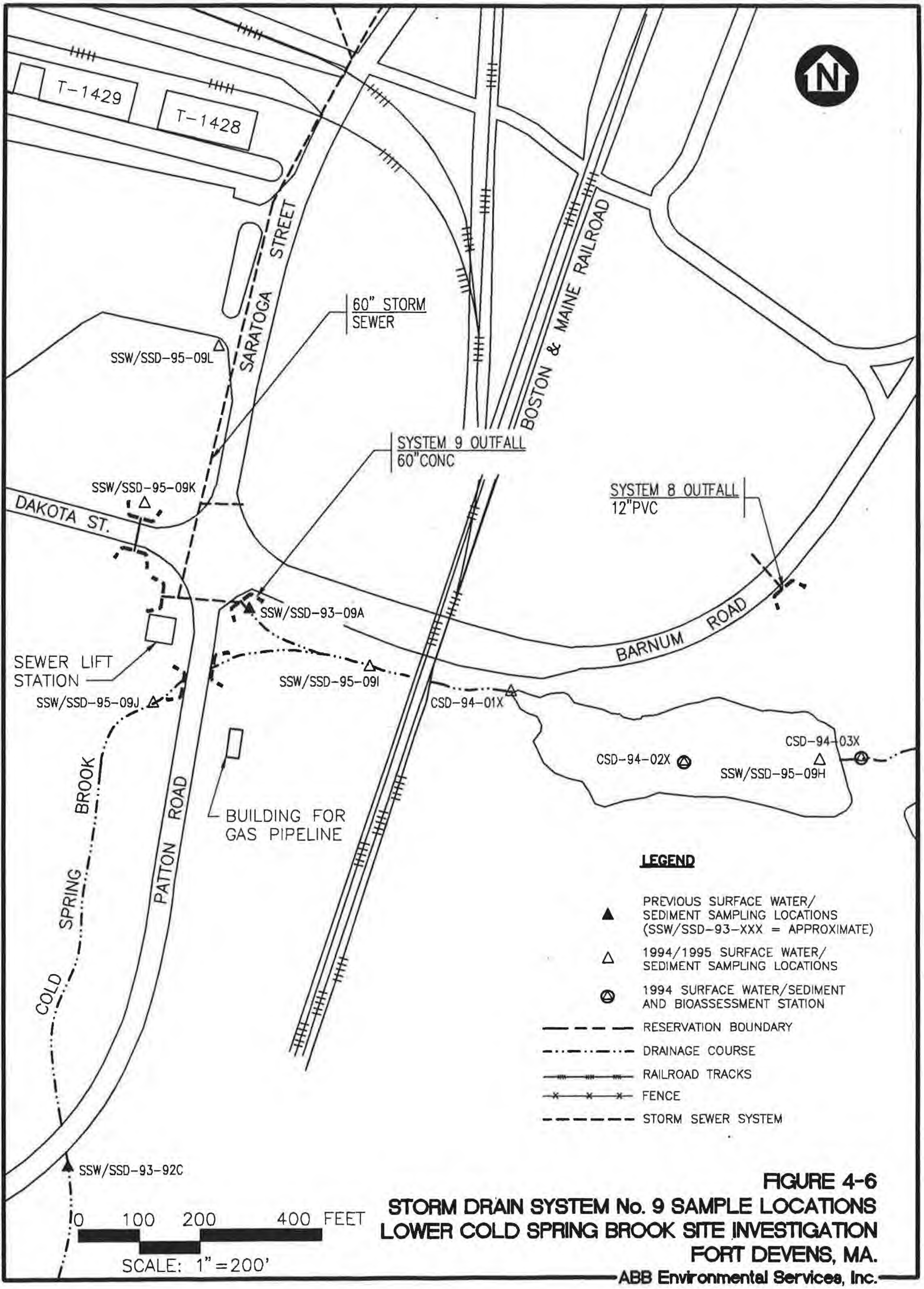

FIGURE 4-6
STORM DRAIN SYSTEM No. 9 SAMPLE LOCATIONS
LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ABB Environmental Services, Inc.

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TABLE 4-1
FIELD PROGRAM TARGET ANALYTE GROUPS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	FIELD PROGRAM							
	1994 SA 73 SI		AREE 70		1995 STORM DRAIN #9 SAMPLING		1993 SA 57 SI	1992 GP3 SI
	Surface Water	Sediment	Surface Water	Sediment	Surface Water	Sediment	Sediment	Sediment
PAL VOCs		X(2)	X	X				X
PAL SVOCs	X	X	X	X	X	X	X	X
PAL INORGANICS	X	X	X	X	X	X		X
TPHC		X	X	X	X	X	X	X
TOC		X		X	X	X	X	X
GRAIN SIZE		X					X	X
% SOLIDS		X						
PEST/PCBs		X(3)			X	X		
WATER QUALITY	X(1)				X(1)			
TSS					X			
OIL FINGERPRINTING							X	

(1) Analyzed for water quality parameters of TSS, chloride, sulfate, total hardness, and alkalinity.

(2) Analyzed for 6 locations adjacent to SA 57 and downgradient of a historical fuel oil spill.

(3) Analyzed for samples from 10 bioassy stations.

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TABLE 4–2
STORM DRAIN SYSTEMS NO. 1/2 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

	DITCH SAMPLE LOCATIONS			COLD SPRING BROOK SAMPLE LOCATIONS			
				UPSTREAM	DOWNSTREAM		
	SSD–93–01B 08/17/93 0 FT	CSD–94–29X 09/21/94 0 FT	CSD–94–30X 09/21/94 0 FT	CSD–94–31X 09/21/94 0 FT	CSD–94–32X 09/21/94 0 FT	CSD–94–33X 09/21/94 0 FT	CSD–94–34X 09/21/94 0 FT
PAL METALS (µg/g)							
Aluminum	9620	9430	7700	16700	5010	9320	5790
Arsenic	15.5	16	23.3	14.6	11.4	5.87	25
Barium	27.1	32.4	33.2	91.2	39.8	60.4	42.7
Beryllium	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5
Cadmium	< 1.2	1.63	< 0.7	ND	ND	ND	ND
Calcium	819	820	2470	3260	2410	1600	2340
Chromium	24.5	32.2	15.9	34.9	11.7	20.7	< 4.05
Cobalt	4.7	5.99	6.54	8.04	5.66	4.87	9.94
Copper	44.5	46.7	15.9	6.39	6.86	3.17	13.9
Iron	16700	13000	10400	12300	6770	7300	9740
Lead	44	78.7	43	15.5	23.5	6.92	52
Magnesium	4470	4590	2220	3500	1430	2410	1710
Manganese	203	259	277	759	891	597	358
Mercury	0.192	< 0.05	< 0.05	ND	ND	ND	ND
Nickel	18	24.5	15.6	25	10.4	14.3	15.7
Potassium	1700	1400	641	577	< 100	355	< 100
Selenium	ND	ND	ND	1.27	0.9	0.993	1.44
Sodium	76.6	519	1000	1330	891	796	1300
Vanadium	18.4	21.7	18.5	15.2	< 3.39	8.74	14.5
Zinc	62.9	53.9	83.5	33.2	39.7	20.3	83.6
PAL SEMIVOLATILE ORGANICS (µg/g)							
2–methylnaphthalene	0.21	< 22	< 1	ND	ND	ND	ND
9h–carbazole	ND	ND	ND	.1ND R	1ND R	.1ND R	1ND R
Acenaphthylene	5.8	< 2	< 0.7	< 0.033	< 0.3	< 0.033	< 0.3
Anthracene	7.1	< 2	< 0.7	0.33	< 0.3	< 0.033	< 0.3
Benzo [a] Anthracene	16	< 8	< 3	< 0.17	< 2	< 0.17	< 2
Benzo [a] Pyrene	8.4	< 10	< 5	< 0.25	< 2	< 0.25	< 2
Benzo [b} Fluoranthene	11	< 10	< 4	< 0.21	< 2	< 0.21	< 2
Benzo [g,h,i] Perylene	11	< 10	< 5	< 0.25	< 2	< 0.25	< 2
Benzo [k] Fluoranthene	6.3	< 30	< 1	< 0.066	< 0.7	< 0.066	< 0.7
Bis(2–ethylhexyl) Phthalate	ND	ND	ND	< 0.62	< 6	< 0.62	< 6
Chrysene	14	10	< 2	< 0.12	< 1	< 0.12	< 1
Fluoranthene	30	10	6	0.62	2	< 0.068	3
Fluorene	2.3	< 2	< 0.7	< 0.033	< 0.3	< 0.033	< 0.3
Indeno [1,2,3–c,d] Pyrene	8.9	< 10	< 6	< 0.29	< 3	< 0.29	< 3
Phenanthrene	30	4	3	0.25	< 0.3	< 0.033	< 0.3
Pyrene	30	10	7	0.47	2	< 0.033	2

TABLE 4-2
STORM DRAIN SYSTEMS NO. 1/2 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

	DITCH SAMPLE LOCATIONS			COLD SPRING BROOK SAMPLE LOCATIONS			
				UPSTREAM	DOWNSTREAM		
	SSD-93-01B 08/17/93 0 FT	CSD-94-29X 09/21/94 0 FT	CSD-94-30X 09/21/94 0 FT	CSD-94-31X 09/21/94 0 FT	CSD-94-32X 09/21/94 0 FT	CSD-94-33X 09/21/94 0 FT	CSD-94-34X 09/21/94 0 FT
PAL PESTICIDES/PCBS (µg/g)							
DDT	NA	NA	NA	NA	< 0.00707 M	NA	< 0.00707 M
DDD	NA	NA	NA	NA	0.024 C	NA	0.0537 C
DDE	NA	NA	NA	NA	< 0.00765	NA	< 0.00765
Dieldrin	NA	NA	NA	NA	< 0.00629 M	NA	< 0.00629 M
Endosulfan Sulfate	NA	NA	NA	NA	< 0.00763	NA	< 0.00763
gamma-chlordane	NA	NA	NA	.33ND R	3ND R	.33ND R	3ND R
OTHER (µg/g)							
Total Organic Carbon	30000	32500	58400	67400	42400	24600	64700
Total Petroleum Hydrocarbons	240	281	239	< 28.2	71.9	55.1	110

NOTES:

R = Non-target compound analyzed for but not detected.
M = Duplicate high spike analysis, not within control limits.
C = Analysis was confirmed.
NA = Not analyzed
ND = Not detectable
µg/g = micrograms/gram

TABLE 4-3
STORM DRAIN SYSTEMS NO. 2/3/4 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	DITCH SAMPLE LOCATIONS					
	SSD-93-03B 08/17/93 0 FT	CSD-94-22X 09/20/94 0 FT	CSD-94-21X 09/20/94 0 FT	CSD-94-24X 09/20/94 0 FT	CSD-94-23X 09/20/94 0 FT	CSD-94-25X 09/20/94 0 FT
PAL METALS (µg/g)						
Aluminum	9380	6000	7840	29500	5000	14000
Antimony	< 19.6	< 1.09	10.6	18.8	< 1.09	3.48
Arsenic	19.2	8.4	18	60	8.55	19
Barium	46.2	12.7	30.9	155	15.9	63.9
Beryllium	ND	ND	ND	ND	ND	ND
Cadmium	3.74	0.947	2.18	27.7	< 0.7	6.35
Calcium	2240	3850	1140	3440	686	2040
Chromium	38.4	23.5	39.5	142	19.7	57.2
Cobalt	8	3.86	5.83	15.7	3.91	10.6
Copper	43.9	13.4	36.1	145	12.2	49
Iron	21900	12100	14300	42400	11100	20900
Lead	230	18	137	410	34.8	166
Magnesium	4200	5020	3910	14900	2430	6360
Manganese	572	231	174	551	172	423
Mercury	0.0751	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	22.3	18.3	22.7	82.1	15	38.3
Potassium	1140	552	1040	4610	583	1860
Selenium	ND	ND	ND	ND	ND	ND
Sodium	108	327	564	1650	412	840
Vanadium	28.2	19.6	24	91.4	14.2	39.5
Zinc	171	46.9	115	573	41	184
PAL SEMIVOLATILE ORGANICS (µg/g)						
2-methylnaphthalene	2.1	< 1	< 1	< 5	< 0.5	< 2
2-methylphenol / 2-cresol	0.35	< 0.6	< 0.6	< 3	0.3	< 1
4-methylphenol / 4-cresol	2.2	< 5	< 5	< 20	2	< 10
9h-carbazole	ND	ND	ND	ND	ND	ND
Acenaphthene	3.6	1	< 0.7	< 4	0.4	< 2
Acenaphthylene	30	< 0.7	< 0.7	< 3	0.3	< 2
Anthracene	30	2	1	< 3	0.6	< 2
Benzo [a] Anthracene	60	6	9	< 20	2	< 8
Benzo [a] Pyrene	60	< 5	10	< 20	< 2	< 10
Benzo [b] Fluoranthene	60	10	20	< 20	6	< 10
Benzo [g,h,i] Perylene	30	< 5	< 5	< 20	< 2	< 10
Benzo [k] Fluoranthene	70	2	6	< 7	1	< 3
Bis(2-ethylhexyl) Phthalate	ND	ND	ND	ND	ND	ND
Chrysene	90	10	10	< 10	6	< 6
Dibenz [a,h] Anthracene	1.7	< 4	< 4	< 20	< 2	< 10

TABLE 4-3
STORM DRAIN SYSTEMS NO. 2/3/4 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS					
	SSD-93-03B 08/17/93 0 FT	CSD-94-22X 09/20/94 0 FT	CSD-94-21X 09/20/94 0 FT	CSD-94-24X 09/20/94 0 FT	CSD-94-23X 09/20/94 0 FT	CSD-94-25X 09/20/94 0 FT
Dibenzofuran	2.6	1	< 0.7	< 4	< 0.4	< 2
Fluoranthene	100	20	20	50	8	20
Fluorene	8.1	2	< 0.7	< 3	< 0.3	< 2
Indeno [1,2,3-c,d] Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	3.6	< 0.7	< 0.7	< 4	< 0.4	< 2
Phenanthrene	100	20	10	20	5	7
Pyrene	200	20	20	40	7	20
PAL VOLATILE ORGANICS (µg/g)						
1,1,1-trichloroethane	ND	NA	NA	NA	NA	NA
Acetone	ND	NA	NA	NA	NA	NA
Toluene	ND	NA	NA	NA	NA	NA
Tetrachloroethylene / Tetrachloroethene	0.24	NA	NA	NA	NA	NA
Trichlorofluoromethane	ND	NA	NA	NA	NA	NA
OTHER (µg/g)						
Total Organic Carbon	66000	5320	14700	154000	4490	54600
Total Petroleum Hydrocarbons	1200	625	2500	5490	625	1220

TABLE 4-3
STORM DRAIN SYSTEMS NO. 2/3/4 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS			
	UPSTREAM		DOWNSTREAM	
	G3D-92-03X 06/23/92 0 FT	CSD-94-27X 09/20/94 0 FT	57D-92-02X 08/19/92 0 FT	CSD-94-28X 09/22/94 0 FT
PAL METALS (µg/g)				
Aluminum	12500	6190	NA	3410
Antimony	ND	ND	NA	ND
Arsenic	95.2	9.37	NA	7.65
Barium	127	35.3	NA	23.3
Beryllium	< 0.5	< 0.5	NA	< 0.5
Cadmium	ND	ND	NA	ND
Calcium	5810	1810	NA	898
Chromium	< 4.05	14.9	NA	8.5
Cobalt	< 1.42	7.86	NA	6.52
Copper	60.4	7.83	NA	4.14
Iron	15900	6590	NA	4800
Lead	350	8.17	NA	10.2
Magnesium	4610	2050	NA	1340
Manganese	339	524	NA	242
Mercury	ND	ND	NA	ND
Nickel	41	13.2	NA	8.67
Potassium	1520	308	NA	173
Selenium	< 0.25	< 0.25	NA	< 0.25
Sodium	2120	707	NA	516
Vanadium	72.5	8.45	NA	< 3.39
Zinc	372	31.4	NA	32.1
PAL SEMIVOLATILE ORGANICS (µg/g)				
2-methylnaphthalene	ND	ND	ND	ND
2-methylphenol / 2-cresol	ND	ND	ND	ND
4-methylphenol / 4-cresol	ND	ND	ND	ND
9h-carbazole	4.68 S	.1ND R	.033ND R	.1ND
Acenaphthene	ND	ND	ND	ND
Acenaphthylene	4.37	< 0.033	0.075	< 0.033
Anthracene	4.42	< 0.033	0.1	< 0.033
Benzo [a] Anthracene	18.1	< 0.17	0.35	0.27
Benzo [a] Pyrene	22.9	< 0.25	0.51	< 0.25
Benzo [b] Fluoranthene	32.7	< 0.21	0.67	< 0.21
Benzo [g,h,i] Perylene	18.9	< 0.25	0.34	< 0.25
Benzo [k] Fluoranthene	33.2	< 0.066	0.47	< 0.066
Bis(2-ethylhexyl) Phthalate	< 3.1	1.5	< 0.62	< 0.62
Chrysene	47.1	< 0.12	0.8	0.67
Dibenz [a,h] Anthracene	ND	ND	ND	ND

TABLE 4–3
STORM DRAIN SYSTEMS NO. 2/3/4 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS			
	UPSTREAM		DOWNSTREAM	
	G3D–92–03X 06/23/92 0 FT	CSD–94–27X 09/20/94 0 FT	57D–92–02X 08/19/92 0 FT	CSD–94–28X 09/22/94 0 FT
Dibenzofuran	ND	ND	ND	ND
Fluoranthene	59.4	< 0.068	1.4	1.1
Fluorene	< 0.165	< 0.033	0.086	< 0.033
Indeno [1,2,3–c,d] Pyrene	20.3	< 0.29	0.33	< 0.29
Naphthalene	ND	ND	ND	ND
Phenanthrene	19.8	< 0.033	0.78	0.39
Pyrene	53.1	< 0.033	1.3	1.1
PAL VOLATILE ORGANICS (μg/g)				
1,1,1–trichloroethane	< 0.0044	NA	NA	NA
Acetone	< 0.017	NA	NA	NA
Toluene	< 0.00078	NA	NA	NA
Tetrachloroethylene / Tetrachloroethene	ND	NA	NA	NA
Trichlorofluoromethane	< 0.0059	NA	NA	NA
PAL PESTICIDES/PCBS (μg/l)				
DDT	NA	< 0.00707 M	NA	NA
DDD	NA	< 0.00826	NA	NA
DDE	NA	< 0.00765	NA	NA
Dieldrin	NA	< 0.00629 M	NA	NA
Endosulfan Sulfate	NA	< 0.00763	NA	NA
gamma–chlordane	2ND R	33ND R	33ND R	33ND R
OTHER (μg/g)				
Total Organic Carbon	219000	32500	24400	19700
Total Petroleum Hydrocarbons	827	< 28	92.6	47.3

NOTES:

M = Duplicate high spike analysis, not within control limits.
R = Non–target compound analyzed for but not detected.
S = Non–target compound analyzed for and detected.
NA = Not analyzed
ND = Not detectable
μg/g = micrograms per gram

TABLE 4-4
BOWERS BROOK AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	BOWERS BROOK SAMPLE LOCATION	COLD SPRING BROOK SAMPLE LOCATIONS		
		UPSTREAM	DOWNSTREAM	
	CSD-94-16X 09/22/94 0 FT	G3D-92-02X 06/24/92 0 FT	CSD-94-18X 09/22/94 0 FT	CSD-94-26X 09/20/94 0 FT
PAL INORGANICS (µg/g)				
Aluminum	7550	12800	8910	7860
Arsenic	57.9	96	63	7.79
Barium	65.4	188	97.3	39.1
Beryllium	< 0.5	< 0.5	< 0.5	< 0.5
Calcium	3060	17000	3150	1400
Chromium	< 4.05	< 4.05	< 4.05	19.8
Cobalt	23.4	19	36	6
Copper	20.8	54.9	21.8	2.34
Iron	11800	23200	24400	6820
Lead	89	220	67	6.9
Magnesium	2070	3210	2360	2140
Manganese	1140	3150	1360	275
Nickel	22.6	41.5	26.4	12.9
Potassium	< 100	1130	555	294
Selenium	< 0.25	2.89	< 0.25	< 0.25
Sodium	2570	1620	1730	692
Vanadium	< 3.39	41.4	23.9	10.9
Zinc	147	398	193	19.9
PAL SEMIVOLATILE ORGANICS				
9h-carbazole	.1ND R	.165ND R	.5ND R	.1ND R
Acenaphthylene	< 0.033	< 0.165	< 0.2	< 0.033
Anthracene	< 0.033	< 0.165	< 0.2	< 0.033
Benzo [a] Anthracene	< 0.17	< 0.8	< 0.8	< 0.17
Benzo [a] Pyrene	< 0.25	< 1.25	< 1	< 0.25
Benzo [b] Fluoranthene	< 0.21	< 1.05	< 1	< 0.21
Benzo [g,h,i] Perylene	< 0.25	< 1.25	< 1	< 0.25
Benzo [k] Fluoranthene	1.1	< 0.33	< 0.3	< 0.066
Bis (2-ethylhexyl) Phthalate	< 0.62	< 3.1	< 3	< 0.62
Chrysene	1.3	< 0.6	< 0.6	< 0.12
Fluoranthene	1.6	4.5	< 0.3	< 0.068
Fluorene	< 0.033	< 0.165	< 0.2	< 0.033
Indeno [1,2,3-c,d] Pyrene	< 0.29	< 1.45	< 1	< 0.29
Phenanthrene	1.1	2.22	< 0.2	< 0.033
Pyrene	2.6	4.59	1	< 0.033
PAL VOLATILE ORGANICS (µg/g)				
1,1,1-trichloroethane	NA	< 0.0044	NA	NA
Acetone	NA	0.49	NA	NA
Toluene	NA	< 0.00078	NA	NA
Trichlorofluoromethane	NA	< 0.0059	NA	NA
PAL PESTICIDES/PCBS (µg/g)				
DDT	NA	NA	< 0.00707 M	NA
DDD	NA	NA	0.0498 C	NA
DDE	NA	NA	< 0.00765	NA
Dieldrin	NA	NA	< 0.00629 M	NA
Endosulfan Sulfate	NA	NA	< 0.00763	NA
gamma-chlordane	.33ND R	2ND R	2ND R	.33ND R
OTHER				
Total Organic Carbon	104000	166000	113000	18500
Total Petroleum Hydrocarbons	192	312	203	< 28.2

NOTES:
M = Duplicate high spike analysis, not within control limits.
C = Analysis was confirmed.
R = Non-target compound analyzed for but not detected.
NA = Not analyzed
ND = Not Detected
µg/g = micrograms per gram

TABLE 4–5
STUDY AREA 57 MARSH AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	MARSH SAMPLE LOCATIONS				
	CSD–94–20X 09/22/94 0 FT	CSD–94–20X 09/22/94 0 FT (dup)	CSD–94–14X 09/22/94 0 FT	CSD–94–35X 09/22/94 0 FT	CSD–94–17X 09/22/94 0 FT
PAL METALS (µg/g)					
Aluminum	20200	21600 D	8820	8540	5160
Arsenic	21	22.3 D	11.5	26.7	26
Barium	78.8	84.2 D	< 5.18	74.3	37.1
Beryllium	ND	ND	ND	ND	ND
Cadmium	2.96	3 D	< 0.7	< 0.7	< 0.7
Calcium	2840	4890 D	10800	13000	4140
Chromium	53.2	56.7 D	< 4.05	31.6	14.6
Cobalt	9.12	10.4 D	< 1.42	8.41	5.15
Copper	39.2	44.2 D	93	44.6	16.2
Iron	21600	22800 D	5790	12100	7560
Lead	222	248 D	240	120	95
Magnesium	5340	5690 D	1610	2470	1590
Manganese	161	174 D	41.7	265	473
Nickel	33.8	37.2 D	< 1.71	22	15.3
Potassium	1620	1600 D	< 100	563	427
Selenium	0.925	0.924 D	9.46	2.61	1.17
Sodium	819	984 D	5930	2210	1020
Vanadium	38.4	41.2 D	< 3.39	23.1	16.9
Zinc	160	176 D	176	209	124
PAL SEMIVOLATILE ORGANICS (µg/g)					
9h–carbazole	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo [a] Anthracene	ND	ND	ND	ND	ND
Benzo [a] Pyrene	ND	ND	ND	ND	ND
Benzo [b] Fluoranthene	ND	ND	ND	ND	ND
Benzo [g,h,i] Perylene	ND	ND	ND	ND	ND
Benzo [k] Fluoranthene	< 3	< 3 D	< 0.7	< 0.7	1
Bis (2–ethylhexyl) Phthalate	ND	ND	ND	ND	ND
Chrysene	< 6	< 6 D	< 1	< 1	1
Fluoranthene	1	< 3 D	< 0.7	< 0.7	3

TABLE 4-5
STUDY AREA 57 MARSH AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

	MARSH SAMPLE LOCATIONS				
ANALYTE	CSD-94-20X 09/22/94 0 FT	CSD-94-20X 09/22/94 0 FT (dup)	CSD-94-14X 09/22/94 0 FT	CSD-94-35X 09/22/94 0 FT	CSD-94-17X 09/22/94 0 FT
Fluorene	ND	ND	ND	ND	ND
Indeno [1,2,3-c,d] Pyrene	ND	ND	ND	ND	ND
Phenanthrene	0.8	< 2 D	< 0.3	< 0.3	1
Pyrene	2	< 2 D	< 0.3	< 0.3	3
PAL VOLATILE ORGANICS (µg/g)					
1,1,1,-trichloroethane	ND	ND	ND	ND	ND
Acetone	0.035	0.052 D	< 0.017	0.11	< 0.017
Toluene	0.0016	< 0.00078 D	< 0.00078	0.0047	< 0.00078
Trichlorofluoromethane	0.031	0.041 D	0.35	0.099	0.033
PAL PESTICIDES/PCBS (µg/g)					
DDT	0.083 CM	0.09 CDM	NA	NA	NA
DDD	0.04 C	0.041 CD	NA	NA	NA
DDE	0.0338 C	0.035 CD	NA	NA	NA
alpha chlordane	0.013 CS	0.0123 CSD	3ND R	3ND R	2ND R
Dieldrin	0.0298 CM	0.0311 CDM	NA	NA	NA
Endosulfan Sulfate	ND	ND	NA	NA	NA
gamma-chlordane	0.0276 CS	0.0298 CSD	3ND R	3ND R	2ND R
Aroclor 1260	0.243 C	0.309 C	30ND R	30ND R	20ND R
OTHER (µg/g)					
Total Organic Carbon	63600	56700 D	266000	148000	58400
Total Petroleum Hydrocarbons	2700	1760 D	1380	251	375

TABLE 4-5
STUDY AREA 57 MARSH AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS		
	UPSTREAM	DOWNSTREAM	
	CSD-94-13X 09/22/94 0 FT	SSD-93-92G 09/16/93 0 FT	CSD-94-19X 09/22/94 0 FT
PAL METALS (µg/g)			
Aluminum	10000	20100	6130
Arsenic	65	51.1	53
Barium	90.1	118	63.5
Beryllium	< 0.5	< 0.427	< 0.5
Cadmium	ND	ND	ND
Calcium	8380	5440	6980
Chromium	30.9	39.8	< 4.05
Cobalt	19	< 2.5	9.31
Copper	28.5	63.7	21.1
Iron	22300	30700	12700
Lead	240	340	79
Magnesium	3220	4340	1740
Manganese	1580	317	1490
Nickel	35.9	31.1	20.1
Potassium	608	1540	< 100
Selenium	3.01	< 0.449	2.34
Sodium	< 100	38.7	1820
Vanadium	31.8	45.6	15.8
Zinc	305	290 JR	147
PAL SEMIVOLATILE ORGANICS (µg/g)			
9h-carbazole	.5ND R	ND	.5ND R
Acenaphthylene	< 0.2	< 0.033	< 0.2
Anthracene	< 0.2	< 0.71	< 0.2
Benzo [a] Anthracene	< 0.8	1.2	< 0.8
Benzo [a] Pyrene	< 1	< 1.2	< 1
Benzo [b] Fluoranthene	< 1	< 0.31	< 1
Benzo [g,h,i] Perylene	< 1	< 0.18	< 1
Benzo [k] Fluoranthene	2	< 0.13	< 0.3
Bis (2-ethylhexyl) Phthalate	< 3	< 0.48	< 3
Chrysene	< 0.6	< 0.032	< 0.6
Fluoranthene	6	1	2

TABLE 4–5
STUDY AREA 57 MARSH AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS		
	UPSTREAM	DOWNSTREAM	
	CSD–94–13X 09/22/94 0 FT	SSD–93–92G 09/16/93 0 FT	CSD–94–19X 09/22/94 0 FT
Fluorene	< 0.2	< 0.065	< 0.2
Indeno [1,2,3–c,d] Pyrene	< 1	< 2.4	< 1
Phenanthrene	2	1.1	1
Pyrene	6	2.1	2
PAL VOLATILE ORGANICS (µg/g)			
1,1,1,–trichloroethane	< 0.0044	< 0.2	< 0.0044
Acetone	0.22	< 3.3	0.66
Toluene	0.0043	< 0.1	0.0033
Trichlorofluoromethane	0.096	< 0.23	0.1
PAL PESTICIDES/PCBS (µg/g)			
DDT	0.0553 C M	< 0.1	NA
DDD	0.49 C	< 0.064	NA
DDE	0.14 C	0.0206	NA
alpha chlordane	ND	ND	NA
Dieldrin	< 0.00629 M	0.0192	NA
Endosulfan Sulfate	< 0.00763	< 1.2	NA
gamma–chlordane	ND	ND	NA
Aroclor 1260	0.0392 C S	ND	2ND R
OTHER (µg/g)			
Total Organic Carbon	124000	170000	161000
Total Petroleum Hydrocarbons	460	1800	242

NOTES:
D = duplicate
R = Non–target compound analyzed for but not detected.
S = Non–target compound analyzed for and detected.
C = Analysis was confirmed
M = Duplicate high spike analysis, not within control limits.
NA = Not analyzed
ND = Not detectable
µg/g = micrograms per gram

TABLE 4–6
STORM DRAIN SYSTEM NO. 6 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS				
	SSD–93–06B 08/18/93 0 FT	SSD–93–06B 08/18/93 0 FT (dup)	57S–92–01X 08/19/92 0 FT	57S–92–02X 08/19/92 0 FT	57S–92–03X 08/19/92 0 FT
PAL METALS (µg/g)					
Aluminum	5750	9680 D	NA	NA	NA
Arsenic	10.3	20.9 D	NA	NA	NA
Barium	24	69 D	NA	NA	NA
Beryllium	ND	ND	NA	NA	NA
Cadmium	< 1.2	3.82 D	NA	NA	NA
Calcium	1190	1760 D	NA	NA	NA
Chromium	27.1	64.6 D	NA	NA	NA
Cobalt	4.23	7.39 D	NA	NA	NA
Copper	40.7	105 D	NA	NA	NA
Iron	14900	21800 D	NA	NA	NA
Lead	140	420 D	NA	NA	NA
Magnesium	2500	3770 D	NA	NA	NA
Manganese	184	320 D	NA	NA	NA
Mercury	< 0.05	0.115 D	NA	NA	NA
Nickel	14.1	22.8 D	NA	NA	NA
Potassium	885	1670 D	NA	NA	NA
Selenium	ND	ND	NA	NA	NA
Sodium	76.2	138 D	NA	NA	NA
Tin	< 7.43	13.5 D	NA	NA	NA
Vanadium	16.8	36.8 D	NA	NA	NA
Zinc	83.1	189 D	NA	NA	NA
PAL SEMIVOLATILE ORGANICS (µg/g)					
9–h carbazole	ND	ND	ND	ND	ND
2–methylnaphthalene	0.19	0.15 D	< 1	< 2	< 2
Acenaphthene	0.22	0.18 D	< 0.7	< 1	< 1
Acenaphthylene	3.2	2.7 D	< 0.7	< 1	< 1
Anthracene	3	2.5 D	< 0.7	< 1	< 1
Benzo [a] Anthracene	3.5	2.7 D	< 3	< 7	< 7
Benzo [a] Pyrene	4.1	3.1 D	< 5	< 10	< 10
Benzo [b] Fluoranthene	4.9	3.5 D	< 4	< 8	< 8
Benzo [g,h,i] Perylene	4.9	3.1 D	< 5	< 10	< 10
Benzo [k] Fluoranthene	3.6	3 D	< 1	4	4
Bis (2–ethylhexyl) Phthalate	1.4	< 0.48 D	< 10	< 20	< 20
Chrysene	4.3	3.3 D	< 2	5	5
Di–n–butyl Phthalate	9.3	6.2GT D	< 1	< 2	< 2

TABLE 4-6
STORM DRAIN SYSTEM NO. 6 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS				
	SSD-93-06B 08/18/93 0 FT	SSD-93-06B 08/18/93 0 FT (dup)	57S-92-01X 08/19/92 0 FT	57S-92-02X 08/19/92 0 FT	57S-92-03X 08/19/92 0 FT
Dibenz [a,h] Anthracene	0.83	< 0.31 D	< 4	< 8	< 8
Fluoranthene	5.2	4 D	< 1	9	10
Fluorene	0.61	< 0.065 D	< 0.7	< 1	< 1
Indeno [1,2,3-c,d] Pyrene	ND	ND	ND	ND	ND
Phenanthrene	4.6	3.2 D	< 0.7	4	4
Pyrene	5.9	4.6 D	< 0.7	10	10
PAL VOLATILE ORGANICS (µg/g)					
1,1,1-trichloroethane	ND	ND	NA	NA	NA
Acetone	ND	ND	NA	NA	NA
Toluene	ND	ND	NA	NA	NA
Trichlorofluoromethane	ND	ND	NA	NA	NA
OTHER (µg/g)					
Total Organic Carbon	75000	NA	24500	24700	18400
Total Petroleum Hydrocarbons	3500	2600 D	1860	1410	2210

TABLE 4-6
STORM DRAIN SYSTEM NO. 6 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS			
	UPSTREAM	DOWNSTREAM		
	CSD-94-10X 09/20/94 0 FT	CSD-94-11X 09/21/94 0 FT	CSD-94-12X 09/21/94 0 FT	G3D-92-01X 06/23/92 0 FT
PAL METALS (µg/g)				
Aluminum	5030	12300	11800	17400
Arsenic	26.8	47.4	67	120
Barium	41.9	83.7	103	121
Beryllium	< 0.5	< 0.5	< 0.5	4.37
Cadmium	ND	ND	ND	ND
Calcium	4500	8540	9740	13500
Chromium	16.7	44.5	39.7	50.7
Cobalt	5.78	16	17.2	29.8
Copper	10	35.7	37.9	42.2
Iron	8150	19200	23200	33100
Lead	55.5	273	258	340
Magnesium	1460	3650	3250	4960
Manganese	1340	934	1840	1020
Mercury	ND	ND	ND	ND
Nickel	11.6	35.2	33.6	55.1
Potassium	< 100	840	666	1580
Selenium	1.09	2.98	2.57	< 0.25
Sodium	909	1830	2000	727
Tin	ND	ND	ND	ND
Vanadium	11	38.4	34.3	50.2
Zinc	63.2	336	341	479
PAL SEMIVOLATILE ORGANICS (µg/g)				
9-h carbazole	ND	ND	ND	ND
2-methylnaphthalene	.1ND R	.5ND R	.5ND R	.165ND R
Acenaphthene	ND	ND	ND	ND
Acenaphthylene	< 0.033	< 0.2	< 0.2	< 0.165
Anthracene	< 0.033	< 0.2	< 0.2	< 0.165
Benzo [a] Anthracene	0.42	< 0.8	< 0.8	< 0.8
Benzo [a] Pyrene	< 0.25	< 1	< 1	< 1.25
Benzo [b] Fluoranthene	< 0.21	< 1	< 1	< 1.05
Benzo [g,h,i] Perylene	< 0.25	< 1	< 1	< 1.25
Benzo [k] Fluoranthene	0.47	5	2	< 0.33
Bis (2-ethylhexyl) Phthalate	< 0.62	< 3	< 3	< 3.1
Chrysene	0.84	6	< 0.6	< 0.6
Di-n-butyl Phthalate	ND	ND	ND	ND

TABLE 4-6
STORM DRAIN SYSTEM NO. 6 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

	COLD SPRING BROOK SAMPLE LOCATIONS			
	UPSTREAM	DOWNSTREAM		
ANALYTE	CSD-94-10X 09/20/94 0 FT	CSD-94-11X 09/21/94 0 FT	CSD-94-12X 09/21/94 0 FT	G3D-92-01X 06/23/92 0 FT
Dibenz [a,h] Anthracene	ND	ND	ND	ND
Fluoranthene	0.89	9	3	3.69
Fluorene	< 0.033	< 0.2	< 0.2	< 0.165
Indeno [1,2,3-c,d] Pyrene	< 0.29	< 1	< 1	< 1.45
Phenanthrene	0.55	5	2	2.63
Pyrene	1.6	9	6	7.54
PAL VOLATILE ORGANICS (µg/g)				
1,1,1-trichloroethane	NA	NA	NA	< 0.0044
Acetone	NA	NA	NA	0.657
Toluene	NA	NA	NA	< 0.00078
Trichlorofluoromethane	NA	NA	NA	< 0.0059
PAL PESTICIDES/PCBS (µg/g)				
DDT	NA	0.0923 CM	NA	NA
DDD	NA	0.41 C	NA	NA
DDE	NA	0.2 C	NA	NA
Dieldrin	NA	< 0.00629 CM	NA	NA
Endosulfan Sulfate	NA	< 0.00763	NA	NA
gamma-chlordane	.33ND R	0.0663 C S	2ND R	2ND R
OTHER (µg/g)				
Total Organic Carbon	85700	149000	223000	4250
Total Petroleum Hydrocarbons	272	534	574	472

NOTES:
D = duplicate
M = Duplicate high spike analysis, not within control limits.
C = Analysis was confirmed.
R = Non-target compound analyzed for but not detected.
S = Non-target compound analyzed for and detected.
NA = Not analyzed
ND = Not detectable
µg/g = micrograms per gram

TABLE 4-7
STORM DRAIN SYSTEM NO. 7 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS						
	CSD-94-04X 09/19/94 0 FT	SSD-93-07A 08/18/93 0 FT	CSD-94-05 09/19/94 0 FT	CSD-94-05 09/19/94 0 FT (dup)	SSD-93-07B 08/18/93 0 FT	CSD-94-06 09/19/94 0 FT	CSD-94-07 09/19/94 0 FT
PAL METALS (µg/g)							
Aluminum	4280	6760	13900	2670 D	20900	6210	9760
Arsenic	12.8	9.91	37.9	38.4 D	41.6	9.75	16.2
Barium	36.2	9.65	207	< 5.18 D	545	28.5	82.8
Beryllium	< 0.5	< 0.427	3.37	< 0.5 D	8.35	< 0.5	< 0.5
Cadmium	< 0.7	< 1.2	6.43	< 0.7 D	10.6	< 0.7	< 0.7
Calcium	1040	6450	6470	1020 D	6910	1430	2430
Chromium	< 4.05	18.6	< 4.05	< 4.05 D	9.64	30.2	40.5
Cobalt	21.7	4.39	116	20.6 D	298	4.32	15
Copper	7.31	20.6	28	< 0.965 D	36.2	13.5	22
Iron	9230	15900	28300	4790 D	67800	10300	19600
Lead	17	26	136	83 D	91	109	212
Magnesium	817	2960	1390	< 100 D	923	3280	4600
Manganese	1610	189	5560	843 D	25000	264	1340
Nickel	19.4	13.7	145	23.2 D	140	16.5	34.4
Potassium	< 100	544	< 100	< 100 D	< 131	916	1290
Selenium	< 0.25	< 0.449	2.18	< 0.25 D	< 0.449	< 0.25	< 0.25
Sodium	775	67.2	1980	< 100 D	455	642	932
Vanadium	< 3.39	10.8	25.7	< 3.39 D	24.6	16.1	27.4
Zinc	69	46.9	604	105 D	415	69.9	158
PAL SEMIVOLATILE ORGANICS (µg/g)							
9-h carbazole	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	< 0.033	0.36	< 0.033	< 0.033 D	< 0.033	< 0.3	< 0.2
Anthracene	ND	ND	ND	ND	ND	ND	ND
Benzo [a] Anthracene	< 0.17	0.64	< 0.17	< 0.17 D	< 0.041	< 2	< 0.8
Benzo [a] Pyrene	ND	ND	ND	ND	ND	ND	ND
Benzo [k] Fluoranthene	< 0.066	0.76	< 0.066	0.48 D	< 0.13	< 0.7	3
Benzo [g,h,i] Perylene	ND	ND	ND	ND	ND	ND	ND
Benzo [k] Fluoranthene	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) Phthalate	ND	ND	ND	ND	ND	ND	ND
Chrysene	< 0.12	0.84	< 0.12	0.94 D	< 0.032	< 1	3
Di-n-butyl Phthalate	< 0.061	5.5	< 0.061	< 0.061 D	22	< 0.6	< 0.3
Fluoranthene	0.27	1	1.3	1.7 D	1	2	6
Fluorene	ND	ND	ND	ND	ND	ND	ND
Indeno [1,2,3-c,d] Pyrene	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	0.16	1	0.74	0.92 D	< 0.032	2	3
Pyrene	0.28	1.5	1.4	1.4 D	< 0.083	2	5

TABLE 4-7
STORM DRAIN SYSTEM NO. 7 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS						
	CSD-94-04X 09/19/94 0 FT	SSD-93-07A 08/18/93 0 FT	CSD-94-05 09/19/94 0 FT	CSD-94-05 09/19/94 0 FT (dup)	SSD-93-07B 08/18/93 0 FT	CSD-94-06 09/19/94 0 FT	CSD-94-07 09/19/94 0 FT
PAL VOLATILE ORGANICS (µg/g)							
1,1,1-trichloroethane	NA	ND	NA	NA	NA	NA	NA
Acetone	NA	ND	NA	NA	NA	NA	NA
Toluene	NA	ND	NA	NA	NA	NA	NA
Trichlorofluoromethane	NA	ND	NA	NA	NA	NA	NA
OTHER							
Total Organic Carbon	41700	9600	85600	199000 D	1500000	27800	63200
Total Petroleum Hydrocarbons	219	250	470	481 D	300	2320	1590

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STORM DRAIN SYSTEM NO. 7 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

	COLD SPRING BROOK SAMPLE LOCATIONS				
	UPSTREAM		DOWNSTREAM		
ANALYTE	57D-92-01X 01/11/93 0 FT	57D-92-01X 08/19/92 0 FT	CSD-94-08X 09/19/94 0 FT	CSD-94-09X 09/20/94 0 FT	SSD-93-92E 09/08/93 0 FT
PAL METALS (µg/g)					
Aluminum	11700	NA	6770	9330	18000
Arsenic	55.3 J	NA	20.7	39	54.7
Barium	93.9	NA	61.2	92.3	125
Beryllium	< 0.5	NA	< 0.5	< 0.5	< 0.427
Cadmium	ND	NA	ND	ND	ND
Calcium	9100	NA	2410	5760	12500
Chromium	33.3	NA	26.1	31	44.3
Cobalt	21.3	NA	10.7	16.2	22.4
Copper	27.8	NA	16.4	28.1	30.1
Iron	25600	NA	14600	20400	35000
Lead	99	NA	141	180	190
Magnesium	3160	NA	2990	2790	4520
Manganese	1400	NA	1030	2040	2440
Nickel	32.2	NA	24.6	30.4	31.3
Potassium	799	NA	816	727	1160
Selenium	< 0.25	NA	< 0.25	1.78	< 0.449
Sodium	1110	NA	945	1230	349
Vanadium	32.4	NA	17.8	26.9	37
Zinc	239	NA	143	234	359
PAL SEMIVOLATILE ORGANICS (µg/g)					
9-h carbazole	.5ND R	2ND R	.5ND R	.5ND	
Acenaphthylene	< 0.2	< 0.2	< 0.2	< 0.2	< 0.033
Anthracene	< 0.2	< 0.2	< 0.2	< 0.2	< 0.71
Benzo [a] Anthracene	< 0.8	< 0.8	< 0.8	< 0.8	1.6
Benzo [a] Pyrene	< 1	< 1	< 1	< 1	< 1.2
Benzo [k] Fluoranthene	< 1	< 1	< 1	< 1	< 0.31
Benzo [g,h,i] Perylene	< 1	< 1	< 1	< 1	< 0.18
Benzo [k] Fluoranthene	< 0.3	< 0.3	1	< 0.3	< 0.13
Bis(2-ethylhexyl) Phthalate	< 3	< 3	< 3	< 3	< 0.48
Chrysene	< 0.6	< 0.6	2	4	< 0.032
Di-n-butyl Phthalate	ND	ND	ND	ND	ND
Fluoranthene	< 0.3	2	4	4	1.8
Fluorene	< 0.2	< 0.2	< 0.2	< 0.2	< 0.065
Indeno [1,2,3-c,d] Pyrene	< 1	< 1	< 1	< 1	< 2.4
Phenanthrene	< 0.2	1	3	2	1.8
Pyrene	< 0.2	2	3	6	2.7

TABLE 4-7
STORM DRAIN SYSTEM NO. 7 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	COLD SPRING BROOK SAMPLE LOCATIONS				
	UPSTREAM		DOWNSTREAM		
	57D-92-01X 01/11/93 0 FT	57D-92-01X 08/19/92 0 FT	CSD-94-08X 09/19/94 0 FT	CSD-94-09X 09/20/94 0 FT	SSD-93-92E 09/08/93 0 FT
PAL VOLATILE ORGANICS (µg/g)					
1,1,1-trichloroethane	< 0.0044	NA	NA	NA	< 0.2
Acetone	0.44	NA	NA	NA	< 3.3
Toluene	< 0.00078	NA	NA	NA	< 0.1
Trichlorofluoromethane	< 0.0059	NA	NA	NA	< 0.23
PAL PESTICIDES/PCBS (µg/g)					
DDT	NA	NA	0.0202 C	NA	< 0.1
DDD	NA	NA	0.0518 C	NA	0.062
DDE	NA	NA	< 0.00765	NA	< 0.068
Dieldrin	NA	NA	< 0.00629	NA	< 0.079
Endosulfan Sulfate	NA	NA	< 0.00763	NA	0.0112
gamma-chlordane	2ND R	2ND R	2ND R	2ND	
OTHER					
Total Organic Carbon	NA	34800	75700	132000	170000
Total Petroleum Hydrocarbons	466	497	734	635	160

NOTES:
D = duplicate
C = Analysis was confirmed
R = Non-target compound analyzed for but not detected
NA = Not analyzed
ND = Not detectable
µg/g = micrograms per gram

TABLE 4−8
STORM DRAIN SYSTEM NO. 8 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATION	COLD SPRING BROOK SAMPLE LOCATIONS	
		UPSTREAM	DOWNSTREAM
	SSD−93−08A 08/18/93 0 FT	CSD−94−03X 09/20/94 0 FT	SSD−93−92D 09/07/93 0 FT
PAL METALS (μg/g)			
Aluminum	14300	3590	15400
Arsenic	13.2	14	25.8
Barium	49.2	15.7	72.8
Beryllium	0.945	ND	< 0.427
Calcium	1510	1010	3140
Chromium	38	8.53	39.4
Cobalt	13.8	2.98	11.7
Copper	26	6.39	4.76
Iron	19200	7020	37200
Lead	110	30.8	34
Magnesium	3040	1330	11000
Manganese	595	516	1500
Mercury	ND	< 0.05 J	ND
Nickel	17.9	8.98	37.4
Potassium	1430	194	3830
Selenium	ND	< 0.25	< 0.449
Sodium	121	502	91
Vanadium	26.4	6.45	26.9
Zinc	190	48.7	85.2
PAL SEMIVOLATILE ORGANICS (μg/g)			
9h−carbazole	ND	1ND R	ND
Acenaphthylene	ND	< 0.033	< 0.033
Anthracene	ND	< 0.033	< 0.71
nzo [a] Anthracene	ND	< 0.17	< 0.041
[a] Pyrene	ND	< 0.25	< 1.2
[b] Fluoranthene	ND	< 0.21	< 0.31
nzo [g,h,i] Perylene	ND	< 0.25	< 0.18
Benzo [k] Fluoranthene	ND	0.15	< 0.13
Bis (2−ethylhexyl) Phthalate	ND	ND	< 0.48
Chrysene	0.4	0.25	< 0.032
Di−n−butyl Phthalate	2.1	ND	ND
Fluoranthene	0.53	0.29	< 0.032
Fluorene	ND	< 0.033	< 0.065
Indeno [1,2,3−c,d] Pyrene	ND	< 0.29	< 2.4
Naphthalene	ND	< 0.037	ND
Phenanthrene	0.48	0.15	< 0.032
Pyrene	0.45	0.4	< 0.083
PAL VOLATILE ORGANICS (μg/g)			
1,1,1 − trichloroethane	ND	NA	0.28
Acetone	ND	NA	< 3.3
Toluene	ND	NA	< 0.1
Trichlorofluoromethane	ND	NA	< 0.23
PAL PESTICIDES/PCBS (μg/g)			
DDT	NA	0.012 CM	< 0.1
DDD	NA	0.0324 C	< 0.064
DDE	NA	0.0234 C	< 0.068
Dieldrin	NA	ND	< 0.079
Endosulfan Sulfate	NA	ND	< 1.2
gamma−chlordane	NA	.33ND R	
OTHER (μg/g)			
Total Organic Carbon	66000	22000	50000
Total Petroleum Hydrocarbons	780	103	23

NOTES:

C = Analysis was confirmed

Duplicate high spike analysis, not within control limits.

on−target compound analyzed for but not detected.

NA = Not analyzed

ND = Not detectable

μg/g = micrograms per gram

TABLE 4-9
STORM DRAIN SYSTEM NO. 9 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS			COLD SPRING BROOK SAMPLE LOCATIONS					
				UPSTREAM		DOWNSTREAM			
	SSD-95-09L	SSD-95-09K	SSD-93-09A 8/19/93 0 FT	SSD-93-92C	SSD-95-09J	SSD-95-09I	CSD-94-01X 09/20/94 0 FT	CSD-94-02X 09/21/94 0 FT	SSD-95-09H
PAL METALS (µg/g)									
Aluminum	11600 B	3320 B	5850	3080	4780 B	4400 B	1720	13100	2440 B
Arsenic	24.8	4.25	17.5	13.1	13.3	12.1	11.9	62	9.4
Barium	64.4 B	16.3 B	19.5	7.85	18.9 B	10.8 B	< 5.18	117	16.8 B
Calcium	4750 B	779 B	1080	482	1870 B	661 B	408	6780	788 B
Chromium	46.6	9.38	17.4	6.24	10.8	14.8	< 4.05	48	5.51
Cobalt	12.7	< 2.5	3.14	ND	< 2.5	< 2.5	< 1.42	9.6	23.2
Copper	62.9	6.24	11.1	ND	8.38	8.8	3.04	48.8	2.84
Iron	26300 B	6900 B	14200	6440	8030 B	9840 B	3450	28700	< 5080 B
Lead	82 B	13.2 B	52	6.31	32.6 B	54 B	5.48	241	10.6 B
Magnesium	4730 B	1410 B	3030	1370	1470 B	2730 B	637	4130	932 B
Manganese	864 B	62.6 B	108	214	195 B	64.1 B	61.5	861	517 B
Mercury	.163	< .05	ND	ND	< .05	< .05	< 0.05 J	0.247 J	.05
Nickel	29.3	5.02	13.6	3.94	7.09	9.52	4.12	33.5	< 26.3
Potassium	2560 B	849 B	672	ND	480 B	527 B	195	1380	< 197 B
Selenium	NA	NA	ND	ND	NA	NA	< 0.25	1.78	NA
Sodium	241	61.6	98	ND	112	< 38.7	409	1900	38.7
Vanadium	49.3 B	7.85 B	12.6	4.09	7.75 B	9.76 B	< 3.39	34.3	3.31 B
Zinc	272 BI	25.9 BI	43.6	18.1	40.8 BI	57.6 BI	15.2	332	16.5 BI
PAL SEMIVOLATILE ORGANICS (µg/g)									
2-methylnaphthalene	< .06	.3	NA	NA	.3	.2	NA	NA	.032
Acenaphthene	< .08	1	NA	NA	< .08	< .08	NA	NA	< .041
9h-carbazole	NA	NA	ND	ND	NA	NA	0.28 S	1ND R	NA
Acenaphthylene	< .07	.7	ND	0.15	< .07	.9	0.12	< 0.3	< .033
Anthracene	< 1	5	ND	ND	< 1	< 1	0.19	< 0.3	< .71
Bis(2-ethylhexyl) Phthalate	20	< 1	NA	NA	< 1	< 1	NA	NA	< .48
Benzo [a] Anthracene	.7	7	2	0.64	.7	7	0.7	< 2	< .041
Benzo [a] Pyrene	< 2	5	ND	ND	< 2	< 2	0.74	< 2	< 1.2
Benzo [b] Fluoranthene	< .6	9	ND	ND	< .6	10	0.68	< 2	< .31
Benzo [g,h,i] Perylene	< .4	2	ND	ND	< .4	< .4	0.38	< 2	< .18
Benzo [k] Fluoranthene	< .3	3	ND	0.51	< .3	4	0.61	< 0.7	< .13
Chrysene	1	6	3	0.68	.9	8	1.3	< 1	.032
Dibenzofuran	< .8	1	NA	NA	< .8	< .8	NA	NA	< .38
Di-n-butyl Phthalate	< 3	< 3	NA	NA	< 3	< 3	NA	NA	< 1.3
Fluoranthene	.9	10	ND	0.95	.8	9	2.1	5	< .032
Fluorene	< .1	4	ND	0.17	< .1	2	0.16	< 0.3	< .065

TABLE 4-9
STORM DRAIN SYSTEM NO. 9 AND ASSOCIATED LOWER COLD SPRING BROOK ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS			COLD SPRING BROOK SAMPLE LOCATIONS						
				UPSTREAM		DOWNSTREAM				
	SSD-95-09L	SSD-95-09K	SSD-93-09A 8/19/93 0 FT	SSD-93-92C	SSD-95-09J	SSD-95-09I	CSD-94-01X 09/20/94 0 FT	CSD-94-02X 09/21/94 0 FT	SSD-95-09H
Hexadecanoic Acid / Palmitic Acid	9 NB	2 NB	NA	NA	3 NB	2 NB	NA	NA	< 4 NB
Indeno [1,2,3-c,d] Pyrene	NA	NA	ND	ND	NA	NA	0.4	< 3	NA
Naphthalene	NA	NA	ND	ND	NA	NA	0.073	< 0.4	NA
Octadecanoic Acid	2 NB		NA	NA			NA	NA	< .81 NB
Phenanthrene	1	20	ND	1.7	1	10	1.6	3	< .032
Pyrene	1	10	ND	1.4	1	10	2.4	6	< .083
PAL PESTICIDES/PCBS (µg/g)									
Endosulfan Ii	.00296 C	< .0007	NA	NA	.00294 C2	.00305 C2	NA	NA	.0007
Dieldrin	.00504 C	.00235 C	NA	NA	.0118 C	.0135 C	NA	NA	< .0016
DDT	.0113 U2	.0056 U2	NA	NA	.0319 U2	.0216 U2	NA	0.15 CM	< .0035
DDD	.00541 C	.0121 C	NA	NA	.0927 C	.106GT 2X	NA	0.56 C	< .00505 C
DDE	.0113 U	.00428 C	NA	NA	.0774 U	.0203 C	NA	0.16 C	< .0027
gamma-chlordane	NA	NA	NA	NA	NA	NA	.33ND R	0.0716 CS	NA
OTHER (µg/g)									
Total Organic Carbon	125000	1490	51000	9600	36600	24200	2080	120000	7400
Total Petroleum Hydrocarbons	965	537	270	NA	77.8	315	61	2120	534

NOTES:
µg/g = micrograms per gram
s.u. = standard units
< = less than
2 = ending calibration not within acceptable limits
B = analyte found in method blank or QC blank
as well as the sample
I = low spike recovery is high
J = Value is estimated
M = Duplicate high spike analysis, not within control limits.
N = tentatively identified compound
R = Non-target compound analyzed for but not detected
S = Non-target compound analyzed for and detected
C = Analysis was confirmed
NA = Not analyzed
ND = Not detectable
X = analyte concentration is above the upper reporting level

TABLE 4-10
STORM DRAIN SYSTEM NO. 5
ANALYTICAL SEDIMENT SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA.

ANALYTE	DITCH SAMPLE LOCATIONS		
	SSD-93-05A 08/17/93 0 FT	GRD-94-06X 09/19/94 0 FT	GRD-94-07X 09/19/94 0 FT
PAL METALS (µg/g)			
Aluminum	30400	10700	42200
Arsenic	43	20	5.35
Barium	99	57	< 5.18
Beryllium	1.62	< 0.5	< 0.5
Cadmium	4.59	0.931	< 0.7
Calcium	6960	591	1830
Chromium	163	36.9	< 4.05
Cobalt	28.8	13.1	< 1.42
Copper	65.6	47.3	63
Iron	48700	16300	2200
Lead	160	356	160
Magnesium	17500	4080	< 100
Manganese	1300	2410	43.2
Mercury	< 0.05	0.0961	< 0.05
Nickel	82	25.3	< 1.71
Potassium	5950	755	< 100
Selenium	< 0.449	0.67	8.64
Sodium	270	448	5310
Vanadium	88.6	48.8	< 3.39
Zinc	301	63.7	< 8.03
PAL SEMIVOLATILE ORGANICS (µg/g)			
Acenaphthene	0.21	< 2	< 0.036
Acenaphthylene	3.8	3	< 0.033
Anthracene	4.5	< 2	< 0.033
Benzo [a] Anthracene	5.9	< 8	< 0.17
Benzo [a] Pyrene	5.8	< 10	< 0.25
Benzo [b] Fluoranthene	6.9	20	< 0.21
Benzo [g,h,i] Perylene	5	< 10	< 0.25
Benzo [k] Fluoranthene	6.2	10	< 0.066
Chrysene	7.4	20	< 0.12
Fluoranthene	7.3	30	< 0.068
Fluorene	0.91	< 2	< 0.033
Phenanthrene	8.4	10	< 0.033
Pyrene	12	30	0.66
OTHER (µg/g)			
Total Organic Carbon	55000	92600	428000
Total Petroleum Hydrocarbons	3200	1570	3200

NOTES:
µg/g = micrograms per gram

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-01X 09/20/94	CSW-94-01X 09/20/94 (filtered)	CSW-94-02X 09/21/94	CSW-94-02X 09/21/94 (filtered)	CSW-94-03X 09/20/94	CSW-94-03X 09/20/94 (filtered)	CSW-94-08X 09/19/94	CSW-94-08X 09/19/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	297	< 141 F	< 141	< 141 F	< 141	< 141 F
Antimony	< 3.03	< 3.03 F	< 3.03	< 3.03 F	< 3.03	< 3.03 F	< 3.03	3.48 F
Arsenic	3.52	3.09 F	5.22	3.73 F	4.9	3.41 F	5.44	3.94 F
Barium	8.06	8.24 F	12.8	7.38 F	5.37	< 5 F	7.86	6.9 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F
Calcium	23800	23900 F	24200	24300 F	23200	23100 F	22800	22200 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F
Iron	205	85.4 F	691	144 F	474	82.8 F	454	207 F
Lead	< 1.26	< 1.26 F	2.39	< 1.26 F	< 1.26	< 1.26 F	1.41	< 1.26 F
Magnesium	3380	3430 F	3410	3400 F	3270	3280 F	3260	3190 F
Manganese	49.5	48.1 F	59.2	44.7 F	45.1	10.1 F	64.4	56.4 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F
Potassium	2160	1690 F	1350	1520 F	1080	1490 F	1830	1490 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	21500	21800 F	21100	21400 F	20900	20800 F	20900	20400 F
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F
Zinc	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
4,4'-ddd			< .0233		< .0233		< .0233	
4,4'-ddt			< .034		< .034		< .034	
Bhc - Alpha			< .0385		< .0385		< .0385	
Bhc - Beta			< .024		< .024		< .024	
Bhc - Delta			< .0293		< .0293		< .0293	
Bhc - Gamma (lindane)			< .0507		< .0507		< .0507	
Endosulfan I			< .023		< .023		< .023	
Endrin Aldehyde			< .0285		< .0285		< .0285	
Heptachlor			< .0423		< .0423		< .0423	
Isodrin			< .0562		< .0562		< .0562	
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		4.5	

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-01X 09/20/94	CSW-94-01X 09/20/94 (filtered)	CSW-94-02X 09/21/94	CSW-94-02X 09/21/94 (filtered)	CSW-94-03X 09/20/94	CSW-94-03X 09/20/94 (filtered)	CSW-94-08X 09/19/94	CSW-94-08X 09/19/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	47000		49000		48000		46000	
Chloride	66000		33000		33000		33000	
Sulfate								
Total Hardness	70400		71600		69600		67600	
Total Suspended Solids	< 4000		4000		< 4000		< 4000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-09X 09/20/94	CSW-94-09X 09/20/94 (filtered)	CSW-94-10X 09/20/94	CSW-94-10X 09/20/94 (filtered)	CSW-94-11X 09/21/94	CSW-94-11X 09/21/94 (filtered)	CSW-94-12X 09/21/94	CSW-94-12X 09/21/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	< 141	< 141 F	< 141	< 141 F	402	< 141 F
Antimony	< 3.03	3.3 F	< 3.03	4.11 F	< 3.03	< 3.03 F	< 3.03	4.02 F
Arsenic	5.97	4.05 F	4.69	< 2.54 F	4.58	3.3 F	8.74	3.52 F
Barium	8.06	7.09 F	7.86	6.9 F	7.77	6.81 F	10.4	8.53 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F
Calcium	22700	22200 F	23300	22000 F	22800	21300 F	22800	21900 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F
Iron	439	139 F	405	119 F	421	105 F	1200	112 F
Lead	< 1.26	< 1.26 F	< 1.26	< 1.26 F	< 1.26	< 1.26 F	5.1	< 1.26 F
Magnesium	3250	3170 F	3340	3160 F	3250	3080 F	3280	3140 F
Manganese	84.3	72.2 F	81.2	69.8 F	94.5	93.7 F	272	355 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F
Potassium	1370	1590 F	1770	1820 F	1260	1460 F	1700	1410 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	20500	20000 F	20600	19600 F	20000	19000 F	19800	19800 F
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F
Zinc	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
4,4'-ddd					< .0233			
4,4'-ddt					< .034			
Bhc - Alpha					< .0385			
Bhc - Beta					< .024			
Bhc - Delta					< .0293			
Bhc - Gamma (lindane)					< .0507			
Endosulfan I					< .023			
Endrin Aldehyde					< .0285			
Heptachlor					< .0423			
Isodrin					< .0562			
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		< 4.8	

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-09X 09/20/94	CSW-94-09X 09/20/94 (filtered)	CSW-94-10X 09/20/94	CSW-94-10X 09/20/94 (filtered)	CSW-94-11X 09/21/94	CSW-94-11X 09/21/94 (filtered)	CSW-94-12X 09/21/94	CSW-94-12X 09/21/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	45000		46000		41000		49000	
Chloride	33000		33000		33000		33000	
Sulfate								
Total Hardness	67600		67600		67600		68400	
Total Suspended Solids	< 4000		< 4000		6000		37000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-13X 09/22/94	CSW-94-13X 09/22/94 (filtered)	CSW-94-14X 09/22/94	CSW-94-14X 09/22/94 (filtered)	CSW-94-16X 09/22/94	CSW-94-16X 09/22/94 (filtered)	CSW-94-17X 09/22/94	CSW-94-17X 09/22/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	7740	< 141 F	501	< 141 F	< 141	< 141 F
Antimony	< 3.03	2.95 F	< 3.03	< 3.03 F	< 3.03	< 3.03 F	< 3.03	2.95 F
Arsenic	3.84	3.3 F	8.42	< 2.54 F	15.8	< 2.54 F	3.52	< 2.54 F
Barium	8.63	8.15 F	107	11.6 F	46.9	12.5 F	8.95	8.28 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	9.74	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F
Calcium	24000	24000 F	22300	7300 F	18000	17200 F	22900	22800 F
Chromium	< 6.02	< 6.02 F	14	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F
Copper	< 8.09	< 8.09 F	60.5	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F
Iron	423	115 F	7800	< 38.8 F	6080	438 F	474	249 F
Lead	< 1.26	< 1.26 F	140	1.41 F	3.36	< 1.26 F	< 1.26	< 1.26 F
Magnesium	3450	3460 F	2020	611 F	3420	3300 F	3270	3270 F
Manganese	101	96.5 F	60	7.88 F	4480	217 F	102	90 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F
Potassium	2110	2010 F	2860	1540 F	2500	2540 F	1500	1460 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	19600	19700 F	44700	46200 F	32800	32800 F	20500	20600 F
Vanadium	< 11	< 11 F	16.4	< 11 F	< 11	< 11 F	< 11	< 11 F
Zinc	< 21.1	< 21.1 F	240	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
4,4'-ddd	< .0233							
4,4'-ddt	< .034							
Bhc - Alpha	< .0385							
Bhc - Beta	< .024							
Bhc - Delta	< .0293							
Bhc - Gamma (lindane)	< .0507							
Endosulfan I	< .023							
Endrin Aldehyde	< .0285							
Heptachlor	< .0423							
Isodrin	< .0562							
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		< 4.8	

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-13X 09/22/94	CSW-94-13X 09/22/94 (filtered)	CSW-94-14X 09/22/94	CSW-94-14X 09/22/94 (filtered)	CSW-94-16X 09/22/94	CSW-94-16X 09/22/94 (filtered)	CSW-94-17X 09/22/94	CSW-94-17X 09/22/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	51000		13000		33000		47000	
Chloride	33000		55000		55000		33000	
Sulfate								
Total Hardness	71600		57200		62400		67200	
Total Suspended Solids	< 4000		212000		146000		9000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:

µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-18X 09/22/94	CSW-94-18X 09/22/94 (filtered)	CSW-94-19X 09/22/94	CSW-94-19X 09/22/94 (filtered)	CSW-94-20X 09/22/94	CSW-94-20X 09/22/94 (filtered)	CSW-94-26X 09/20/94	CSW-94-26X 09/20/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	< 141	< 141 F	167	< 141 F	< 141	< 141 F
Antimony	< 3.03	3.04 F	< 3.03	< 3.03 F	< 3.03	< 3.03 F	< 3.03	< 3.03 F
Arsenic	2.98	< 2.54 F	3.73	< 2.54 F	< 2.54	< 2.54 F	< 2.54	< 2.54 F
Barium	11.5	12.5 F	8.95	8.18 F	16.8	16.5 F	12.8	9.44 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F
Calcium	18400	17500 F	22300	22500 F	21300	21100 F	17300	16900 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F
Iron	305	873 F	562	105 F	1090	172 F	804	150 F
Lead	< 1.26	< 1.26 F	< 1.26	< 1.26 F	1.41	< 1.26 F	< 1.26	< 1.26 F
Magnesium	3200	3300 F	3200	3230 F	2820	2810 F	2900	2870 F
Manganese	278	442 F	128	86.8 F	119	108 F	613	222 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F
Potassium	2040	2200 F	1580	1830 F	2620	2160 F	1730	1850 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	29100	32100 F	19900	20200 F	21200	20900 F	22900	22600 F
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F
Zinc	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
4,4'-ddd	< .0233				< .0233			
4,4'-ddt	< .034				< .034			
Bhc - Alpha	< .0385				< .0385			
Bhc - Beta	< .024				< .024			
Bhc - Delta	< .0293				< .0293			
Bhc - Gamma (lindane)	< .0507				< .0507			
Endosulfan I	< .023				< .023			
Endrin Aldehyde	< .0285				< .0285			
Heptachlor	< .0423				< .0423			
Isodrin	< .0562				< .0562			
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	11		< 4.8		< 4.8		< 4.8	

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-18X 09/22/94	CSW-94-18X 09/22/94 (filtered)	CSW-94-19X 09/22/94	CSW-94-19X 09/22/94 (filtered)	CSW-94-20X 09/22/94	CSW-94-20X 09/22/94 (filtered)	CSW-94-26X 09/20/94	CSW-94-26X 09/20/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	34000		47000		22000		36000	
Chloride	66000		33000		66000		66000	
Sulfate								
Total Hardness	56400		68000		61600		54400	
Total Suspended Solids	< 4000		< 4000		131000		< 4000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-27X 09/20/94	CSW-94-27X 09/20/94 (filtered)	CSW-94-28X 09/22/94	CSW-94-28X 09/22/94 (filtered)	CSW-94-31X 09/21/94	CSW-94-31X 09/21/94 (filtered)	CSW-94-32X 09/21/94	CSW-94-32X 09/21/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	< 141	< 141 F	3150	< 141 F	< 141	< 141 F
Antimony	< 3.03	< 3.03 F	< 3.03	3.12 F	< 3.03	< 3.03 F	< 3.03	2.95 F
Arsenic	< 2.54	< 2.54 F	< 2.54	< 2.54 F	79.3	< 2.54 F	< 2.54	< 2.54 F
Barium	9.54	8.18 F	8.18	8.56 F	179	7.01 F	7.4	8.18 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F
Calcium	16700	16400 F	17800	17500 F	19700	16400 F	16400	16400 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 F	6.33	< 6.02 F	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F
Iron	381	109 F	323	151 F	40300	200 F	490	247 F
Lead	< 1.26	< 1.26 F	3.15	< 1.26 F	32.8	10.6 F	5.97	< 1.26 F
Magnesium	2800	2790 F	3050	3020 F	3640	2810 F	2790	2820 F
Manganese	209	179 F	181	132 F	6320	151 F	177	171 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F
Potassium	2080	1910 F	1650	1750 F	2720	1530 F	1760	1800 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	22300	22200 F	26100	25900 F	23000	23000 F	22500	22600 F
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F
Zinc	< 21.1	< 21.1 F	< 21.1	< 21.1 F	83	< 21.1 F	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
4,4'-ddd	< .0233						< .0233	
4,4'-ddt	< .034						< .034	
Bhc - Alpha	< .0385						< .0385	
Bhc - Beta	< .024						< .024	
Bhc - Delta	< .0293						< .0293	
Bhc - Gamma (lindane)	< .0507						< .0507	
Endosulfan I	< .023						< .023	
Endrin Aldehyde	< .0285						< .0285	
Heptachlor	< .0423						< .0423	
Isodrin	< .0562						< .0562	
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		< 4.8	

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-27X 09/20/94	CSW-94-27X 09/20/94 (filtered)	CSW-94-28X 09/22/94	CSW-94-28X 09/22/94 (filtered)	CSW-94-31X 09/21/94	CSW-94-31X 09/21/94 (filtered)	CSW-94-32X 09/21/94	CSW-94-32X 09/21/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	35000		35000		32000		35000	
Chloride	33000		66000		66000		66000	
Sulfate								
Total Hardness	51600		56000		63200		51200	
Total Suspended Solids	< 4000		< 4000		380000		4000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-33X 09/21/94	CSW-94-33X 09/21/94 (filtered)	CSW-94-34X 09/21/94	CSW-94-34X 09/21/94 (filtered)	CSW-94-35X 09/22/94	CSW-94-35X 09/22/94 (filtered)	SSW-95-09H 07/10/95
PAL METALS (µg/L)							
Aluminum	1370	< 141 F	374	< 141 F	< 141	< 141 F	< 112
Antimony	< 3.03	2.77 F	< 3.03	< 3.03 F	< 3.03	4.11 F	< 60
Arsenic	40	< 2.54 F	5.22	< 2.54 F	< 2.54	< 2.54 F	8.94 M
Barium	89.9	7.59 F	13.3	7.98 F	9.35	8.37 F	18.1
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	1.21
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 6.78
Calcium	17800	16300 F	16400	15500 F	11200	11200 F	24200
Chromium	19.7	< 6.02 F	6.26	< 6.02 F	< 6.02	< 6.02 F	< 16.8
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	< 25
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 8.09	< 8.09 F	< 18.8
Iron	19200	247 F	2120	429 F	389	195 F	1700
Lead	12.9	2.06 F	4.56	< 1.26 F	2.71	< 1.26 F	< 4.47 MP
Magnesium	3210	2790 F	2830	2660 F	1300	1310 F	3620
Manganese	1870	148 F	211	157 F	46.2	39.1 F	196
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	< .1
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 32.1
Potassium	2150	1860 F	2020	1960 F	1340	801 F	< 1240
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 2.53
Sodium	23000	22500 F	22600	22000 F	24700	24900 F	20300
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	< 27.6
Zinc	29.6	< 21.1 F	< 21.1	< 21.1 F	< 21.1	< 21.1 F	< 18 MI
PAL PESTICIDES/PCBS (µg/L)							
4,4'-ddd			< .0233				< .0081
4,4'-ddt			< .034				< .0025
Bhc - Alpha			< .0385				.0182 C
Bhc - Beta			< .024				< .0099
Bhc - Delta			< .0293				< .0034
Bhc - Gamma (lindane)			< .0507				< .0025 N
Endosulfan I			< .023				< .0025 N
Endrin Aldehyde			< .0285				< .0504
Heptachlor			< .0423				.0034 U
Isodrin			< .0562				< .0025
PAL SEMIVOLATILE ORGANICS (µg/L)							
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		< 7.7 V

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-33X 09/21/94	CSW-94-33X 09/21/94 (filtered)	CSW-94-34X 09/21/94	CSW-94-34X 09/21/94 (filtered)	CSW-94-35X 09/22/94	CSW-94-35X 09/22/94 (filtered)	SSW-95-09H 07/10/95
PAL WET CHEMISTRY							
Alkalinity	33000		27000		19000		46600 F
Chloride	33000		33000		33000		42000
Sulfate							13000
Total Hardness	52000		50400		31600		73900
Total Suspended Solids	192000		352000		< 4000		< 4000
OTHER							
Total Organic Carbon (µg/L)							3430

NOTES:

µg/L = micrograms per liter

< = less than

B = analyte found in method blank or QC blank as well as the sample.

C = analysis was confirmed

D = duplicate

F = filtered

I = low spike recovery is high

M = high spike recovery is high

N = high spike recovery is low

U = analysis is unconfirmed

V = sample was subjected to unusual storage/preservation conditions

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	SSW-95-09H 07/10/95			SSW-95-09I 07/10/95			SSW-95-09I 07/10/95 (filtered)			SSW-95-09J 07/10/95			SSW-95-09J 07/10/95 (filtered)			SSW-95-09J 07/10/95 (duplicate)			SSW-95-09J 07/10/95 (duplicate/filtered)		
PAL METALS (µg/L)																					
Aluminum	<	112	F	<	112		<	112	F	<	112		<	112	F	<	112	D	<	112	DF
Antimony	<	60	F	<	60		<	60	F	<	60		<	60	F	<	60	D	<	60	DF
Arsenic		4.98	FM		19.9	M	<	2.35	FM		11.6	M		3.89	FM		4.38	DM		2.54	DFM
Barium		16	F		21.6			18.3	F		7.05			7.75	F		8.22	D		7.05	DF
Beryllium	<	1.12	F		1.47			1.39	F		1.19			1.27	F		1.31	D		1.21	DF
Cadmium	<	6.78	F	<	6.78		<	6.78	F	<	6.78		<	6.78	F	<	6.78	D	<	6.78	DF
Calcium		24100	F		30800			29000	F		23800			25900	F		26900	D		24300	DF
Chromium	<	16.8	F	<	16.8		<	16.8	F	<	16.8		<	16.8	F	<	16.8	D	<	16.8	DF
Cobalt	<	25	F	<	25		<	25	F	<	25		<	25	F	<	25	D	<	25	DF
Copper	<	18.8	F	<	18.8		<	18.8	F	<	18.8		<	18.8	F	<	18.8	D	<	18.8	DF
Iron		437	F		3470			1830	F	<	77.5			167	F		178	D	<	77.5	DF
Lead	<	4.47	FMP	<	4.47	MP	<	4.47	FMP	<	4.47	MP	<	4.47	FMP	<	4.47	DMP	<	4.47	DFMP
Magnesium		3610	F		3400			3240	F		3580			3850	F		4010	D		3630	DF
Manganese		99.9	F		704			489	F		45.4			146	F		56	D		43.9	DF
Mercury	<	.1	F	<	.1		<	.1	F	<	.1		<	.1	F	<	.1	D	<	.1	DF
Nickel	<	32.1	F	<	32.1		<	32.1	F	<	32.1		<	32.1	F	<	32.1	D	<	32.1	DF
Potassium	<	1240	F		1380		<	1240	F	<	1240		<	1240	F	<	1240	D		1340	DF
Selenium	<	2.53	F	<	2.53		<	2.53	F	<	2.53		<	2.53	F	<	2.53	D	<	2.53	DF
Sodium		20500	F		33300			31800	F		20300			21900	F		22600	D		20700	DF
Vanadium	<	27.6	F	<	27.6		<	27.6	F	<	27.6		<	27.6	F	<	27.6	D	<	27.6	DF
Zinc	<	18	FMI		23.8	MI		18.7	FMI	<	18	MI	<	18	FMI	<	18	DMI	<	18	DFMI
PAL PESTICIDES/PCBS (µg/L)																					
4,4'-ddd					.00833	C				<	.0081										
4,4'-ddt				<	.0025					<	.0025										
Bhc - Alpha					.021	C				<	.0025										
Bhc - Beta				<	.0099					<	.0099										
Bhc - Delta				<	.0034						.00862	U									
Bhc - Gamma (lindane)					.00318	UN				<	.0025	N									
Endosulfan I				<	.0025	N				<	.0025	N									
Endrin Aldehyde				<	.0504						.0921	U									
Heptachlor					.00358	U					.0032	U									
Isodrin				<	.0025						.00848	BU									
PAL SEMIVOLATILE ORGANICS (µg/L)																					
Bis(2-ethylhexyl) Phthalate				<	7.7	V				<	7.7	V				<	7.7	VD			

TABLE 4-11
LOWER COLD SPRING BROOK ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	SSW-95-09H 07/10/95	SSW-95-09I 07/10/95	SSW-95-09I 07/10/95 (filtered)	SSW-95-09J 07/10/95	SSW-95-09J 07/10/95 (filtered)	SSW-95-09J 07/10/95 (duplicate)	SSW-95-09J 07/10/95 (duplicate/filtered)
PAL WET CHEMISTRY							
Alkalinity		70800 FV		44200 FV			
Chloride		57000 V		42000 V			
Sulfate		10100 V		14000 V			
Total Hardness		89500				82000 D	
Total Suspended Solids		< 4000		< 4000			
OTHER							
Total Organic Carbon (µg/L)		3650		1340		1150 D	

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-04X 09/19/94	CSW-94-04X 09/19/94 (filtered)	CSW-94-05X 09/19/94	CSW-94-05X 09/19/94 (duplicate)	CSW-94-05X 09/19/94 (filtered)	CSW-94-05X 09/19/94 (duplicate/filtered)	CSW-94-06X 09/19/94	CSW-94-06X 09/19/94 (filtered)
PAL METALS (µg/L)								
Aluminum	1070	< 141 F	1970	4740 D	< 141 F	< 141 DF	208	< 141 F
Antimony	< 3.03	< 3.03 F	< 3.03	< 3.03 D	< 3.03 F	< 3.03 DF	< 3.03	< 3.03 F
Arsenic	< 2.54	< 2.54 F	5.54	14.1 D	< 2.54 F	< 2.54 DF	< 2.54	< 2.54 F
Barium	42.7	27.8 F	65	136 D	35.4 F	33.8 DF	29	26.7 F
Beryllium	< 5	< 5 F	< 5	< 5 D	< 5 F	< 5 DF	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 D	< 4.01 F	< 4.01 DF	< 4.01	< 4.01 F
Calcium	11000	10600 F	12400	14500 D	11700 F	11400 DF	11600	11800 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 D	< 6.02 F	< 6.02 DF	< 6.02	< 6.02 F
Cobalt	< 25	< 25 F	< 25	44.3 D	< 25 F	< 25 DF	< 25	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	8.94 D	< 8.09 F	< 8.09 DF	< 8.09	< 8.09 F
Iron	6680	< 38.8 F	5770	14000 D	124 F	107 DF	679	124 F
Lead	< 1.26	< 1.26 F	10.1	27.3 D	< 1.26 F	< 1.26 DF	3.58	< 1.26 F
Magnesium	1290	1260 F	1470	1770 D	1400 F	1370 DF	1460	1440 F
Manganese	1450	195 F	1940	6050 D	385 F	336 DF	323	224 F
Mercury	< .243	< .243 F	< .243	< .243 D	< .243 F	< .243 DF	< .243	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	42.1 D	< 34.3 F	< 34.3 DF	< 34.3	< 34.3 F
Potassium	1360	1560 F	1820	2500 D	1710 F	1800 DF	1830	1630 F
Selenium	< 3.02	< 3.02 F	< 3.02	3.3 D	< 3.02 F	< 3.02 DF	< 3.02	< 3.02 F
Sodium	15000	15000 F	15900	15800 D	16500 F	15800 DF	19400	19800 F
Vanadium	< 11	< 11 F	< 11	< 11 D	< 11 F	< 11 DF	< 11	< 11 F
Zinc	33.9	< 21.1 F	112	187 D	< 21.1 F	< 21.1 DF	< 21.1	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
DDD								
DDT								
Bhc - Alpha								
Bhc - Beta								
Bhc - Delta								
Bhc - Gamma (lindane)								
Endosulfan I								
Endrin Aldehyde								
Heptachlor								
Isodrin								
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	10		< 4.8	6.1 D			4.5	

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-04X 09/19/94	CSW-94-04X 09/19/94 (filtered)	CSW-94-05X 09/19/94	CSW-94-05X 09/19/94 (duplicate)	CSW-94-05X 09/19/94 (filtered)	CSW-94-05X 09/19/94 (duplicate/filtered)	CSW-94-06X 09/19/94	CSW-94-06X 09/19/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	15000		13000	13000 D			18000	
Chloride	27400		31800	31800 D			33000	
Sulfate								
Total Hardness	32400		37600	48000 D			34800	
Total Suspended Solids	9000		9000	21000 D			10000	
OTHER								
Total Organic Carbon (μg/L)								

NOTES:
μg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-07X 09/19/94	CSW-94-07X 09/19/94 (filtered)	SW-94-21X 09/20/94	CSW-94-21X 09/20/94 (filtered)	SW-94-24X 09/20/94	CSW-94-24X 09/20/94 (filtered)	SW-94-30X 09/21/94	CSW-94-30X 09/21/94 (filtered)
PAL METALS (µg/L)								
Aluminum	< 141	< 141 F	930	< 141 F	710	< 141 F	74600	< 141 F
Antimony	< 3.03	< 3.03 F	< 3.03	< 3.03 F	< 3.03	3.66 F	7.68	< 3.03 F
Arsenic	< 2.54	< 2.54 F	14	11.4 F	19.3	7.78 F	93.2	3.09 F
Barium	25.9	24.9 F	18	12 F	52.5	47.1 F	387	14.5 F
Beryllium	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F	< 5	< 5 F
Cadmium	< 4.01	< 4.01 F	< 4.01	< 4.01 F	< 4.01	< 4.01 F	27	< 4.01 F
Calcium	11600	11500 F	7650	7290 F	8310	8490 F	38800	14400 F
Chromium	< 6.02	< 6.02 F	< 6.02	< 6.02 F	< 6.02	< 6.02 F	187	< 6.02 F
Cobalt	< 25	< 25 F	< 25	< 25 F	< 25	< 25 F	75	< 25 F
Copper	< 8.09	< 8.09 F	< 8.09	< 8.09 F	8.97	< 8.09 F	194	< 8.09 F
Iron	332	115 F	3710	1680 F	6320	158 F	126000	3060 F
Lead	1.52	< 1.26 F	20.6	1.52 F	18.2	2.93 F	370	1.41 F
Magnesium	1430	1410 F	798	517 F	1450	1300 F	29600	2570 F
Manganese	226	204 F	350	324 F	1190	973 F	4250	920 F
Mercury	< .243	< .243 F	< .243	< .243 F	< .243	< .243 F	.426	< .243 F
Nickel	< 34.3	< 34.3 F	< 34.3	< 34.3 F	< 34.3	< 34.3 F	185	< 34.3 F
Potassium	1780	1730 F	1570	1250 F	2080	1710 F	14000	2250 F
Selenium	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F	< 3.02	< 3.02 F
Sodium	19000	19000 F	22500	22000 F	18000	18600 F	24000	22300 F
Vanadium	< 11	< 11 F	< 11	< 11 F	< 11	< 11 F	162	< 11 F
Zinc	< 21.1	< 21.1 F	61.2	42.9 F	280	277 F	935	< 21.1 F
PAL PESTICIDES/PCBS (µg/L)								
DDD								
DDT								
Bhc - Alpha								
Bhc - Beta								
Bhc - Delta								
Bhc - Gamma (lindane)								
Endosulfan I								
Endrin Aldehyde								
Heptachlor								
Isodrin								
PAL SEMIVOLATILE ORGANICS (µg/L)								
Bis(2-ethylhexyl) Phthalate	< 4.8		< 4.8		< 4.8		< 4.8	

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	CSW-94-07X 09/19/94	CSW-94-07X 09/19/94 (filtered)	SW-94-21X 09/20/94	CSW-94-21X 09/20/94 (filtered)	SW-94-24X 09/20/94	CSW-94-24X 09/20/94 (filtered)	SW-94-30X 09/21/94	CSW-94-30X 09/21/94 (filtered)
PAL WET CHEMISTRY								
Alkalinity	17000		24000		16000		30000	
Chloride	33000		28500		18700		33000	
Sulfate								
Total Hardness	34000		20000		27200		92400	
Total Suspended Solids	< 4000		31000		36000		3950000	
OTHER								
Total Organic Carbon (µg/L)								

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	SSW-95-09K 07/10/95		SSW-95-09K 07/10/95 (duplicate)		SSW-95-09K 07/10/95 (filtered)	
PAL METALS (µg/L)						
Aluminum	223				< 112	F
Antimony	< 60				< 60	F
Arsenic	63.4	M			26.7	FM
Barium	30.5				25.1	F
Beryllium	1.15				1.15	F
Cadmium	< 6.78				< 6.78	F
Calcium	22500				22500	F
Chromium	< 16.8				< 16.8	F
Cobalt	< 25				< 25	F
Copper	< 18.8				< 18.8	F
Iron	23500				9250	F
Lead	< 4.47	MP			< 4.47	FMP
Magnesium	2300				2290	F
Manganese	845				835	F
Mercury	< .1				< .1	F
Nickel	< 32.1				< 32.1	F
Potassium	1610				1420	F
Selenium	< 2.53				< 2.53	F
Sodium	27900				28000	F
Vanadium	< 27.6				< 27.6	F
Zinc	< 18	MI			< 18	FMI
PAL PESTICIDES/PCBS (µg/L)						
DDD	< .0081		.0178	DC		
DDT	< .0025		.00314	DU		
Bhc - Alpha	.00444	C	.00479	DU		
Bhc - Beta	< .0099		.0119	DU		
Bhc - Delta	.0037	U	< .0034	D		
Bhc - Gamma (lindane)	.00423	UN	.00553	DUN		
Endosulfan I	< .0025	N	.00436	DUN		
Endrin Aldehyde	.0639	U	< .0504	D		
Heptachlor	< .0025		.0034	DU		
Isodrin	< .0025		< .0025	D		
PAL SEMIVOLATILE ORGANICS (µg/L)						
Bis(2-ethylhexyl) Phthalate	< 7.7	V				

TABLE 4-12
STORM DRAIN SYSTEM ANALYTICAL SURFACE WATER SAMPLE RESULTS

LOWER COLD SPRING BROOK SITE INVESTIGATION
FORT DEVENS, MA

ANALYTE	SSW-95-09K 07/10/95	SSW-95-09K 07/10/95 (duplicate)	SSW-95-09K 07/10/95 (filtered)
PAL WET CHEMISTRY			
Alkalinity	53100 FV		
Chloride	39000 V		
Sulfate	5640 V		
Total Hardness	64500		
Total Suspended Solids	< 59000		
OTHER			
Total Organic Carbon (µg/L)	13300		

NOTES:
µg/L = micrograms per liter
< = less than
B = analyte found in method blank or QC blank as well as the sample.
C = analysis was confirmed
D = duplicate
F = filtered
I = low spike recovery is high
M = high spike recovery is high
N = high spike recovery is low
U = analysis is unconfirmed
V = sample was subjected to unusual storage/preservation conditions

5.0 PRELIMINARY RISK EVALUATION

This PRE is a screening-level evaluation of actual and potential risks that environmental contaminants may pose to ecological receptors in the vicinity of lower Cold Spring Brook. The specific objectives of this PRE are to:

- review and summarize the existing analytical data collected for surface soil, sediment, and surface water in the vicinity of lower Cold Spring Brook,
- qualitatively characterize the ecological communities at the site to identify potential ecological receptors and contaminant exposure pathways,
- compare the analytical data to available ecological screening guidelines and criteria,
- qualitatively evaluate the health and diversity of the lower Cold Spring Brook macroinvertebrate community,
- evaluate the toxicity of lower Cold Spring Brook sediment to aquatic receptors and,
- identify data gaps and make recommendations for future actions.

The PRE for lower Cold Spring Brook is presented in three subsections. Subsection 5.1 presents the methodology used to conduct the PRE; Subsection 5.2 presents the results of the PRE; and Subsection 5.3 presents the PRE summary and interpretations.

Based of the difficulty experienced by study investigators in accessing most lower Cold Spring Brook sample locations, it was concluded that human exposure pathways were not significant. Consequently, the PRE does not evaluate potential human health effects.

5.1 PRE METHODOLOGIES

This PRE evaluates surface water, surface soil, and sediment analytical data collected between 1992 and 1994 in lower Cold Spring Brook, in the lower Cold Spring Brook floodplain, and in storm drain systems tributary to lower Cold Spring Brook. Although all drainage ditch samples collected in the field were labelled as sediment, several ditch samples were treated as surface soil in the PRE because of the terrestrial nature of the habitat and the lack of standing water at these locations throughout most of the year. All drainage ditch samples collected in Storm Drain Systems No. 1/2, 6, 8, and 5 were treated in this manner. All data are summarized in Section 4. In addition, the PRE evaluates bioassessment data gathered during the 1994 field program at lower Cold Spring Brook.

Previous Fort Devens SI reports for the Groups 3, 5, and 6 SAs (ABB-ES, 1993a), for the Groups 2, 7, and Historic Gas Stations SAs (ABB-ES, 1993b), and for the Railroad Roundhouse SA (ABB-ES, 1995b) describe the PRE methodology in detail. The lower Cold Spring Brook PRE includes site-specific macroinvertebrate and toxicity testing, as well as a benchmark screening section. This additional empirical information allows for a more site-specific evaluation of aquatic ecological risks than a PRE based solely on benchmark screening. Because exposure pathways to human receptors are lacking at lower Cold Spring Brook, this PRE does not include a public health component.

5.1.1 Data Assessment

As described in Section 4, this report evaluates data from several previous investigations. The following data sets are evaluated in the lower Cold Spring Brook ecological PRE:

- Lower Cold Spring Brook surface water and sediment (see Figure 2-1)
- Storm Drain Systems No. 1/2 surface water and surface soil (see Figure 4-1)
- Storm Drain Systems No. 2/3/4 surface water and sediment (see Figure 4-2)

- Storm Drain System No. 6 surface soil (see Figure 4-4)
- Storm Drain System No. 7 surface water and sediment (see Figure 4-5)
- Storm Drain System No. 8 surface soil (see Figure 2-1)
- Storm Drain System No. 9 sediment (see Figure 4-6)

In addition, this PRE contains an evaluation of surface soil in Storm Drain System No. 5 (see Figure 2-1), which drains to Grove Pond, and an evaluation of surface water and sediment in the dammed region of Cold Spring Brook near SA 57 (see Figure 4-3).

To evaluate each of the data sets described above, data were screened against background (surface soil) or upgradient reference data (surface water and sediment) to eliminate analytes from evaluation in the PRE. The background surface soil data set consisted of chemical data gathered from 20 surface soil sample locations selected to establish background concentrations of inorganic analytes for Group 1A sites. The values approximate the 68th percentile upper bound limits (the mean values plus one standard deviation) of these chemicals (ABB-ES, 1993c). The upgradient surface water and sediment location used as a reference station was SSD/SSW-93-92C (A.D. Little, 1994b). These samples, located in Cold Spring Brook approximately 1,000 feet upstream of the intersection of Patton Road and Barnum Pond, represent chemical concentrations in the brook upstream of the influence of Storm Drain Systems No. 1/2, 2/3/4, 6, 7, 8, 9, and the SA 57 area. SSD/SSW-93-92C is shown in Figure 4-6. Analytes were eliminated from the PRE if the maximum detected concentration was less than the background or upgradient screening value.

Calcium, magnesium, potassium, and sodium were excluded as ecological chemicals of potential concern (COPCs) for all media; these analytes are considered to be essential nutrients and are only toxic at elevated concentrations. Evidence suggests that there is little potential for toxic effects resulting from over-exposure to these essential nutrients. The highly controlled physiological regulatory mechanisms for these inorganic ions suggest that there is little, if any, potential for bioaccumulation, and available toxicity data demonstrate that high dietary intakes of these nutrients are well-tolerated (NAS, 1977; NRC, 1982; 1984a,b).

PRE data summaries include the frequency of detection, range of detection limits, range of detected concentrations, average detected concentration, and for inorganic analytes, background or upgradient screening concentrations. For data sets that only include one sample location, a range of detected concentrations may be presented if a duplicate was collected at that sample location.

5.1.2 Ecological Characterization

This subsection contains a brief, qualitative description of ecological resources in the vicinity of lower Cold Spring Brook.

Cold Spring Brook is a perennial stream located along the eastern boundary of the Main Post at Fort Devens. The brook receives overland runoff and storm drainage from undeveloped land, land in industrial use, and parking lots and roadways. The section of Cold Spring Brook located west of the B&MRR right-of-way contains the brook headwaters. This region collects runoff from the eastern portion of the Main Post at Fort Devens, including the Magazine Area and the area in the vicinity of the Cold Spring Brook Landfill. The brook in this region flows north through forested woodlands and wetlands before passing beneath the B&MRR right-of-way near Barnum Road.

The brook collects runoff from the industrial area along Barnum Road as it flows northeast from the railroad right-of-way. All of the storm drain systems evaluated in this PRE discharge to lower Cold Spring Brook between Patton Road and the Fort Devens property boundary near the Barnum Gate. Approximately mid-way between the railroad right-of-way and Barnum Gate, Cold Spring Brook receives additional surface water flow from Bowers Brook, a perennial stream carrying surface water flow from Bare Hill Pond in Harvard. The Bowers Brook watershed is considered a potential additional source of contaminants to lower Cold Spring Brook from off-site agricultural activities. As Cold Spring Brook flows north, it leaves Fort Devens property and ultimately discharges to Grove Pond (see Figure 1-2).

Gross signs of vegetative stress that may be attributable to contamination from the Fort Devens industrial area were surveyed during a site visit conducted by

ABB-ES ecologists in Fall 1995. With the exception of a small unvegetated area located in Storm Drain System No. 2/3/4, no signs of plant stress or phytotoxicity were detected during the survey. The lack of vegetation in a 400 square foot portion of the ditch in the vicinity of CSD-94-23X could either be attributable to contaminant-related phytotoxicity or to physical conditions (e.g., periodic ponding or high velocity storm surges).

5.1.2.1 Vegetative Cover Types. Between the headwaters and Storm Drain System No. 6, the lower Cold Spring Brook floodplain is generally a forested swamp habitat dominated by red maples (*Acer rubrum*). The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory identifies this region of Cold Spring Brook as palustrine forested wetlands, with a combination of broad-leaved deciduous and needle-leaved evergreen trees dominating the forest composition (Figure 5-1) (USFWS, 1977). Various oak species (*Quercus* spp.), grey birch (*Betula populifolia*), white pine (*Pinus strobus*), silky dogwood (*Cornus amomum*), sheep laurel (*Kalmia angustifolia*), swamp azalea (*Rhododendron viscosum*), poison sumac (*Rhus vernix*), American elm (*Ulmus americana*), nannyberry (*Viburnum lentago*), buckthorn (*Rhamnus frangula*), highbush blueberry (*Vaccinium corymbosum*), and speckled alder (*Alnus rugosa*) also occur in the floodplain of lower Cold Spring Brook. Typical floodplain herbaceous components include various graminoids, cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), and sphagnum mosses (*Sphagnum* sp.).

Downstream of Storm Drain System No. 6 (in the vicinity of sampling stations CSD-94-12X and -13X), until discharge to Grove Pond, the USFWS characterizes the Cold Spring Brook floodplain as a scrub/shrub swamp, with emergent marsh characteristics (see Figure 5-1). Duckweed (*Lemna minor*), arrow arum (*Peltandra virginica*), and cattail (*Typha latifolia*) occur in the stream channel. Floodplain wetland vegetation includes sheep laurel, speckled alder, sweet gale (*Myrica gale*), swamp rose (*Rosa palustris*), red maple, arrowwood (*Viburnum recognitum*), forget-me-not (*Myosotis scorpioides*), purple loosestrife (*Lythrum salicaria*), Japanese knotweed (*Polygonum cuspidatum*), sphagnum mosses, and various grasses. Red maple and white pine dominate the tree canopy along the stream banks. Red oak (*Quercus rubra*), white oak (*Quercus alba*), and willow (*Salix nigra*) are also located in this area.

Lower Cold Spring Brook is a warm water stream that contains predominantly slow-moving (lentic) environments, as well as discreet channelized regions with more lotic characteristics. The only true riffle habitat in lower Cold Spring Brook is in the vicinity of sampling station CSW/CSD-94-03X, directly downgradient of an old man-made dam. Stream channel width ranges from as little as 5 feet, in the forested floodplain, to a wide, braided and dendritic channel in a downstream, emergent marsh and forested swamp. Stream depths range from 3 to 5 inches to several feet; deeper water (up to 3 to 4 feet) is found more commonly in the emergent marsh portions of the stream than in the forested floodplain. The banks of lower Cold Spring Brook tend to be poorly defined, with limited bank habitat; however, stretches of the stream bank are approximately 1 to 2 feet in height, and may provide limited habitat for mammals such as the mink (*Mustella vison*). Discreet regions of the stream channel are scoured, with filamentous green algae and aquatic macrophytes growing in the channel. Although no fish sampling was conducted, it is likely that deeper portions of lower Cold Spring Brook provide limited habitat for warmwater fish typical of southeastern New England.

5.1.2.2 Ecological Characterization of Storm Drain Systems. Eight storm drain systems convey stormwater from Fort Devens into lower Cold Spring Brook. Each of these drain systems is a potential source of contamination to lower Cold Spring Brook. A ninth system, System No. 5, drains to Grove Pond. The following discussion provides a qualitative ecological characterization of these storm drain systems. Additional information regarding the individual storm drain systems is contained in Section 1.

Storm Drain Systems No. 1/2. Limited wetland habitat occurs in the vicinity of Storm Drain Systems No. 1/2. No standing water was observed in the drainage ditch leading to the lower Cold Spring Brook floodplain. A qualitative evaluation of soils in this storm drain system did not show any hydric soil indicators. Some leaf litter was observed in the ditch. Vegetation in the vicinity of Storm Drain System No. 1/2 included upland trees; the only wetland species noted in the region were an occasional northern arrowwood and cinnamon fern in the ditch channel.

Storm Drain Systems No. 2/3/4. The vegetation within this outfall area is dominated by common reed (*Phragmites communis*). During sampling, several areas of the storm drain system did not contain standing water. In forested areas, the tree layer consists primarily of red maple, grey birch, paper birch (*Betula* *papyrifera*), American elm, and red oak. Shrubs located in the area include silky dogwood, red osier dogwood (*Cornus stolonifera*), northern arrowwood, tartarian honeysuckle (*Lonicera tartarica*), highbush blueberry, and black cherry (*Prunus serotina*) saplings. Several unidentified grasses and ferns, as well as sedge (*Carex* sp.) and jewelweed (*Impatiens capensis*) comprise the herbaceous layer in the floodplain in the vicinity of Storm Drain Systems No. 2/3/4.

Storm Drain System No. 5. Although this storm drain system is not part of the lower Cold Spring Brook floodplain, the evaluation of System No. 5 has been presented in this SI because of its proximity to the Cold Spring Brook storm drain systems.

No wetland habitat occurs in the vicinity of Storm Drain System No. 5, except where the system discharges to Grove Pond. No standing water was observed in the drainage ditch and a qualitative evaluation of soils in this storm drain system did not show any hydric soil indicators. Considerable leaf litter was observed in the ditch, and no signs of active flow were observed. Vegetation in the vicinity of Storm Drain System No. 5 is dominated by upland trees such as white and scarlet oaks (*Quercus alba, Q. coccinea*), and shrubs such as sheep laurel and witch hazel (*Hamamelis virginiana*). At the point of discharge to Grove Pond, hydrophytic vegetation such as northern arrowwood, elderberry (*Sambucus canadensis*), royal fern, and cinnamon fern occur.

Storm Drain System No. 6. The System No. 6 drainage ditch receives runoff from an outfall pipe at the edge of a parking lot south of Barnum Road. The intermittent discharge meanders through a forested floodplain dominated by red maple and white pine before discharging into lower Cold Spring Brook.

SA 57. Lower Cold Spring Brook in the vicinity of SA 57 is a poorly defined channel flowing through a wetland with emergent marsh and scrub-shrub swamp characteristics. The floodplain forest in the upstream portions of SA 57 includes red maple and white pine. The emergent and shrubby regions of the site are dominated by broad-leaved cattail, speckled alder, tussock sedge (*Carex stricta*), red maple saplings, cinnamon fern, and other emergent species.

Storm Drain System No. 7. Cold Spring Brook is well-defined in this area, and is characterized as a scrub/shrub swamp dominated by a shrub layer of northern arrowwood, speckled alder, poison sumac, highbush blueberry, and silky dogwood. The 80-100 foot high tree canopy is dominated by red maple, red oak, and white pine. Cinnamon fern, interrupted fern (*Osmunda claytoniana*), brambles (*Rubus* sp.), jewelweed, and sphagnum moss comprise the herbaceous layer in this area.

Storm Drain System No. 8. The System No. 8 outfall does not contain any channelized areas. Storm water from this system flows into the wetlands associated with the dammed area of lower Cold Spring Brook adjacent to the B&MRR tracks.

Storm Drain System No. 9. Storm Drain System No. 9 is an extensive system that drains paved residential areas, railroad tracks, and unpaved storage yards near the intersection of Bates Service Road and Cavite Street. The system runs east along Cavite Street, then drains south along Saratoga Street and discharges into Cold Spring Brook at the junction of Saratoga Street and Barnum Road.

A railyard located to the north and east of System No. 9 has been in place since 1942. The northwestern part of System No. 9 is occupied by housing units that were constructed in the 1950s. An historical blacksmith shop, lumber yard, and dispatch office located in the center of System No. 9 are currently occupied by the electric shop, hazardous waste storage area, and heating shop. The AREEs associated with System No. 9 include 61D(AP), 61AV, 61AX, 61AY, 69F, and 63S. SA 29 is also located in the vicinity of System No. 9.

5.1.2.3 Wildlife Habitat at Lower Cold Spring Brook. The various wetland cover types in the vicinity of lower Cold Spring Brook are expected to provide diverse wildlife habitat. Species typically occurring in floodplain wetland systems in New England include mink, river otter (*Lutra canadensis*), and muskrat (*Ondatra zibethicus*). Beaver (*Castor canadensis*) activity has been observed in a ponded area downstream of System No. 9. Birds common to floodplain marshes and forests include wood duck (*Aix sponsa*), swamp sparrow (*Melosprza georgiana*), great blue heron (*Ardea herodias*), Virginia rail (*Rallus limicola*), and red-winged blackbird (*Agelaius phoeniceus*). Green frogs (*Rana clamitans*) have been observed in the lower Cold Spring Brook watershed, and it is likely that the eastern painted turtle (*Chrysemys picta*) may find habitat in this area. Although no fish samples have been collected from lower Cold Spring Brook, the deeper portions of the brook may provide habitat for fish species similar to those found in Cold Spring Brook Pond, such as golden shiner (*Notemigonus crysoleucas*), pumpkinseed (*Lepomis gibbossus*), and chain pickerel (*Esox niger*).

5.1.2.4 Endangered and Threatened Species. According to the Fort Devens Endangered Species and Basewide Biological Survey (ABB-ES, 1993d), no state or federally listed rare and endangered species occur in lower Cold Spring Brook or its floodplain.

5.1.3 Benchmark Screening

Benchmark screening compares analytical data to available toxicity screening benchmarks, guidelines, and criteria. The purpose of the benchmark screening evaluation is to focus on primary ecological exposure pathways and to identify potential ecological risk from exposure to contaminants.

Benchmark screening evaluations were conducted for the following groups of ecological receptors:

- aquatic receptors exposed to contaminated sediments and surface water (e.g., fish and macroinvertebrates),
- terrestrial vertebrate receptors exposed to contaminated ditch and floodplain surface soils (e.g., mammals and birds),
- terrestrial invertebrate receptors exposed to contaminated ditch and floodplain surface soils (e.g., earthworms), and,
- terrestrial plant receptors exposed to contaminated ditch and floodplain surface soils.

5.1.3.1 Sediment. Several different sediment benchmark values were used in the lower Cold Spring Brook PRE. Analytical data were compared to the range of screening values, rather than to any one particular value. Sediment benchmark values used in the ecological PRE include the following:

- **USEPA Sediment Quality Criteria.** Draft and Final Sediment Quality Criteria (SQC) for several hydrophobic organic compounds have been developed and published by the USEPA (1988 [draft] and

1993a,b,c,d [final]). No USEPA SQC are available to evaluate the effects of inorganic constituents on aquatic life. The USEPA SQC are intended to protect benthic organisms which are exposed primarily to contaminants in the interstitial water between sediment particles.

The USEPA sediment toxicity threshold criteria for organic chemicals were carbon-normalized based on the average TOC measured at each site. Carbon-normalized criteria were calculated by multiplying the percent carbon by the appropriate SQC, and ecological risk was evaluated by directly comparing the carbon-normalized value with the sediment analytical data.

- **National Oceanographic and Atmospheric Administration (NOAA) Sediment Threshold Values.** Long and Morgan (1990) have developed biological effects-based criteria for evaluating sediment concentration data. Although this NOAA study is designed primarily for evaluating the toxicity of marine and estuarine sediments, USEPA Region I has suggested that Long and Morgan (1990) criteria may be used as a source of information for the evaluation of freshwater sediments at hazardous waste sites. The Effects Range-Low (ER-L) of Long and Morgan (1990) represents the 10th percentile concentration of contamination in estuarine sediments with observed (or predicted) effects.

- **Ontario Ministry of the Environment Provincial Sediment Quality Guidelines.** Persaud et al. (1992) have developed Provincial Sediment Quality Guidelines (PSQGs) for use in evaluating sediments throughout Ontario. These biologically-based guidelines were derived to protect those organisms directly affected by contaminated sediment: the bottom-dwelling, or benthic, species. The PSQGs are intended to provide guidance for sediment-related decisions, ranging from prevention of adverse effects to remedial action. Analyte concentrations were compared against the Lowest Effect Level PSQGs, which represent the level of contamination which has no effect on the majority of sediment-dwelling organisms.

- **N.Y. State Department of Environmental Conservation Sediment Criteria.** The New York State Department of Environmental Conservation (NYSDEC) Bureau of Environmental Protection, Division of Fish and Wildlife has published sediment criteria in a document entitled "Sediment Criteria - December 1989" (NYSDEC, 1989). This report is a guidance document, not a NYSDEC standard or policy. The NYSDEC guidance document contains criteria for several organic and inorganic constituents found in sediment samples. When appropriate, the NYSDEC criteria for organic analytes were normalized for TOC content.

5.1.3.2 Soils. No state or federal standards or guidelines exist for surface soil exposure, so this exposure pathway was evaluated by comparing analyte concentrations in surface soil to protective contaminant levels (PCLs) for terrestrial vertebrate receptors, phytotoxicity benchmark values for plants, and invertebrate toxicity benchmark values for terrestrial invertebrates.

For risk screening, PCLs were compared directly to analytical data. The PCLs were calculated using a computer-generated chronic exposure food web model, and are similar to guidelines available in the literature. The methodology for PCL calculation is discussed in detail in Appendix E. PCLs for lower Cold Spring Brook were based on potential contaminant exposure to the short-tailed shrew (*Blarina brevicauda*), the American woodcock (*Scolopax minor*), the red fox (*Vulpes vulpes*), or the red-tailed hawk (*Buteo jamaicensis*). Table E-1 presents PCLs for the ecological receptors evaluated for potential contaminant exposures at lower Cold Spring Brook. The lowest PCL for each analyte was selected for comparison to the analytical soil data. Because of study-specific variables such as pH, organic carbon content, medium substrate, and the chemical form of the contaminant in the literature study, some terrestrial vertebrate PCLs were lower than the inorganic background screening value. For these analytes, the background concentration was used as an alternative benchmark value.

Phytotoxicity risk screening was conducted through a direct comparison of phytotoxicity benchmarks to maximum detected surface soil analyte concentrations. Terrestrial phytotoxicity data were obtained from the Oak Ridge National Laboratory (ORNL) (Suter et al., 1993). Generally, plant benchmark values represent significant phytotoxic endpoints, such as reduction in root weight or decrease in top weight. Because terrestrial phytotoxicity data are generally limited, a number of surrogate values were used as phytotoxicity benchmark values: 2,4-dinitrophenol was used to screen all other phenolic compounds; di-n-butylphthalate was used to screen all other phthalate esters; toluene was used to screen all other aromatic VOCs; and DDT was used to screen all other pesticides (Suter et al., 1993). Because of study-specific variables such as pH, organic carbon content, medium substrate, and the chemical form of the contaminant in the literature study, some phytotoxicity values were lower than the inorganic background screening value. For these analytes, no alternative benchmark value was available for screening.

In order to assess potential effects of surface soil contaminants on terrestrial invertebrates (e.g., earthworms), toxicity data for earthworms were obtained from the literature. Earthworm toxicity risk screening was conducted via a direct comparison of the analytical data to earthworm toxicity benchmarks. In general, toxicity data for reproductive effects were chosen as benchmarks. When reproductive data were unavailable, appropriate mortality endpoints were chosen as benchmarks. Data on earthworm toxicity from organic chemicals are limited. Neuhauser et al. (1985) conducted 14-day soil tests on one to two chemicals from each of several organic chemical classes (e.g., phenols, amines, aromatic VOCs, halogenated aliphatic VOCs, polynuclear aromatic hydrocarbons (PAHs), and phthalate esters). A single representative benchmark was generated for each class of compounds, and all compounds within a chemical class were assigned the same benchmark value. Because LC_{50} data do not represent protective soil chemical concentrations (e.g., they represent chemical concentrations lethal to 50 percent of the tested population), one-fifth of the LC_{50} value was used. The resultant chemical concentration (selected as the benchmark) is expected to be protective of 99.9 percent of the exposed population from lethal effects (USEPA, 1986b).

5.1.3.3 Surface Water. Surface water benchmark values used in the lower Cold Spring Brook ecological PRE include Ambient Water Quality Criteria (AWQC) published by the USEPA. AWQC have been developed for the protection of fresh water and marine aquatic life. Chronic USEPA AWQC represent the four-day average chemical concentration not to be exceeded more than once every three years. These criteria are intended to be protective of all life stages of aquatic plants and animals (USEPA, 1986a). For some contaminants, chronic criteria were not available, and acute criteria, Lowest Observed Effect Levels (LOELs), and proposed criteria were used instead.

5.1.4 Qualitative Macroinvertebrate Survey

A qualitative macroinvertebrate study was conducted at 10 surface water and sediment sampling locations along lower Cold Spring Brook (Figure 5-2). The purpose of the macroinvertebrate sampling was to qualitatively characterize benthic fauna, determine whether the benthic communities are grossly impaired, attempt to identify source areas responsible for any observed impairment, and potentially to serve as a baseline to evaluate the success of future remedial actions.

Stream macroinvertebrates in lower Cold Spring Brook were collected between September 26 and 28, 1994. Duplicate benthic samples were collected using a pole-mounted Eckman grab. One kick sample, using a dip net, was also collected from the epiphytic habitat at each of the 10 sampling stations. After collection, each sample was washed through a sieve-bottomed bucket, placed in a labeled container, and preserved. In the laboratory, subsamples of 100 organisms were removed for analysis according to guidelines as described in Plafkin et al. (1989). Benthic organisms in each subsample were counted, generally identified to the family level, and assigned a Functional Feeding Group classification.

Analytical metrics described in Plafkin et al. (1989) for Rapid Bioassessment Protocol (RBP) II were used to analyze the data from each sampling station. The metrics are described in Appendix F and summarized in Table 5-1. The biological condition of each experimental station was evaluated by comparing habitat quality scores at reference stations to those of experimental stations, and using cumulative scoring criteria based on similarity to reference stations. Comparison between reference and experimental stations were compared separately for benthic data and epiphytic data.

5.1.5 Aquatic Laboratory Toxicity Tests

A screening-level laboratory toxicity testing program was conducted to assess the toxicity of sediments to aquatic organisms residing within lower Cold Spring Brook sediments. The testing program evaluated the toxicity of 10 sediment samples to two freshwater species. The sediment samples for toxicity testing were collected from the 10 macroinvertebrate field sampling stations (see Figure 5-2). Information derived from the toxicity tests are used to establish baseline conditions and as a "weight-of-evidence" approach to evaluate ecological effects from the storm drain systems and other potential sources of contamination.

The toxicity of bulk sediment samples was measured using an acute test with an amphipod (*Hyalella azteca*) and a subchronic test with a midge (*Chironomus tentans*). The 10 sediment samples were collected from lower Cold Spring Brook between September 19 and 21, 1994 by ABB-ES. Test organisms were placed in beakers containing sediment samples and clean overlying water, and were incubated under standard conditions for 10 days. After the exposure period, the surviving organisms were counted. Sediment toxicity was estimated by statistically comparing the response of exposed organisms in the test sediment with the reference sediment.

The sediment toxicity tests are described in greater detail in Appendix G.

5.2 PRELIMINARY RISK EVALUATION RESULTS

This subsection presents the results of the PRE for lower Cold Spring Brook. The PRE consisted of three components: benchmark screening of sediment, surface soil, and surface water; a qualitative macroinvertebrate survey; and aquatic laboratory toxicity tests. A brief summary and interpretation of the results is included in Subsection 5.3.

5.2.1 Sediment and Surface Soil Screening Results

Analytical chemistry data from sediment samples were compared to available toxicity screening benchmarks, guidelines, and criteria. This PRE includes screening for seven storm drain systems that flow into lower Cold Spring Brook, lower Cold Spring Brook itself, and System No. 5 which drains north into Grove Pond. Four of the storm drain systems that represent terrestrial habitats and do not support aquatic life were screened against surface soil benchmarks. This subsection discusses the PRE screening results in the following order:

- Storm Drain Systems No. 1/2: surface soil
- Storm Drain Systems No. 2/3/4: sediment
- SA 57 Marsh: sediment
- Storm Drain System No. 6: surface soil

- Storm Drain System No. 7: sediment
- Storm Drain System No. 8: surface soil
- Storm Drain System No. 9: and upstream subsection of lower Cold Spring Brook: sediment
- Storm Drain System No. 5: surface soil
- Downstream subsection of lower Cold Spring Brook: sediment

5.2.1.1 Storm Drain Systems No. 1/2. The PRE for Storm Drain Systems No. 1/2 evaluates risks to terrestrial receptors from exposure to surface soils in this intermittent drainage ditch. Based on site observations, the storm drain system does not support aquatic life, and "sediment" samples collected at the site were evaluated as surface soils in this PRE. The PRE compares maximum surface soil concentrations (among three sampling stations from 1993 and 1994) to surface soil PCLs for terrestrial vertebrates, phytotoxicity screening values, and invertebrate screening values. As described in Subsection 5.1.3.2, PCLs were derived from a chronic exposure food chain model for the following four receptor species: short-tailed shrew, American woodcock, red fox, and red-tailed hawk. Table 5-2 presents the analyte concentrations and screening values used. Figure 4-1 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the screening of organic and inorganic chemicals.

Organic analytes detected in Storm Drain Systems No. 1/2 samples included 14 SVOCs, 13 of which are classified as PAHs. TPHC was detected in all three sample locations, with a maximum concentration of 261 milligrams per kilogram (mg/kg). Concentrations of SVOCs within this system were below all available terrestrial vertebrate and invertebrate screening values. No phytotoxicity screening values were available for any of the SVOCs detected in surface soils within Storm Drain Systems No. 1/2. Of the three sample locations, SVOCs were frequently detected in only one sample, SSD-93-01B (the only sample from 1993 within the storm drain system). This is the most upstream sampling point in the storm drain system, and is closest to potential contaminant sources.

Eighteen inorganic analytes were detected in Storm Drain Systems No. 1/2 surface soil. Maximum concentrations were screened against background surface soil concentrations established for Group 1A sites at Fort Devens (ABB-ES, 1993c). For the nine inorganics that exceeded background concentrations, maximum concentrations were then compared to available surface soil screening values, as shown in Table 5-2. None of the inorganic contaminant concentrations exceeded available screening values.

The lack of phytotoxicity values for all SVOCs and several inorganics detected in surface soil samples within this system represents an uncertainty in this PRE. Invertebrate screening values are also not available for several inorganic chemicals. It is unknown what potential adverse effects may occur to these receptors as a result of exposure to these analytes.

Summary. This screening-level PRE for Storm Drain Systems No. 1/2 suggests that ecological receptors are not at risk from surface soil contamination. Although surface soil concentrations for several inorganic chemicals exceed background soil concentrations, the comparison of site concentrations with surface soil PCLs indicates that terrestrial receptors are probably not at risk.

5.2.1.2 Storm Drain Systems No. 2/3/4. The PRE for Storm Drain Systems No. 2/3/4 evaluates risks to aquatic receptors from exposure to sediments. The evaluation consists of a comparison of maximum sediment contaminant concentrations at six sampling stations to sediment benchmark values. Table 5-3 presents the analyte concentrations and screening values used in the Storm Drain Systems No. 2/3/4 PRE. Figure 4-2 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

Organic analytes detected in samples from Storm Drain Systems No. 2/3/4 included one VOC (tetrachloroethylene) and 19 SVOCs. Of the 19 SVOCs, 15 are classified as PAHs. Maximum concentrations of 11 PAHs exceeded all available sediment screening values by one to four orders of magnitude. The total PAH concentrations in Storm Drain Systems No. 2/3/4 ranged from 35.6 mg/kg at sample location CSD-94-23X to 847 mg/kg at location SSD-93-03B. The TPHC concentrations ranged between 625 and 5,490 mg/kg within the storm drain system.

The sample from station SSD-93-03B (the only sample collected during 1993 within the storm drain system) was the source for all maximum concentrations of organic chemicals in Storm Drain Systems No. 2/3/4. This is the most upstream sampling point in this system, and is closest to potential contaminant sources. In general, the four upstream sampling locations had greater concentrations of organic chemicals than the two samples located downstream towards Cold Spring Brook, suggesting a relationship between the industrial drainage area associated with the storm drain system and organic analytes detected in the system.

Nineteen inorganic analytes were detected in sediment from Storm Drain Systems No. 2/3/4. Maximum concentrations were screened against upstream concentrations. All maximum concentrations of inorganic analytes exceeded concentrations detected in this upstream location. Following a screening against upstream concentrations, inorganic concentrations were compared to available sediment screening values, as shown in Table 5-3. Maximum concentrations of antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel, and zinc exceeded all available screening values. Maximum concentrations of these inorganics were typically one or two orders of magnitude greater than the screening values.

All maximum inorganic concentrations, with the exception of calcium, were detected at sample location CSD-94-24X. This sample was collected just upstream of the intersection of System No. 2 with Systems No. 3 and No. 4. Sample CSD-94-23X, directly downgradient of station CSD-94-24X, generally had the lowest concentrations of inorganics. At the sample location just downgradient of station CSD-94-23X, CSD-94-25X, inorganic contaminant concentrations were typically higher than all but one of the six samples. These data suggest that no clear trends in inorganic contaminant concentrations exist relative to industrial source areas.

The relatively low levels of PAHs and inorganic analytes in the vicinity of CSD-93-23X suggests that the lack of vegetation noted during the Fall 1994 ecological field survey may be attributable to physical factors rather than contaminant-related phytotoxicity (see Subsection 2.2.1).

Summary. This screening-level PRE for Storm Drain Systems No. 2/3/4 indicates that sediment concentrations of PAHs and several inorganics exceed available screening values and may represent a risk to aquatic and benthic organisms. The lack of sediment screening values for tetrachloroethylene, cresols (2- and 4-methylphenol), aluminum, barium, and vanadium detected in sediment samples represents an uncertainty in this PRE. It is unknown what potential adverse effects may occur to aquatic receptors as a result of exposure to these analytes. The magnitude of exceedances for PAHs and certain inorganics suggests that these analytes may pose risks to sensitive aquatic receptors occurring in this storm drain system. However, given the generally poor quality of aquatic habitat in the vicinity of the one upgradient sample with high organic concentrations (SSD-93-03B), it is unlikely that aquatic risks from PAHs are widespread.

5.2.1.3 Study Area 57 Marsh. Although SA 57 will be evaluated separately in an RI, a PRE has been completed for the SA 57 marsh. The SA 57 marsh PRE evaluates risks to aquatic receptors from exposure to sediments. The evaluation consisted of a comparison of maximum sediment contaminant concentrations at four sampling stations (CSD-94-14X, CSD-94-17X, CSD-94-20X, and CSD-94-35X) to sediment benchmark values. Table 5-4 presents the analyte concentrations and screening values used in the SA 57 marsh PRE. Figure 4-3 presents the locations of these samples. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

Organic analytes detected in SA 57 marsh samples included three VOCs, five SVOCs, six pesticides, and the PCB Aroclor-1260. TPHC was also detected in all four sediment samples at concentrations ranging from 251 mg/kg to 2,700 mg/kg. Laboratory analysis of pesticides and PCBs was completed for only one sample within the SA 57 marsh. Maximum concentrations of four of the SVOCs (all PAHs), all of the pesticides, and the PCB exceeded the lowest sediment screening values. In addition, alpha- and gamma-chlordane were detected at concentrations in excess of the highest sediment screening value. Screening value exceedances for PAHs were marginal, while screening value exceedances for pesticides were generally greater by one order of magnitude. No screening value was available for TPHC.

The maximum concentrations of all PAHs were detected in sample CSD-94-17X. PAHs were not detected in samples CSD-94-14X and CSD-94-35X, and detections in sample CSD-94-20X were below available screening values (the maximum TPHC concentration of 2,700 mg/kg was detected at location CSD-94-20X, however). Based on the isolated detections of PAHs at concentrations in excess of screening values, and the relatively low magnitude of exceedances, it is unlikely that aquatic receptors occurring in the SA 57 marsh would be at risk from exposure to PAHs.

Sample CSD-94-20X was the only sample analyzed for pesticides and PCBs. It is not known if this sample is representative of potential pesticide and PCB contamination within the SA 57 marsh. Interpretation of potential risks is confounded by the magnitude of the range of available sediment screening values, which encompasses a range of up to three orders of magnitude for some analytes.

Eighteen inorganic analytes were detected in SA 57 marsh sediment. Maximum concentrations were screened against concentrations detected in the upstream sample location. All maximum concentrations of inorganic analytes exceeded concentrations detected in this upstream location. Following a screening against upstream concentrations, inorganic concentrations were compared to available sediment screening values, as shown in Table 5-4. With the exception of cobalt, the maximum detected concentrations of all inorganics for which screening values were available exceeded the lowest screening value. In addition to exceeding the lowest screening value, copper, lead, manganese, nickel, and zinc were detected at maximum concentrations that exceeded the maximum sediment screening value. Maximum contaminant concentrations generally exceeded screening values by less than one order of magnitude, and often the exceedance was marginal.

The maximum concentrations of several inorganics were detected in sample CSD-94-20X, although the concentrations of many inorganics did not differ substantially among the four sediment samples collected within the SA 57 marsh. In general, these inorganic concentrations were well in excess of the upstream concentrations used for screening, suggesting that the presence of inorganic analytes in SA 57 sediment may not be indicative of natural conditions.

Summary. This screening-level PRE for the SA 57 marsh indicates that sediment concentrations of PAHs, pesticides, and several inorganics exceed available screening values and may represent a risk to sensitive aquatic and benthic organisms. The lack of sediment screening values for the VOCs, aluminum, barium, selenium, vanadium, and TPHC detected in sediment samples within the SA 57 marsh represents an uncertainty in this PRE. It is unknown what potential adverse effects may occur to aquatic receptors as a result of exposure to these analytes.

5.2.1.4 Storm Drain System No. 6. The Storm Drain System No. 6 PRE evaluates risks to terrestrial receptors from exposure to surface soils in this dry drainage ditch. Based on site observations, System No. 6 does not support aquatic life, and "sediment" samples collected at the site were evaluated as surface soils in this PRE. The PRE consisted of a comparison of maximum surface soil concentrations at four sampling stations from 1992 and 1993 to surface soil PCLs for terrestrial vertebrates, phytotoxicity screening values, and invertebrate screening values. As described in Subsection 5.1.3.2, PCLs were derived from a chronic exposure food chain model for the following four receptor species: short-tailed shrew, American woodcock, red fox, and red-tailed hawk. Table 5-5 presents the analyte concentrations and screening values used. Figure 4-4 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the screening of organic and inorganic chemicals.

Organic analytes detected in System No. 6 samples included 17 SVOCs, 14 of which are classified as PAHs. TPHC was detected in all four samples, with a maximum concentration of 3,500 mg/kg. Concentrations of SVOCs within System No. 6 were below all available terrestrial vertebrate, plant, and invertebrate screening values. Of the four sample locations, SVOCs were frequently detected in only one sample, SSD-93-06B. This is the most upstream sampling point in System No. 6, and is closest to potential contaminant sources.

Laboratory analysis of inorganics was completed for only one sample at System No. 6. Nineteen inorganic analytes were detected in sample SSD-93-06B and its duplicate. Maximum concentrations of the sample and its duplicate were screened against background surface soil concentrations established for Group 1A sites at Fort Devens (ABB-ES, 1993c). For the 12 inorganics that exceeded background concentrations, the maximum concentration of the sample and its duplicate were then compared to available surface soil screening values, as shown in Table 5-5. The concentration of cadmium (3.82 mg/kg) exceeded the vertebrate and phytotoxicity screening values by approximately a factor of two. Chromium and zinc concentrations (64.6 and 189 mg/kg, respectively) slightly exceeded the invertebrate screening values for those two chemicals. In addition, the lead concentration (420 mg/kg) exceeded the vertebrate screening value by approximately a factor of two. Screening of the average of the sample and its duplicate, rather than the maximum, would substantially reduce the exceedances for cadmium, lead, and zinc. The average chromium concentration, in fact, would be less than the invertebrate screening value.

The lack of phytotoxicity values for all SVOCs except phthalates and for several inorganics detected in surface soil samples at System No. 6 represents an uncertainty in this PRE. Invertebrate screening values are also not available for several inorganics. It is unknown what potential adverse effects may occur to these receptors as a result of exposure to these analytes.

A comparison of maximum concentrations with available screening values indicates that terrestrial receptors are not at risk from exposure to SVOCs and many inorganics in System No. 6 surface soils. The maximum concentrations of cadmium, chromium, and zinc only slightly exceeded their respective terrestrial screening values, and the maximum lead concentration of 420 mg/kg exceeded the vertebrate screening value (220 mg/kg) by approximately a factor of two. However, maximum concentrations of these inorganics were all detected in one of a duplicate pair of samples; the concentrations detected in the other sample of the pair were much less than the vertebrate screening values. Because these two samples are both measures of the same environmental concentration, the average of these two analytical results is most representative of the actual exposure concentration at the location (SSD-93-06B). The average concentration of cadmium, chromium, and zinc detected in these two samples does not exceed terrestrial screening values, and the average concentration of lead (280 mg/kg) only slightly exceeds the terrestrial vertebrate screening value. It is unlikely that vertebrate receptors are at risk from exposure to inorganics in System No. 6 surface soils.

No other surface soil samples in System No. 6 were analyzed for inorganic analytes; however, several sediment samples collected downstream of the confluence of System No. 6 and Cold Spring Brook had concentrations of lead ranging from 258 to 340 mg/kg. It is possible that System No. 6 contributed to elevated lead concentrations in Cold Spring Brook.

Summary. This screening-level PRE indicates that it is unlikely that terrestrial receptors are at risk from exposure to System No. 6 surface soil.

5.2.1.5 Storm Drain System No. 7. The Storm Drain System No. 7 PRE evaluates risks to aquatic receptors from exposure to sediments. The evaluation consisted of a comparison of maximum sediment contaminant concentrations at six sampling stations to sediment benchmark values. Table 5-6 presents the analyte concentrations and screening values used in the System No. 7 PRE. Figure 4-5 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

Organic analytes detected in System No. 7 samples included eight SVOCs. Of the eight SVOCs, seven are classified as PAHs. Maximum concentrations of five PAHs (benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene) exceeded NOAA ER-L sediment screening values by approximately one order of magnitude. The total PAH concentrations detected in System No. 7 ranged from 0.71 mg/kg at sample location CSD-94-04X to 20 mg/kg at location CSD-94-07X. The TPHC concentrations ranged between 219 and 2,320 mg/kg within the storm drain system.

Sample CSD-94-07X was the source of most maximum concentrations of organic chemicals that exceeded NOAA ER-L values in System No. 7. This is the furthest downstream sampling point in System No. 7, and is closest to the discharge point to lower Cold Spring Brook. The most upstream sample, CSD-94-04X, had the lowest concentrations and the fewest detections of SVOCs. Low concentrations of SVOCs, in general, were fairly constant throughout the storm drain system. TPHC concentrations at the two most downstream locations (CSD-94-06X and CSD-94-07X) were an order of magnitude greater than in the other four samples, suggesting that the source may not be the floor/area drains serving Buildings 3712 and 3713.

Organic sediment screening values for USEPA SQCs and NYSDEC guidelines were carbon-normalized according to the average TOC detected at the site. Because of an error in the USAEC IRDMIS database (sample SSD-93-07B was reported as having a TOC of 150 percent), the average TOC for System No. 7 was recalculated based on five samples rather than six.

Nineteen inorganic analytes were detected in System No. 7 sediment. Maximum concentrations were screened against concentrations detected in the upstream sample. All maximum concentrations of inorganic analytes exceeded concentrations detected in this upstream location. Following a screening of upstream concentrations, inorganic concentrations were compared to available sediment screening values, as shown in Table 5-6. Maximum concentrations of arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, and zinc exceeded most available screening values. Maximum concentrations of these inorganics were typically one or two orders of magnitude greater than the screening values. Mean concentrations of these chemicals also exceeded most screening values.

Maximum concentrations of nickel and zinc were detected in sample CSD-94-05X. This sample is located between the industrial area and Barnum Road. The remaining maximum inorganic concentrations that exceeded screening values were detected downstream of Barnum Road. Sample SSD-93-07B, located just downstream of the Barnum Road crossing, contained maximum concentrations of arsenic, cadmium, cobalt, copper, iron, and manganese. This analysis indicates that contaminant concentrations tend to be higher towards Barnum Road than upstream towards industrial sources.

This screening-level PRE for System No. 7 indicates that sediment concentrations of PAHs and several inorganics exceed available screening values and may represent a risk to aquatic and benthic organisms. Sediment contaminant concentrations are greatest between Barnum Road and Cold Spring Brook, suggesting that the source of contaminants may be a result of road runoff rather than industrial input. The lack of sediment screening values for di-n-butylphthalate, aluminum, barium, beryllium, selenium, and vanadium detected in sediment samples at System No. 7 represents an uncertainty in this PRE. It is unknown what potential adverse effects may occur to aquatic receptors as a result of exposure to these analytes.

5.2.1.6 Storm Drain System No. 8. System No. 8 consists of a culvert that provides a conduit under Barnum Road for runoff from a wooded area north of Barnum Road. The PRE evaluates risks to terrestrial receptors from exposure to surface soils near the discharge end of the culvert. Based on site observations, the storm drain system does not represent aquatic habitat or support aquatic life, and "sediment" samples collected at the site were evaluated as surface soils in this PRE. The PRE evaluation consists of a comparison of surface soil concentrations detected in the single surface soil sample to surface soil PCLs for terrestrial vertebrates, phytotoxicity screening values, and invertebrate screening values. As described in Subsection 5.1.3.2, PCLs were derived from a chronic exposure food chain model for the following four receptor species: short-tailed shrew, American woodcock, red fox, and red-tailed hawk. Table 5-7 presents the analyte concentrations and screening values used. Figure 2-1 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the screening of organic and inorganic chemicals.

Organic analytes detected in the System No. 8 soil sample included five SVOCs, four of which are classified as PAHs. TPHC was also detected at a concentration of 780 mg/kg. Concentrations of SVOCs within System No. 8 were below all available terrestrial vertebrate and invertebrate screening values. A phytotoxicity screening value was available only for di-n-butylphthalate, and this screening value was not exceeded.

Seventeen inorganic analytes were detected in System No. 8 surface soil. Maximum concentrations were screened against background surface soil concentrations established for Group 1A sites at Fort Devens (ABB-ES, 1993c). For the 10 inorganic analytes that exceeded background concentrations, maximum concentrations were then compared to available surface soil screening values, as shown in Table 5-7. The detected concentration of manganese (595 mg/kg) marginally exceeded its phytotoxicity screening value, and the maximum concentration of zinc (190 mg/kg) exceeded its invertebrate screening value by a factor of less than two. No vertebrate screening values were exceeded.

The lack of phytotoxicity values for all PAHs and several inorganics detected in surface soil samples at System No. 8 represents an uncertainty in this PRE. Invertebrate screening values are also not available for several inorganics, and no screening values for any receptor group were available for TPHC. It is unknown what potential adverse effects may occur to these receptors as a result of exposure to these analytes. However, since System No. 8 is a small, man-made drainageway with a limited watershed, it is unlikely that it provides significant habitat to sensitive plant and invertebrate species. In addition, those inorganic analytes that were detected at a concentration in excess of the background screening value generally exceeded background by marginal amounts, suggesting that the inorganic analytes detected are not a result of any identifiable source, but may instead be indicative of naturally occurring conditions. This, in addition to the low magnitude of exceedances of available screening values, suggests that plant and invertebrate receptors potentially occurring in System No. 8 would not be adversely affected by exposure to the analytes detected in surface soil.

This screening-level PRE for System No. 8 indicates that terrestrial vertebrate, terrestrial invertebrate, and plant receptors are unlikely to be at risk from exposure to analytes detected in System No. 8 surface soil.

5.2.1.7 Storm Drain System No. 9 and the Upstream Subsection of Lower Cold Spring Brook. The Storm Drain System No. 9 PRE evaluates risks to aquatic receptors from exposure to sediments collected from two distinct locations: System

No. 9, and an upstream section along lower Cold Spring Brook. The Cold Spring Brook samples evaluated in this PRE were collected upgradient of all industrial area storm drain systems except System No. 9; samples from this location may be affected by System No. 9, by run-off from the area surrounding the intersection of Saratoga Street and Dakota Street, or by upper Cold Spring Brook.

The PRE consists of a comparison of maximum sediment contaminant concentrations to sediment benchmark values. Available sediment data for System No. 9 consist of a single sampling station (SSD-93-09A) collected at the outfall of System No. 9 during 1993. Available sediment data for the upstream subsection of lower Cold Spring Brook consists of five sampling stations: CSD-94-01X through CSD-94-03X (which were collected during 1994 from immediately upstream to immediately downstream of the ponded area east of the B&MRR), SSD-95-09H (collected in 1995 near the outlet of the ponded area east of the B&MRR), and SSD-95-09I (collected during 1995 immediately upstream of the B&MRR) (see Figure 4-6).

Three additional samples collected in 1995 upgradient of the System No. 9 area are evaluated qualitatively in the PRE. These samples include SSD-95-09J (collected in Cold Spring Brook upstream of the study area), SSD-95-09K (collected in a small, isolated cattail marsh at the intersection of Saratoga Road and Dakota Street), and SSD-95-09L (collected in a ditch along Saratoga Road near the Commissary) (see Figure 4-6). Sample SSD-95-09J was used to identify chemicals potentially migrating from upstream areas of Cold Spring Brook (i.e., prior to any storm drain system influence); it was not used for COPC screening. Samples SSD-95-09K and SSD-95-09L were collected from two locations that contribute runoff to the same Patton Road culvert that receives the discharge from System No. 9. These data may be indicative of chemical impacts to System No. 9 and the upstream subsection of lower Cold Spring Brook. The analytical data collected in 1995 appear to be chemically distinctive from, and not compatible with, the earlier data. Consequently, these three samples (SSD-95-09J, SSD-95-09K, and SSD-95-09L) were evaluated only in relation to the other samples collected in 1995 (SSD-95-09H and SSD-95-09I).

Table 5-8 presents the analyte concentrations and screening values used in the System No. 9 evaluation, and Table 5-9 presents the analyte concentrations and screening values used in the upgradient subsection of lower Cold Spring Brook.

Figure 4-6 presents the locations of samples collected within these two areas. The following paragraphs discuss the results of the two PRE screenings.

System No. 9. Two organic analytes, benzo(a)anthracene and chrysene, were detected in the System No. 9 sediment sample. TPHC was also detected in the sample at a concentration of 270 mg/kg. Maximum concentrations of two SVOCs exceeded the lowest sediment screening values by approximately one order of magnitude. However, neither analyte exceeded the upper sediment screening value. No screening value was available for TPHC.

Sixteen inorganic analytes were detected in System No. 9 sediment. Maximum concentrations were screened against concentrations detected in an upstream sample location (SSD-93-92C) (A.D. Little, 1994b). With the exception of manganese, all maximum concentrations of inorganic analytes exceeded concentrations detected in this upstream location. Following a screening of upstream concentrations, inorganic concentrations were compared to available sediment screening values, as shown in Table 5-8. The detected concentration of arsenic (17.5 mg/kg) exceeded the lowest arsenic screening value and the detected concentration of lead (53 mg/kg) exceeded the upper lead screening value of 35 mg/kg. Given the relatively low magnitude of screening value exceedances, it is unlikely that the presence of arsenic and lead at the concentrations detected, would present a risk to aquatic receptors potentially occurring at System No. 9.

This screening-level PRE for System No. 9 indicates that sediment concentrations of arsenic and lead are unlikely to pose a risk to aquatic and benthic organisms.

Upstream Subsection of Lower Cold Spring Brook. Twenty-four organic analytes, 15 of which are classified as PAHs, and six pesticides were detected in sediment samples from the upstream subsection of lower Cold Spring Brook. TPHC was detected at a maximum concentration of 2,120 mg/kg. Maximum concentrations of eleven SVOCS exceeded minimum screening values by up to two orders of magnitude. In addition, maximum concentrations of three SVOCs slightly exceeded the upper sediment screening values. Maximum concentrations of all six pesticides exceeded the lowest sediment screening value, and two pesticides (gamma-chlordane and Endosulfan II) exceeded the upper sediment screening value. The interpretation of potential aquatic receptor risks associated with exposure to organics in sediment is confounded by the range of available screening values, which varies by up to three orders of magnitude for several analytes. No screening value was available for TPHC.

Eighteen inorganic analytes were detected in sediments from the upstream subsection of lower Cold Spring Brook. Maximum concentrations were screened against concentrations detected in the sediment sample, SSD-93-92C (see Figure 4-6). All maximum concentrations of inorganic analytes exceeded concentrations detected in this upstream location. Inorganic concentrations that exceeded upstream concentrations were then compared to available sediment screening values (Table 5-9). The maximum detected concentrations of arsenic, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc exceeded sediment screening values. The maximum concentrations of these inorganic analytes generally exceeded their screening values by one order of magnitude or less.

Most of the analytes that exceeded sediment screening values in the upstream subsection of lower Cold Spring Brook were also detected in SSD-94-09J, SSD-95-09K, and SSD-95-09L at concentrations exceeding screening values. All the PAHs of concern were detected at SSD-95-09K at concentrations higher than the minimum, and sometimes maximum, screening values. All the inorganics in the upstream subsection of lower Cold Spring Brook that exceeded sediment screening values were also detected in SSD-95-09L at concentrations that exceeded screening values.

This screening-level PRE for the upstream subsection of lower Cold Spring Brook indicates that sediment concentrations of SVOCs, pesticides, and several inorganics exceed available screening values. As a result, this may represent a risk to sensitive aquatic and benthic organisms. The lack of sediment screening values for aluminum, barium, selenium, vanadium, and TPHC detected in sediment samples at System No. 9 represents an uncertainty in this PRE. It is unknown what potential adverse effects may occur to aquatic receptors as a result of exposure to these analytes. Although the number of screening value exceedances in the upstream portion of lower Cold Spring Brook suggests that potential risks to sensitive aquatic receptors exist, it should be noted that very few compounds (including the DDD, DDE, DDT, arsenic, lead, and manganese) were detected at concentrations that exceed sediment screening values in the most downstream sample (CSD-94-03X) of this group. It is possible that the slow moving, marshy area downstream of the B&MRR acts as a sink for most of the SVOCs, pesticides, and inorganics detected at higher concentrations upstream.

5.2.1.8 Storm Drain System No. 5 . Storm Drain System No. 5 lies in a different watershed than the other storm drain systems evaluated in this SI report, and drains north into Grove Pond. The PRE evaluates risks to terrestrial receptors from exposure to surface soils in this dry drainage ditch. Based on site observations, the storm drain system does not support aquatic life, and "sediment" samples collected at the site were evaluated as surface soil conditions in this PRE. The PRE consists of a comparison of maximum surface soil concentrations at three sampling stations from 1993 and 1994 to surface soil PCLs for terrestrial vertebrates, phytotoxicity screening values, and invertebrate screening values. As described in Subsection 5.1.3.2, PCLs were derived from a chronic exposure food chain model for the following four receptor species: short-tailed shrew, American woodcock, red fox, and red-tailed hawk. Table 5-11 presents the analyte concentrations and screening values used. Figure 2-1 presents the locations of samples collected within this storm drain system. The following paragraphs discuss the results of the screening of organic and inorganic chemicals.

Organic analytes detected in System No. 5 samples included 13 SVOCs, all of which are classified as PAHs. Concentrations of SVOCs within System No. 5 were below all available terrestrial vertebrate and invertebrate screening values. No phytotoxicity screening values were available for any of the SVOCs detected in surface soils within System No. 5. Of the three sample locations, SVOCs were most frequently detected in SSD-93-05A (the only sample from 1993 within the storm drain system). This is the most upstream sampling point in System No. 5, and is closest to potential contaminant sources. Several maximum concentrations of PAHs were also detected in sample location GRD-94-06X.

Twenty inorganic analytes were detected in System No. 5 surface soil. Maximum concentrations were screened against background surface soil concentrations established for Group 1A sites at Fort Devens (ABB-ES, 1993c). For the 19 inorganic chemicals that exceeded background concentrations, maximum concentrations were then compared to available surface soil screening values, as shown in Table 5-11. The maximum concentrations of aluminum (42,200 mg/kg) and cadmium (4.59 mg/kg) slightly exceeded the vertebrate and phytotoxicity screening values. The maximum chromium concentration (163 mg/kg) exceeded the invertebrate screening value by approximately a factor of three. Concentrations of cobalt, manganese, and nickel (28.8, 2,410, and 82 mg/kg, respectively) exceeded the phytotoxicity values by as much as a factor of five. The maximum zinc concentration (301 mg/kg) exceeded both the vertebrate and the invertebrate screening concentrations.

Of the three sample locations, maximum concentrations of inorganic analytes were detected most frequently in SSD-93-05A (the only sample from 1993 within the storm drain system). This is the most upstream sampling point in System No. 5, and is closest to potential contaminant sources.

The lack of phytotoxicity values for all SVOCs and several inorganics detected in surface soil samples at System No. 5 represents an uncertainty in this PRE. Invertebrate screening values are also not available for several inorganics. It is unknown what potential adverse effects may occur to these receptors as a result of exposure to these analytes.

This screening-level PRE for System No. 5 indicates that surface soil concentrations of aluminum, cadmium, chromium, cobalt, lead, manganese, nickel, selenium, and zinc exceed several of the available screening values. Except for aluminum, the average concentrations of these contaminants slightly exceed or do not exceed the screening values, indicating that it is unlikely that terrestrial receptors are at risk from soils in System No. 5.

5.2.1.9 Downstream Subsection of Lower Cold Spring Brook. The lower Cold Spring Brook PRE evaluates risks to aquatic receptors from exposure to sediments. The evaluation consists of a comparison of maximum sediment contaminant concentrations at 25 sampling stations from 1992, 1993, and 1994 to sediment benchmark values. Table 5-10 presents the analyte concentrations and screening values used in the lower Cold Spring Brook PRE. Figure 2-1 presents the locations of these samples between SSD-93-92D (upstream extent) and CSD-94-34X (downstream extent) collected along lower Cold Spring Brook and evaluated in this PRE. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

Nine samples were analyzed for VOCs. The following four VOCs were detected: 1,1,1-trichloroethane, acetone, toluene, and trichlorofluoromethane. No sediment screening values were available for these four VOCs. Detections of VOCs were most common in two samples, CSD-94-13X and CSD-94-19X. These two samples were collected in the vicinity of the SA 57 area.

All 25 samples were analyzed for SVOCs. Of the 15 SVOCs detected, 13 are classified as PAHs. Maximum concentrations of all PAHs except acenaphthalene exceeded NOAA ER-L sediment screening values by one to three orders of magnitude. Maximum concentrations of benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, and phenanthrene also exceeded USEPA SQCs. Frequency of detection for SVOCs in lower Cold Spring Brook, however, were low. Average concentrations were much lower than maximum concentrations, and were at concentrations below all USEPA SQC. The total PAH concentrations in lower Cold Spring Brook ranged from no detections to a maximum of 334 mg/kg at location G3D-92-03X. The TPHC concentrations ranged from 23 and 1,800 mg/kg within lower Cold Spring Brook.

Sample G3D-92-03X was the source of all maximum concentrations of PAHs that exceeded sediment screening values in lower Cold Spring Brook. During the 1994 field sampling effort, sample CSD-94-27X was collected in the same location as G3D-92-03X. No PAHs were detected in the 1994 sample. Additional analysis of SVOC detections and locations reveals that PAHs seem to be most prevalent between the confluences of System No. 6 and SA 57, and just downstream of SA 57. The maximum TPHC concentration was also detected in this vicinity, at SSD-93-92G, just downstream of the drainage confluence with SA 57.

Ten samples within lower Cold Spring Brook were analyzed for pesticides and PCBs. Maximum concentrations of DDD, DDE, DDT, gamma-chlordane, dieldrin, and endosulfan sulfate exceeded several sediment guidelines. Maximum concentrations of pesticides were most commonly detected in samples CSD-94-11X and CSD-94-13X, located between System No. 6 and the SA 57 marsh. No pesticides were detected in System No. 6, or in immediately upstream sample locations CSD-94-10X or CSD-94-12X. Therefore, it is possible that the slow moving, depositional areas at CSD-94-11X and CSD-94-13X act as sink for pesticides that may have migrated from upstream areas.

Chemical analysis for inorganics was completed for 23 of the 25 samples within lower Cold Spring Brook. Eighteen inorganic analytes were detected in Cold Spring Brook sediment. Maximum concentrations were screened against concentrations detected in the upstream sample location. All maximum concentrations of inorganic analytes exceeded values reported for the upstream location. Following a screening of upstream concentrations, inorganic concentrations were compared to available sediment screening values, as shown in Table 5-10. Of these, maximum concentrations of arsenic, chromium, iron, lead, manganese, nickel, and zinc exceeded most available screening values. Maximum concentrations of these inorganics were typically one or two orders of magnitude greater than the screening values. With the exception of chromium, mean concentrations also exceeded most screening values.

Maximum concentrations of arsenic, chromium, nickel and zinc were detected in sample G3D-92-01X. This sample is located just upstream of the SA 57 confluence near sediment sample location CSD-94-13X. The maximum concentration of manganese (3,150 mg/kg) was detected at sample G3D-92-02X, downstream of the SA 57 marsh near sediment sample CSD-94-19X. These maximum detected concentrations from sediment samples collected in 1992 are higher than the levels detected in nearby sediment samples collected in 1994, which only slightly exceed the sediment screening concentrations. It is likely that the sediment data from 1994 is more representative of current conditions in this area of lower Cold Spring Brook.

The maximum lead concentration (350 mg/kg) was detected in sample G3D-92-03X collected in 1992; this location is co-located with sample CSD-94-27X (8.17 mg/kg) which was collected in 1994. The sediment data collected in 1994 are well below the sediment screening values; therefore, the results of the 1994 sampling event may be more representative of current conditions. There do not seem to be any additional trends of contaminant detections within lower Cold Spring Brook.

The lack of sediment screening values for all VOCs, bis(2-ethylhexyl)phthalate, carbazole, aluminum, barium, beryllium, selenium, and vanadium detected in sediment samples in lower Cold Spring Brook represents an uncertainty in this PRE. It is unknown what potential adverse effects may occur to aquatic receptors as a result of exposure to these analytes. The magnitude of exceedances for other SVOCs and inorganics, however, suggests that these analytes may pose risks to sensitive aquatic receptors occurring in the stream.

This screening-level PRE for lower Cold Spring Brook indicates that sediment concentrations of PAHs, pesticides, and several inorganics exceed available screening values; however, potential risks to aquatic and benthic organisms are unclear due to the inconsistencies observed between the 1992 and 1994 data. No particular "hot spots" are apparent in the stream, although samples directly downstream of SA 57 frequently contained elevated concentrations of contaminants. It is possible that levels of pesticides from an unknown source, and PAHs, TPHC, and some inorganics detected in the vicinity of SA 57 may cause risk to aquatic and benthic receptors.

5.2.2 Surface Water Screening Results

Analytical data for surface water samples collected during low to moderate flow conditions in September 1994 and July 1995 were compared to available USEPA AWQC values. This surface water PRE evaluates inorganic data from filtered samples collected in 1994 and 1995. Surface water samples collected in 1992 and 1993 were not filtered and were considered less representative of current conditions, therefore, they were not considered in this PRE. Maximum concentrations of inorganics were screened against concentrations detected in the upstream sample location (SSW-93-92C) (A.D. Little, 1994b). This subsection discusses the PRE screening results in the following order:

- Storm Drain Systems No. 7 and 2/3/4: surface water
- SA 57 Marsh: surface water
- Upstream subsection of lower Cold Spring Brook: surface water
- Downstream subsection of Lower Cold Spring Brook: surface water

The following subsections present the surface water PREs for these two data groups.

5.2.2.1 Storm Drain Systems No. 7 and 2/3/4. The PRE for the storm drain systems evaluated risks to aquatic receptors from exposure to surface water collected in Storm Drain Systems No. 7 and 2/3/4. The evaluation consisted of a comparison of maximum surface water contaminant concentrations at 7 sampling stations from 1994 to surface water benchmark values. Screening value exceedances were identified and discussed by outfall location. Table 5-12 presents the analyte concentrations and screening values used in the PRE for the storm drain systems. Figures 4-2 and 4-5 present sample collection locations. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

One organic analyte (bis(2-ethylhexyl)phthalate) was reported in storm drain system surface water samples. The maximum detected concentration of 10 micrograms per liter (μg/L) did not exceed the surface screening value of 160 μg/L.

Eleven inorganic analytes were detected in filtered surface water collected in the storm drain systems. Maximum concentrations were screened against concentrations detected in SSW-93-92C. Maximum concentrations of nine inorganic analytes exceeded concentrations detected in this upstream location, however, risk from two analytes (magnesium and potassium) were not evaluated in this PRE because these analytes are considered essential nutrients. Following a screening of upstream concentrations, inorganic concentrations were compared to available AWQC, as shown in Table 5-12. Iron, lead, and zinc were detected in filtered surface water samples at maximum concentrations that exceeded surface water screening values. The maximum detected concentration of lead (2.93 μg/L) barely exceeded its screening value (1.0 μg/L); iron (3,060 μg/L) and zinc (277 μg/L) exceeded their screening values by a factor of three and five, respectively. Alkalinity results (30,000 μg/L) were 50 percent greater than available AWQC.

Iron concentrations from two samples (CSW-94-21X and CSW-94-30X) exceeded the screening value. Zinc was detected at a concentration in excess of its screening value at CSW-94-24X, and lead concentrations at three locations (CSW-94-21X, CSW-94-24X, and CSW-94-30X) slightly exceeded the screening value.

Samples CSW-94-21X and CSW-94-24X are associated with Storm Drain Systems No. 2/3/4. The maximum concentrations of iron, lead, and zinc were detected in these samples, suggesting that the majority of risk to aquatic receptors potentially exposed to storm drain system surface waters is associated with Storm Drain Systems No. 2/3/4. These analytes were also detected in sediment from these storm drain systems at concentrations in excess of sediment screening values. However, since these inorganic analytes were not detected at concentrations in excess of screening values in downstream Cold Spring Brook surface waters, it is unlikely that they present a substantial ecological risk to aquatic receptors occurring in the lower portion of Cold Spring Brook.

The lack of surface water screening values for barium and manganese represent an uncertainty in this evaluation. It is unknown what potential effects to aquatic receptors may occur as a result of exposures to these analytes. Given the ephemeral nature of aquatic habitat in the ditches, it is unlikely that sensitive aquatic receptors would be found there.

The screening level PRE for storm drain system surface water indicates that unfiltered surface water concentrations of bis(2-ethylhexyl)phthalate and filtered surface water concentrations of inorganic analytes are unlikely to present a risk to aquatic receptors.

5.2.2.2 SA 57 Marsh. This PRE evaluated risks to aquatic receptors from exposure to surface water collected from the SA 57 marsh. The evaluation consisted of a comparison of maximum surface water contaminant concentrations at four sampling stations from 1994 to surface water benchmark values. Table 5-13 presents the analyte concentrations and screening values used in the PRE for the SA 57 marsh. Figure 4-3 presents sample collection locations. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

No organic analytes were reported in SA 57 marsh surface water samples. Nine inorganic analytes were detected in filtered surface water collected in the SA 57 marsh. Maximum concentrations were screened against concentrations detected in SSW-93-92C. Maximum concentrations of all nine inorganic analytes exceeded concentrations detected in this upstream location, however, risks from four analytes (calcium, magnesium, potassium, and sodium) were not evaluated in this PRE because these analytes are considered essential nutrients. Following a screening of upstream concentrations, inorganic concentrations were compared to available AWQC, as shown in Table 5-13. No maximum concentrations exceeded surface water screening values. Alkalinity results (47,000 μg/L) were approximately two times greater than available AWQC.

The lack of surface water screening values for barium and manganese represent an uncertainty in this evaluation. It is unknown what potential effects to aquatic receptors may occur as a result of exposures to these analytes. The screening level PRE for SA 57 marsh surface water indicates organic and inorganic analytes are not likely to present a risk to aquatic receptors.

5.2.2.3 Upstream Subsection of Lower Cold Spring Brook. This PRE evaluated risks to aquatic receptors from exposure to surface water collected in the upstream subsection of lower Cold Spring Brook. The evaluation consisted of a comparison of maximum surface water contaminant concentrations at 5 sampling stations (CSW-94-01X, CSW-94-02X, CSW-94-03X, SSW-95-09H, and SSW-94-09I) to surface water benchmark values. Table 5-14 presents the analyte concentrations and screening values used in the PRE for the upstream subsection of lower Cold Spring Brook. Figure 2-1 presents sample collection locations. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

Four pesticides (alpha-BHC, gamma-BHC, DDD, and heptachlor) were reported in surface water samples from this study area. The maximum detected concentration of only DDD (0.0083 μg/L) exceeded its surface water screening value of 0.001 μg/L.

Ten inorganic analytes were detected in filtered surface water collected in the study area. Maximum concentrations were screened against concentrations detected in SSW-93-92C. Maximum concentrations of all ten inorganic analytes exceeded concentrations detected in this upstream location, however, risk from four analytes (calcium, magnesium, potassium, and sodium) were not evaluated in this PRE because these analytes are considered essential nutrients. Following a screening of upstream concentrations, inorganic concentrations were compared to available AWQC, as shown in Table 5-14. Only iron (1,830 μg/L) was detected in filtered surface water samples at a maximum concentration that exceeded its surface water screening value (1,000 μg/L). Alkalinity results (49,000 μg/L) were approximately 2.5 times greater than available AWQC.

DDD and iron were detected at only one location (SSW-95-09I) that exceeded their screening values. DDD and iron were also detected at higher concentrations at upgradient surface water sample location SSW-95-09K.

The lack of surface water screening values for barium and manganese represent an uncertainty in this evaluation. It is unknown what potential effects to aquatic receptors may occur as a result of exposures to these analytes. H

The screening level PRE for the upstream subsection of lower Cold Spring Brook surface water indicates that unfiltered surface water concentrations of DDD and filtered surface water concentrations of iron may potentially cause risk to aquatic receptors. Both these analytes were detected in sediment at concentrations that exceeded screening values, therefore, it is likely that the presence of these analytes in surface water reflect elevated sediment concentrations. However, the slight exceedances suggest that the potential for risk to aquatic receptors from exposure to these analytes in surface water is minimal.

5.2.2.4 Downstream Subsection of Lower Cold Spring Brook. The lower Cold Spring Brook PRE evaluates risks to aquatic receptors from exposure to surface water. The evaluation consisted of a comparison of maximum surface water contaminant concentrations at 16 sampling stations from 1994 to surface water benchmark values. Table 5-15 presents the analyte concentrations and screening values used in the lower Cold Spring Brook PRE. Figure 2-1 presents the locations of samples collected within the brook. The following paragraphs discuss the results of the PRE screening of organic and inorganic chemicals.

One organic analyte (bis(2-ethylhexyl)phthalate) was reported in lower Cold Spring Brook surface water samples. The maximum detected concentration of 11 μg/L did not exceed the surface water screening value of 360 μg/L.

Ten inorganic analytes were detected in filtered surface water collected in lower Cold Spring Brook. Only lead was detected at a maximum concentration that exceeded its screening value. Lead was detected in two filtered surface water samples, CSW-94-31X and CSW-94-33X. However, only one sample CSW-94-31X contained lead at a concentration (10.6 μg/L) that exceeded its screening value (1.7 μg/L). Lead was not detected in filtered samples immediately upgradient or downgradient of sample CSW-94-31X, suggesting that storm drain outfalls are not likely to be a source for this occurrence. This, in addition to the relatively low frequency of detection (e.g., two of 16 samples), suggests that the lead detected in filtered surface water samples from lower Cold Spring Brook is associated with natural sources, and not a result of activities which may have contaminated lower Cold Spring Brook.

The lack of surface water screening values for barium, manganese, and sodium detected in surface water samples at lower Cold Spring Brook represents an uncertainty in this evaluation. It is unknown what potential effects to aquatic receptors may occur as a result of exposures to these analytes. However, given the quality of aquatic habitat in lower Cold Spring Brook (i.e., it is generally characterized as slow moving and depositional), it is unlikely that more sensitive aquatic receptors typically found in riffle-run habitats would occur in this brook (as suggested in the Preliminary Bioassessment Report, Appendix F).

The screening level PRE for lower Cold Spring Brook surface water indicates that unfiltered surface water concentrations of bis(2-ethylhexyl)phthalate and filtered surface water concentrations of inorganic analytes are unlikely to present a risk to aquatic receptors.

5.2.3 Macroinvertebrate Survey Results

In order to compare the sediment and surface water analytical results to site-specific conditions, a bioassessment was conducted to measure habitat characteristics and macroinvertebrate abundance and diversity. Macroinvertebrate subsamples from each station were identified, and habitat and biological metrics were analyzed according to the USEPA RBP II (Plafkin et al., 1989). This subsection summarizes the results of the bioassessment. Appendix F includes the full report of this study.

Representatives of ABB-ES, USEPA, Massachusetts Department of Environmental Protection (MADEP), USFWS, the Army, and Fort Devens agreed in a meeting held 31 August 1994 upon ten locations (two reference and eight sampling locations) to characterize the benthic quality in lower Cold Spring Brook. Two reference locations (CSD-94-02X and CSD-94-03X) were selected in the uppermost portion of lower Cold Spring Brook to represent stream conditions prior to potential contaminant influence from System 8, System 7, SA 57, Systems 2/3/4, and Systems 1/2. CSD-94-02X was selected to represent low velocity, swamp-like depositional habitats along lower Cold Spring Brook, and CSD-94-03X was selected to represent depositional areas of riffle-run habitats in the brook. The remaining eight macroinvertebrate sample locations were spaced along the brook at significant junctures (i.e., at system outfalls, upstream of SA 57 and at the mouth of SA 57, at Bowers Brook, and close to the base boundary).

As agreed upon in the 31 August 1994 meeting, macroinvertebrate samples were collected in the fall of 1994 at stations corresponding to agreed on surface water/sediment sample locations along lower Cold Spring Brook. Sub-samples consisting of 100 organisms (or the entire sample, if it contained fewer than 100 organisms) were isolated and all organisms were identified to the family level, whenever possible. Samples were processed in the laboratory using a modified method of Plafkin et al. (1989). The metric values selected for analyses of the macroinvertebrate data include taxonomic richness, the Hilsenhoff Biotic Index, Scraper/Filter Ratio, Ephemeroptera-Plecoptera-Trichoptera (EPT) Index, EPT/Chironomidae Ratio, percent contribution of the dominant taxon, and the Community Loss Index. The values calculated for each of these metrics are listed in Appendix F.

The biological condition of sampling stations was evaluated by comparing the experimental stations to a reference station (CSD-94-02X). Station CSD-94-03X was originally proposed as a lotic reference station for comparison with stations CSD-94-08X and CSD-94-11X, but because station CSD-94-03X had different habitat than any other station (i.e., more riffle run habitat), its use as a reference station was considered inappropriate. Station CSD-94-02X, the most upstream of the 10 bioassessment stations, was selected as the most suitable reference station for the remaining bioassessment stations. Most of the experimental stations had habitats categorized as "comparable" or "supporting" when compared to reference station CSD-94-02X. These categories are meant to demonstrate that the available habitat at the experimental stations could support a similar biological community to that of the reference station. One station, CSD-94-13X, had habitat categorized as partially supporting relative to reference station CSD-94-02X, and one station, CSD-94-20X, had habitat categorized as "non-supporting".

The benthic communities at all stations except station CSD-94-18X were similar to the reference station. Benthic data showed moderate impairment at station CSD-94-03X, impairment at station CSD-94-18X, and no impairment at other stations. The two benthic samples from station CSD-94-18X contained no organisms. Most stations were dominated by the amphipod family Talitridae.

The biological metric values, in general, reflected the low habitat quality found in lower Cold Spring Brook. Taxa richness and EPT richness were both low compared to values typical of a faster stream with a cobble and gravel substrate. The biotic index values indicated the abundance of moderately pollution-tolerant organisms. The scraper/filterer ratio and EPT/Chironomidae ratio were both very low at most stations. Because scrapers and filterers as well as EPT taxa prefer faster water with coarse substrates and little sedimentation, the low values observed at lower Cold Spring Brook may be attributed to the physical habitat limitations.

Epiphytic communities were similar at all stations. The biological condition scoring for each station showed that no impairment was seen in any of the epiphytic samples when experimental stations were compared to reference station CSD-94-02X. Nevertheless, it appeared that there were lower numbers of epiphytic organisms at some stations that also had low numbers of benthic organisms (e.g., stations CSD-94-03X, -08X, and -32X).

Although biological condition scores were low at most stations, they were comparable to scores found at the reference station (CSD-94-02X). These data suggest that the macroinvertebrate community in lower Cold Spring Brook, which tends to be dominated by pollution-tolerant organisms, was not impaired by contaminant contributions from downstream storm drain discharges. The presence of pollution-tolerant organisms does not necessarily indicate degraded or impaired conditions unless pollution-intolerant organisms occur more frequently in the reference station that in the experimental stations. At lower Cold Spring Brook, the low number of pollution-intolerant organisms most likely results from physical habitat limitations.

5.2.4 Aquatic Laboratory Toxicity Results

A laboratory toxicity testing program was incorporated into the PRE of lower Cold Spring Brook to help evaluate ecological risks in this aquatic system. Comparison of chemical concentrations to screening values does not always yield an accurate assessment of risks. For example, analytical measurement of contaminant concentration in sediment may not reflect the bioavailable fraction of sediment associated with contaminants. In addition, organisms may be exposed to multiple contaminants with different modes of toxicity, and this would not be addressed in a simple screen against benchmarks. The toxicity testing evaluated the toxicity of ten sediment samples collected from lower Cold Spring Brook to two freshwater species. This subsection summarizes the results of the aquatic laboratory toxicity study. Appendix G includes the full report of this study.

The toxicity of bulk sediment samples was measured using an acute test with an amphipod (*Hyalella azteca*) and a subchronic test with a midge (*Chironomus tentans*). Amphipod survival was significantly different in two sediment samples tested (CSD-94-03X and CSD-94-08X) compared to the survival of the control organisms. A third sample, CSD-94-27X, appeared to affect survival, but because of the high variability in survival among four replicates of the sample, results were not statistically different from the control. Surviving organisms from the same three samples, CSD-94-03X, CSD-94-08X, and CSD-94-27X, appeared to be reduced in size when compared to the size of the control organisms.

Results of the midge survival study indicate that no sediment samples were statistically different from the reference sample. Similarly, no reduction in dry weight was observed in any sediment sample compared with the dry weight of the organisms in the reference sample.

Results of the toxicity testing program indicated that exposure to sediment at three locations (03X, 08X, and 27X) affected survival and/or growth of *H. azteca*, while none of the sediments affected survival and growth of *C. tentans*. These results indicate that *H. azteca* is more sensitive than *C. tentans* to lower Cold Spring Brook sediment chemistry. No relationship could be established, however, between measured chemical parameters and the observed amphipod response. It is possible that sediment conditions such as sulfide concentration or the relatively low TOC concentration in the samples may have affected chemical bioavailability and toxicity.

5.3 SUMMARY AND INTERPRETATION

The following subsections summarize the results of lower Cold Spring Brook investigations.

5.3.1 General Overview of Study Results

The ecological PRE for lower Cold Spring Brook includes analyses of four sources of data: laboratory results from surface water, surface soil, and sediment samples collected in lower Cold Spring Brook and associated storm drain systems during 1992, 1993, 1994 and 1995; results from a 1994 qualitative macroinvertebrate and community analysis; results from a 1994 laboratory aquatic toxicity test; and results from an ecological characterization field program. The macroinvertebrate and aquatic toxicity studies provide data to assess site risks that were unavailable for earlier PREs conducted at Fort Devens. These additional data allow for greater emphasis on site-specific conditions rather than literature screening values. Several general conclusions drawn from the PRE are presented in this subsection.

Lower Cold Spring Brook is a low gradient stream with slow current velocity, a sand and mud substrate, and an abundance of aquatic vegetation. The biological metric values analyzed in the bioassessment study yield a low habitat quality rating for lower Cold Spring Brook. Because higher quality habitat is associated with a faster stream having a cobble and gravel substrate, the lower quality habitat observed in lower Cold Spring Brook is not necessarily indicative of chemical contamination of the stream. The habitat observations do suggest, however, that sensitive aquatic receptors are not likely to be found in lower Cold Spring Brook, and use of the most conservative toxicity benchmarks for screening purposes may be overprotective.

In general, surface water chemical concentrations were not found to be substantially higher than upgradient concentrations. Iron, lead, and zinc were detected in storm drain systems at concentrations that exceeded the AWQC for these chemicals. In lower Cold Spring Brook, lead was the only contaminant detected at a concentration that exceeded an AWQC. Because the AWQC are protective of sensitive species, such as salmonids, that do not occur in lower Cold Spring Brook, it is unlikely that surface water in lower Cold Spring Brook or in the evaluated drainage ditches leading to it poses a risk to aquatic receptors.

Benchmark screening of contaminants detected in sediment samples indicated possible risks to aquatic receptors. However, the macroinvertebrate and aquatic toxicity studies demonstrated increased mortality at only a small number of stations. Among sediment samples evaluated, the storm drain systems contained higher contaminant concentrations than lower Cold Spring Brook. Those storm drain systems that were dry most of the year (Systems No. 1/2, System No. 5, System No. 6, and System No. 8) and were evaluated for exposure to terrestrial organisms had surface soil concentrations that were not indicative of ecological risks.

5.3.2 Analysis of Results by Storm Drain System

Storm Drain Systems No. 1/2. SVOCs and inorganics detected in soil were below all PCLs. In surface water, iron and lead were detected at concentrations that exceeded the AWQC for these chemicals. Bioassessment and aquatic toxicity results from stations located downstream of Systems No. 1/2 in lower Cold Spring Brook (CSD-94-32X and -34X) did not demonstrate any adverse effects. No

AREEs, AOCs, or SAs are associated with this storm drain system, and the PRE suggests that ecological risks are not associated with Systems No. 1/2.

Storm Drain Systems No. 2/3/4. Several PAHs and inorganic chemicals were detected in sediment samples at concentrations that exceeded sediment screening values. Systems No. 2/3/4 also contained the highest TPHC concentration (5,440 mg/kg) detected in the watershed. Surface water concentrations of iron, lead, and zinc exceeded AWQC in this storm drain system. No bioassessment and aquatic toxicity station was located in the vicinity of the outfall of these systems. Therefore, no site-specific toxicity information is available to compare to the screening results.

The majority of maximum concentrations were detected at upstream sample locations, closest to industrial sources. Several AREEs, AOCs, and SAs are associated with these storm drain systems.

SA 57 Marsh. The SA 57 marsh contained sediments with detected concentrations of VOCs, SVOCs, pesticides, PCBs, and inorganics. TPHC was detected at a maximum concentration of 2,700 mg/kg. SVOCs were detected at concentrations that marginally exceeded screening values, while pesticides, PCBs, and inorganics significantly exceeded screening values. Detections of pesticides and maximum concentrations of inorganics in sediment were found at 1994 sampling station CSD-94-20X. Although this station was also categorized as containing "non-supporting" habitat in the bioassessment study, macroinvertebrate and aquatic toxicity results did not indicate any increased mortality to aquatic receptors.

Storm Drain System No. 6. SVOCs detected in soil were below all PCLs, and concentrations of cadmium, chromium, lead, and zinc were marginally above PCLs. Bioassessment and aquatic toxicity results from station CSD-94-11X located downstream of System No. 6 in lower Cold Spring Brook did not demonstrate any adverse effects.

Storm Drain System No. 7. Five PAHs were detected in sediment at maximum concentrations that exceeded NOAA ER-Ls, but did not exceed USEPA SQCs. TPHC was detected at a maximum concentration of 2,320 mg/kg. Concentrations of several inorganic chemicals exceeded available screening values. Increased mortality of *Hyalella azteca* was observed in 1994 sampling station CSD-94-08X located at the intersection of System No. 7 with Cold Spring Brook. This sample contained no maximum concentrations of any contaminants. Results from the *Chironomus tentans* and macroinvertebrate studies, however, did not indicate any increased mortality to aquatic receptors.

In general, maximum concentrations were detected between Barnum Road and the confluence with lower Cold Spring Brook, indicating potential contaminant inputs from road runoff or other sources south rather than industrial drainage.

Storm Drain System No. 8. SVOCs detected in soil were below all PCLs, and concentrations of manganese and zinc were marginally above screening values for plants or invertebrates. No bioassessment and aquatic toxicity station was located in the vicinity of the outfall of System No. 8. No AREEs, AOCs, or SAs are associated with this storm drain system.

Storm Drain System No. 9. Within the storm drain system, two PAHs were detected in sediment at maximum concentrations that exceeded NOAA ER-Ls, but did not exceed USEPA SQCs. Concentrations of arsenic and lead exceeded available sediment screening values. Downgradient of the storm drain system in the ponded area of Cold Spring Brook, contaminant concentrations tended to be higher. Eleven PAHs were detected in sediment at maximum concentrations that exceeded NOAA ER-Ls; four PAHs were detected at concentrations that exceeded USEPA SQCs. TPHC was detected at a maximum concentration of 2,120 mg/kg. Pesticides and several inorganic analytes were also detected in sediment in this area at concentrations above screening values. Two analytes detected in surface water that exceeded screening values (DDD and iron) were also detected at concentrations in sediment that exceeded minimum screening values. It is possible that elevated concentrations in sediment may contribute to elevated concentrations in surface water.

Sampling station CSD-94-02X, located in the middle of the ponded area, was used as a reference station for the bioassessment study. Although in the habitat scores, station CSD-94-03X (located slightly downstream of the ponded area) was determined to represent habitat of as good or better quality as the reference station, this station exhibited increased mortality of *Hyalella azteca*. Results from the *Chironomus tentans* and macroinvertebrate studies did not indicate any increased mortality to aquatic receptors associated with System No. 9.

Storm Drain System No. 5. SVOCs detected in soil were below all PCLs, and concentrations of several inorganics were above screening values. TPHC was detected at a maximum concentration of 3,200 mg/kg. The majority of contamination was located at the furthest upgradient station, directly below the System No. 5 outlet. No bioassessment and aquatic toxicity station was located in the vicinity of the outlet of System No. 5.

5.3.3 Lower Cold Spring Brook

Within Cold Spring Brook, several PAHs, pesticides, and inorganic chemicals were detected in sediment samples at concentrations that exceeded sediment screening values. TPHC was detected at a maximum concentration of 1,800 mg/kg. The maximum concentrations of PAHs and lead were detected in a 1992 sample that was resampled in 1994. This new sample did not show any detections of PAHs and had a much lower concentration of lead. In addition to this sample, the majority of maximum concentrations of PAHs and pesticides were detected between System No. 6 and the SA 57 marsh. Maximum concentrations of inorganics were generally located downstream of the SA 57 marsh. Lead was detected in surface water (between Systems No. 1/2 and Systems No. 2/3/4) at a concentration exceeding the AWQC.

Results of the bioassessment and aquatic toxicity studies revealed isolated areas of marginal effects. Compared to the reference station, 1994 sampling station CSD-94-13X (located between System No. 6 and the SA 57 marsh) was determined to have partially-supporting habitat. At station CSD-94-18X, located at the intersection of Bowers Brook and Cold Spring Brook, no macroinvertebrates were found, indicating severe benthic impairment. The sporadic presence of benthic organisms collected at the lower Cold Spring Brook sampling locations generally precluded the detection of statically significant effects to the macroinvertebrate community; however, the observed absence of benthic organisms in the duplicate macroinvertebrate samples collected at CSD-94-18X is notable.

The reason for the lack of benthic organisms was not determined, although it is hypothesized that a stressor other than the contaminants measured in this study could have adversely affected the benthic habitat in this area (e.g., physical limitations, as indicated by a relatively low habitat quality score, may be a cause). Measured analyte concentrations at CSD-94-18X, when compared to concentrations at other bioassessment stations, do not appear to be great enough to account for the discrepancy. In addition, laboratory toxicity testing to evaluate contaminant toxicity did not identify significant survival or growth effects on test organisms from exposure to sediment collected at CSD-94-18X.

During laboratory toxicity tests, samples from stations CSD-94-08X (located at the outfall of System No. 7) and CSD-94-27X exhibited increased mortality of *Hyalella azteca*. Results from the *Chironomus tentans* and macroinvertebrate studies at other lower Cold Spring Brook stations, however, did not indicate any increased mortality to aquatic receptors.