Environmental Restoration Program

OPERABLE UNIT 9
REGIONAL SOILS INVESTIGATION REPORT

MOUND PLANT
MIAMISBURG, OHIO

August 1995

Revision 2

U.S. Department of Energy
Ohio Field Office

EG&G Mound Applied Technologies

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ACRONYMS

ASTM	American Society for Testing and Materials
CC	cross check
CEC	cation exchange capacity
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Contract Laboratory Program
cm/sec	centimeters per second
CRDL	Contract-Required Detection Limit
CRQL	Contract-Required Quantitation Limit
DOE	U.S. Department of Energy
DQA	Data Quality Assessment
DQO	Data Quality Objectives
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FIDLER	Field Instrument for the Detection of Low Energy Radiation
FL	Fenceline
FSP	Field Sampling Plan
ID	Identification
I.D.	Inner Diameter
meq/100g	milliequivalents per 100 grams
MS/MSD	matrix spike/matrix spike duplicate
NPDES	National Pollutant Discharge Elimination System
O.D.	Outer diameter
OU	Operable Unit
PCB	polychlorinated biphenyl
pCi/g	picocuries per gram
PE	performance evaluation
%R	percent recovery
QA	quality assurance
QAPjP	Quality Assurance Project Plan
QC	quality control
RI	Remedial Investigation
RPD	relative percent difference
RSI	Regional Soils Investigation
SM/PP	Special Metallurgical/Plutonium Processing
SOP	Standard Operating Procedure
SOW	Statement of Work
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USGS	U.S. Geological Survey
VOC	Volatile Organic Compound

ACKNOWLEDGEMENTS

This work was accomplished under the direction of Mr. Arthur Kleinrath of the U.S. Department of Energy. Mr. Kleinrath is the Remedial Project Manager for the Environmental Restoration Program at the Mound Plant. Mr. Jim Rigano, of EG&G Mound Applied Technologies, is the Project Manager responsible for Operable Unit 9. The Mound Program recognizes the following persons for their contributions. Their work was essential in fulfilling this Program requirement.

Technical Reviews:	EG&G -	Joe Geneczko, Daniel Carfagno, Alec Bray, and Jim Rigano
Field Sampling Team:	EG&G -	Denny Gault
	SAIC -	Paul Parrish, Joletta Humpert, and Laura Morrison
	-	Brad Richardson, Matt Obloy, and Chris Halley
	-	Joe Schultheis, Greg Loder, and Juan Alvarado
Laboratory Management:	SAIC -	Noreen Campbell, Rich Tremaglio and Amy Meyer
Data Management:	SAIC -	Frank Miller, Dave Korns, Dana Jones, and Steve Corpus (mapping)
Data Validation:	SAIC -	Steve McBride, Maria Johnson, Wes Wilson, and Juan Alvarado
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Project Management:	SAIC -	Michael D. Giordano as Project Manager with Maury Walsh as Program Manager
Laboratory Services:		EcoTek, CompuChem, and Quanterra

PREFACE

The Department of Energy, Miamisburg, Ohio oversees the operation of the Mound Plant in Miamisburg, Ohio. EG&G Mound Applied Technologies presently operates the plant, which started operation in 1949. Presently the facility supports the U.S. Department of Energy (DOE) weapons and energy programs performing research, development, and production.

On November 21, 1989, EPA placed the Mound Plant on the National Priorities List due to historical disposal practices and releases of chemicals to the environment. The National Priorities List identifies sites to be examined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund). DOE signed a CERCLA Section 120 Federal Facility Agreement with the U.S. Environmental Protection Agency and later with Ohio Environmental Protection Agency. The Agreement requires that DOE investigate the magnitude of chemical releases and take appropriate remedial actions. DOE created the Environmental Restoration (ER) Program to execute these duties.

The ER Program had divided its duties among six operable units (OUs). OU1 is responsible for investigation and remediation at the historic Site Sanitary Landfill. OU2 will investigate and remediate the environmental problems on the Main Hill at the Mound Plant. OU4 is addressing releases of plutonium to the Miami-Erie Canal adjacent to the plant. Examining and remediating the South Property is assigned to OU5. OU6 oversees the verification of activities performed by the Decontamination and Decommissioning Program, and OU9 addresses the possibility of chemical release beyond the plant boundary and items of common interest among all operable units. The ER Program has eliminated OUs 3, 7, and 8 by reassigning those responsibilities to the other OUs.

Comments and Responses
to Reviews of the
OU9 Regional Soils Investigation Report

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Agency for Toxic Substances
and Disease Registry
Atlanta GA 30333

JUN 2 0 1995

Mr. Arthur W. Kleinrath
Project Engineer Team Leader
Department of Energy
Ohio Field Office
Miamisburg Area Office
P.O. Box 66
Miamisburg, Ohio 45343-0066

Dear Mr. Kleinrath:

In accordance with your request, the Agency for Toxic Substances and Disease Registry (ATSDR) has reviewed the *Operable Unit 9 Regional Soils Investigation Report, March 1995*. We wish to thank you for the extension that you granted us to evaluate the data and for providing the data to us in an electronic format.

The method of collecting the soil samples was not ideal for evaluating the public health hazard of the contaminants. In particular, we prefer to assess discrete surface samples collected in the top three inches of soil (or less) since this is the soil people are most likely exposed to. Apparently some of the uppermost soil was discarded for some samples (page 2-16). A larger volume of soil collected from below the surface might dilute high surface contamination; or, contamination below the surface might suggest a hazard where no exposures exist. Similarly, at the Main Hill Seeps, we are most interested in the actual seeps (liquid contamination) or the saturated soils - not the soil nearby. Having made these remarks, we also recognize that the regional soils survey was conducted to satisfy other purposes. In our evaluation we assumed all reported soil concentrations were surface concentrations.

The *Regional Soils Investigation Report* presents data for chemicals detected that are only tentatively identified; these include "saturated hydrocarbon" "unsaturated hydrocarbon", "polycyclic hydrocarbon", "polyaromatic hydrocarbon", "polychlorinated hydrocarbon", "oxygenated hydrocarbon", and "unknown". ATSDR assumes these chemicals do not include those that are identified and reported elsewhere in the data. We further assumed that the tentatively identified compounds do not add appreciably to the toxicity of the mixture of identified chemicals in the soils. We think this is a safe

assumption based on the comprehensiveness and appropriateness of the analyte list. These assumptions limit consideration of the chemicals to those specifically reported.

Finally, we did not consider data marked with the qualifiers "R", "U", or "UJ". We did consider all other data.

MAIN HILL SEEPS SOILS INVESTIGATION

We considered whether the contamination at the Main Hill Seeps could be a public health hazard for acute dermal and inhalation exposures. We do not expect anyone to be near the seeps for a long enough time to experience chronic adverse health effects, and we do not expect anyone will eat the soil near the seeps.

Prolonged dermal contact with the soil at the Main Hill Seeps may cause skin irritation to some individuals. However, the concentrations of chemicals in the soil samples collected, even in aggregate, are not high enough to pose a more serious health threat. Given the terrain and the openness and the relative isolation of the Main Hill Seeps area, we do not believe air concentrations of the contaminants in the Main Hill Seeps pose an inhalation hazard to anyone.

NPDES OUTFALL 001 SOIL INVESTIGATION

We considered air exposures to volatile compounds released from soil at the NPDES berm since there are residences nearby the berm. We do not expect anyone will eat the soil near the NPDES berm.

We do not believe the contaminants in the soils at the NPDES Outfall 001 berm pose an inhalation hazard to nearby residents.

AIRBORNE DEPOSITIONAL INVESTIGATION

All the data were reviewed for all the sampling locations. (We note that soil samples collected for radioactive analyses extend out approximately 100,000 feet from the Mound locus, and for the non-radioactive analyses extend out to 3,500 feet or less from the Mound locus.) The data are fairly consistent in all directions from the Mound Plant.

We chose to focus our evaluation on the data collected at six residential locations because of the likelihood of greater exposure frequency and duration to people at their homes. We considered oral, inhalation, and dermal exposures. The

locations we evaluated in depth are those designated RCA, RCC, RCG, RCM, RCR, and RCS.

The levels of most of the analytes measured in the soils from the six residential locations are similar to all the regional soils data (not counting data from the NPDES berm and the Main Hill Seeps). In some cases, data from the six residential sampling locations include the maximum levels of analytes measured at all locations, especially for the pesticides.

None of the radioactive elements in the regional soils survey are a public health hazard. The radioisotopes that are naturally occurring or are part of background soil from fallout are well within the expected ranges for these radioisotopes based on national survey information, and are not a public health hazard. The plutonium-238 levels are very low and also do not pose a public health hazard.

We evaluated the aggregate chemical data (non-radioactive) considering acute and 30-year exposures. We gave special consideration to analytes which are known to be hazardous, such as arsenic, cadmium, lead, and polyaromatic hydrocarbons such as benzo(a)pyrene. Although the soil samples were not collected in a manner ideal for our evaluation, taken all together, in our estimation, the levels of chemicals detected in the soils do not pose a public health hazard.

We thank you for the opportunity to comment on this important work in the CERCLA program at the Mound Plant. We hope that our assessment of this data is helpful to you and to the community near the Mound Plant. Please do not hesitate to telephone me at (404)639-6035 or write me at 1600 Clifton Road NE, Mailstop E-56, Atlanta, Georgia 30333, if you have further questions or concerns.

Sincerely yours,

William H Taylor

William H. Taylor, Ph.D.
Chemist, Energy Section B
Federal Facilities Assessment Branch
Division of Health Assessment
and Consultation

cc:
Brian Nickel, OEPA
Tim Fischer, US EPA
John Weithofer, City of Miamisburg

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

April 6, 1995

HSRL-6J

Mr. Arthur Kleinrath
U.S. Department of Energy
Dayton Area Office
P.O. Box 66
Miamisburg, OH 45343-0066

RE: U.S. DOE Mound Plant
Operable Unit #9
Regional Soils Investigation Report

Dear Mr. Kleinrath:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the Operable Unit #9 (OU9) Regional Soils Investigation Report. Attached are the comments which U.S. EPA believes should be addressed and incorporated into the report. It is U.S. EPA's understanding that the Ohio Environmental Protection Agency will be providing comments regarding this report under separate cover.

Pursuant to our Federal Facility Agreement, this document is a secondary document which requires only a regulatory review and comment cycle. A revised document should be submitted to the regulators within forty-five (45) days of receipt of comments. If you have any questions, please call me at (312) 886-5787.

Sincerely,

Timothy J. Fischer

Timothy J. Fischer
Remedial Project Manager

cc: Brian Nickel, OEPA
Monte Williams, EG&G
Debra White, USDOE
Jim Rigano, EG&G
Chuck Friedman, EG&G
Richard Neff, Geotech, DAO
William Rummel, Geotech, DAO

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GENERAL COMMENTS:

Comment #1: U.S. EPA is concerned about the use of risk-based guidelines as a point of comparison within the text of the document. It is the understanding of U.S. EPA that the document's purpose was to present information which would be useful in determining the extent of contamination of soils and surface water attributed to the operations of the Mound Plant. This would involve only the comparison of current sampling results to background conditions. U.S. EPA is concerned that the inclusion of these risk-based guideline values may be misconstrued as approval of these values by U.S. EPA. Since U.S. EPA, Ohio EPA, and U.S. DOE have not agreed upon any specific guideline values or preliminary remedial goals (PRGs), it is inappropriate to include any risk-based guidelines at this time.

Response #1: Risk-based guideline values, and references to them, have been removed from the report text. Nevertheless, DOE feels that the risk-based guidelines add value because they provide some measure of the health hazard associated with the results of this sampling program. Therefore, we are including the risk-based comparisons as Attachment 1 in this response to your comments. We acknowledge that your agency has neither reviewed, nor approved, the assumptions used to calculate these guidelines and that the guidelines would change if different assumptions are used.

Comment #2: The Regional Soils Investigation Report presents sampling results from the airborne depositional sampling, NPDES Outfall 001 pipline sampling, and soil and water sampling at the Main Hill seeps in a straightforward, clear manner, but it does not contain much discussion on the significance of the sampling results, or explain what will be done with this data (will it be incorporated into a site-wide risk assessment; will a separate risk assessment be conducted for off-property results?). The groundwater seeps data is worth special notice, with seep 601 on the west side of the Main Hill containing tritium at levels 188 times the guideline value, and levels of plutonium-238, strontium-90, and uranium-234 from 3 to 10 times greater than their respective guidance values. Also of note are the soil samples collected downgradient of seep 605 that contained elevated levels of iron, copper, and lead.

Response #2: Concur, introductory text has been modified to state the use of the collected data. The sampling program was initiated to gather data for the future OU9 site-wide risk assessment, as well as the stated objectives in Section 1.

SPECIFIC COMMENTS:

Comment #1: Section D.3.3, Appendix D
Page D-8, Paragraph 1
This paragraph is confusing as it is written. The percentages given for bias on the estimated data set do not add up to 100 percent (50% biased low, 9% biased high, and 20% bias unknown).

Response #1: Concur, the verbage has been modified to clarify the point.

Comment #2: Section D.4.2.1 and D.4.2.3 through D.4.2.6, Appendix D
Pages D-9 and D-10
The matrix spike/matrix spike duplicate (MS/MSD) discussions for each of the compound groups should include a sentence describing the overall performance of the MS/MSD samples, and if any actions were taken based on the results.

Response #2: The tables of data following the discussions in the referenced sections shows the overall performance against each spike material. No general laboratory actions were taken during this sampling event.

OhioEPA

State of Ohio Environmental Protection Agency

Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911
(513) 285-6357
FAX (513) 285-6249

George V. Voinovich
Governor

April 5, 1995

RE: US DOE MOUND
MONTGOMERY COUNTY
OU9 OPERATIONAL AREA
REGIONAL SOILS
INVESTIGATION REPORT

Mr. Arthur Kleinrath
US DOE Miamisburg Area Office
1 Mound Road
P.O. Box 66
Miamisburg, Ohio 45343-0066

Dear Mr. Kleinrath:

The Ohio Environmental Protection Agency has received and reviewed the *Operable Unit 9 Regional Soils Investigation Report, March 1995*. The Ohio Department of Health assisted in the review and its comments have been incorporated. It should be noted that HAZWRAP Guideline Values are in draft form, are internal to DOE and are not approved by the Ohio EPA. Until the Ohio EPA has approved the Guideline Values as Preliminary Remedial Goals, they should not be incorporated into this or any other CERCLA document.

As per the Federal Facilities Agreement, the document is a secondary document which includes only a regulatory review and comment cycle. As Ohio EPA, USEPA and DOE Mound have agreed, DOE Mound will provide comment responses and make the document and comment responses available to the public. If the document is revised or modified, please incorporate the attached comments where specified. Once the document is finalized, please include a copy of this letter and the attached comments with the document.

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Should there be any questions concerning the above, please contact Lisa Anderson at (513)285-6051 or me at (513)285-6468.

Sincerely,

Brian Nickel
Mound Project Manager
Office of Federal Facilities Oversight

Attachment (1)

cc: T. Fischer, USEPA Region V
M. Williams, EG&G
J. Zahora, EG&G
R. Vandegrift, ODH/CO
J. Rigano, EG&G
R. Bendula, SWDO/DDAGW
D. White, DOE/MB

SPECIFIC COMMENTS:

Comment #1: Section 4.1, Page 4-2, Paragraph 2:
The statement referring to the "D, E, and F-rings" would be much clearer if a diagram depicting the sampling "rings" was available. We realize that this is in part due to the consolidation of some sampling locations. If such a diagram is available, please include in the document.

Response #1: A diagram (Figure) has been added to show the inner-most rings and sample locations. All of the consolidation of sampling points was done on these inner rings and the outer ring location designations are self explanatory.

GENERAL COMMENTS:

Comment #1: The OU9 Regional Soils Investigation is intended to "determine the regional and local extent of soil contamination from Mound Plant emissions" (Page 1-1, Introduction). Extent of contamination due to a site or source should be defined by comparison to background or ambient conditions. In attempting to define contamination, Ohio EPA guidance "considers a site to be contaminated if contaminants are present on-site at concentrations significantly above background", (How Clean is Clean, Ohio EPA, 1991). Risk-based cleanup guidelines such as Mound HAZWRAP Guideline Values are not appropriate indicators of background quality.

Until Ohio EPA has reviewed and approved the Guideline Values as Preliminary Remedial Goals, they should not be incorporated into this or any other CERCLA document. Ohio EPA requests that they be removed from the documents, along with all references to them.

Response #1: Risk-based guideline values, and references to them, have been removed from the report text. Nevertheless, DOE feels that the risk-based guidelines add value because they provide some measure of the health hazard associated with the results of this sampling program. Therefore, we are including the risk-based comparisons as Attachment 1 in this response to your comments. We acknowledge that your agency has neither reviewed, nor approved, the assumptions used to calculate these guidelines and that the guidelines would change if different assumptions are used.

Comment #2: In some cases, background values are "not available"; e.g. Americium-241, Bismuth-207, Cobalt-60 and Plutonium-242. Please state in the text why specific background values are not available and please reference OU9 Workplan.

Response #2: The text has been changed to add the source of the existing background values for radionuclides. During the OU9 sampling event, some additional radionuclides were analyzed for which were not done during the background effort.

ATTACHMENT 1

Comparison of OU9 Regional Soils to Risk-Based Baseline Values

To understand hazards associated with chemicals in soils the risk presented by their presence must be estimated. The risk-based guideline values presented in Table A.1 were developed using generally accepted procedures that conservatively approximate soil concentrations which would result in one additional cancer incident in a population of 1 million people (10^{-6} increased cancer risk).

Please note that the risk-based calculations presented in this report are preliminary. At this time US EPA and Ohio EPA have neither reviewed, nor approved, the assumptions used to calculate these guidelines. The guidelines would change if different assumptions are used.

It is noteworthy that in February 1995 the parties, with public input, agreed on soil clean-up guidelines for the Miami-Erie Canal which is adjacent to the Mound Plant. The Canal clean-up guideline requires 95% of residual soils contain less than 75 pCi/g and that no soils contain more than 150 pCi/g. For clean-up to this level, the estimated increased risk of cancer incidents is two in 100 thousand in a residential exposure scenario and one in 1 million in a recreational exposure scenario. (DOE 1995).

DATA EVALUATION METHODOLOGY

The maximum concentration (the greater of the surface or subsurface results) is being used as the reported concentration for each individual sample location. The rationale for choosing the maximum concentration rather than the surface or subsurface data sets was the high likelihood that soils may have been mixed, plowed, bull-dozed, etc. These values were then compared against a "baseline" value to show areas of concern.

The baseline values were established by determining the higher of the: (1) known risk-based cleanup guidelines, (2) generated regional or local background, or (3) regulatory limits.

The "Risk-Based Cleanup Guideline Values" (DOE 1994a) prepared by Hazardous Waste Remedial Actions Program (HAZWRAP), was used as the primary source for selecting baseline values. The most conservative soil guideline values were selected from each of the four exposure scenarios to generate soil guideline values for radionuclide and chemical constituents. The scenarios were chosen to represent the

population of the study area. The scenarios; residential, recreational, subsistence farmer, and commercial are hereafter referred to as location types 1, 2, 3, and 4 respectively. Additional guideline values were generated for analytes which had toxicological data but were not addressed in the HAZWRAP prepared report. The same procedures and assumptions that were used in the HAZWRAP prepared report were followed in the generation of these additional values.

Generated regional or local background values (DOE 1994b), were included in completing the baseline values for data comparison.

The regulatory limit of 5 picocuries per gram (pCi/g) was used for the Ra-226 baseline for all scenarios.

Tables A.1 through A.6 show the baseline values for all of the individual analytes which were detected.

SAMPLING RESULTS

Radionuclide Results

The maximum concentration for an individual sample location was compared to the established baseline values by sample location type for the radionuclides. Table A.7 summarizes the radionuclide results above the baseline values. Figure A.1 shows the sample locations and results above the baseline values. Cesium-137 samples were collected at the fenceline and fenceline plus 1000 feet rings. Eight of the locations sampled had results above the baseline, with a range of results from 0.45 to 1.14 pCi/g.

Of the remaining radionuclide samples collected, one plutonium-238 sample at location RBM had a result of 5.68 pCi/g, one uranium-235 sample at location RJE had a result of 0.23 pCi/g, and one uranium-238 sample at location RBC had a result of 1.4 pCi/g.

Inorganic Results

Samples were collected for inorganic compounds at the fenceline and fenceline plus 1000 feet rings. Table A.8 indicates the samples which exceed the baseline, and those for which no baseline was established. Figure A.2 is the spatial representation (map) of the data.

Table A.1. Baseline Values For Data Comparison - Radionuclides (pCi/g)

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Bismuth-210M	N/A	5.00e+02	5.00e+02	2.00e+04	2.00e+04	1.40e+02	1.40e+02	2.00e+03	2.00e+03
Cesium-137	4.20e-01	2.10e-02	4.20e-01	8.80e-01	8.80e-01	2.10e-02	4.20e-01	4.40e-01	4.40e-01
Potassium-40	3.70e+01	N/A	3.70e+01	N/A	3.70e+01	N/A	3.70e+01	N/A	3.70e+01
Plutonium-238	1.30e-01	3.60e+00	3.60e+00	1.40e+02	1.40e+02	1.00e+00	1.00e+00	1.40e+01	1.40e+01
Plutonium-239/40	1.80e-01	3.40e+00	3.40e+00	1.40e+02	1.40e+02	9.70e-01	9.70e-01	1.40e+01	1.40e+01
Plutonium-242	N/A	3.60e+00	3.60e+00	1.40e+02	1.40e+02	1.00e+00	1.00e+00	1.40e+01	1.40e+01
Radium-226	2.00e+00	1.30e-05	5.00e+00[1]	5.10e-04	5.00e+00[1]	1.30e-05	5.00e+00[1]	2.10e-05	5.00e+00[1]
Strontium-90	7.20e-01	2.20e+01	2.20e+01	8.90e+02	8.90e+02	6.20e+00	6.20e+00	8.90e+01	8.90e+01
Thorium-228	1.50e+00	7.40e-03	1.50e+00	3.10e-01	1.50e+00	7.40e-03	1.50e+00	1.60e-01	1.50e+00
Thorium-230	3.00e+00	5.30e+01	5.30e+01	2.10e+03	2.10e+03	1.70e+01	1.70e+01	2.00e+02	2.00e+02
Thorium-232	1.40e+00	5.90e+01	5.90e+01	2.40e+03	2.40e+03	1.80e+01	1.80e+01	2.20e+02	2.20e+02
Tritium	1.60e+00	1.50e+04	1.50e+04	5.90e+05	5.90e+05	4.20e+03	4.20e+03	5.90e+04	5.90e+04
Uranium-234	1.10e+00	4.50e+01	4.50e+01	1.80e+03	1.80e+03	1.40e+01	1.40e+01	1.70e+02	1.70e+02
Uranium-235	1.10e-01	1.70e-01	1.70e-01	7.30e+00	7.30e+00	1.70e-01	1.70e-01	3.60e+00	3.60e+00
Uranium-238	1.20e+00	1.10e+00	1.20e+00	4.70e+01	4.70e+01	1.00e+00	1.20e+00	2.00e+01	2.00e+01

[1] 40 CFR 192.12
N/A Not available

Table A.2. Baseline Values For Data Comparison - Inorganics (mg/kg)
Page 1 of 2

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Aluminum	1.90e+04	N/A	1.90e+04	N/A	1.90e+04	N/A	1.90e+04	N/A	1.90e+04
Arsenic	8.60e+00	7.90e+02	7.90e+02	3.20e+04	3.20e+04	7.90e+02	7.90e+02	1.30e+03	1.30e+03
Barium	1.80e+02	1.90e+04	1.90e+04	2.20e+05	2.20e+05	1.90e+04	1.90e+04	1.40e+05	1.40e+05
Beryllium	1.30e+00	1.50e-01	1.30e+00	6.00e+00	6.00e+00	6.90e-02	1.30e+00	1.30e+00	1.30e+00
Bismuth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	2.10e+00	6.50e+03	6.50e+03	2.60e+05	2.60e+05	6.50e+03	6.50e+03	1.10e+04	1.10e+04
Calcium	3.10e+05	N/A	3.10e+05	N/A	3.10e+05	N/A	3.10e+05	N/A	3.10e+05
Chromium	2.00e+01	9.60e+02	9.60e+02	3.90e+04	3.90e+04	9.60e+02	9.60e+02	1.60e+03	1.60e+03
Cobalt	1.90e+01	N/A	1.90e+01	N/A	1.90e+01	N/A	1.90e+01	N/A	1.90e+01
Copper	2.60e+01	N/A	2.60e+01	N/A	2.60e+01	N/A	2.60e+01	N/A	2.60e+01
Cyanide	N/A	1.60e+03	1.60e+03	6.30e+04	6.30e+04	5.50e+02	5.50e+02	4.10e+04	4.10e+04
Iron	3.50e+04	N/A	3.50e+04	N/A	3.50e+04	N/A	3.50e+04	N/A	3.50e+04
Lead	4.80e+01	N/A	4.80e+01	N/A	4.80e+01	N/A	4.80e+01	N/A	4.80e+01
Magnesium	4.00e+04	N/A	4.00e+04	N/A	4.00e+04	N/A	4.00e+04	N/A	4.00e+04
Manganese	1.40e+03	1.10e+04	1.10e+04	4.40e+05	4.40e+05	3.80e+03	3.80e+03	2.60e+05	2.60e+05
Mercury	N/A	2.30e+01	2.30e+01	9.50e+02	9.50e+02	8.20e+00	8.20e+00	6.10e+02	6.10e+02
Nickel	3.20e+01	1.60e+03	1.60e+03	6.30e+04	6.30e+04	5.50e+02	5.50e+02	4.10e+04	4.10e+04
Potassium	1.90e+03	N/A	1.90e+03	N/A	1.90e+03	N/A	1.90e+03	N/A	1.90e+03

Table A.2. Baseline Values For Data Comparison - Inorganics (mg/kg)
Page 2 of 2

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Aluminum	1.90e+04	N/A	1.90e+04	N/A	1.90e+04	N/A	1.90e+04	N/A	1.90e+04
Selenium	N/A	1.40e+03	1.40e+03	5.50e+04	5.50e+04	6.40e+02	6.40e+02	1.00e+04	1.00e+04
Sodium	2.40e+02	N/A	2.40e+02	N/A	2.40e+02	N/A	2.40e+02	N/A	2.40e+02
Thallium	4.60e-01	N/A	4.60e-01	N/A	4.60e-01	N/A	4.60e-01	N/A	4.60e-01
Vanadium	2.50e+01	5.50e+02	5.5e+02	2.20e+04	2.20e+04	1.90e+02	1.90e+02	1.40e+04	1.40e+04
Zinc	1.40e+02	2.30e+04	2.30e+04	9.50e+05	9.50e+05	8.20e+03	8.20e+03	6.10e+05	6.10e+05

NA Not available

Table A.3. Baseline Values For Data Comparison - Pesticides/PCBs (ug/kg)

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
4,4'-DDD	4.20e+00	N/A	4.20e+00	N/A	4.20e+00	N/A	4.20e+00	N/A	4.20e+00
4,4'-DDE	N/A	1.90e+03	1.90e+03	7.60e+04	7.60e+04	8.80e+02	8.80e+02	1.70e+04	1.70e+04
4,4'-DDT	N/A	1.90e+03	1.90e+03	7.60e+04	7.60e+04	8.80e+02	8.80e+02	1.70e+04	1.70e+04
Aldrin	N/A	3.80e+01	3.80e+01	1.50e+03	1.50e+03	1.80e+01	1.80e+01	3.40e+02	3.40e+02
Alpha-Chlordane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor-1248	N/A	8.30e+01	8.30e+01	3.40e+03	3.40e+03	3.90e+01	3.90e+01	7.40e+02	7.40e+02
Aroclor-1260	N/A	8.30e+01	8.30e+01	3.40e+03	3.40e+03	3.90e+01	3.90e+01	7.40e+02	7.40e+02
Beta-BHC	N/A	3.50e+02	3.50e+02	1.40e+04	1.40e+04	1.70e+02	1.70e+02	3.20e+03	3.20e+03
Dieldrin	N/A	4.00e+01	4.00e+01	1.60e+03	1.60e+03	1.90e+01	1.90e+01	3.60e+04	3.60e+04
Endrin Ketone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	N/A	1.60e+06	1.60e+06	6.60e+07	6.60e+07	7.70e+05	7.70e+05	1.20e+07	1.20e+07
Gamma-Chlordane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	N/A	1.40e+01	1.40e+01	5.70e+03	5.70e+03	6.60e+01	6.60e+01	1.30e+03	1.30e+03
Heptachlor Epoxide	N/A	7.00e+01	7.00e+01	2.80e+03	2.80e+03	3.30e+01	3.30e+01	6.30e+02	6.30e+02
p,p'-Methoxychlor	3.00e+01	N/A	3.00e+01	N/A	3.00e+01	N/A	3.00e+01	N/A	3.00e+01

NA Not available

Table A.4. Baseline Values For Data Comparison - Volatile Organic Compounds (ug/kg)

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Acetone	N/A	2.70e+07	2.70e+07	1.10e+09	1.10e+09	2.70e+06	2.70e+06	2.00e+08	2.00e+08
Hexane	N/A	5.70e+04	5.70e+04	5.70e+04	5.70e+04	5.70e+04	5.70e+04	5.70e+04	5.70e+04
Methylene Chloride	N/A	8.50e+01	8.50e+01	3.40e+03	3.40e+03	4.00e+01	4.00e+01	7.60e+02	7.60e+02
Toluene	N/A	2.30e+05	2.30e+05	2.30e+05	2.30e+05	2.30e+05	2.30e+05	2.30e+05	2.30e+05
Trichlorotrifluoroethane	N/A	5.70e+05	5.70e+05	5.70e+05	5.70e+05	5.70e+05	5.70e+05	5.70e+05	5.70e+05

NA Not available

Table A.5. Baseline Values For Data Comparison - Semi-Volatile Organic Compounds (ug/kg)
Page 1 of 2

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
1,2-Dichloroethane	N/A	3.50e+02	3.50e+02	1.40e+04	1.40e+04	3.30e+02	3.30e+02	6.10e+02	6.10e+02
2-Methylnaphthalene	N/A	8.20e+06	8.20e+06	3.30e+08	3.30e+08	3.80e+06	3.80e+06	6.10e+07	6.10e+07
4-Chloro-3-Methylphenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthene	N/A	1.60e+07	1.60e+07	6.60e+08	6.60e+08	7.70e+06	7.70e+06	1.20e+08	1.20e+08
Acenaphthylene	N/A	8.20e+06	8.20e+06	3.30e+08	3.30e+08	3.80e+06	3.80e+06	6.10e+07	6.10e+07
Anthracene	N/A	8.20e+07	8.20e+07	3.30e+09	3.30e+09	8.20e+06	8.20e+06	6.10e+08	6.10e+08
Benzo(a)anthracene	N/A	8.80e+02	8.80e+02	3.50e+04	3.50e+04	4.10e+02	4.10e+02	7.80e+03	7.80e+03
Benzo(a)pyrene	N/A	8.80e+01	8.80e+01	3.50e+03	3.50e+03	4.10e+01	4.10e+01	7.80e+02	7.80e+02
Benzo(b)fluoranthene	N/A	8.80e+02	8.80e+02	3.50e+04	3.50e+04	4.10e+02	4.10e+02	7.80e+03	7.80e+03
Benzo(g,h,i)perylene	N/A	8.80e+01	8.80e+01	3.50e+03	3.50e+03	4.10e+01	4.10e+01	7.80e+02	7.80e+02
Benzo(k)fluoranthene	N/A	8.80e+02	8.80e+02	3.50e+04	3.50e+04	4.10e+02	4.10e+02	7.80e+03	7.80e+03
Benzoic Acid	N/A	1.10e+09	1.10e+09	1.30e+10	1.30e+10	1.10e+08	1.10e+08	8.20e+09	8.20e+09
Bis(2-ethylhexyl)phthalate	N/A	4.60e+04	4.60e+04	1.80e+06	1.80e+06	2.10e+04	2.10e+04	4.10e+05	4.10e+05
Butylbenzylphthalate	N/A	5.50e+07	5.50e+07	2.20e+09	2.20e+09	5.50e+06	5.50e+06	4.10e+08	4.10e+08
Carbazole	N/A	3.20e+04	3.20e+04	1.30e+06	1.30e+06	1.50e+04	1.50e+04	2.90e+05	2.90e+05
Chrysene	N/A	8.80e+03	8.80e+03	3.50e+05	3.50e+05	4.10e+03	4.10e+03	7.80e+04	7.80e+04
Delta-BHC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Di-n-butylphthalate	N/A	2.70e+04	2.70e+04	1.10e+06	1.10e+06	2.70e+03	2.70e+03	2.00e+05	2.00e+05

Table A.5. Baseline Values For Data Comparison - Semi-Volatile Organic Compounds (ug/kg)
Page 2 of 2

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Di-n-octylphthalate	N/A	1.60e+06	1.60e+06	6.30e+07	6.30e+07	5.50e+05	5.50e+05	4.10e+07	4.10e+07
Dibenzo(a,h)anthracene	N/A	8.80e+02	8.80e+02	3.50e+03	3.50e+03	4.10e+01	4.10e+01	7.80e+02	7.80e+02
Dibenzofuran	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dimethylphthalate	N/A	2.70e+09	2.70e+09	1.10e+11	1.10e+11	1.30e+09	1.30e+09	2.00e+10	2.00e+10
Fluoranthene	N/A	1.10e+07	1.10e+07	4.40e+08	4.40e+08	1.10e+06	1.10e+06	8.20e+07	8.20e+07
Fluorene	N/A	1.10e+07	1.10e+07	4.40e+08	4.40e+08	5.10e+07	5.10e+07	8.20e+07	8.20e+07
Indeno(1,2,3-c,d)pyrene	N/A	8.80e+02	8.80e+02	3.50e+04	3.50e+04	4.10e+02	4.10e+02	7.80e+03	7.80e+03
Napthalene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	N/A	5.30e+03	5.30e+03	2.10e+05	2.10e+05	2.50e+03	2.50e+03	4.80e+04	4.80e+04
Phenanthrene	N/A	8.80e+01	8.80e+01	3.50e+03	3.50e+03	4.10e+01	4.10e+01	7.80e+02	7.80e+02
Phenol	N/A	4.70e+07	4.70e+07	1.90e+09	1.90e+09	1.60e+07	1.60e+07	1.20e+09	1.20e+09
Pyrene	N/A	8.20e+06	8.20e+06	3.30e+08	3.30e+08	8.20e+05	8.20e+05	6.10e+07	6.10e+07

NA Not available

Table A.6. Baseline Values For Data Comparison - Anions (mg/kg)

		Location Type							
		Residential		Recreational		Subsistence Farmer		Commercial	
Analyte	Background Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value	Guideline Value	Baseline Value
Chloride	1.07e+02	N/A	1.07e+02	N/A	1.07e+02	N/A	1.07e+02	N/A	1.07e+02
Fluoride	6.70e+00	N/A	6.70e+00	N/A	6.70e+00	N/A	6.70e+00	N/A	6.70e+00
Sulfate	1.50e+02	N/A	1.50e+02	N/A	1.50e+02	N/A	1.50e+02	N/A	1.50e+02
Nitrate/Nitrite	2.60e+01	N/A	2.60e+01	N/A	2.60e+01	N/A	2.60e+01	N/A	2.60e+01

NA Not available

Table A.7. Radionuclide Results Above Baseline (pCi/g)

Parameter	Baseline	Station	Location Type	Results
Cs-137	0.44	RAA	Commercial	1.07
		RAD	Commercial	0.492 J
		RAE	Commercial	0.681 J
		RAN	Commercial	0.777
		RAP	Commercial	**1.14**
	0.44	RAR	Commercial	0.729
	0.42	RCC	Residential	0.558
		RCG	Residential	0.458
Pu-238	3.60	RBM	Residential	**5.68**
U-235	0.17	RJE	Residential	0.234
U-238	1.20	RBC	Residential	1.4

Bold Maximum concentration detected

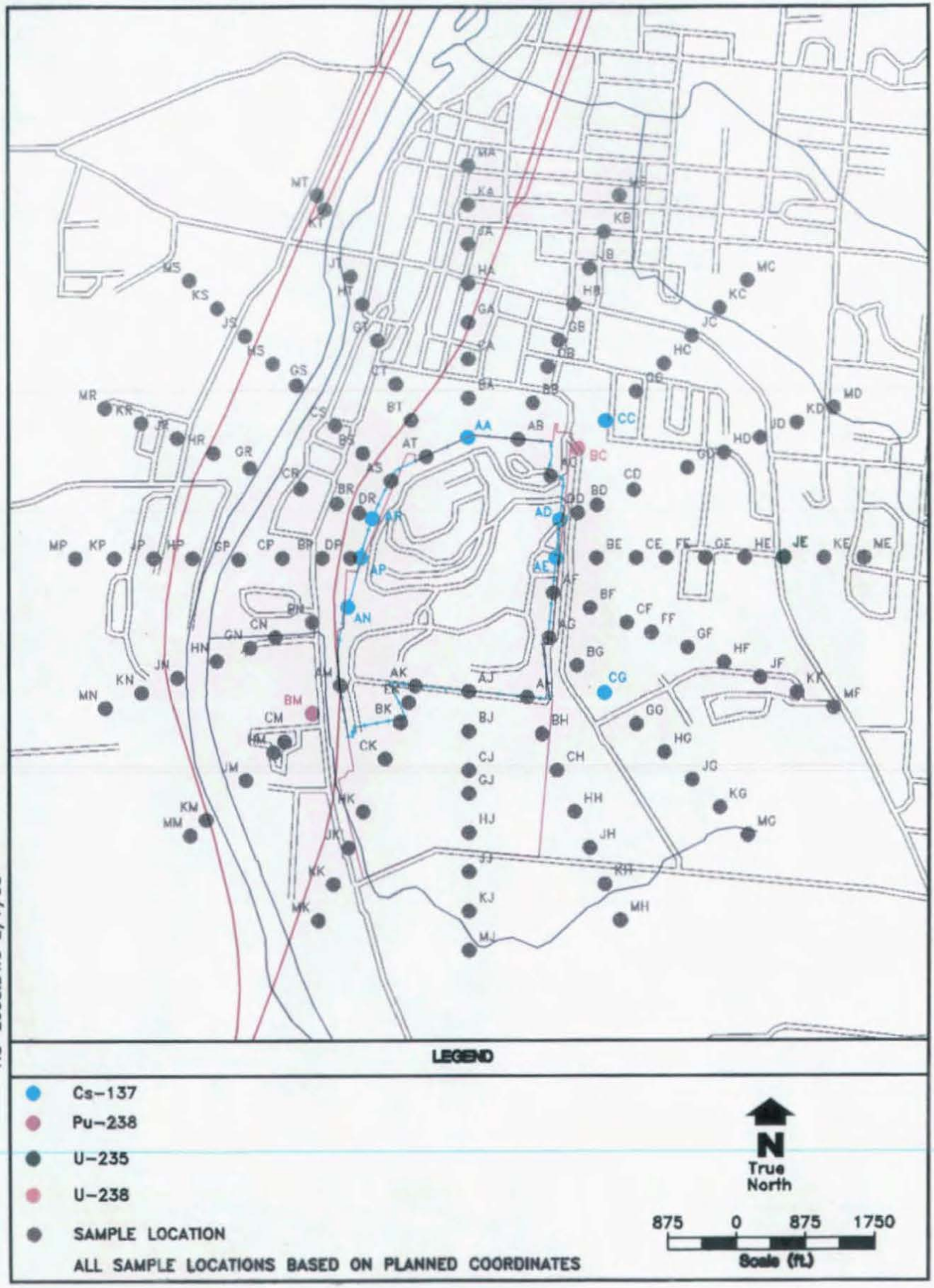

Figure A.1. Radionuclide Results Above Baseline

Table A.8. Inorganic Results Above Baseline (mg/kg)
Page 1 of 3

Parameter	Baseline	Station	Location Type	Results
Aluminum	19,000	RAA	Commercial	22800
	19,000	RAD	Commercial	**24500**
	19,000	RAF	Commercial	19600
	19,000	RAG	Commercial	22900
	19,000	RAH	Commercial	21500
	19,000	RAK	Commercial	20000
	19,000	RAP	Commercial	19900
	19,000	RCF	Recreational	21700
Bismuth	NA	RAG	Commercial	8.1
	NA	RAN	Commercial	6.4
	NA	RCA	Residential	37.6
	NA	RCB	Residential	26.5
	NA	RCC	Residential	55.1
	NA	RCD	Recreational	39
	NA	RCE	Recreational	47.2
	NA	RCF	Recreational	46.6
	NA	RCG	Residential	38.5
	NA	RCH	Subsistence Farmer	38
	NA	RCJ	Subsistence Farmer	**70.4**
	NA	RCK	Subsistence Farmer	69.5
	NA	RCM	Residential	31.75
	NA	RCN	Commercial	49.4
	NA	RCP	Commercial	47.6
	NA	RCR	Residential	26.3
	NA	RCS	Residential	34.4
	NA	RCT	Recreational	63.25
Cobalt	19	RAD	Commercial	20.4
	19	RCD	Recreational	19.3
	19	RCM	Residential	**28**
Copper	26	RAG	Commercial	29
	26	RAH	Commercial	33.1
	26	RCA	Residential	31 J

Table A.8. Inorganic Results Above Baseline (mg/kg)
Page 2 of 3

Parameter	Baseline	Station	Location Type	Results
Copper (continued)	26	RCC	Residential	27.8
	26	RCD	Recreational	31.4
	26	RCJ	Subsistence Farmer	26.55 J
	26	RCK	Subsistence Farmer	28.6 J
	26	RCM	Residential	**79**
	26	RCN	Commercial	34.9
Iron	35,000	RAA	Commercial	46200
	35,000	RAD	Commercial	38800
	35,000	RAG	Commercial	38650
	35,000	RAH	Commercial	43600
	35,000	RAP	Commercial	40900
	35,000	RCF	Recreational	38400 J
	35,000	RCM	Residential	**62600**
Lead	48	RAC	Commercial	**163**
	48	RAE	Commercial	88.3
	48	RAF	Commercial	66.6
	48	RAG	Commercial	49.7
	48	RAP	Commercial	84.5
	48	RAR	Commercial	95
	48	RAT	Commercial	64.2
	48	RCA	Residential	84.9
	48	RCM	Residential	51.85
	48	RCS	Residential	50.3
Magnesium	40,000	RAB	Commercial	52200
	40,000	RCJ	Subsistence Farmer	43700
	40,000	RCK	Subsistence Farmer	44100
	40,000	RCT	Recreational	**53850**
Potassium	1,900	RAA	Commercial	2380
	1,900	RAK	Commercial	2970
	1,900	RAN	Commercial	3385
	1,900	RAP	Commercial	2560

Table A.8. Inorganic Results Above Baseline (mg/kg)
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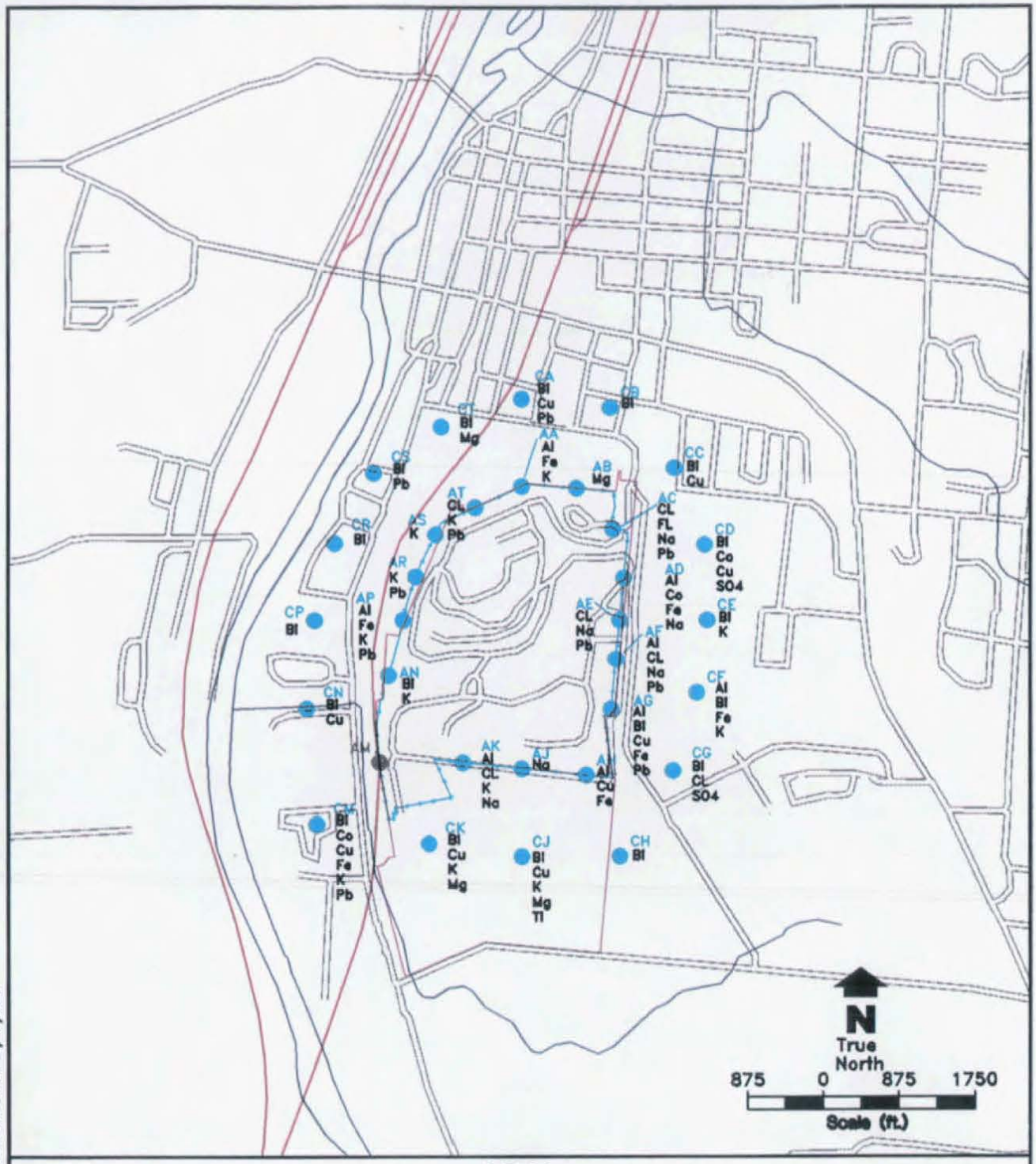
Parameter	Baseline	Station	Location Type	Results
Potassium (continued)	1,900	RAR	Commercial	2540
	1,900	RAS	Commercial	2810
	1,900	RAT	Commercial	2010
	1,900	RCE	Recreational	2030
	1,900	RCF	Recreational	2170
	1,900	RCJ	Subsistence Farmer	2100
	1,900	RCK	Subsistence Farmer	1980
	1,900	RCM	Residential	**3770**
Sodium	240	RAC	Commercial	809 J
	240	RAD	Commercial	483 J
	240	RAE	Commercial	811 J
	240	RAF	Commercial	948 J
	240	RAJ	Commercial	619 J
	240	RAK	Commercial	**1770 J**
Thallium	0.46	RCJ	Subsistence Farmer	0.94

Bold maximum



INORG.DWG 2/7/95

LEGEND

● ABOVE BASELINE	Fe – IRON	● SAMPLE LOCATION
Al – ALUMINUM	Pb – LEAD	CL – CHLORIDE
Be – BERYLLIUM	Mg – MAGNESIUM	FL – FLUORIDE
Bi – BISMUTH	K – POTASSIUM	SO4 – SULFATE
Co – COBALT	Na – SODIUM	
Cu – COPPER	Tl – THALLIUM	

ALL SAMPLE LOCATIONS BASED ON PLANNED COORDINATES

Figure A.2. Inorganic Results Above Baseline

Pesticides/PCBs

Samples were collected for Pesticides/PCBs at the fenceline and fenceline plus 1000 feet rings. Table A.9 indicates the samples which exceed the baseline, and those for which no baseline was established. Figure A.3 is the spatial representation map of the data.

VOCs

Samples were collected for VOCs at the fenceline and fenceline plus 1000 feet rings. There were no detectable results above the baselines for VOCs.

SVOCs

Samples were collected for SVOCs at the fenceline and fenceline plus 1000 feet rings. Table A.10 indicates the samples which exceed the baseline, and those for which no baseline was established. Figure A.3 also shows the spatial representation of this data.

Anions

Samples were collected for anions at the fenceline and fenceline plus 1000 feet rings. Table A.11 indicates the samples which exceed the baseline, and those for which no baseline was established. Figure A.3 is the spatial representation of the data.

Chloride results are compared to a background-based baseline value of 107 mg/kg. Of the 32 locations sampled, six locations had results above the baseline, with five fenceline locations ranging from 119 to 1180 mg/kg, and one fenceline plus 1000 feet location at 114 mg/kg.

Fluoride results are compared to a background-based baseline value of 6.7 mg/kg. Of the 32 locations sampled, one fenceline plus 1000 feet location had a result above baseline at 7.8 mg/kg.

Sulfate results are compared to a background-based baseline value of 150 mg/kg. Of the 32 locations sampled, two fenceline plus 1000 feet locations had results above baseline at 220 and 646 mg/kg.

Table A.9. Pesticides/PCB Results Above Baseline (ug/kg)

Parameter	Baseline	Station	Location Type	Results
4,4'-DDD	4.2	RCN	Commercial	6.4 J
Aroclor-1248	740	RCN	Commercial	1300
Endrin Ketone	NA	RCA	Residential	5.3 J
	NA	RCB	Residential	0.87 NJ
	NA	RCS	Residential	1.9 NJ
	NA	RCT	Residential	2
Heptachlor Epoxide	70	RCC	Residential	300 J
Alpha-Chlordane	NA	RAC	Commercial	0.9 J
	NA	RAT	Commercial	1.6 J
	NA	RCA	Residential	1.6 J
	NA	RCC	Residential	**770 J**
	NA	RCP	Commercial	53 J
	NA	RCR	Residential	1.9 J
Gamma-Chlordane	NA	RAC	Commercial	0.84 J
	NA	RAT	Commercial	1.3 J
	NA	RCA	Residential	2.2 J
	NA	RCC	Residential	**660 J**
	NA	RCP	Commercial	24
	NA	RCR	Residential	1.1
	NA	RCS	Residential	4.2
	NA	RCT	Recreational	0.3 J

Bold maximum concentration detected

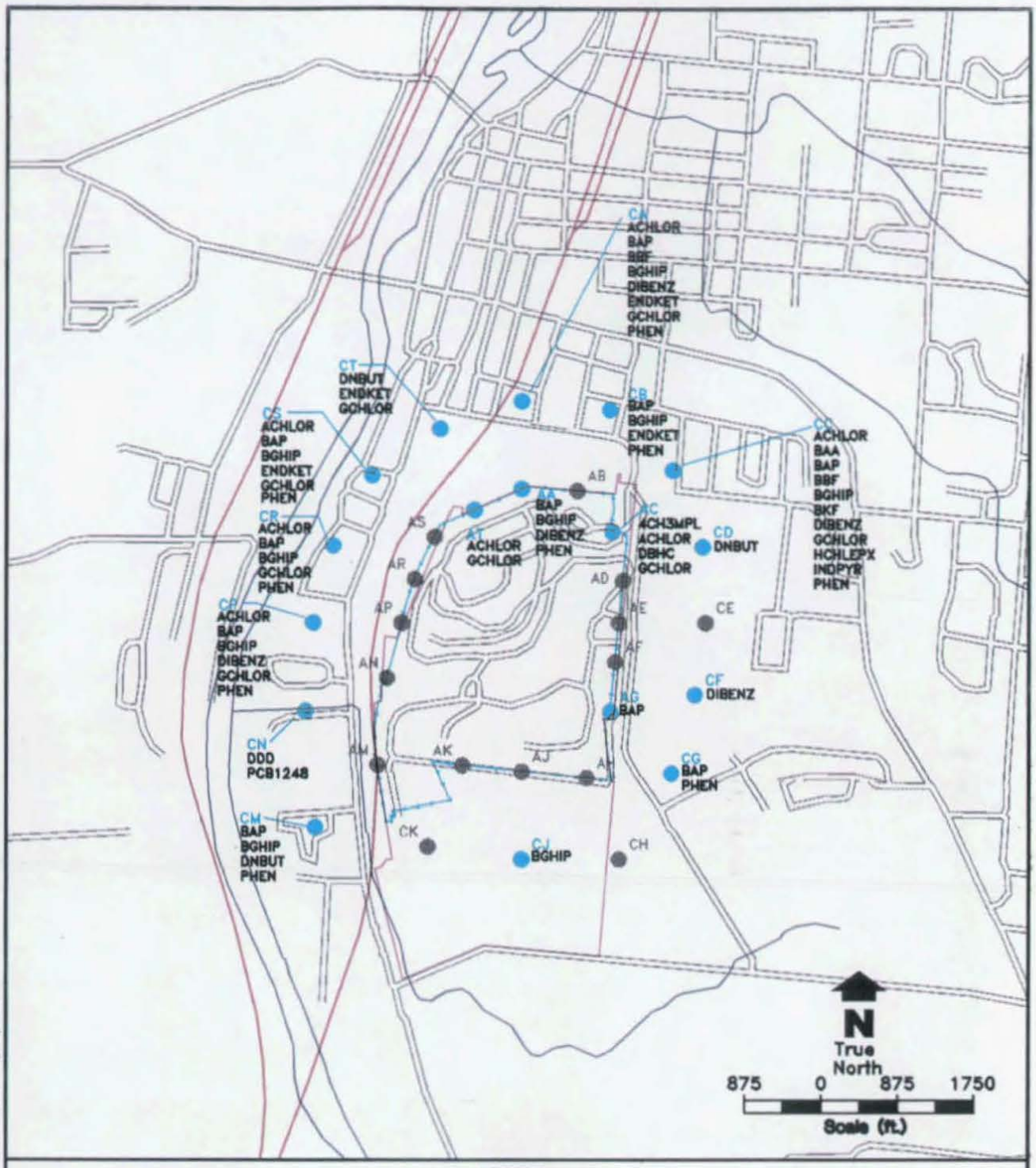


Figure A.3. Organic Results Above Baseline

Table A.10. Semi-Volatile Results Above Baseline (ug/kg)
Page 1 of 2

Parameter	Baseline	Station	Location Type	Results
4-Chloro-3-methylphenol	NA	RAC	Commercial	47 J
Benzo(a)anthracene	880	RCC	Residential	2200 J
Benzo(a)pyrene	780	RAA	Commercial	**3600 J**
	780	RAG	Commercial	820 J
	88	RCA	Residential	920
	88	RCB	Residential	170 J
	88	RCC	Residential	2300 J
	88	RCG	Residential	130 J
	88	RCM	Residential	180 J
	780	RCP	Commercial	1700
	88	RCR	Residential	480 J
	88	RCS	Residential	310 J
Benzo(b)fluoranthene	880	RCA	Residential	1700
	880	RCC	Residential	**4000 J**
Benzo(g,h,i)perylene	780	RAA	Commercial	**1700 J**
	88	RCA	Residential	610
	88	RCB	Residential	110 J
	88	RCC	Residential	1400 J
	41	RCJ	Subsistence Farmer	47 J
	88	RCM	Residential	113 J
	780	RCP	Commercial	960
	88	RCR	Residential	320 J
	88	RCS	Residential	190 J
Benzo(k)fluoranthene	880	RCC	Residential	**1700 J**
Dibenzofuran	NA	RAA	Commercial	**240 J**
	NA	RCA	Residential	44 J
	NA	RCC	Residential	92 J
	NA	RCF	Recreational	160 J
	NA	RCP	Commercial	110 J
Indeno(1,2,3-c,d)pyrene	880	RCC	Residential	1500 J

Table A.10. Semi-Volatile Results Above Baseline (ug/kg)
Page 2 of 2

Parameter	Baseline	Station	Location Type	Results
Phenanthrene	780	RAA	Commercial	**4600 J**
	88	RCA	Residential	780
	88	RCB	Residential	110 J
	88	RCC	Residential	1500 J
	88	RCG	Residential	90 J
	88	RCM	Residential	170 J
	780	RCP	Commercial	2200
	88	RCR	Residential	430 J
	88	RCS	Residential	200 J
Delta-BHC	NA	RAC	Commercial	0.25 J

Bold maximum concetration detected

Table A.11. Anion Results Above Baseline (mg/kg)

Parameter	Baseline	Station	Location Type	Results
Chloride	107	RAC	Commercial	248 J
	107	RAE	Commercial	203 J
	107	RAF	Commercial	329
	107	RAK	Commercial	**1180**
	107	RAT	Commercial	119
	107	RCG	Residential	114
Fluoride	6.7	RAC	Commercial	7.8
Sulfate	150	RCD	Recreational	**646**
	150	RCG	Residential	220

Bold maximum concentration detected

U.S. Army Toxic and Hazardous Materials Agency Explosives

There were no detectable results for the target explosive compounds in any of the samples taken.

RESULTS OF NPDES 001 OUTFALL SOIL GEOCHEMICAL SAMPLING

This section presents the analytical results for the surface and subsurface soil samples collected during the investigations of the NPDES 001 Outfall pipeline soils. These results are used in conjunction with statistical analyses to identify locations of the maximum concentrations of the selected parameters.

Only the results which were above the baseline comparison standard or those which could warrant further investigation (results which indicated abnormal distribution of potential contaminants, or results which indicated influence from"other sources", etc.) are presented in this section. The data from the NPDES 001 Outfall pipeline investigation are presented for each sample point by parameter in tabular form in Appendix E, which includes data qualifiers applied by the analytical laboratory and data qualifiers applied by the data validation team.

The results presented in the following subsections are geochemical evaluations only. Geochemical analytical results include concentrations of radionuclides, inorganics, pesticides/PCBs, VOCs, SVOCs, and anions in soil samples.

Radionuclides

No radiological contamination was detected in the NPDES pipeline soils above the baseline standard.

Inorganics

The inorganic concentrations in soil samples that were measured above the baseline for this investigation are shown in Table A.12. Only four analytes (magnesium, potassium, sodium, and thallium) were detected at concentrations above the available baseline. Bismuth, for which no baseline was available for comparison, was also detected.

Table A.12. Inorganic Concentrations Above Baseline Values in NPDES 001 Pipeline Soils Sample

	Concentration (mg/kg)								
Parameter	**Location 01**	**Location 02**	**Location 03**	**Location 04**	**Location 05**	**Location 06**	**Location 07**	**Location 08**	**Baseline[1]**
Bismuth	56	74	73	77	72	72	**83**	72	NA
Magnesium	---	53100 52400	57000	56400	47900	64900	**74700**	62000	40000
Potassium	**5600**	2500	---	---	1900	---	---	---	1900
Sodium	---	439	---	---	---	---	---	---	240
Thallium	---	0.84	---	---	---	---	---	---	0.46

--- Concentration not above baseline value
Bold Maximum concentration detected
NA Not available
mg/kg milligram per kilogram
[1] Greater of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994) or OU9 Background Study (DOE 1994).

Pesticides/PCBs

The pesticide concentrations in soil samples that were measured above the baseline for this investigation are shown in Table A.13. Only one analyte (p,p,-Methoxychlor) was detected in one sample above the baseline. Alpha-chlordane and endrin ketone, for which no baselines were available for comparison, were also detected.

VOCs

No VOC contamination was detected in the NPDES pipeline soils above the baseline standard.

SVOCs

No SVOC contamination was detected in the NPDES pipeline soils above the baseline standard.

Anions

The anion concentrations in soil samples that were measured above the baseline for this investigation are shown in Table A.14. Chloride and sulfate were detected at concentrations above the available baseline.

RESULTS OF MAIN HILL SEEPS SOIL AND WATER SAMPLING

This section presents the analytical results for the groundwater and soil geochemical samples collected during the investigation of the Main Hill Seeps. These results are used in conjunction with statistical analyses to identify locations of the maximum concentrations of the selected parameters.

Only the results which were above the HAZWRAP guideline values or those which could warrant further investigation (results which indicated abnormal distribution of potential contaminants or results which indicated influence from "other sources", etc.) are presented in this section. The data from the Main Hill Seeps investigation are presented for each sample point by parameter in tabular form in Appendix E, which includes data qualifiers applied by the analytical laboratory and by the data validation team. The sample locations and field sampling activities for the Main Hill Seeps investigation are described in Section 2 of the RSI report.

Table A.13. Pesticide/PCB Concentrations Above Baseline Values in NPDES 001 Pipeline Soil Samples

	Concentration (mg/kg)		
Parameter	**Location 02**	**Location 03**	**Baseline[1]**
Alpha-Chlordane	0.41	---	NA
Endin Ketone	0.73	---	NA
p,p-Methoxychlor	---	57	30

--- Concentration not above baseline value or analyte not detected
NA Not available
mg/kg milligram per kilogram
[1] Greater of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE, 1994) or OU9 Background Study (DOE, 1994).

Table A.14. Anion Concentrations Above Baseline Values in NPDES 001 Pipeline Soils Sample

	Concentration (mg/kg)		
Parameter	**Location 01**	**Location 02**	**Baseline[1]**
Chloride	119	---	107
Sulfate	240	250	150

--- Concentration not above baseline value
mg/kg milligram per kilogram
[1] Greatest of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994a) or OU9 Background Study (DOE 1994b).

Soil Results

Geochemical analytical results include concentrations of radionuclides, inorganics, pesticides/PCBs, VOCs, SVOCs, and anions in soil samples.

Radionuclides

The radiological concentrations in soil that were measured above the baseline for this investigation are shown in Table A.15. Only two analytes, cesium and potassium, were detected in the Main Hill Seeps soils at concentrations above the available baseline, which is the greater of either the HAZWRAP commercial risk (10^{-6}) guideline value or the OU9 Background concentrations.

Inorganics

The inorganic concentrations in soil that were measured above the baseline for this investigation are shown in Table A.16. Only eight analytes, aluminum, cobalt, copper, iron, lead, magnesium, potassium, and sodium, were detected in the Main Hill Seeps soils at concentrations above the available baseline. Bismuth was also detected, but no baseline values are available for comparison. Copper, iron, lead were significantly greater than baseline at location 605. This result should be further investigated.

Pesticides/PCBs

The pesticide/PCB concentrations in soil that were measured above the baseline for this investigation are shown in Table A.17. No pesticides/PCBs were detected in the Main Hill Seeps soils at concentrations above the available baseline. Pesticides alpha-chlordane, endrin ketone, and gamma-chlordane were also detected, but no baseline values are available for comparison.

VOCs

No VOC concentrations in the Main Hill Seep soil were measured above the baseline for this investigation.

Table A.15. Radionuclide Concentrations Above Baseline Values in Main Hill Seep Soil Samples

	Concentration (pCi/g)			
	Seep Location			
Parameter	**605**	**607**	**608**	**Baseline [1]**
Cesium-137	0.52	0.51 0.45	---	0.44
Potassium-40	---	---	**44** 39[2]	37

--- Concentration not above baseline value
Bold Maximum concentration detected
pCi/g picocuries per gram
[1] Greatest of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994a) or OU9 Background Study (DOE 1994b).
[2] Reading was obtained at a location 10 feet away from actual seep location.

Table A.16. Inorganic Concentrations Above Baseline Values in Main Hill Seep Soil Samples

	Concentration (mg/kg)							
	Seep Location							
Parameter	**601**	**602**	**603**	**605**	**606**	**607**	**608**	**Baseline [1]**
Aluminum	---	20700	---	---	---	---	---	19000
Beryllium	---	---	---	---	---	---	---	1.3
Bismuth	52 49[2] 44[3]	51 52[2] 47[3]	59 49[2] 52[3]	51 **166[2]** 108[3]	49 51[2] 51[3]	41 29[2] 33[3]	35 58[2] 58[3]	NA
Cobalt	---	19[2]	---	**21**	---	---	**21**	19
Copper	34[3]	27 29[3]	---	**56** 36[2] 45[3]	---	---	35 31[2] 31[3]	26
Iron	---	38800	---	77800 72000[2] **148000[3]**	35700[2] 38000[3]	---	40400	35000
Lead	---	---	---	1100	---	---	---	48
Magnesium	**53500[2]**	---	---	50300[2] 46000[3]	---	---	---	4000
Potassium	**3760** 2850[3]	3750 3420[2] 2650[3]	---	2200	3090 2835[2] 3480[3]	2200 1950[3]	3750 3000[2] 2790[3]	1900
Sodium	---	750 710[2] 950[3]	2240 **2670[2]** 1420[3]	820	898[2]	660[2] 1400[3]	---	240

--- Concentration not above baseline value
Bold Maximum concentration detected
NA Not available
mg/kg milligrams per kilogram
[1] Greatest of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994a) or OU9 Background Study (DOE 1994b).
[2] Reading was obtained at a location 10 feet away from actual seep location.
[3] Reading was obtained at a location 20 feet away from actual seep location.

Table A.17. Pesticide/PCB Concentrations Above Baseline Values in Main Hill Seep Soil Samples

	Concentration (µg/kg)			
	Seep Location			
Parameter	**601**	**603**	**608**	**Baseline** [1]
Alpha-Chlordane	.86	.54 **10**[2] 1.6[3]	---	NA
Endrin Ketone	---	---	.54 **.69**[2] .61[3]	NA
Gamma-Chlordane	1.1[3]	.42 **7.4**[2] 1.3[3]	---	NA

--- Analyte not detected
Bold Maximum concentration detected
NA Not available
µg/kg micrograms per kilogram
[1] Greatest of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994a) or OU9 Background Study (DOE 1994b).
[2] Reading was obtained from a location 10 feet away from the actual seep location.
[3] Reading was obtained from a location 20 feet away from the actual seep location.

SVOCs

No SVOC concentrations in soil were measured above the baseline for the Main Hill Seep soil investigation.

Anions

The anion concentrations in soil that were measured above the baseline for the Main Hill Seeps investigation are shown in Table A.18. Only chloride and sulfate were detected above the available baseline.

Water Results

Radionuclides

The radiological concentrations detected in water samples are shown in Table A.19. Those concentrations, noted in bold type, represent detected contaminants that are above the reported guideline values, which are taken from the HAZWRAP report, commercial land use scenarios, lifetime cancer risk of 10^{-6}. Although the seep water samples are taken at the surface, and therefore are not truly groundwater samples, HAZWRAP groundwater guideline values are used as the baseline.

Radium-226, cesium-137, and cobalt-60 were not detected in the Main Hill Seeps water samples. For those radionuclides having guideline values, plutonium-238, strontium-90, tritium, uranium-234, and uranium-238 exceeded the guideline values in at least one sample. Of these, only one sample exceeds the 10^{-4} lifetime cancer risk guideline value (tritium, at location 601).

Inorganics

The inorganic concentrations in water samples for this investigation are shown in Table A.20. Cobalt, copper, mercury, and selenium were not detected in the Main Hill Seeps water samples. For those inorganics having guideline values, only beryllium exceeded the guideline value. Analytes aluminum, calcium, iron, magnesium, phosphorus, potassium, silver, sodium, and thallium, for which no baselines are available for comparison, were also detected.

Table A.18. Anion Concentrations Above Baseline Values in Main Hill Seep Soil Samples

	Concentration (mg/kg)							
	Seep Location							
Parameter	**601**	**602**	**603**	**605**	**606**	**607**	**608**	**Baseline [1]**
Chloride	225[2] 264[3]	535 114[2] 227[3]	1150 **1300**[2] 372[3]	602 224[2] 495[3]	165 637[2] 290[3]	323[2] 1020[3]	111 224[2] 235[3]	107
Sulfate	356[2] 284[3]	392 **422**[3]	322	185[3]	---	351[3]	152 248[2]	150

--- Concentration not above baseline value
Bold Maximum concentration detected
mg/kg milligrams per kilogram
1 Greatest of HAZWRAP 10^{-6} risk (commercial use) guideline (DOE 1994a) or OU9 Background Study (DOE 1994b).
2 Reading was obtained from a location 10 feet away from the actual seep location.
3 Reading was obtained from a location 20 feet away from the actual seep location.

Table A.19. Radionuclide Concentrations Above Guideline Values in Main Hill Seep Water Samples

	Concentration (pCi/L)				
Parameter	**Location 601**	**Location 602**	**Location 607**	**Location 608**	**Guideline Value***
Potassium-40	199	130	185	---	NA
Plutonium-238	**1.98**	---	1.13	---	0.73
Strontium-90	**44**	---	---	4.9	4.4
Tritium	**563,000**	16,900	66,300	16,500	3,000
Uranium-234	66	---	---	---	10
Uranium-238	6.6	---	---	---	5.7

--- Concentration not above guideline value or analyte not detected
Bold Maximum concentration detected
NA Not available
pCi/L picocurries per liter
* HAZWRAP analysis, commercial scenario, 10^{-6} lifetime cancer risk.

Table A.20. Inorganic Concentrations Above Guideline Values in Main Hill Seeps Water Samples

	Concentration (mg/kg)				
Parameter	**Location 601**	**Location 602**	**Location 607**	**Location 608**	**Guideline Value***
Aluminum	0.085	0.304	0.081	2.11	NA
Beryllium	.55	---	---	0.76	0.067
Calcium	169	34.1	231	210	NA
Iron	1.91	1.17	0.10	3.77	NA
Magnesium	43.7	7.4	79.2	77	NA
Phosphorous	---	78	---	---	NA
Potassium	3.2	2.5	10.8	7.8	NA
Silver	---	3.2	---	---	NA
Sodium	198	305	569	146	NA
Thallium	---	---	6.9	---	NA

--- Concentration not above guideline value or analyte not detected
NA Not available
mg/kg milligrams per kilogram
* HAZWRAP analysis, commercial scenario, 10^{-6} lifetime cancer risk.

Pesticides/PCBs

No pesticides or PCBs were detected in any of the Main Hill Seeps water samples.

VOCs

Although several VOCs were detected in the Main Hill Seeps water samples (Table A.21), none of them exceeded available guideline values. Analytes bromoform, chlorodibromomethane, and chloroform, for which no baseline are available for comparison, were also detected at location 602 only. No background concentrations are available for comparison.

SVOCs

None of the SVOCs detected in the Main Hill Seeps water samples exceeded the available guideline values.

Anions

Anions were detected in both onsite and offsite locations in the Main Hill Seeps water samples (Table A.22). However, no background concentrations or guideline values are available for comparison. Maximum anion concentrations occur at location 607.

Correlation Between Soil Results and Water Results

The results of the Main Hill Seeps investigation are qualitatively compared between soil and water samples for each category of analyte. No meaning correlation is possible because the baseline standards for each media are based on different assumptions regarding exposure pathways, toxicity, slope factors, etc.

Radionuclides

Radiological results from seeps soil and water sampling show no correlation. For soils, cesium-237 and potassium-40 were detected above the baseline standard. However, for water samples, concentrations of plutonium-238, strontium-90, tritium, and uranium-234 and 238 were measured above the baseline.

Table A.21. VOC Concentrations in Main Hill Seeps Water Samples

	Concentration (µg/L)	
Parameter	**Location 602**	**Guideline Value***
Bromoform	2 µg/L	NA
Chlorodibromomethane	3 µg/L	NA
Chloroform	1 µg/L	NA

NA Not available
µg/L microgram per liter
* HAZWRAP analysis, commercial scenario, 10^{-6} lifetime cancer risk.

Table A.22. Anion Concentrations in Main Hill Seep Water Samples

	Concentration (mg/L)				
Parameter	Location 601	Location 602	Location 607	Location 608	Guideline Value*
Chloride	367	226	**1070**	441	NA
Fluoride	0.17	0.17	**0.18**	---	NA
Nitrate/Nitrite	15	1.4	**6.4**	3.7	NA
Sulfate	92	79	**185**	104	NA

--- Analyte not detected
Bold Maximum concentration detected
NA Not available
mg/L milligram per liter
* HAZWRAP analysis, commercial scenario, 10^{-6} lifetime cancer risk.

Inorganics

Inorganic results from seeps soil and water sampling show no correlation. Aluminum, cobalt, copper, iron, lead, magnesium, potassium, and sodium were detected above the baseline standard for soils. However, only beryllium was measured above the baseline for water samples.

Pesticides/PCB

Pesticide/PCB results from seeps soil and water sampling were consistent in that pesticides or PCBs were not detected above the baseline standards in either media.

VOCs

VOC results from seeps soil and water sampling were consistent in that VOCs were not detected above the baseline standards in either media.

SVOCs

SVOC results from seep soil and water sampling were consistent in that SVOCs were not detected above the baseline standards in either media.

Anions

Anion results from seeps soil and water showed no correlation. For soils, chloride and sulfate were detected above the baseline standards. However, for water samples, since no baseline standard is available, no comparison is possible.

Section 1

1. INTRODUCTION

This report presents the findings from the Regional Soils Investigation (RSI) conducted as part of the OU9 Site-Wide Remedial Investigation (RI) in accordance with the Remedial Investigation/Feasibility Study OU9, Site-Wide Work Plan (DOE 1992a) for the Mound Plant. The RSI consists of three separate sampling events, the Airborne Depositional Investigation, the National Pollutant Discharge Elimination System (NPDES) Outfall 001 Soil Investigation, and the Soil and Water Sampling at the Main Hill Seeps.

The primary objectives of the RSI are to determine the regional and local extent of soil contamination from Mound Plant emissions. Specifically, this includes characterization of regional soils for aqueous and airborne deposition from historical stack emissions, and investigation of potential contamination of soils along the NPDES Outfall 001 and at bedrock seeps around the Main Hill.

Additional objectives addressed herein include:

- evaluation of the data to determine if an area of influence exists for individual analytes,
- comparison of the data to previously generated background results, and
- evaluation of the need for additional sampling/characterization of off-site surface water and sediment sampling locations.

All investigation data will eventually be compiled into a comprehensive report for all operable units (OUs) of the plant (DOE 1992a). The data generated will be used in the site-wide risk assessment to be performed in the future.

Section 2 describes the sampling program used for each of the three efforts: Airborne Depositional Investigation, NPDES Outfall 001 Soil Investigation, and Soil and Water Sampling at the Main Hill Seeps.

Section 3 summarizes the results of the sampling and provides this information in tabular form. Section 4 includes discussions on the contaminant depositional patterns and shows any areas of analyte influence. Section 5 presents the references used for this report.

The Appendices include the complete set of sample identifiers, soil descriptions at sample locations, geotechnical data, data quality assessment report, the complete set of analytical results, and a copy of regulator comments with DOE responses.

Section 2

2. RSI SAMPLING PROGRAM AND ACTIVITIES

The Remedial Investigation/Feasibility Study Operable Unit 9, Site Wide Field Sampling Plan (FSP) (DOE 1992b) describes the regional soils sampling program and procedures. This RSI includes three of the four listed soil investigations.

2.1. SAMPLING PROGRAM

The three investigations undertaken for this RSI program are:

- Airborne Depositional Investigation,
- NPDES Outfall 001 Soil Investigation, and
- Soil and Water Sampling at the Main Hill Seeps

which are fully described in Section 6 of the FSP. The fourth investigation was the Background Soil Conditions which was performed under a separate task. The following is a brief summary of each RSI investigation.

2.1.1. Airborne Depositional Investigation

Four sampling efforts were conducted which include: Aqueous Deposition, Vapor Deposition, Particulate Deposition, and Uranium/Thorium. The Aqueous Deposition effort included sampling 32 surface and subsurface soil locations (fenceline and fenceline plus 1,000 feet). The samples were analyzed for the following contaminants:

Volatile Organic Compounds (VOCs)
Semi-Volatile Compounds (SVOCs)
Target Compound List (TCL) pesticides/polychlorinated biphenyls (PCBs)
Target Analyte List (TAL) inorganics
Bismuth
Fluoride
Strontium-90
Gamma Spectrometry

Nitrate/nitrite

Chloride

Sulfate

U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) explosives (20% of locations)

The Vapor Deposition effort included sampling 206 surface and subsurface soil locations and analyzing the samples for tritium contamination.

The Particulate Deposition effort included sampling 252 surface and subsurface soil locations and analyzing the samples for isotopic plutonium (238 and 239/240).

The Uranium/Thorium effort included sampling 77 surface soil locations and analyzing the samples for isotopic uranium (234/235 and 238) and isotopic thorium (228, 230, and 232).

The soil type was categorized for each sample location using U.S. Geological Survey (USGS) descriptions. This information can be found in Appendix B.

2.1.2. NPDES Outfall 001 Soil Investigation

This effort consisted of installing eight boreholes along the pipeline running from Mound to the Great Miami River. Both geotechnical and chemical analyses were performed on the soil samples. The samples were analyzed for the following parameters:

VOCs

SVOCs

TAL inorganics

Bismuth

Fluoride

TCL pesticides/PCBs

Isotopic plutonium

Isotopic thorium

Isotopic uranium

Strontium-90

Gamma Spectrometry

Nitrate/nitrite

Chloride

Sulfate

USATHAMA explosives (20% of locations)

2.1.3. Soil and Water Sampling at the Main Hill Seeps

This effort included soil and water sampling of the active seeps, and additional soil sampling downstream of each seep. Surface and multiple depth subsurface soil samples were analyzed for the same parameters list as the NPDES Outfall effort. The following are additional analytes that were required for the seep water analysis:

TAL inorganics (dissolved)

Isotopic plutonium, thorium, uranium (dissolved)

Radium-226

Americium-241

Strontium-90 (dissolved)

In addition, the following field measurements were also required for seep water:

Temperature

Hydrogen Ion Content (pH)

Specific conductivity

Dissolved oxygen

Redox potential

Flow rate

The actual work conducted was performed according to the Standard Operating Procedures (SOPs) from the OU9 Quality Assurance Project Plan (QAPjP) (DOE 1992c). The SOPs used for this investigation were: 1.1, 1.3, 1.4, 1.5, 1.6, 1.8, 1.15, 2.2, 2.8, 2.9, 4.1, 5.1, 5.2, 5.3, 5.4, 5.8, 6.1, 6.2, and 6.3. These SOPs are described in detail in the QAPjP.

2.2. SAMPLE DESIGNATIONS

A six digit identifier was assigned to each sample collected to accommodate the EPA Contract Laboratory Program (CLP) reporting requirements. For tracking the samples collected for the RSI, an identifying label was attached to each sample. Table II.1 indicates characters used to create this six digit identifier. Figure 2.1 shows sample collection methodology.

The Mound Plant ER program has an existing sample numbering scheme for all samples collected for the ER program. The Mound sample identification (ID) system consists of a ten digit sample identifier as explained in the FSP. This system contains too many characters for the CLP laboratories to report the results in their data base. Because of this fact, a sample numbering system was developed for this project which contained only six characters.

For example, RGD311, was a sample ID used for this investigation. The first character, R, represents the regional soil (Airborne Depositional Investigation) sampling event. The second character, G, shows the sample was collected at a distance of 3000 feet from the Mound Plant locus and the third character, D, represents the ENE compass direction. The number 3 indicates that this sample is a soil sample. The number 1 indicates that this is a duplicate sample. The final digit, number 1, represents the number of the order of the sample taken at this location. Therefore, RGD311 is a soil sample taken 3000' to the ENE of the plant locus and is a duplicate of the first sample taken at this location.

A cross reference table to show the original ten digit Mound identifier, the six digit identifier used, and a brief location description can be found in Appendix A.

2.3. SAMPLING ACTIVITIES

During the RSI, a total of 252 locations were sampled. The sections below describe the individual sampling events. Changes or deviations from the FSP are described in their appropriate section.

2.3.1. Airborne Depositional Investigation

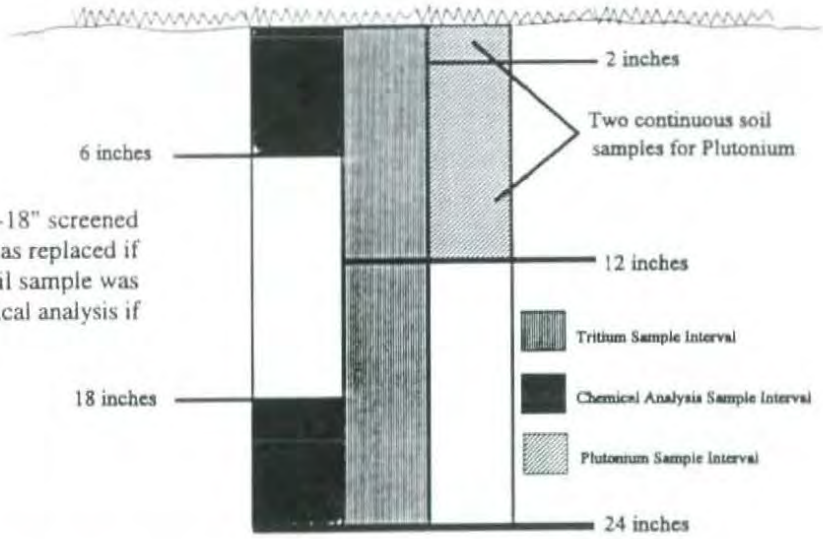
The Airborne Depositional Investigation consisted of sampling the fenceline, fenceline +1000', and the 1,500 to 100,000 feet distances from the plant locus. These distances are located on 16 radial lines

Table II.1. Project Sample Designations Key

Investigation	First	Second	Third	Fourth	Fifth	Sixth
Airborne Deposition Investigation	R	A-Fence Line B-Fence Line + 500' C-Fence Line + 1000' D-1500' E-2000' F-2500' G-3000' H-3500' J-4000' K-4500' M-5000' N-6000' P-7000' R-8000' S-9000' T-10000' U-25000' V-50000' X-75000' Y-100000'	A-N J-S B-NNE K-SSW C-NE M-SW D-ENE N-WSW E-E P-W F-ESE R-WNW G-SE S-NW H-SSE T-NNW	1-Water 3-Soil	0-Original 1-Duplicate	1 thru 9 Sample Order
Soil and Water Sampling at the Main Hill Seeps	S	1-Seep 601 2-Seep 602 3-Seep 603 4-Seep 604 5-Seep 605 6-Seep 606 7-Seep 607 8-Seep 608	1-0' from Seep 2-10' from Seep 3-20' from Seep			
NPDES Outfall 001 Soil Investigation	N	The Second and Third characters are joined together and show the sample location along the NPDES outfall line. 01-Near Manhole 1 02-Near Manhole 2 03-Near Manhole 3 04-Near Manhole 4 05-Near Manhole 5 06-Near Manhole 6 07-Between Manholes 7 and 8 08-Between Manholes 8 and 9				
QA Samples Airborne Deposition Investigation	R	Z-QA Sample	A-Rinsate B-Trip Blank C-Field Ambient Blank D-Sample Bank Blank	001-999 Sample Order		
NPDES Outfall 001 Soil Investigation	N	The Second and Third characters are joined together. 92-Trip Blank 93-Field Ambient Blank 94-Rinsate 97-Sample Bank Blank				
Soil and Water Sampling at the Main Hill Seeps	S					

One, 2-foot deep, 3-inch diameter soil boring was completed to collect the samples at a given location. If necessary, a second boring was completed to attain enough sample volume. Packaged top soil or soil from the surrounding area was added as needed to replace soil removed.

The sod plug was removed prior to sampling to be replaced later. The top soil was removed if necessary to get below the root zone.



Sample Interval 6-18" screened with a HNu, soil was replaced if non-detect, or a soil sample was collected for chemical analysis if there was a hit.

Excess soil from a sample interval was placed in a stainless steel bowl to be composited with soil for the next sample within that interval. As an example, the excess soil from the chemical analysis samples were placed in a stainless steel bowl to be used in the collection of the tritium sample to ensure that there was enough sample volume.

Samples were analyzed for a variety of chemicals depending on the distance from the Mound Plant.

Near the plant:	Organic chemicals, pesticides/PCB's, metals, radionuclides including tritium, thorium, uranium, and plutonium.
Further from the plant:	Plutonium at all locations, tritium, uranium, and thorium at some locations.

Figure 2.1. Sample Collection Methodology

travelling out from a central point on the Mound Plant Site (see Figures 2.2, 2.3, and 2.4). Each figure also shows the sample location descriptor. An explanation of these descriptions can be found in Table II.1. Sampling was conducted according to the FSP, except for the changes noted below.

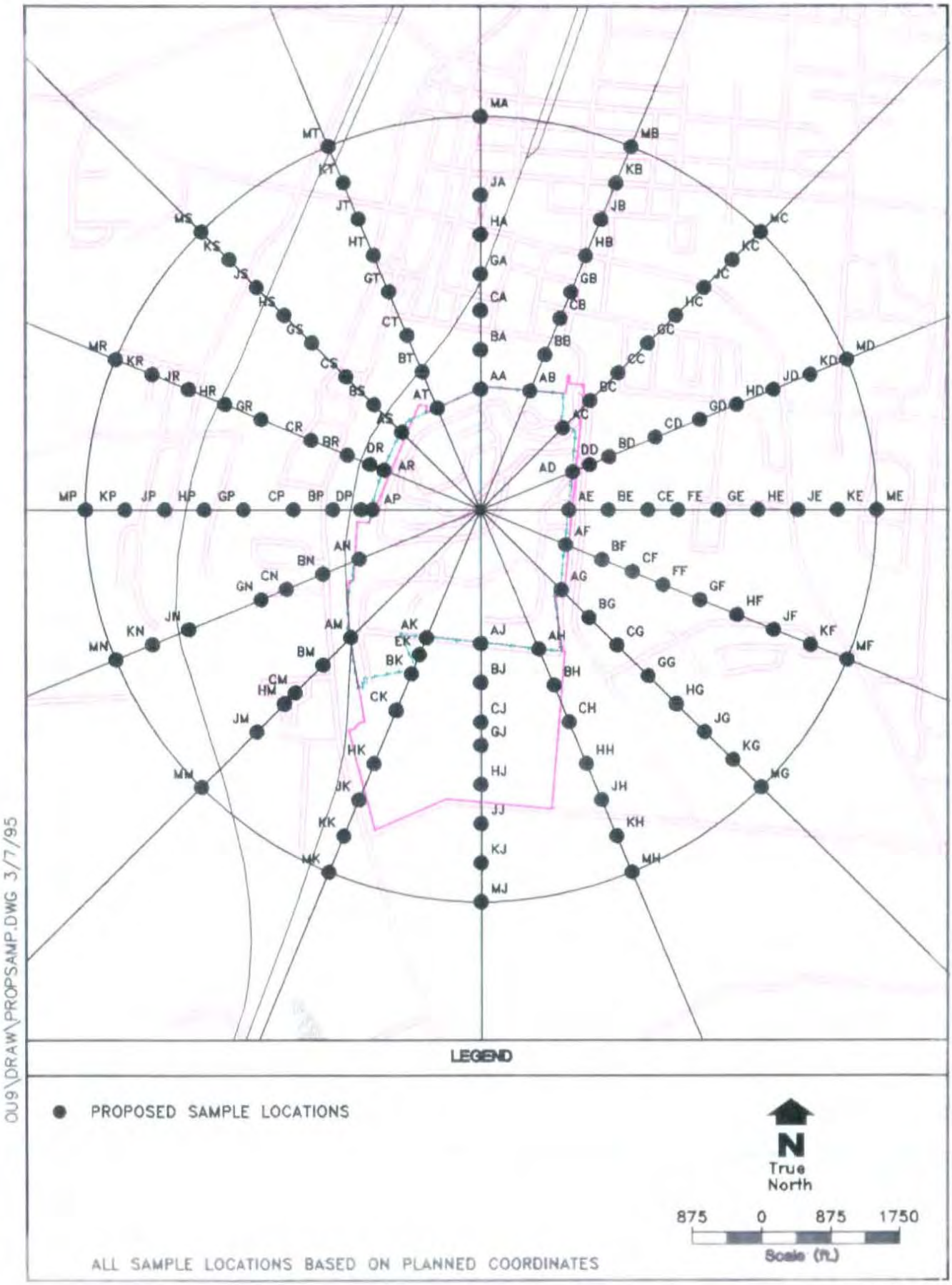
The FSP presented the possible sample locations as being measured from the Mound Plant security fence or a plant locus between the two smoke stacks from the Main Hill and the Special Metallurgical/Plutonium Processing (SM/PP) Hill. For this effort, the sample locations were determined to be from the Mound Plant locus and only those locations found outside the security fence were sampled. Because of this, some sample locations were sufficiently close together that they could be combined with other locations. Therefore, several FSP assigned numbers were not used. Table II.2 presents the sample locations which were combined and lists the FSP assigned numbers that were not used because of these combinations.

Before sampling began for the RSI, an attempt was made to gain access to all the sampling locations by obtaining signed access agreements from the property owners. A few locations had to be relocated or completely abandoned because of a failure to obtain a signed agreement. Table II.2 presents the locations which were changed or abandoned.

The change in the sample location identifiers affected four sample locations for uranium and thorium analyses. Twenty percent of the locations from 1000 feet to 100,000 feet were randomly selected to be sampled for uranium and thorium. Table VI.7b, from the FSP (DOE 1992b) lists the proposed sample locations. Some of the randomly selected locations fell within the plant fenceline. These were relocated to offsite locations to maintain the twenty percent sampling strategy. The next sample location outside the security fence on the planned directional vector was selected as the new sample location for uranium and thorium. Only four sample locations had to be changed. The planned locations and the modified locations for the four samples are reflected in Table II.3.

2.3.2. NPDES Outfall 001 Soil Investigation

The leak assessment of the NPDES pipeline consisted of soil core sampling along the pipeline between manholes #1 and #9. Sampling took place on and off Mound Plant property. The soil samples were analyzed for the full suite of analytes listed in Section 2.1.2, plus geotechnical parameters. Figure 2.5 presents a map of the sampling locations. Table II.1 shows the description used for each sample location.



LEGEND

● PROPOSED SAMPLE LOCATIONS

N
True North

875 0 875 1750
Scale (ft.)

ALL SAMPLE LOCATIONS BASED ON PLANNED COORDINATES

OU9\DRAW\PROPSAMP.DWG 3/7/95

Figure 2.2. Fenceline to 5,000' Proposed Sample Location Map

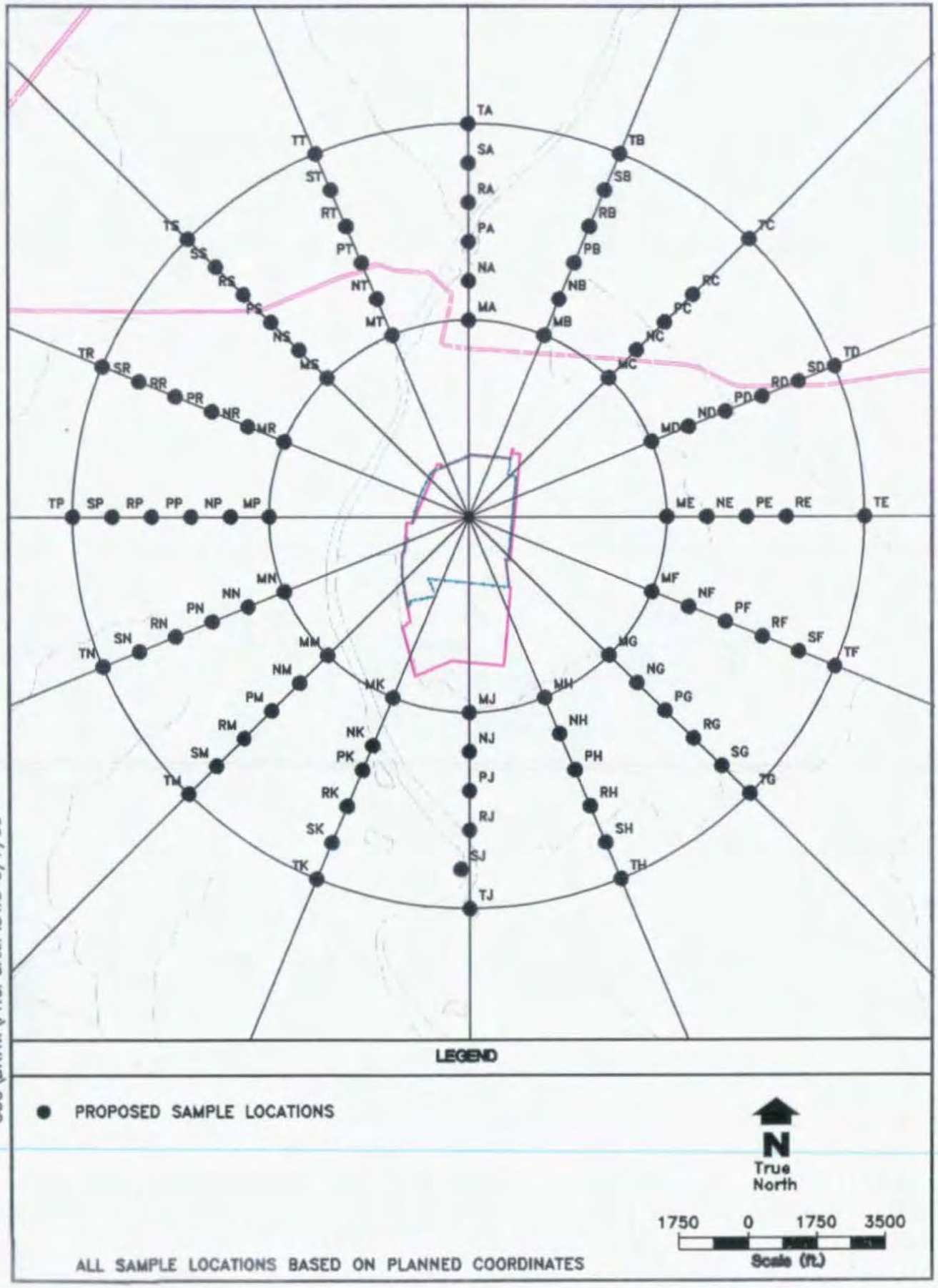
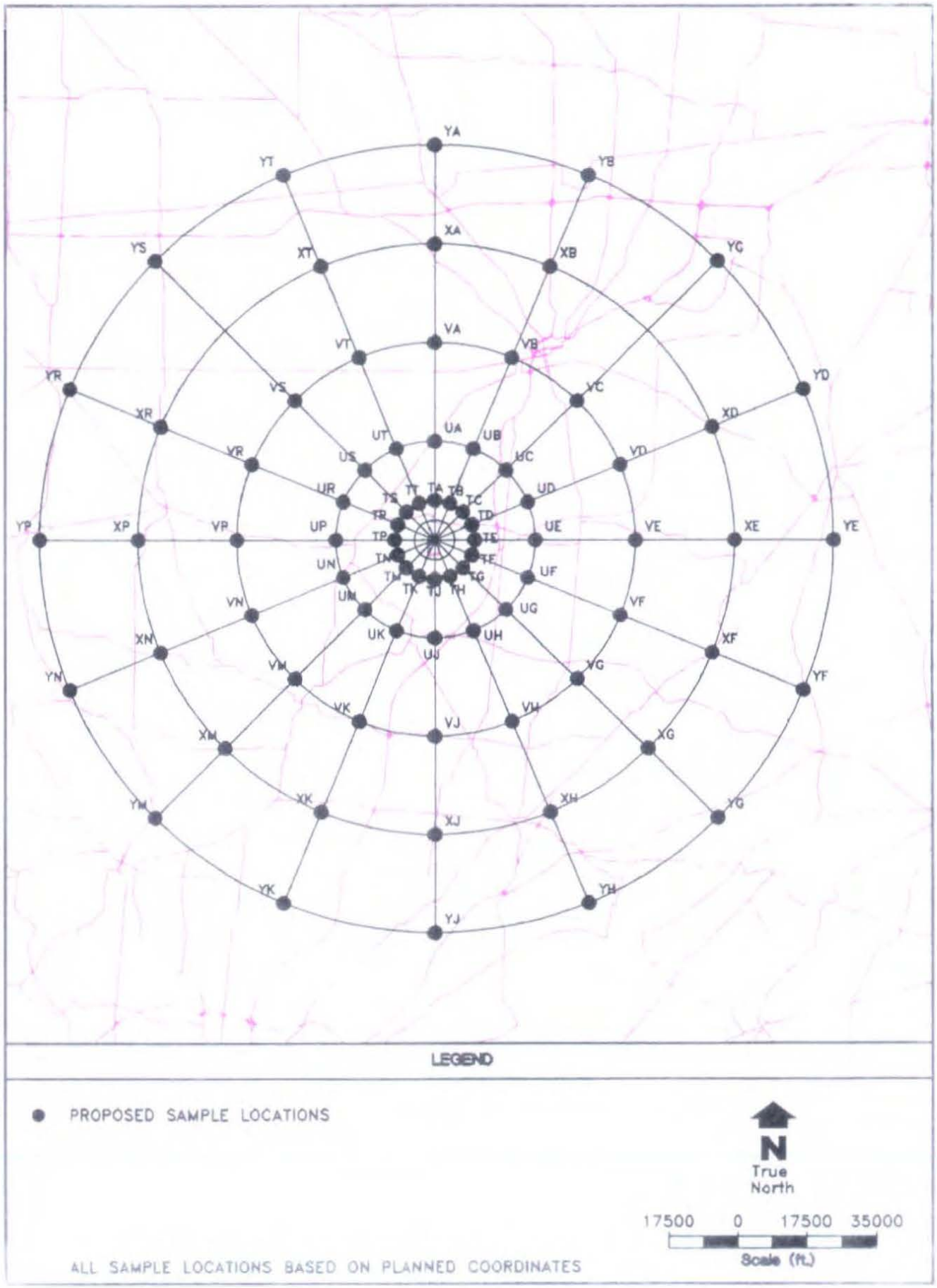


Figure 2.3. 5,000' to 10,000' Proposed Sample Location Map



LEGEND

● PROPOSED SAMPLE LOCATIONS

N
True North

17500 0 17500 35000
Scale (ft.)

ALL SAMPLE LOCATIONS BASED ON PLANNED COORDINATES

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Figure 2.4. 10,000' to 100,000' Proposed Sample Location Map

Table II.2. FSP Assigned Sample Numbers Not Used
Page 1 of 2

Sample Location Identifier	Direction	Distance[a] (feet)	Reason Location Not Used
RDA	N	1500	Combined with fence line sample RAA
REA	N	2000	Combined with fence line +500 sample RBA
RFA	N	2500	Combined with fence line +1000 sample RCA
RKA	N	4500	Unable to obtain access agreement
RDB	NNE	1500	Inside security fence
REB	NNE	2000	Combined with fence line +500 sample RBB
RFB	NNE	2500	Combined with fence line +1000 sample RCB
RDC	NE	1500	Combined with fence line sample RAC
REC	NE	2000	Combined with fence line +500 sample RBC
RFC	NE	2500	Combined with fence line +1000 sample RCC
RSC	NE	9000	Unable to obtain access agreement
RXC	NE	75000	Unable to obtain access agreement
RED	ENE	2000	Combined with fence line +500 sample RBD
RFD	ENE	2500	Combined with fence line +1000 sample RCD
RDE	E	1500	Combined with fence line +500 sample RBE
REE	E	2000	Combined with fence line +1000 sample RCE
RSE	E	9000	Unable to obtain access agreement
RDF	ESE	1500	Combined with fence line +500 sample RBF
REF	ESE	2000	Combined with fence line +1000 sample RCF
RDG	SE	1500	Combined with fence line sample RAG
REG	SE	2000	Combined with fence line +500 sample RBG
RFG	SE	2500	Combined with fence line +1000 sample RCG
RDH	SSE	1500	Inside security fence
REH	SSE	2000	Combined with fence line sample RAH
RFH	SSE	2500	Combined with fence line +500 sample RBH
RGH	SSE	3000	Combined with fence line +1000 sample RCH
RDJ	S	1500	Inside security fence
REJ	S	2000	Combined with fence line +500 sample RBJ

Table II.2. FSP Assigned Sample Numbers Not Used
Page 2 of 2

Sample Location Identifier	Direction	Distance[a] (feet)	Reason Location Not Used
RFJ	S	2500	Combined with fence line +1000 sample RCJ
RDK	SSW	1500	Inside security fence
RFK	SSW	2500	Combined with fence line +500 sample RBK
RGK	SSW	3000	Combined with fence line +1000 sample RCK
RDM	SW	1500	Inside security fence
REM	SW	2000	Inside security fence
RFM	SW	2500	Combined with fence line +500 sample RBM
RGM	SW	3000	Combined with fence line +1000 sample RCM
RKM	SW	4500	Unable to obtain access agreement
RDN	WSW	1500	Inside security fence
REN	WSW	2000	Combined with fence line +500 sample RBN
RFN	WSW	2500	Combined with fence line +1000 sample RCN
RHN	WSW	3500	Sample Point located in the Great Miami River
REP	W	2000	Combined with fence line +500 sample RBP
RFP	W	2500	Combined with fence line +1000 sample RCP
RER	WNW	2000	Combined with fence line +500 sample RBR
RFR	WNW	2500	Combined with fence line +1000 sample RCR
RDS	NW	1500	Combined with fence line sample RAS
RES	NW	2000	Combined with fence line +500 sample RBS
RFS	NW	2500	Combined with fence line +1000 sample RCS
RXS	NW	75000	Unable to obtain access agreement
RDT	NNW	1500	Combined with fence line sample RAT
RET	NNW	2000	Combined with fence line +500 sample RBS
RFT	NNW	2500	Combined with fence line +1000 sample RCT

a Distance is measured from the Mound Plant locus

Table II.3. Modified Sample Locations

Directional Vector	Planned Sample Location Ring (feet)	Final Sample Location Ring (feet)
NE	2,000	3,000
ESE	2,000	2,500
SSE	2,000	3,500
WSW	2,000	3,000

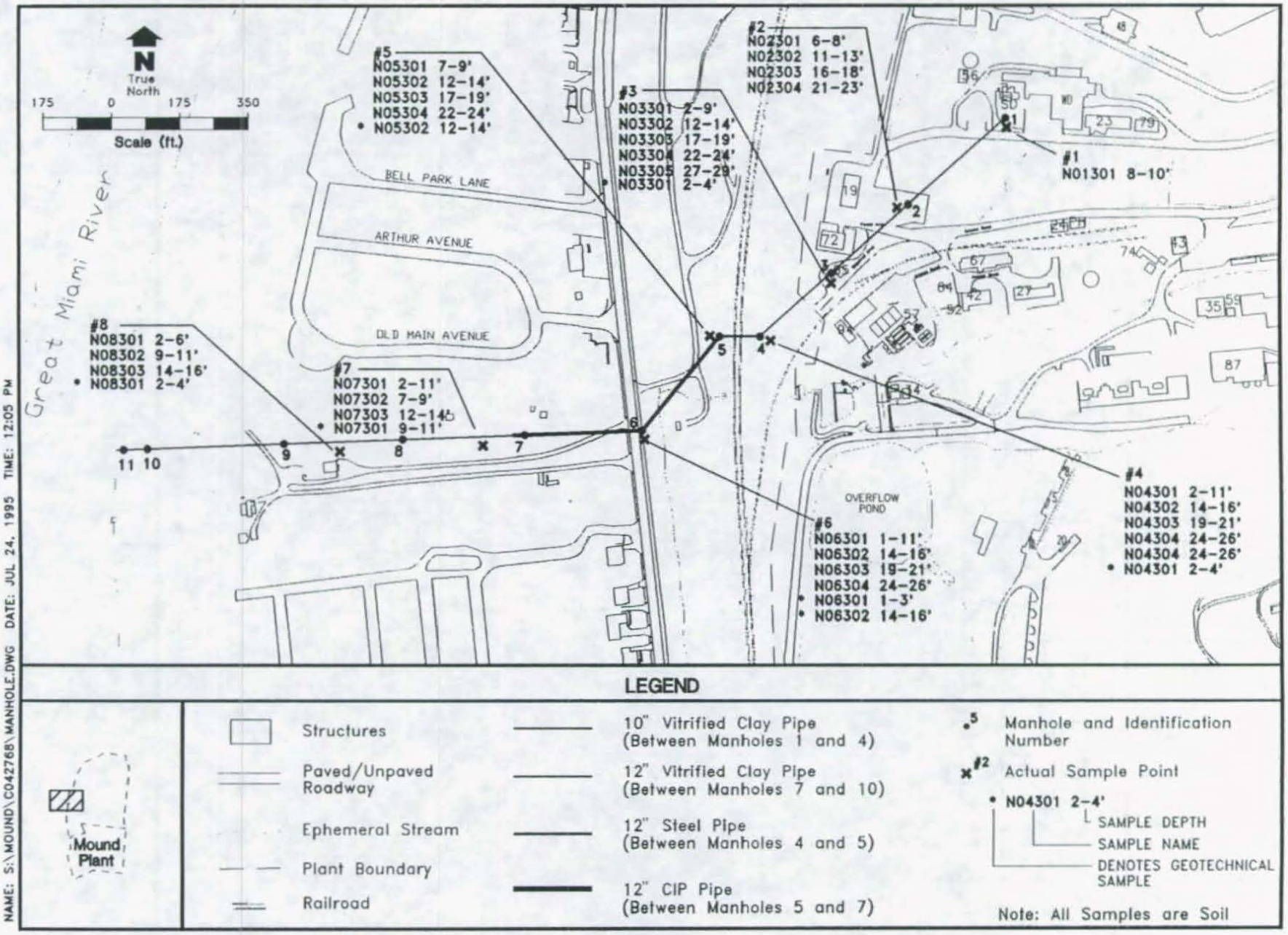


Figure 2.5. NPDES Sample Locations

Sampling was conducted in accordance with the OU9 FSP, with the following exceptions. The FSP indicated that six sampling locations with the possibility of a seventh, located near manhole #4, would be investigated. The FSP also indicated that the exact locations will be determined in the field. Eight sampling locations were identified and samples taken from all eight locations. Sampling locations were near manholes #1, #2, #3, #4, #5, and #6, as well as between #7 and #8 and between #8 and #9. The additional location was sampled to insure all pipe size change areas would be assessed for leakage.

The FSP indicated that a minimum of two samples per stratigraphic unit (excluding bedrock) should be obtained for geotechnical analysis. Geotechnical samples were collected from five of the borings. Three strata types were discernable: a silt and clay layer, a sand and gravel layer, and bedrock. Due to the physical properties of the sand and gravel layer, only one geotechnical sample was obtained for analysis. Four samples of the silt and clay layer were also collected.

2.3.3. Soil and Water Sampling at the Main Hill Seeps

The Main Hill Seep assessment consisted of sampling the soil (surface and subsurface) at and near the seeps, and sampling the water discharged at the surface. At a minimum, three surface soil samples were taken: at all selected locations, at approximately 10 feet downgradient from each selected location, and at approximately 20 feet downgradient from each selected location. Additional soil samples taken at a depth of two feet were taken at four of the selected locations. Surface water samples were also taken at four of the selected locations. Water samples could not be taken at locations 603, 605, and 606 because the flow was insufficient. Sampling took place on and off the Mound Plant property. Figure 2.6 presents the Main Hill Seep Sample Locations. Table II.1 describes the sample location descriptors used.

Sampling was conducted in accordance with the FSP, with one exception. The FSP indicated that eight sampling locations (601, 602, 603, 604, 605, 606, 607, 608) should be sampled. Upon inspection of the seeps, only seven seeps were identified. One seep was found near the historically represented locations of seeps 604 and 605. Due to the relatively short distance between seeps 604 and 605 on the historical map (Figure 2.6), the field crew arbitrarily identified this "combined" seep as 605.

The soil and water samples were analyzed for the full suite of analytes listed in Section 2.1.3. plus geotechnical parameters as described above.

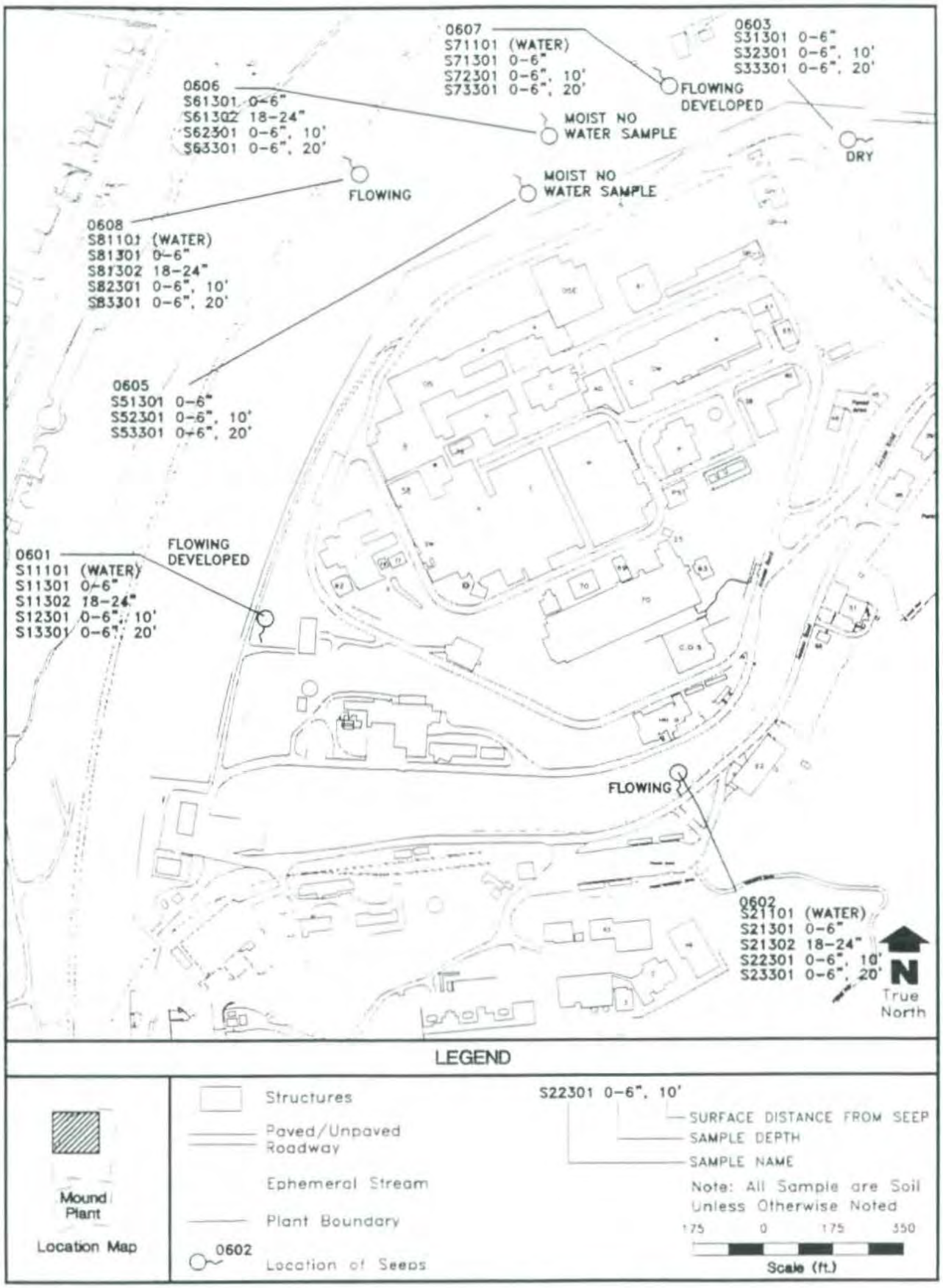


Figure 2.6. Main Hill Seep Sample Locations

2.4. GEOTECHNICAL SAMPLING METHODS

2.4.1. Geotechnical Sampling at Main Hill Seeps

One soil sample was obtained from each of the seven seep locations for geotechnical and mineralogical analyses. The samples were collected from a depth of 0 to 6 inches below ground surface, except at seeps 605 and 607. In both of these two cases, bedrock was encountered at a depth of 5 inches. Sampling sites were located as near to the seep as practical yet outside the main seepage pathway in order to avoid highly saturated samples. After locating a sampling site representative of the area around a particular seep and clearing away the surface debris, the geotechnical sample was collected using a stainless steel spoon according to Mound Plant ER Program SOP 5.2 *Soil Sampling with a Spade and Scoop*. Excavated soil was temporarily placed into a stainless steel bowl and the entire geotechnical sample was then transferred to two polyethylene containers, one 2-liter and one 4-liter.

2.4.2. Geotechnical Sampling Along NPDES Pipeline

A total of eight soil borings were drilled along the NPDES pipeline and geotechnical samples were obtained from six of the borings. Each borehole was advanced using a Mobile B-63 rotary drill rig with 4 1/4 inch inner diameter (I.D.) hollow-stem augers. Soil samples were acquired by driving a standard 3-inch outer diameter (O.D.) split-spoon sampler through and ahead of the augers in accordance with American Society for Testing and Materials (ASTM) standard method D1586-84 and SOP 5.1. *Soil and Rock Borehole Logging and Sampling*. Upon retrieval, the soil sampler was opened and the amount of sample recovery was recorded. The sample was immediately screened with a Field Instrument for the Detection of Low Energy Radiation (FIDLER) and an organic vapor detector by the site geologist. Approximately 300 grams of soil from each sampled interval was reserved for plutonium and thorium analyses by the Mound Plant Soil Screening facility. The remaining sample was sealed in one 2-liter and one 4-liter polyethylene container. Due to the sample volume requirement and the difficulties encountered in obtaining coarse grained samples, it was necessary to drive several split-spoons at each NPDES location in order to collect a sufficient volume of soil for analysis. In general, two boreholes were drilled at each NPDES location to obtain the required sample volume. Where multiple borings were drilled at one NPDES sampling location, the borings were located within five feet of each other.

The primary objective of the geotechnical sampling was to obtain one representative sample from each stratigraphic horizon encountered in a boring. Since geochemical sampling had higher priority and the volume requirement for both geochemical and geotechnical samples could not be achieved, the alternate objective was to collect at least two samples from each stratigraphic unit from the entire suite of boreholes. This second objective was met by obtaining seven geotechnical samples from six of the boreholes installed along the NPDES pipeline. Two samples were obtained from boring location N06 (adjacent to NPDES manhole #6).

In general, three distinct stratigraphic horizons were discernable in the borings: (1) a surficial silt and/or clay layer, (2) a sand and gravel layer, and (3) bedrock. As the surficial silt and clay layer varied in both composition and thickness over the length of the pipeline, five geotechnical samples from this stratigraphic unit were collected. Four of these samples (N03301, N04301, N06301, and N08301) were obtained within five feet of the surface. The fifth sample (N06302) was obtained from a depth of 12 - 14 feet below ground level at boring N06 where this upper stratigraphic layer was particularly thick. Two geotechnical samples of the intermediate level sand and gravel layer were collected. Although an attempt was made in each boring location to acquire a geotechnical sample from this intermediate layer, the presence of cobbles and boulders led to poor sample recovery. Sufficient sample volume for geotechnical analyses could only be obtained from borings N05 and N07. However, in each boring where this layer was encountered, the physical character and composition exhibited in the geochemical samples appeared similar. Bedrock was encountered in only two of the borings, N01 and N02. Due to the methods employed for collecting soil samples, no significant sample of the bedrock stratigraphic horizon was obtained. The sample recovery was only sufficient to identify that the shale and limestone bedrock had indeed been penetrated.

2.5. QUALITY ASSURANCE SURVEILLANCE AUDIT

An internal quality assurance (QA) surveillance of the work was conducted for the RSI project on May 11, 1994. The surveillance consisted of observing work practices and reviewing documentation and records generated from the sampling events. Any problems or deficiencies were reported with a non-conformance report. The Non-Conformance Report reported the deficiency, the person reporting the deficiency, and the responsible party. The responsible party listed their reason for the problem and corrective measures taken to prevent this problem from occurring again. The deficiencies found during this surveillance did not affect the data quality objectives.

2.6. HEALTH AND SAFETY AUDIT

The Health and Safety Officer conducted an initial audit of the work area and required documentation prior to starting the field work. The field team read the health and safety plans and signed the training sheets. All necessary training and medical surveillance requirements were completed prior to starting the field work. Necessary information such as emergency phone numbers and maps to nearby medical facilities were hung in conspicuous locations and taken with the sampling teams into the field. A spill kit was available at the office trailer to contain spills of chemicals used for equipment decontamination activities. All monitoring equipment was calibrated by the factory prior to field sampling activities. A calibration check was performed daily on all monitoring equipment. All soil samples were screened using the appropriate monitoring equipment. All samples collected on Mound Plant property or during the sampling of the NPDES Outfall were screened by the Mound Plant Soil Screening facility before being shipped to the offsite laboratory for further analysis. The Health and Safety Officer also performed a surveillance of the teams performing the sampling activities to insure that safe work practices were being used. No health and safety problems occurred during the field activities.

Section 3

3. DEPOSITION PATTERNS

To meet the objectives of this RSI program, the data has been evaluated in an attempt to determine if and where any areas of influence can be found. An area of influence due to airborne deposition of contaminants, based on the sampling scheme presented herein, is defined by two methods. The primary method is to define a local area of influence where a group (generally more than three) of sample locations have concentrations higher than the surrounding sample locations. The comparison of the data to background concentrations is also considered in the identification of areas. The secondary method is to establish a regional area of influence by determining if there is a pattern of deposition versus distance from the site by looking at the mean concentrations of the sampling rings versus distance from the site. This method was done only for radionuclides, which were sampled out to a distance of about 100,000 feet from Mound.

3.1. RADIONUCLIDES

Of the radionuclides reported, plutonium-238, uranium-235, and uranium-238 had no indication of local or regional areas of influence. Plutonium had wide spread locations where contamination was found. The locations were not grouped in patterns or areas of influence, however. Several other radionuclides were found within 5,000 feet of Mound, again with no discernable pattern.

3.2. NON-RADIONUCLIDES

Of the organic and inorganic compounds detected, no patterns were present and no definable areas of influence exist. This could be due to the limited area that was sampled. Sixteen fenceline locations and sixteen fenceline + 1000' locations were included in this database.

3.3. RADIONUCLIDE CONCENTRATION VERSUS DISTANCE FROM PLANT LOCUS

Radionuclide concentrations observed for individual rings are plotted against distance from the site, using all detectable values and 1/2 of the non-detect values for each sample location. The inner rings (1,500, 2,000, 2,500 and 3,000 feet) were supplemented with the best fit locations from the fenceline, fenceline + 500 feet, and fenceline + 1000 feet sample locations to increase the data points (statistical population) at these distances.

These graphical results are presented in Figures 3.1 to 3.9. The presentations show both the predetermined background values (DOE 1994b) and "95-95 upper tolerance limits" --i.e., 95% upper confidence limits on the 95th percentiles are calculated using the RSI data sets. For the sample sizes involved, the nonparametric upper tolerance limits are equal to the maximum values. The fact that some of the limits lie beyond the maximum value (i.e., Th-228) is the result of sample population size, shape of distribution, and the standard deviation of the values. Both the "fenceline to" 5,000 feet and the greater than 5,000 feet data set values are shown. In preparing these figures, the concentration scale (y-axis) is adjusted based on the data to simplify interpretation of the graphs. The x-axis is plotted as a log scale for plutonium and tritium, with sample distances ranging from 1,500 to 100,000 feet. For thorium and uranium the x-axis is plotted as a linear scale with distances ranging from 1,500 to 10,000 feet. The "95 - 95 upper tolerance limit" value is shown on each chart for the greater than 5,000 feet locations data set. The plots of each radionuclide are formatted to conform with the background determinations (DOE 1994b). That is, Th-228, Th-232, U-234, and U-238 are treated as being normally distributed; Pu-238, Pu-239/240, Tritium, and U-235 as being lognormal; and Th-230 background values are derived nonparametrically.

Median concentrations of Pu-238 show a downward trend which approaches a fairly steady level from 3,000 feet and beyond. To quantify this observed effect somewhat, the data were partitioned into two subsets: values at distances to 5,000 feet (this data set allows a direct comparison to the background data set previously obtained [DOE 1994b]) versus those at distances greater than 5,000 feet. A comparison of mean concentrations between these two groups shows a reduction in the mean concentrations from 1.23 pCi/g to 0.47 pCi/g.

Figure 3.6 presents the results for tritium. One extreme value at 1,500 feet dominates this chart. The median concentrations indicate a fairly steady level throughout the entire sampling range. The occurrence of higher values is generally restricted to intermediate sampling distances, namely the 3,500, 4,000, and 5,000 feet rings. Partitioning the tritium data into two groups (less than 5,000 feet versus all greater than 5,000 feet) yields a comparison of means for these two groups in which the difference is significant.

The plots for the various isotopes of thorium (except Th-230) and uranium show no significant relationships between concentration level and distance from the plant.

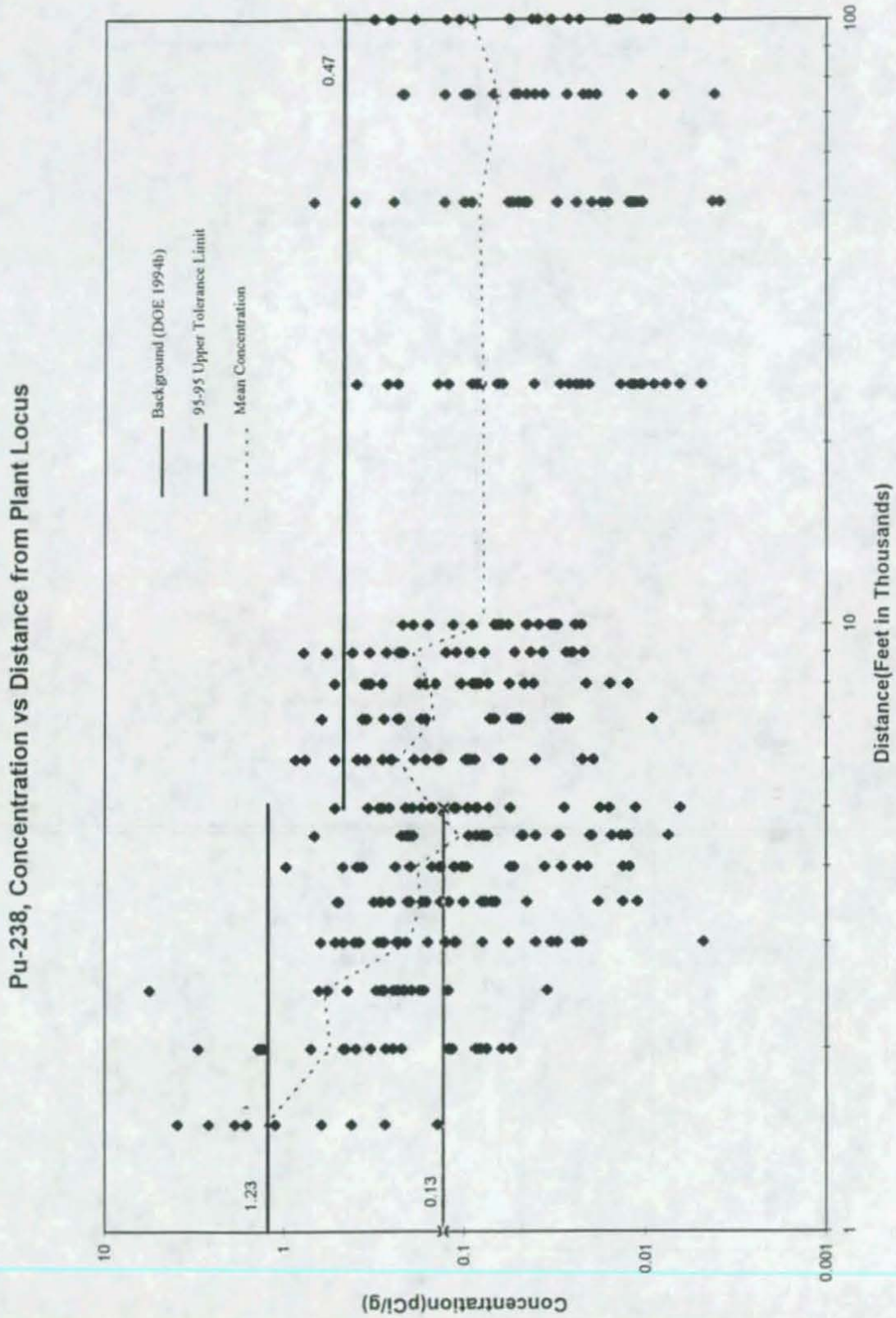


Figure 3.1. Pu-238, Concentration vs. Distance from Plant Locus

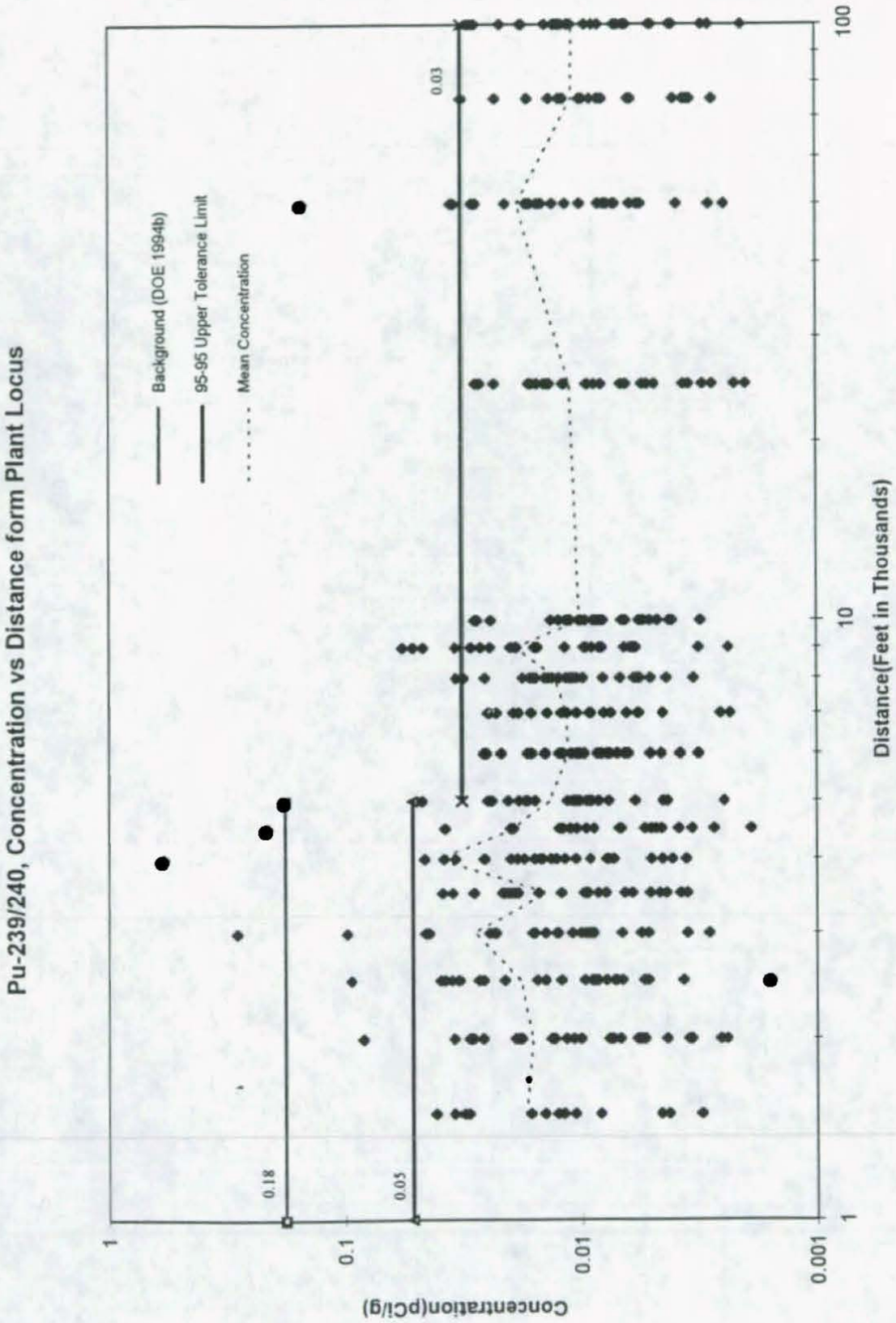


Figure 3.2. Pu-239/240, Concentration vs. Distance from Plant Locus

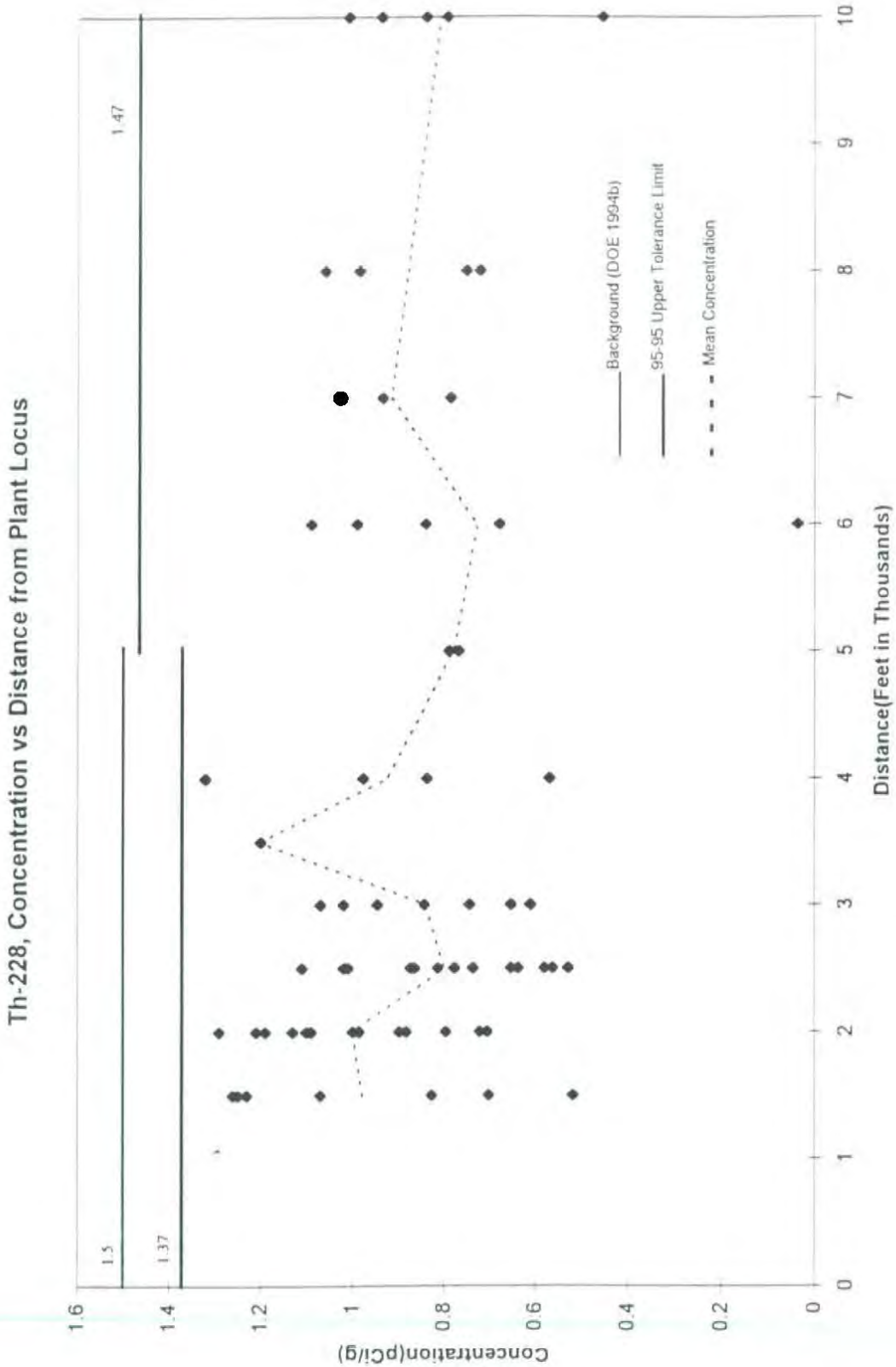


Figure 3.3. Th-228, Concentration vs. Distance from Plant Locus

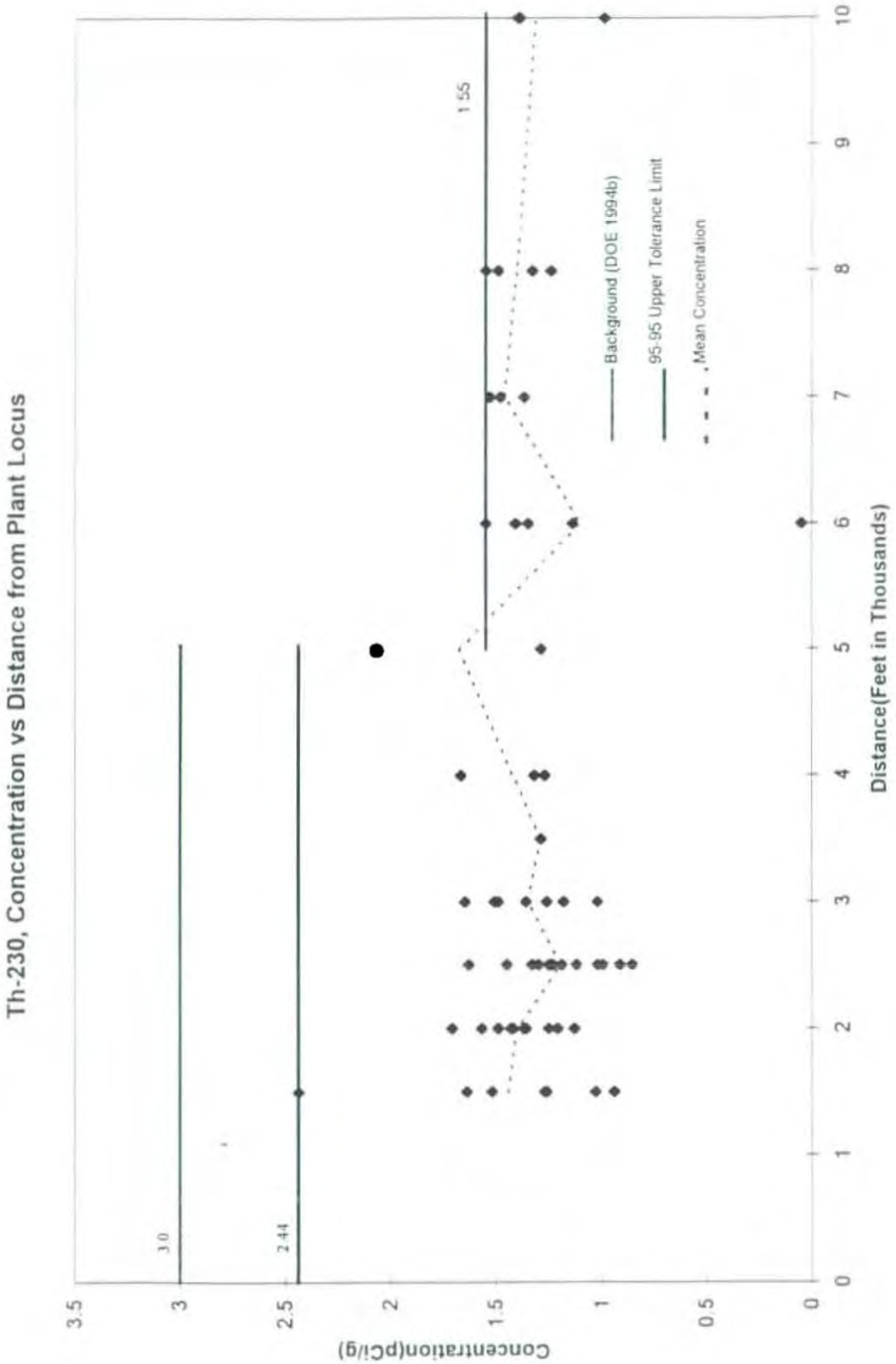


Figure 3.4. Th-230, Concentration vs. Distance from Plant Locus

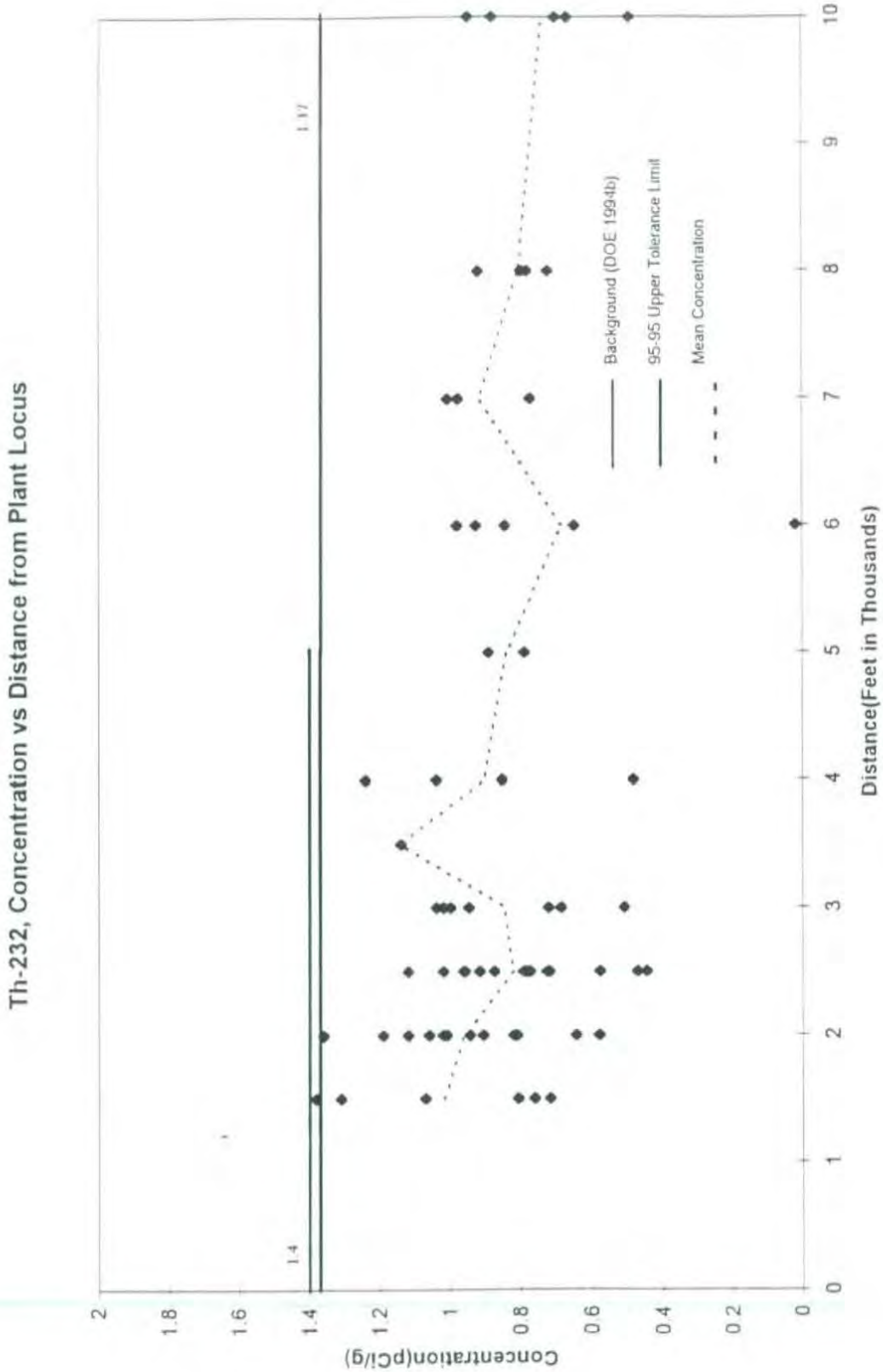


Figure 3.5. Th-232, Concentration vs. Distance from Plant Locus

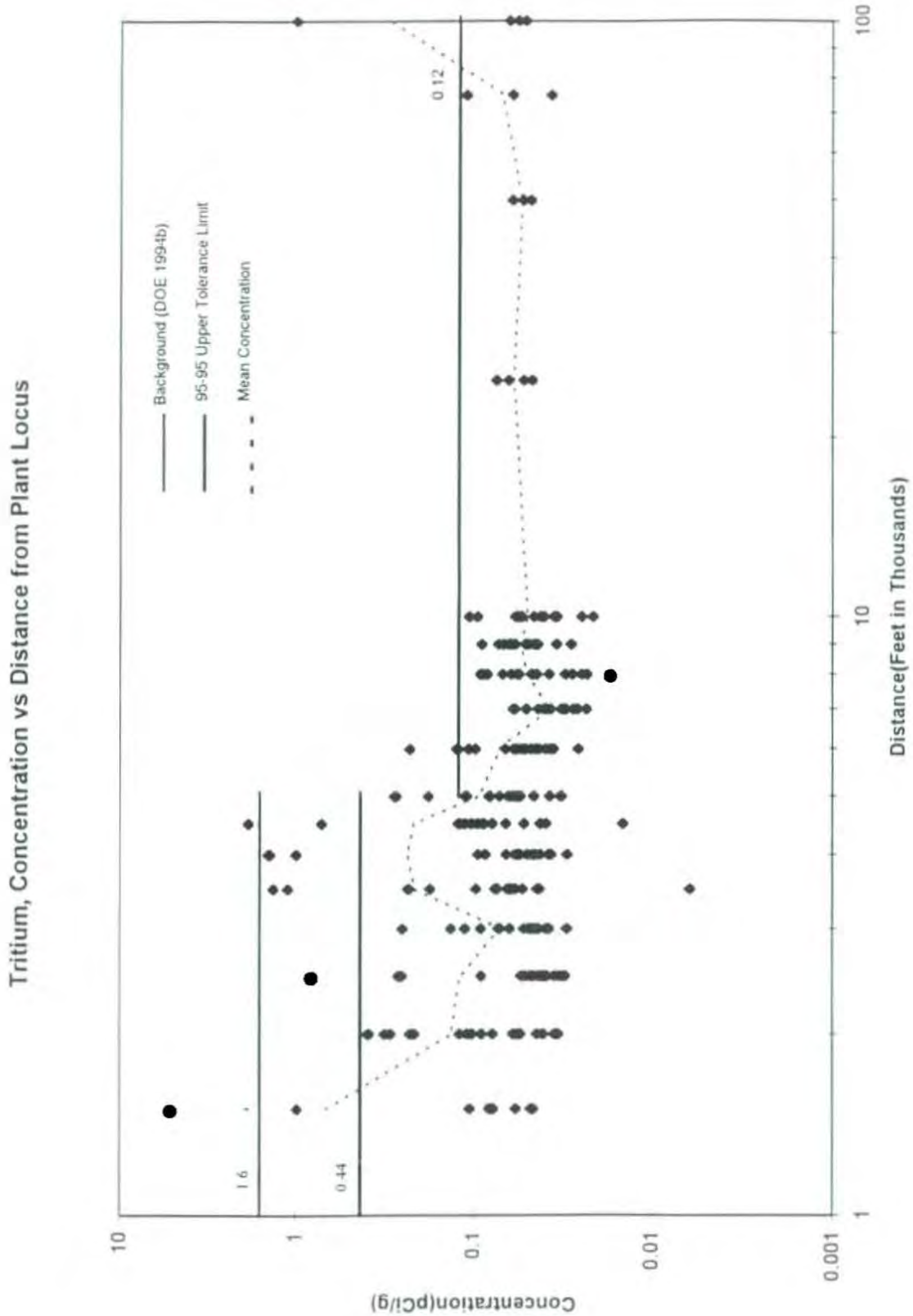


Figure 3.6. Tritium, Concentration vs. Distance from Plant Locus

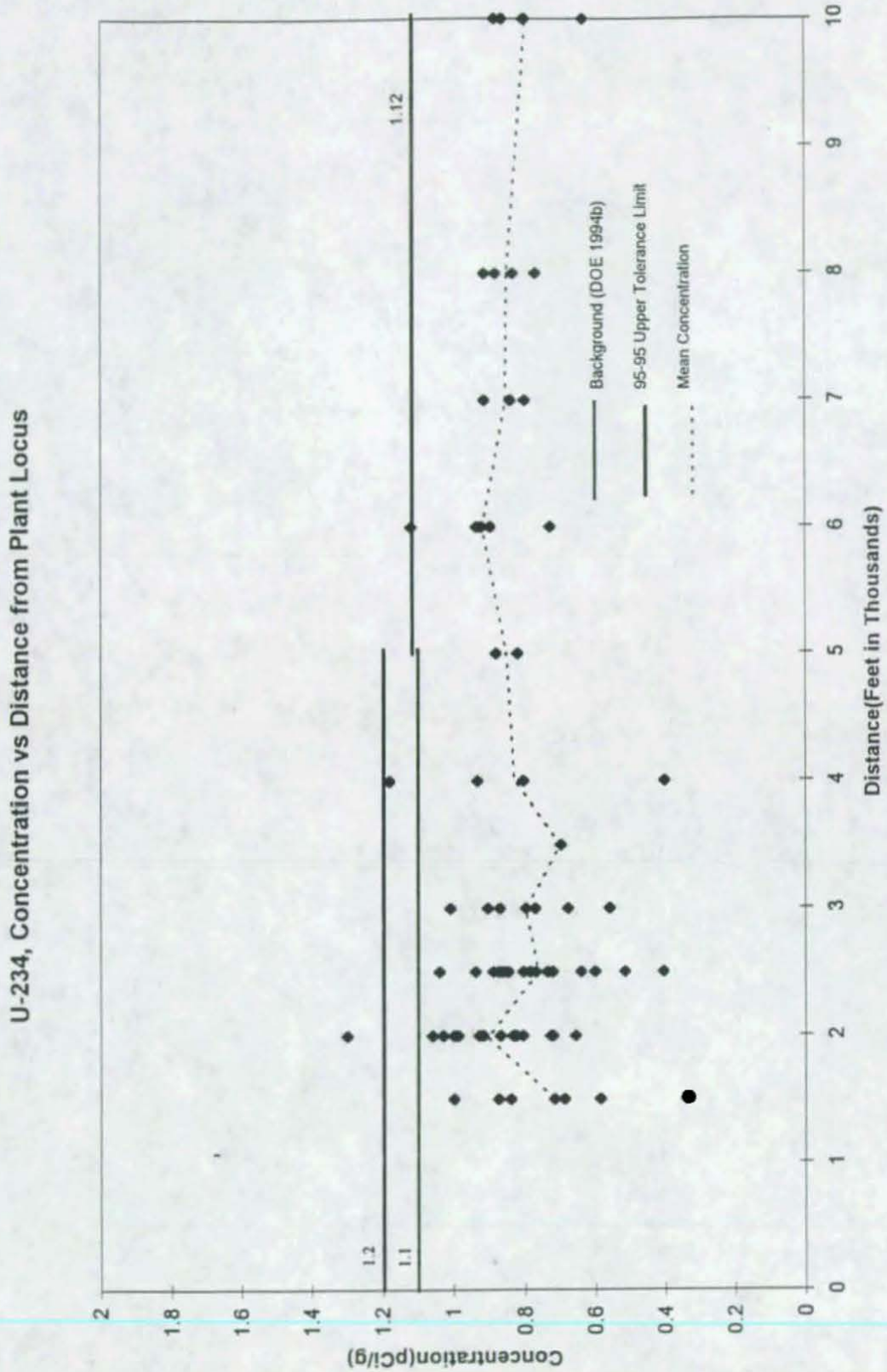


Figure 3.7. U-234, Concentration vs. Distance from Plant Locus

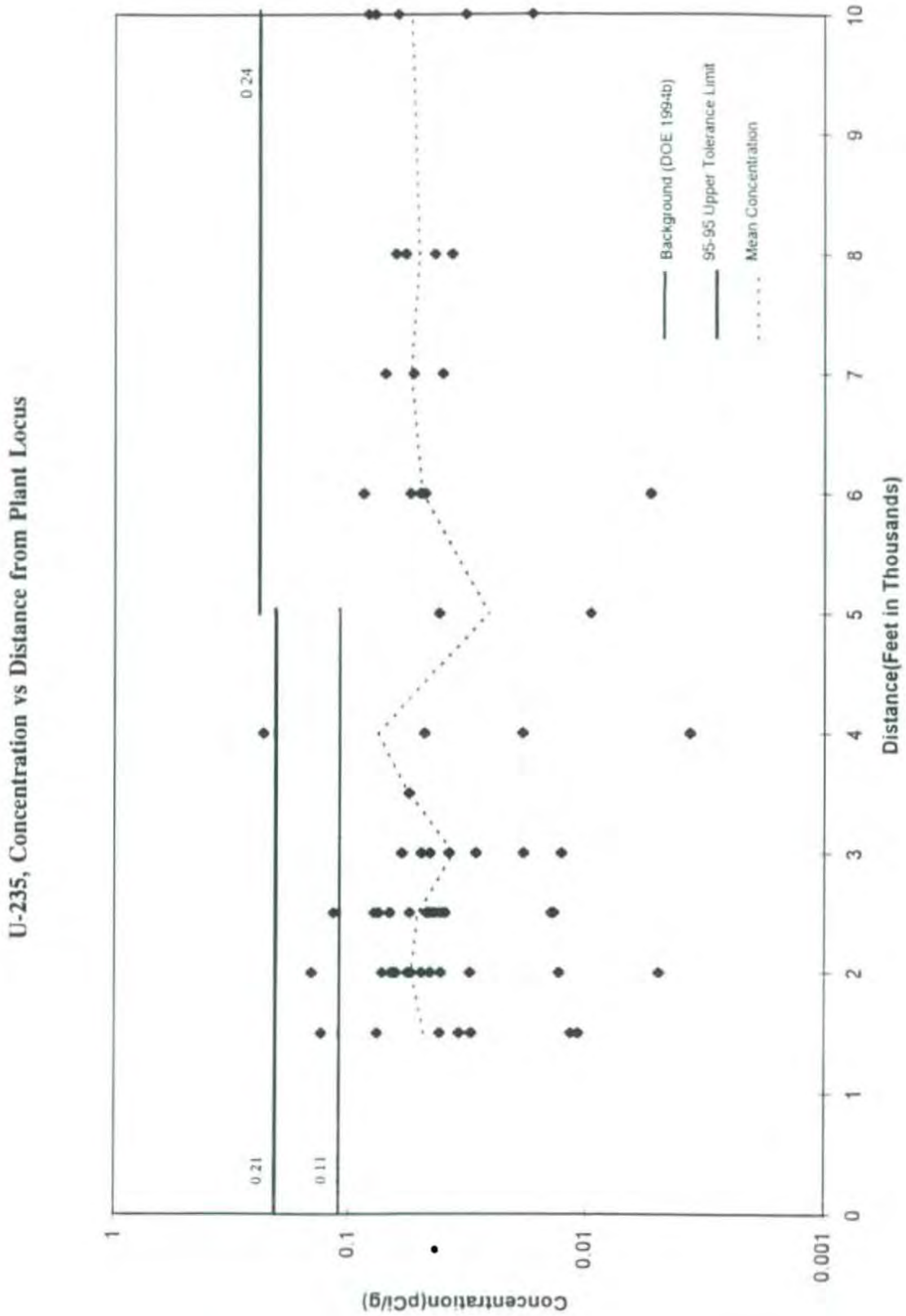


Figure 3.8. U-235, Concentration vs. Distance from Plant Locus

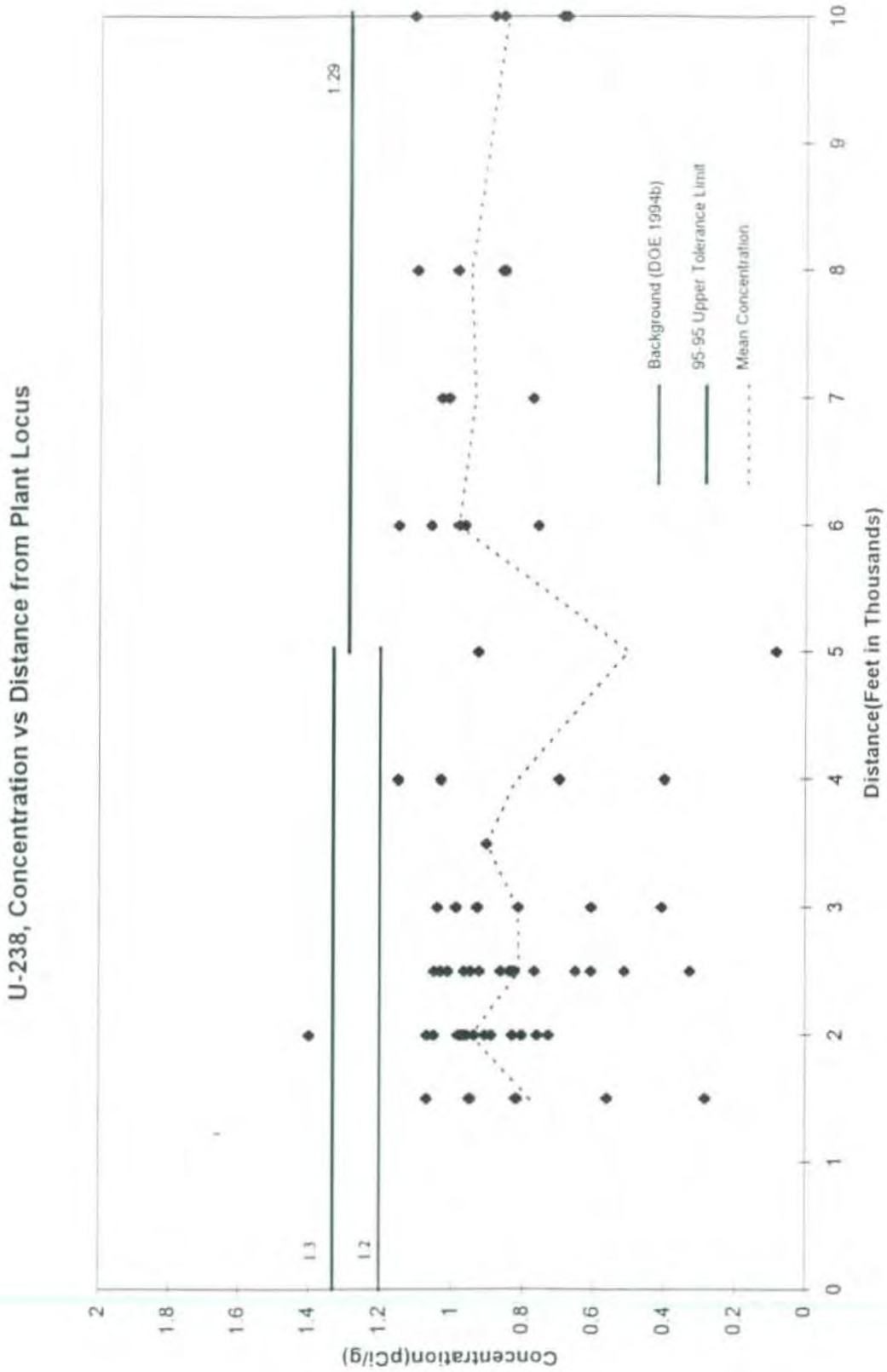


Figure 3.9. U-238, Concentration vs. Distance from Plant Locus

4. RSI SAMPLING RESULTS

This Section uses figures to depict all RSI Sampling results above background concentrations. This allows for an understanding of the spatial distribution of contaminants and how they vary with distance from Mound.

4.1. DATA EVALUATION METHODOLOGY

The maximum concentration (the greater of the surface or subsurface results) is being used as the reported concentration for each individual sample location. The rationale for choosing the maximum concentration rather than the surface or subsurface data sets was the high likelihood that soils may have been mixed, plowed, bull-dozed, etc. since the time of deposition on the soil surface. These values were then compared against the generated background values (DOE 1994b).

Table IV.1 shows the background values (DOE 1994b) for all of the individual analytes which were detected.

4.2. SAMPLING RESULTS

4.2.1. Radionuclide Results

The maximum concentration for an individual sample location was compared to the established background values by sample location for the radionuclides. Figure 4.1 - 4.3 show the sample locations and results above the background values for plutonium isotopes. There does not appear to be any discernable area of influence caused by Mound. The values found above background are wide spread, but not continuous in all directions.

Figures 4.4 - 4.6 show the sample locations and results above background for tritium. Only three locations have concentrations above background. Two are on the fenceline and the other is in the north-west direction and about 4,500 feet from the plant locus.

Figures 4.7 and 4.8 show the balance of the radionuclides that were analyzed for in the RSI program. Radium-226 was prevalent at the fenceline and fenceline +1000' rings. Uranium, strontium and cesium

Table IV.1. Background Values For Data Comparison

Anion		Inorganic		Pesticides/PCB's		Radionuclides		Volatile Organic Compounds		Semi-Volatile Organic Compounds	
Analyte	BG	Analyte	BG	Analyte	BG	Analyte	BG	Analyte	BG	Analyte	BG
Chloride	107	Aluminum	19000	4,4'-DDD	4.2	Bi-210m	N/A	Acetone	N/A	1,2-Dichloroethane	N/A
Fluoride	6.7	Arsenic	8.6	4,4'-DDE	N/A	Cs-137	0.42	Hexane	N/A	2-Methylnaphthalene	N/A
Sulfate	150	Barium	180	4,4'-DDT	N/A	K-40	37	Methylene Chloride	N/A	4-Chloro-3-methylphenol	N/A
		Bismuth	N/A	Aldrin	N/A	Pu-238	0.13	Toluene	N/A	Acenaphthene	N/A
		Cadmium	2.1	Aroclor-1248	N/A	Pu-239/240	0.18	Trichlorotrifluoroethane	N/A	Acenaphthylene	N/A
		Chromium	20	Aroclor-1260	N/A	Pu-242	N/A			Anthracene	N/A
		Cobalt	19	Dieldrin	N/A	Ra-226	2			Benzo(a)anthracene	N/A
		Copper	26	Endosulfan II	N/A	Sr-90	0.72			Benzo(a)pyrene	N/A
		Cyanide	N/A	Endrin Ketone	N/A	Tritium	1.6			Benzo(b)fluoranthene	N/A
		Iron	35000	Heptachlor	N/A	U-234	1.1			Benzo(g,h,i)perylene	N/A
		Lead	48	Heptachlor Epoxide	N/A	U-235	0.11			Benzo(k)fluoranthene	N/A
		Magnesium	40000	alpha-Chlordane	N/A	U-238	1.2			Benzoic Acid	N/A
		Manganese	1400	beta-BHC	N/A					Butylbenzylphthalate	N/A
		Mercury	N/A	gamma-Chlordane	N/A					Carbazole	N/A
		Nickel	32	p,p'-Methoxyclor	30					Chrysene	N/A
		Potassium	1900							Di-n-butylphthalate	N/A
		Selenium	N/A							Di-n-octylphthalate	N/A
		Sodium	240							Dibenzo(a,h)anthracene	N/A
		Thallium	0.46							Dibenzofuran	N/A
		Vanadium	25							Dimethylphthalate	N/A
		Zinc	140							Fluoranthene	N/A
										Fluorene	N/A
										Indeno(1,2,3-c,d)pyrene	N/A
										Pentachlorophenol	N/A
										Phenanthrene	N/A
										Phenol	N/A
										Pyrene	N/A
										bis(2-Ethylhexyl)phthalate	N/A
										delta-BHC	N/A

Bi - Bismuth
BG - background value
Bi - Bismuth
Cs - Cesium
K - Potassium
NA - Not Applicable
Pu - Plutonium
Ra - Radium
Sr - Strontium
U - Uranium

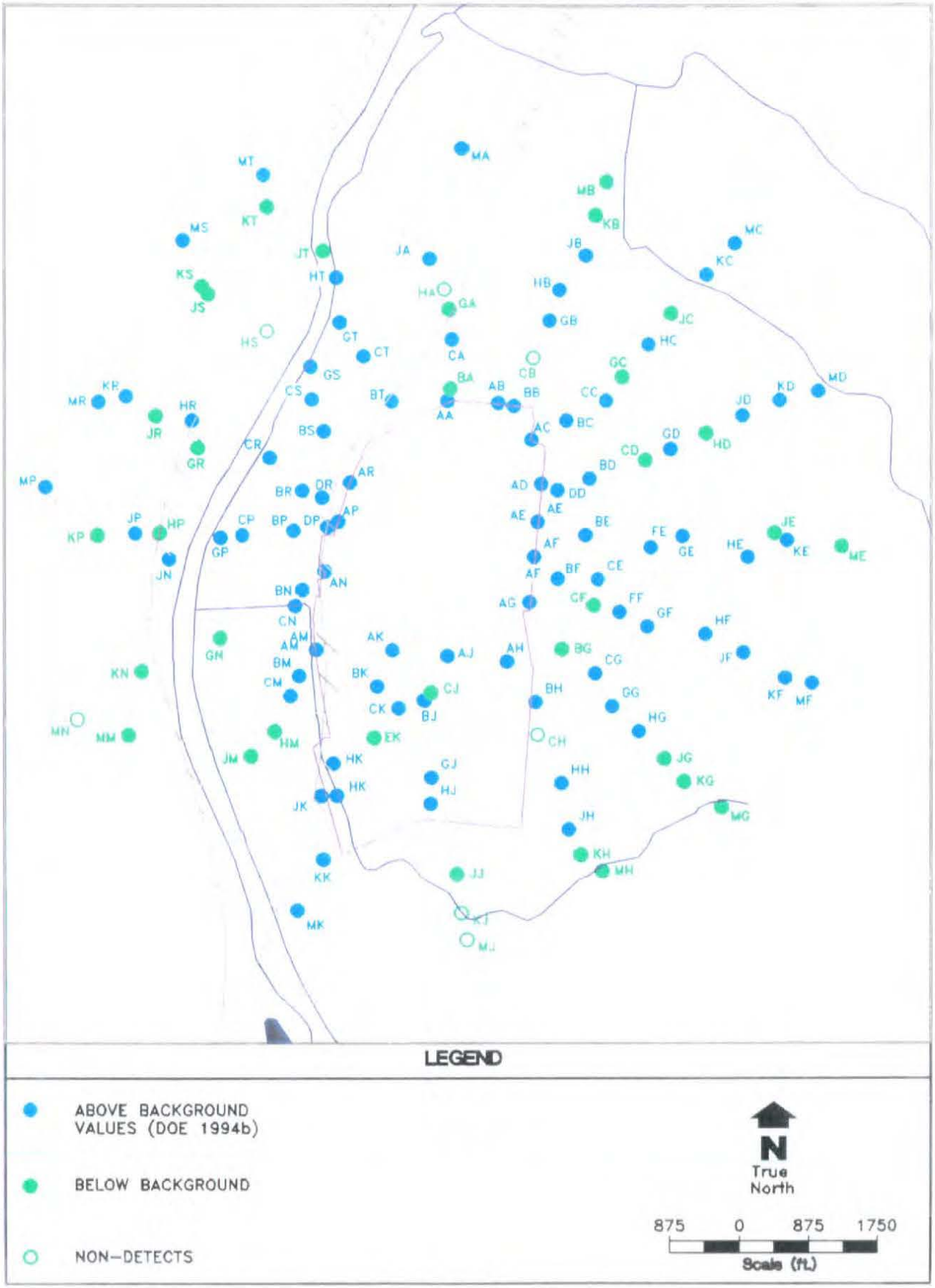


Figure 4.1. Plutonium Concentrations Found from Fenceline to 5,000 feet from Mound (pCi/g)

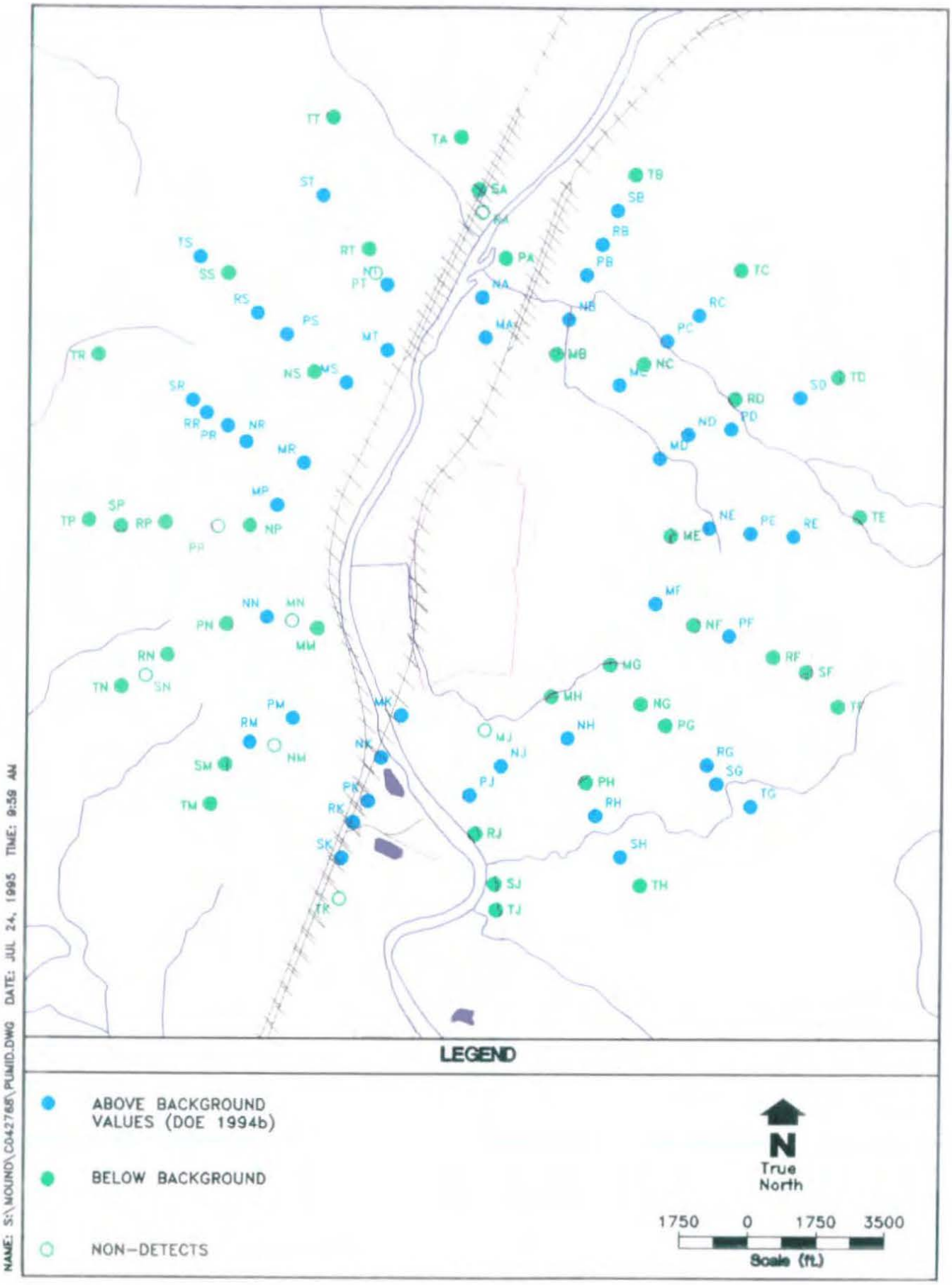


Figure 4.2. Plutonium Concentrations Found from 5,000 feet to 10,000 feet from Mound (pCi/g)

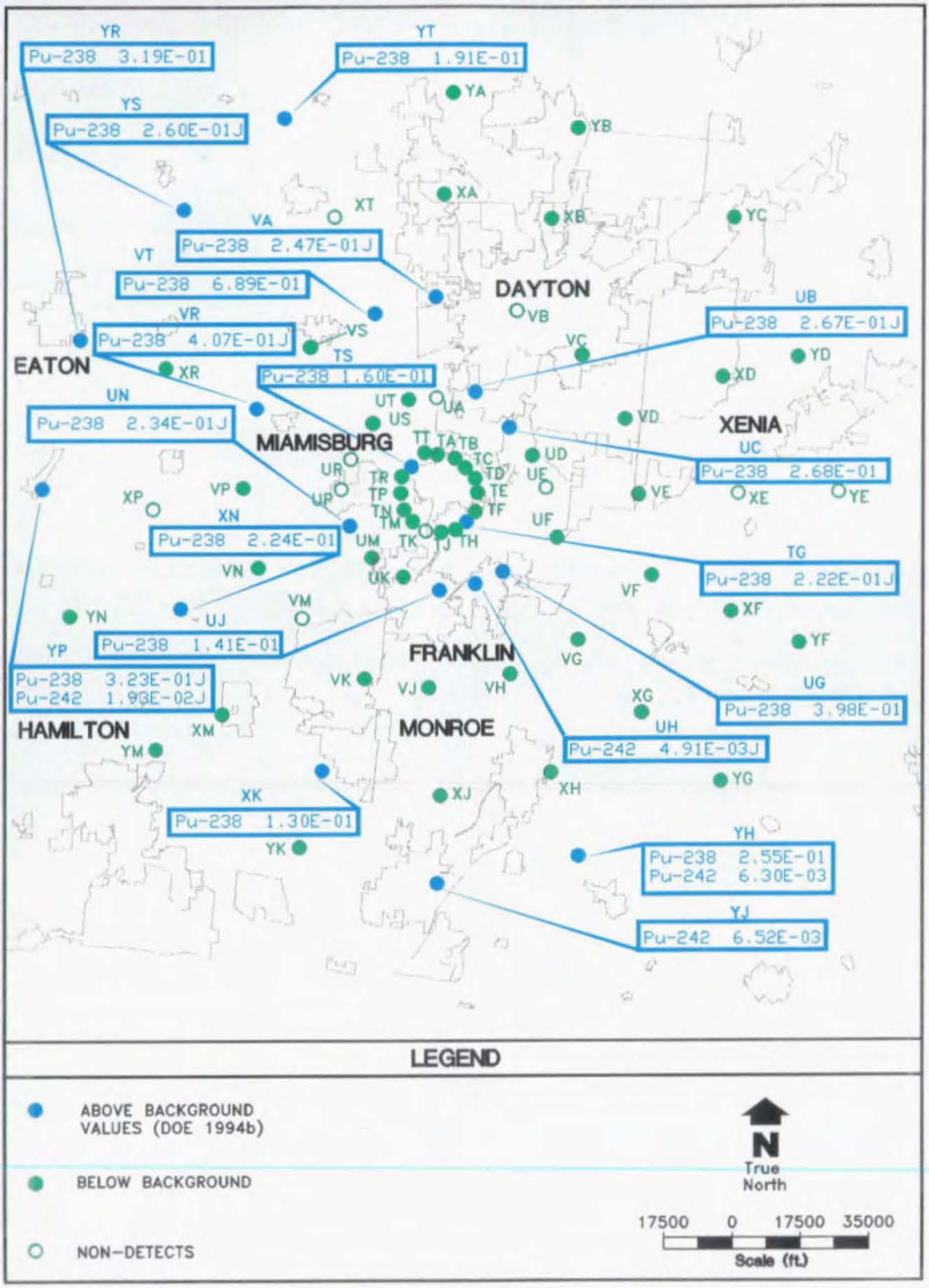


Figure 4.3. Plutonium Concentrations Found from 10,000 feet to 100,000 feet from Mound (pCi/g)

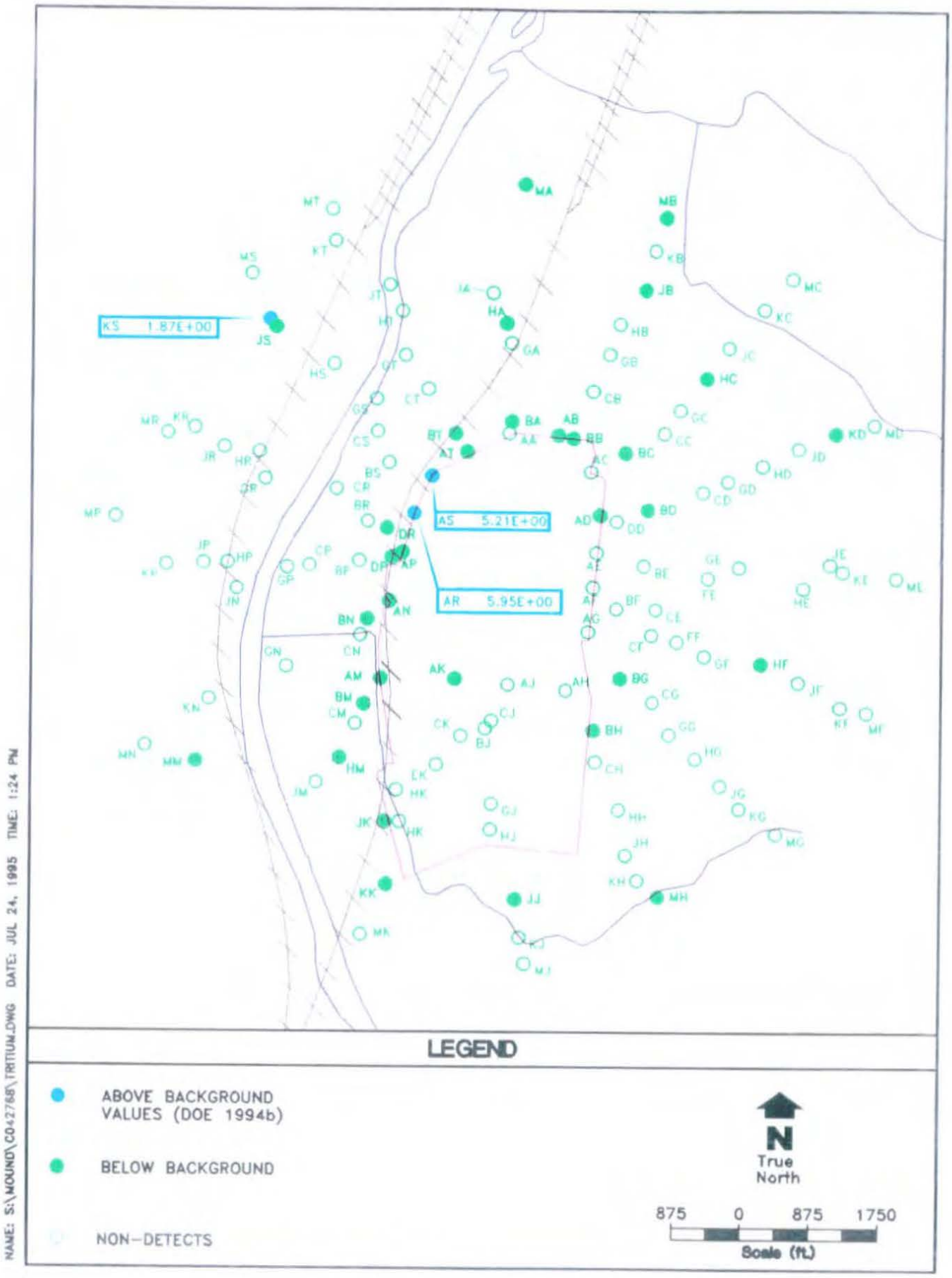


Figure 4.4. Tritium Concentrations Found from Fenceline to 5,000 feet from Mound (pCi/g)

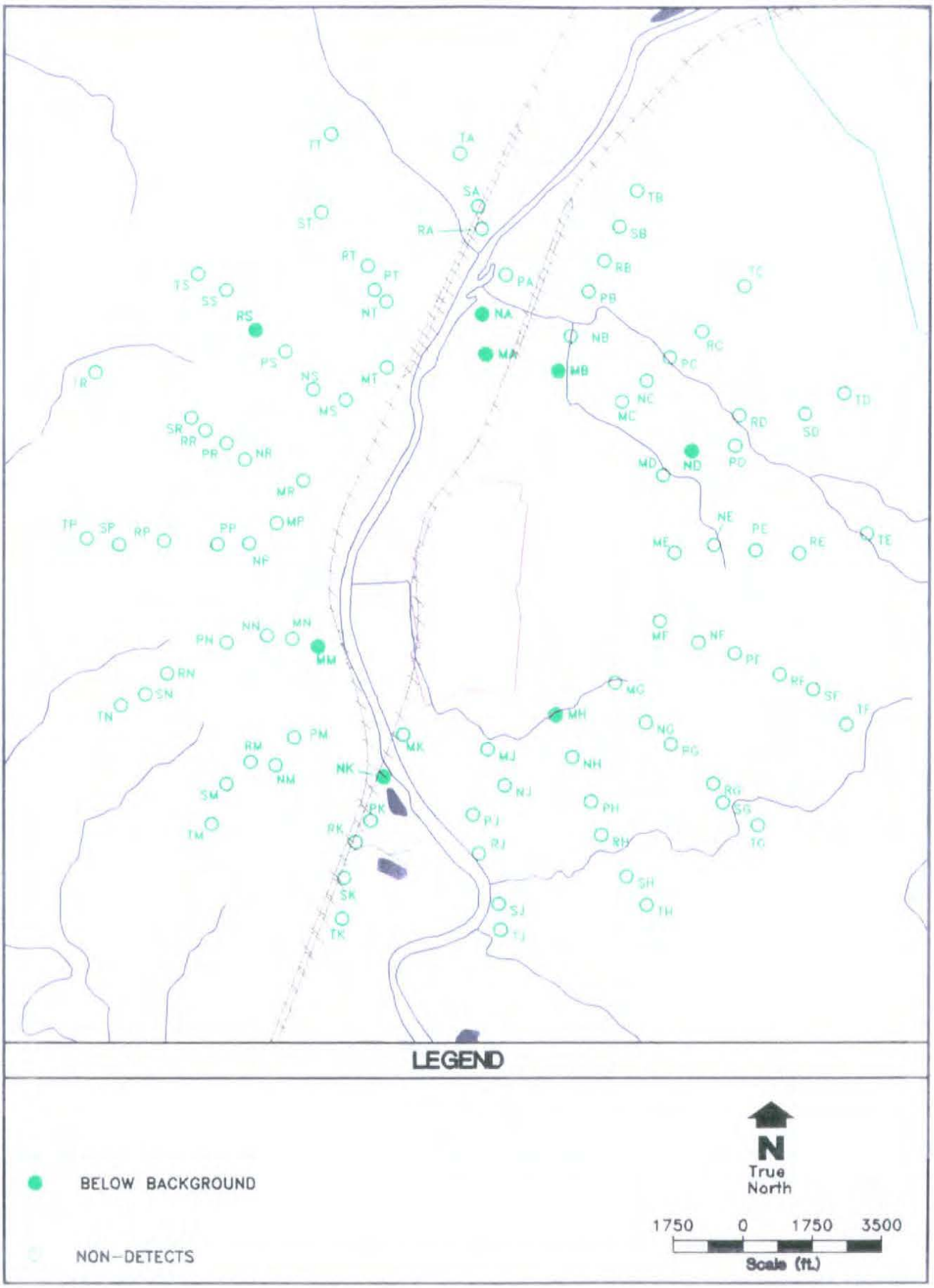
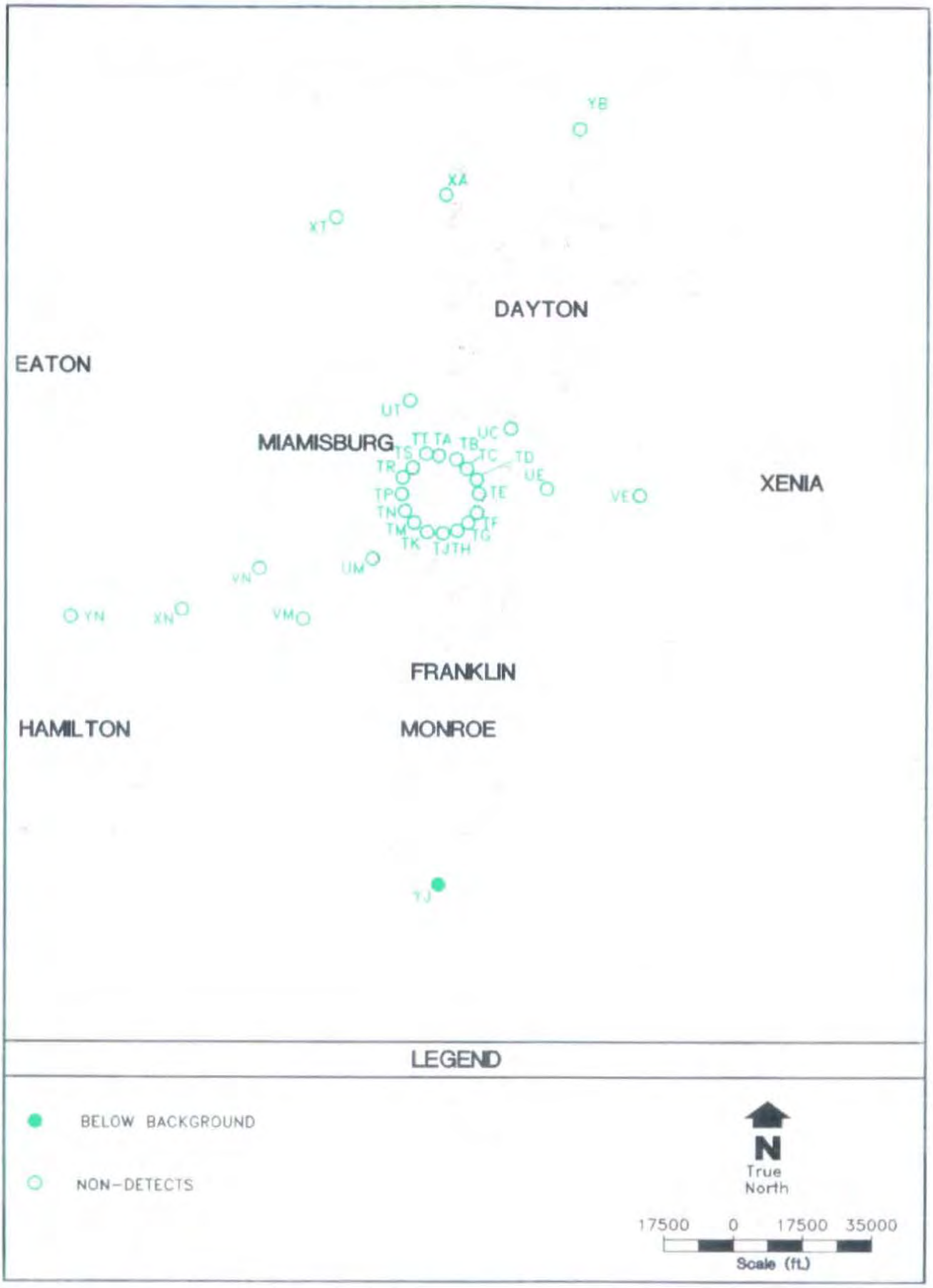
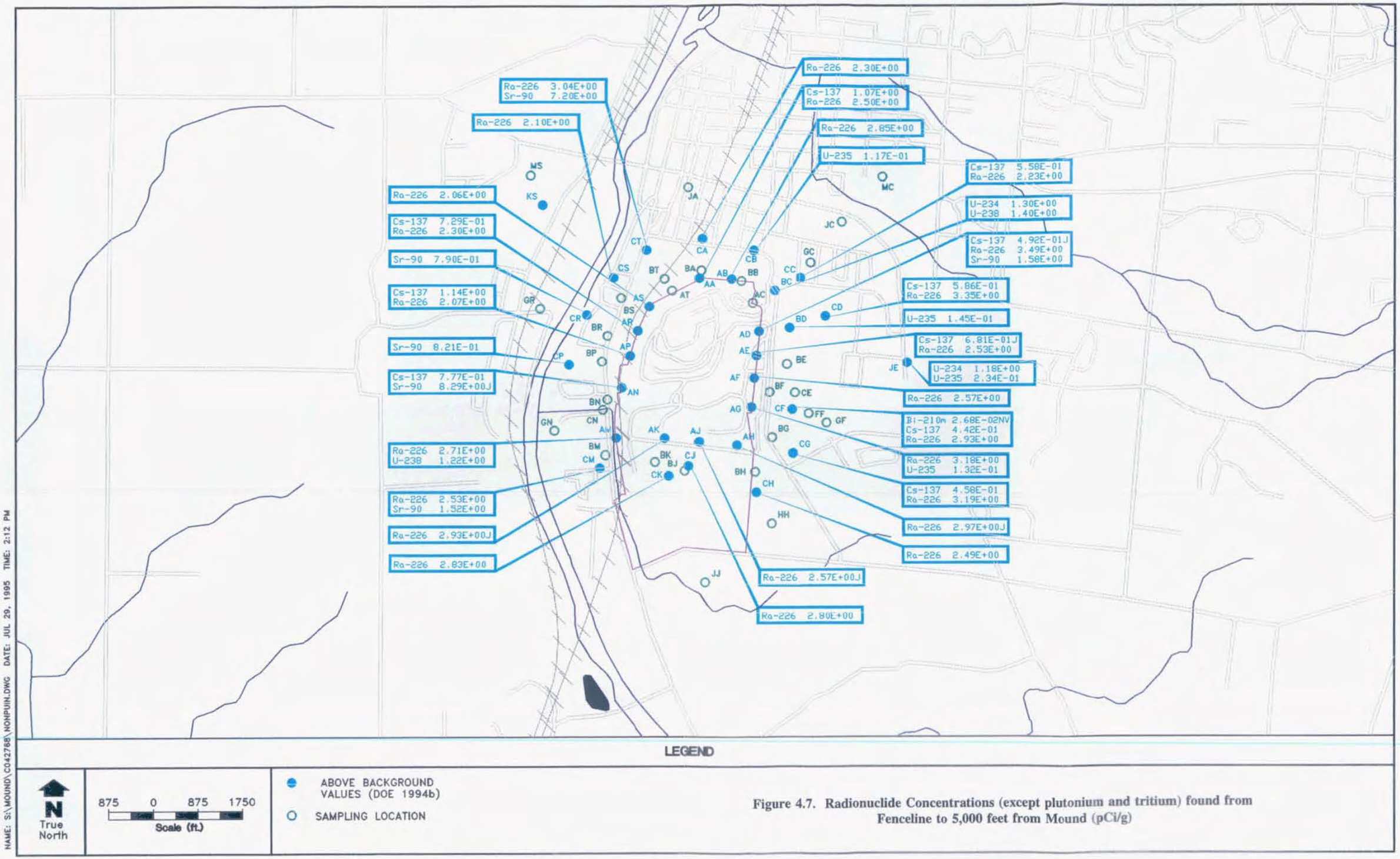


Figure 4.5. Tritium Concentrations Found from 5,000 feet to 10,000 feet from Mound (pCi/g)



NAME: S:\MOUND\C042768\TRITOUTR.DWG DATE: JUL 25, 1995 TIME: 1:28 PM

Figure 4.6. Tritium Sample Locations from 10,000 feet to 100,000 feet from Mound



LEGEND

True North

875 0 875 1750
Scale (ft.)

ABOVE BACKGROUND VALUES (DOE 1994b)

SAMPLING LOCATION

Figure 4.7. Radionuclide Concentrations (except plutonium and tritium) found from Fenceline to 5,000 feet from Mound (pCi/g)

NAME: S:\MOUND\C042768\NONPUIN.DWG DATE: JUL 29, 1995 TIME: 2:12 PM

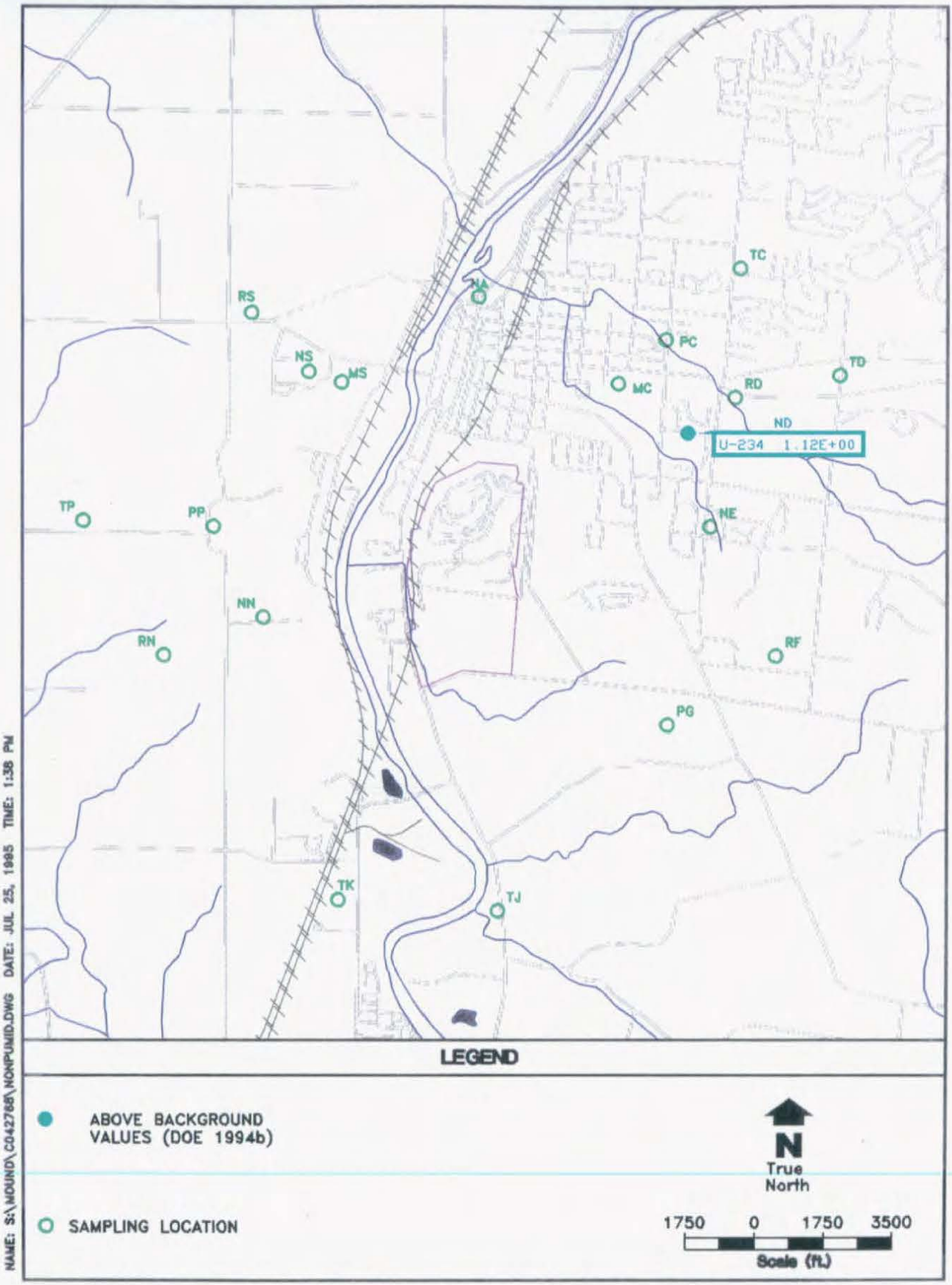


Figure 4.8. Radionuclide Concentrations (except plutonium and tritium) found from 5,000 feet to 10,000 feet from Mound (pCi/g)

also were found sporadically within 1,000 feet from Mound. Only uranium-234 (at one location) was found at distances greater than 5,000 feet from Mound.

4.2.2. Inorganic and Anion Results

Samples were collected for inorganic compounds at the fenceline and fenceline + 1000 feet rings. Figures 4.9 and 4.10 are the spatial representations (maps) of the data.

4.2.3. Pesticides/PCBs

Samples were collected for Pesticides/PCBs at the fenceline and fenceline + 1000 feet rings. Figures 4.11 and 4.12 are the spatial representations of the data.

4.2.4. VOCs and SVOCs

Samples were collected for VOCs and SVOCs at the fenceline and fenceline + 1000 feet rings. Figures 4.13 and 4.14 are spatial representations of the results found above background.

4.2.5. USATHAMA

There were no detectable results for the target explosive compounds in any of the samples taken.

4.3. RESULTS OF NPDES 001 OUTFALL SOIL GEOCHEMICAL SAMPLING

This section presents the analytical results for the surface and subsurface soil samples collected during the investigations of the NPDES 001 Outfall pipeline soils. These results are used in conjunction with statistical analyses to identify locations of the maximum concentrations of the selected parameters.

Only the results which were above background values or those which could warrant further investigation (results which indicated abnormal distribution of potential contaminants, or results which indicated influence from"other sources", etc.) are presented in this section. The data from the NPDES 001 Outfall

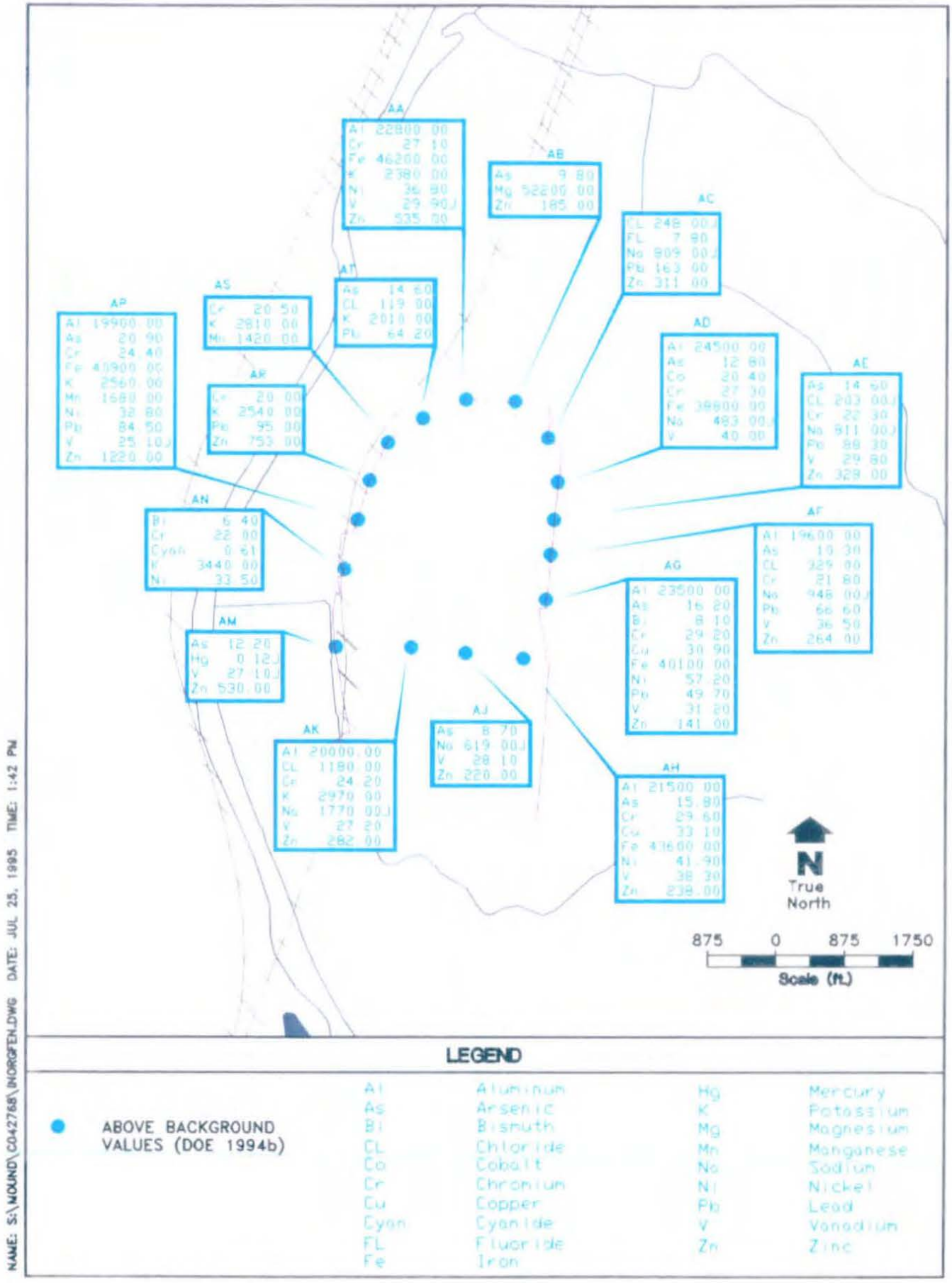


Figure 4.9. Inorganic and Anion Results Above Background for the Fenceline Locations (mg/kg)

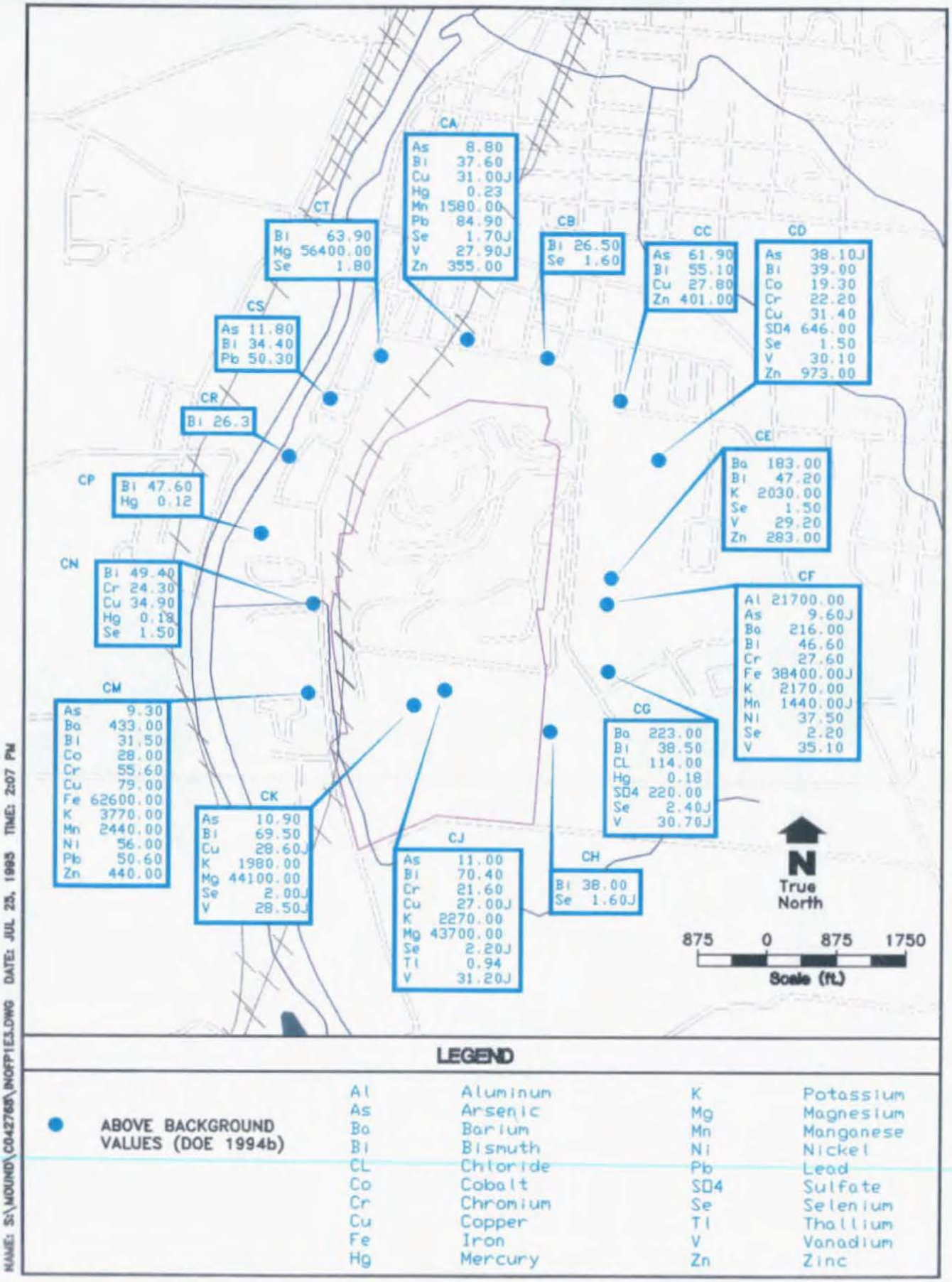
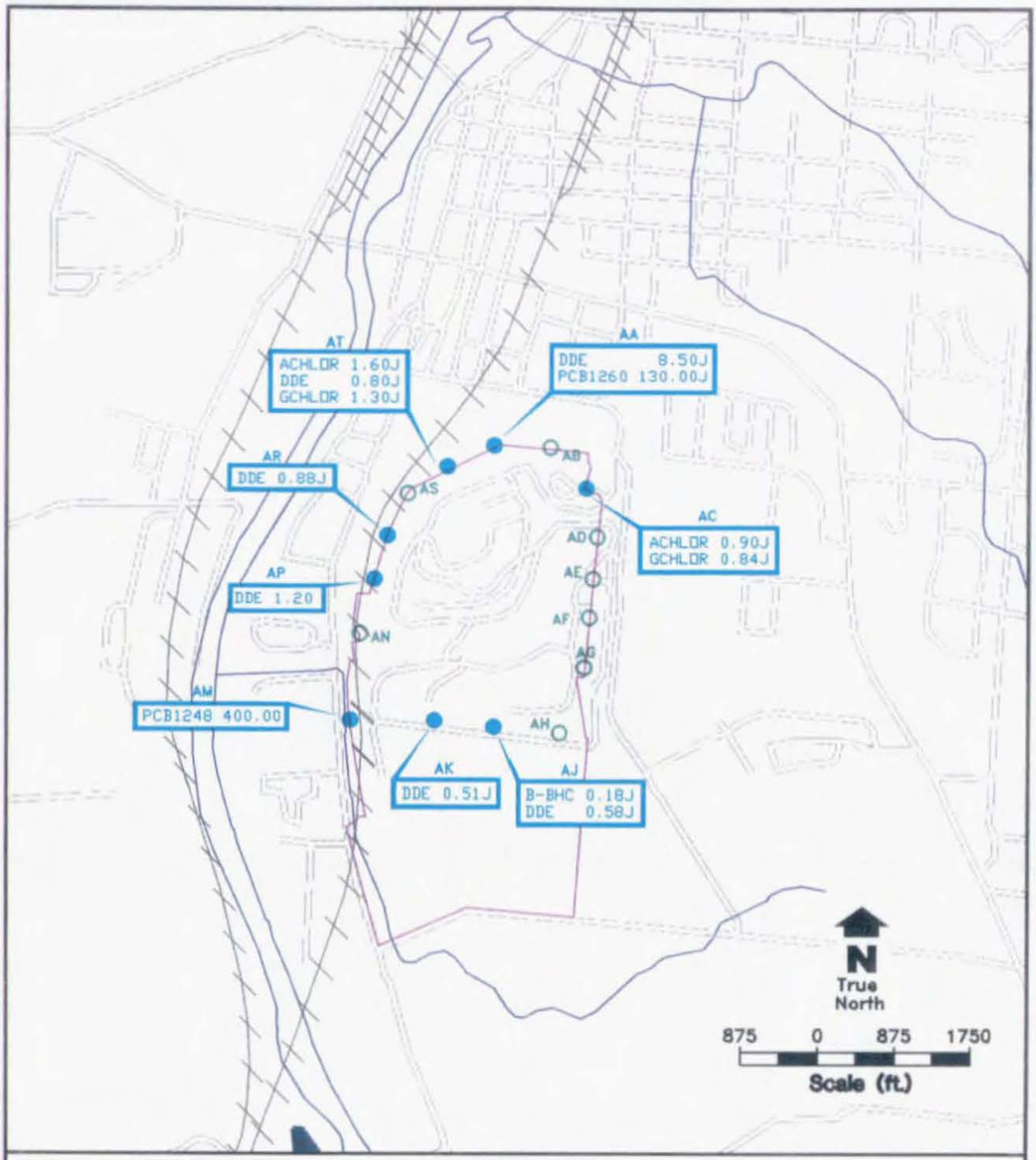


Figure 4.10. Inorganic and Anion Results Above Background for Fenceline +1000' Locations (mg/kg)



LEGEND

● ABOVE BACKGROUND VALUES (DOE 1994b)	ACHLDR	alpha-Chlordane	GCHLDR	gamma-Chlordane
	B-BHC	beta-BHC	PCB1248	Aroclor-1248
○ SAMPLING LOCATION	DDE	4,4'-DDE	PCB1260	Aroclor-1260

NAME: S:\MOUND\C042768\PESTPCB.DWG DATE: JUL 25, 1995 TIME: 5:43 PM

Figure 4.11. Pesticides/PCB Results Above Background for Fenceline Locations (µg/kg)

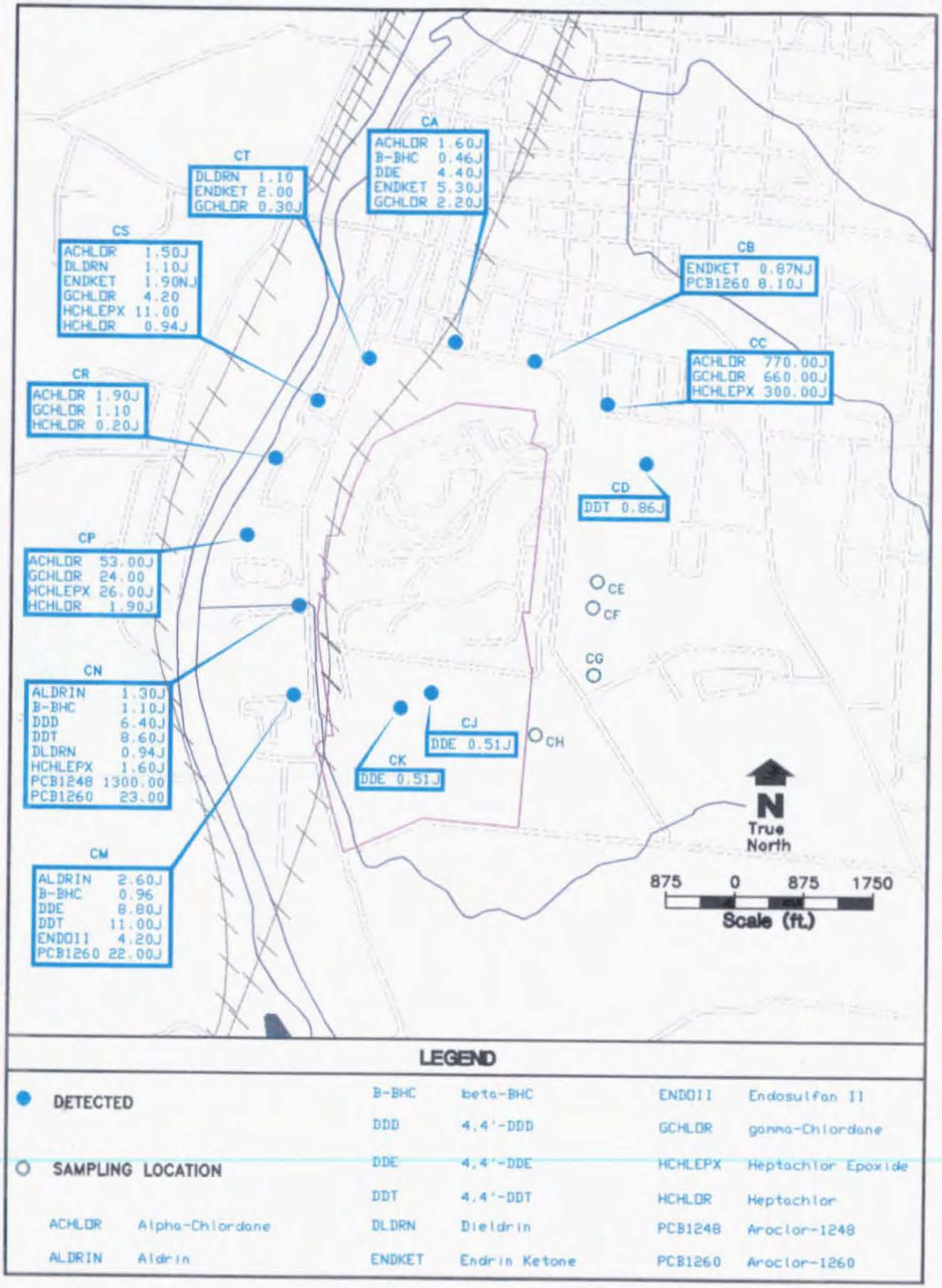


Figure 4.12. Pesticides/PCB Results Above Background for Fenceline +1000' Locations (µg/kg)

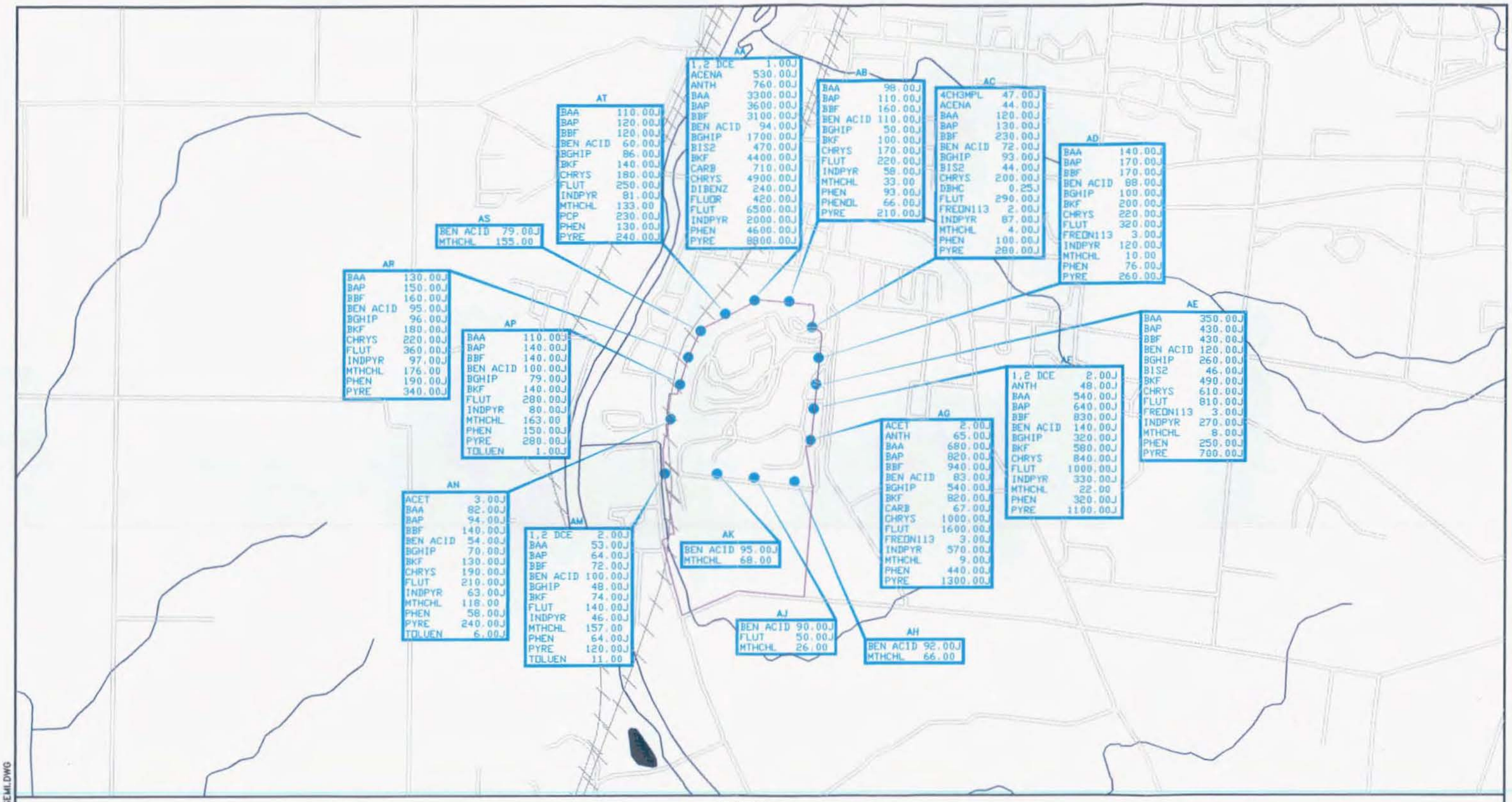


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Figure 4.13. Volatiles and Semi-Volatiles Found at Fenceline Locations (µg/kg)

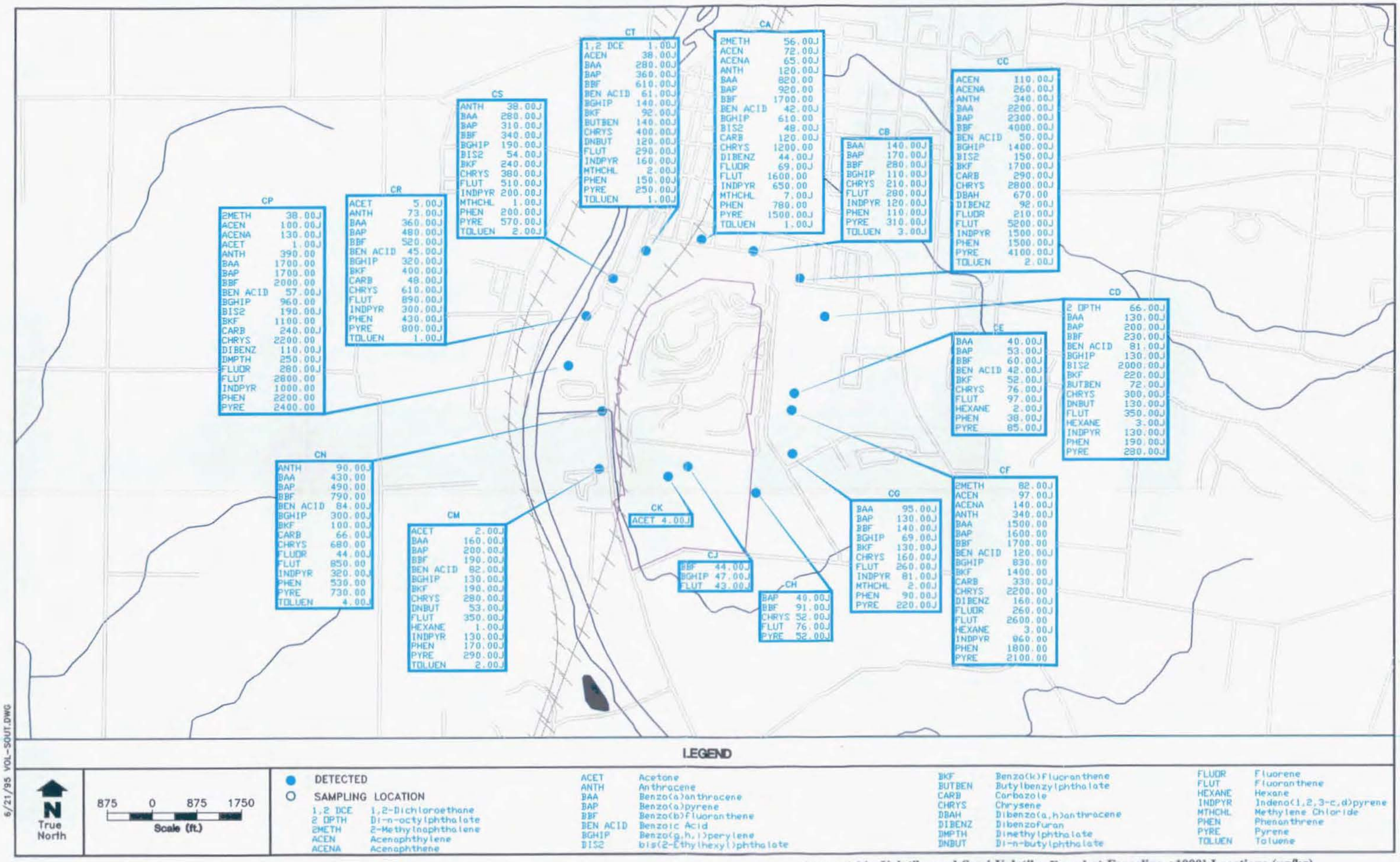


Figure 4.14. Volatiles and Semi-Volatiles Found at Fenceline +1000' Locations (µg/kg)

pipeline investigation are presented for each sample point by parameter in tabular form in Appendix E, which includes data qualifiers applied by the analytical laboratory and data qualifiers applied by the data validation team.

The results presented in the following subsections are geochemical evaluations only. Geochemical analytical results include concentrations of radionuclides, inorganics, pesticides/PCBs, VOCs, SVOCs, and anions in soil samples. Results of geotechnical analyses are discussed in Section 4.5.

4.3.1. Radionuclides

Radium-226 was found at each location except N03 and N08. Other radionuclides were detected at various concentrations as shown in Figure 4.15 with the highest reading being 3.48 pCi/g of Pu-238 (at N06).

4.3.2. Inorganics and Anions

The inorganic concentrations and anions in soil samples that were measured above background for this investigation are shown in Figure 4.16. Of interest are the magnesium readings at all locations except N01 and the only iron concentration being at N01.

4.3.3. Pesticides/PCBs, VOCs, and SVOCs

All detections for pesticides/PCBs, VOCs, and SVOCs were validated with a "J" which means "estimated." These values are shown in Figure 4.17.

4.4. RESULTS OF MAIN HILL SEEPS SOIL AND WATER SAMPLING

This section presents the analytical results for the groundwater and soil geochemical samples collected during the investigation of the Main Hill Seeps. These results are used in conjunction with statistical analyses to identify locations of the maximum concentrations of the selected parameters.

Only the results which were above background values or those which could warrant further investigation (results which indicated abnormal distribution of potential contaminants or results which indicated

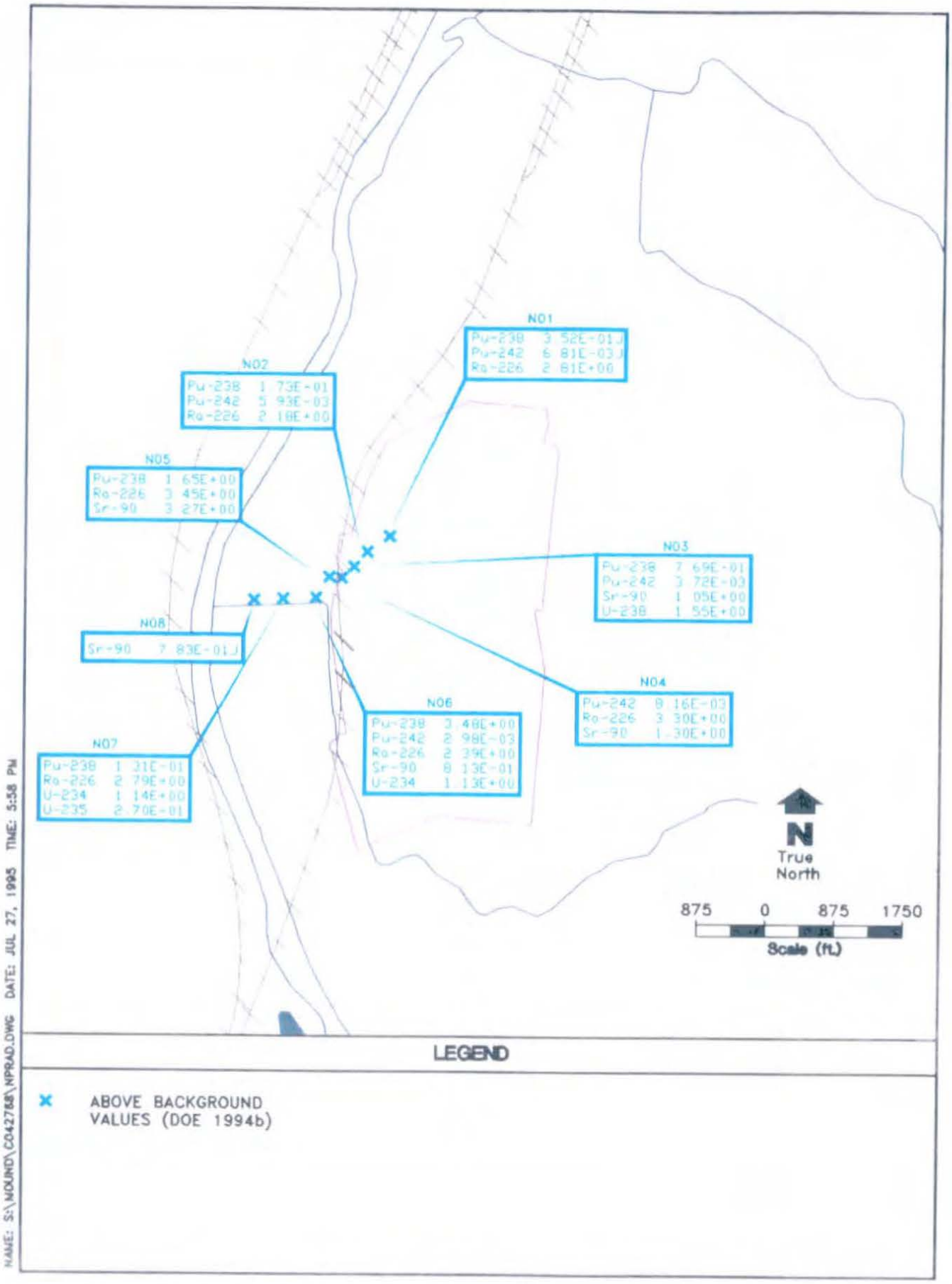


Figure 4.15. Radionuclide Detections Along the NPDES Outfall 001 Pipeline (pCi/g).

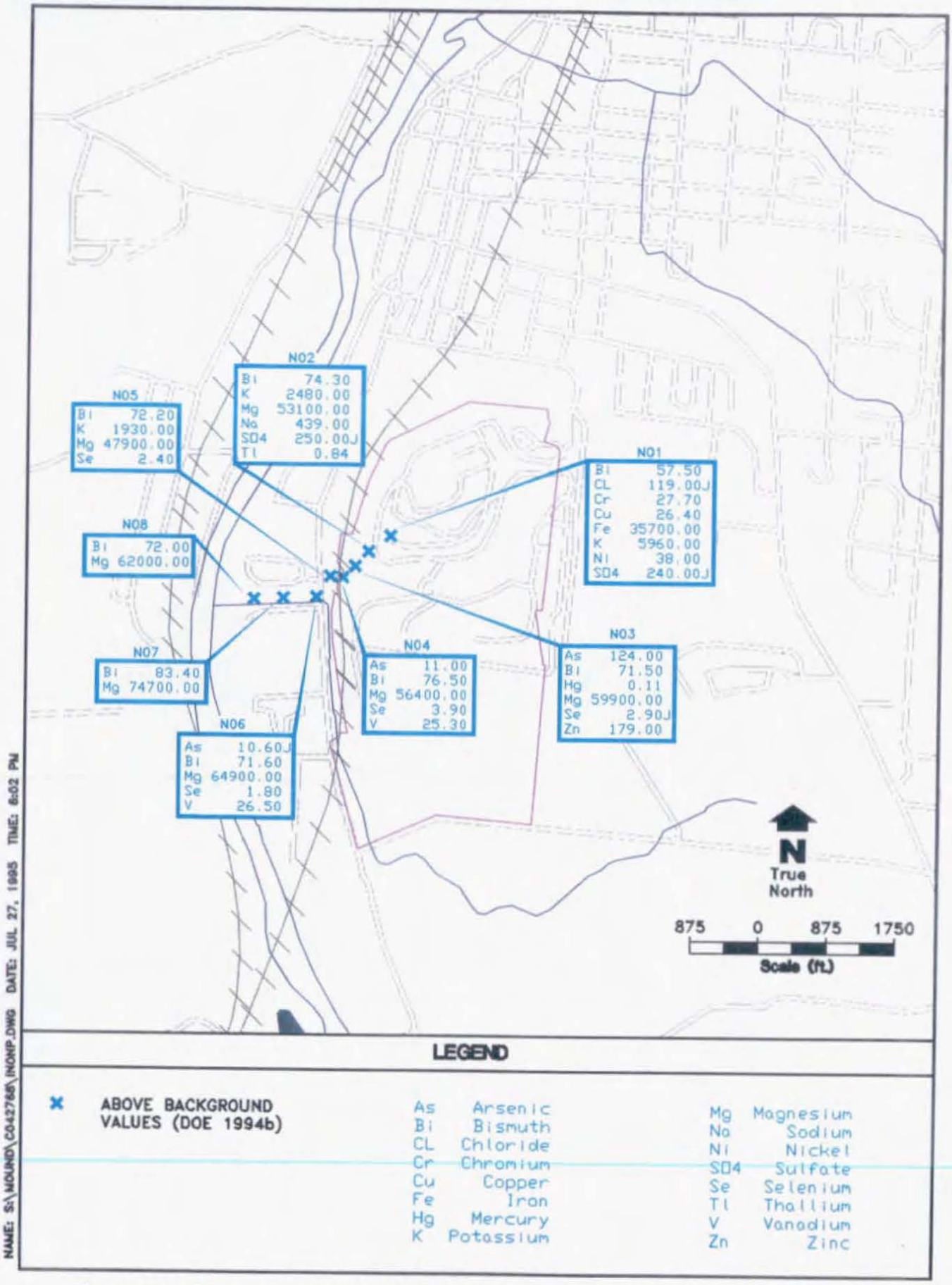


Figure 4.16. Inorganic and Anion Detections Above Background Along the NPDES Outfall 001 Pipeline (mg/kg).

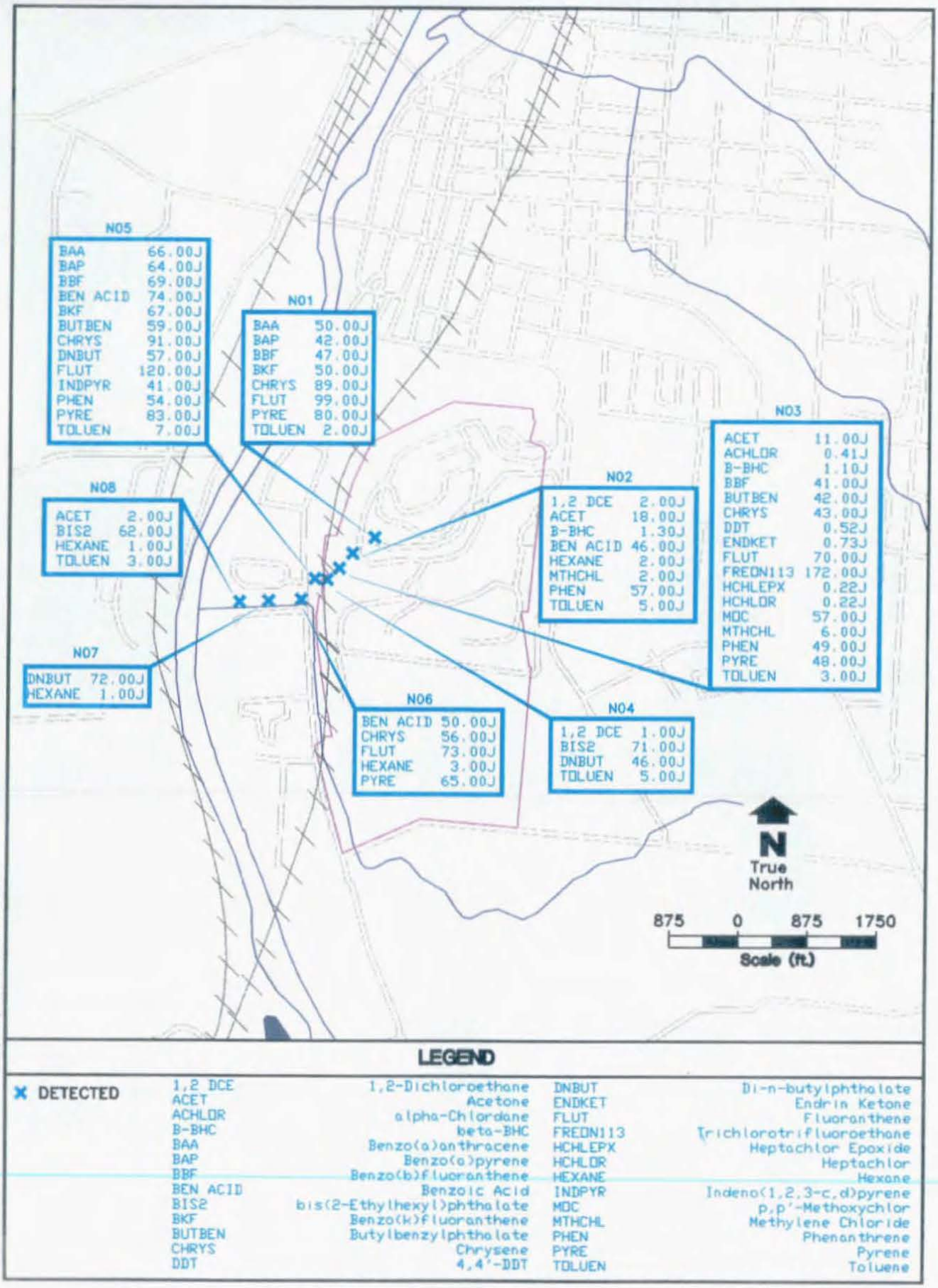


Figure 4.17. Pesticide/PCBs, VOCs, and SVOCs Detected Along the NPDES Outfall 001 Pipeline (µg/kg).

influence from "other sources", etc.) are presented in this section. The data from the Main Hill Seeps investigation are presented for each sample point by parameter in tabular form in Appendix E, which includes data qualifiers applied by the analytical laboratory and by the data validation team. The sample locations and field sampling activities for the Main Hill Seeps investigation are described in Section 2.

4.4.1. Soil Results

Geochemical analytical results include concentrations of radionuclides, inorganics, pesticides/PCBs, VOCs, SVOCs, and anions in soil samples.

4.4.1.1. Radionuclides

The radiological concentrations in soil that were measured above background for this investigation are shown in Figure 4.18. Only Pu-238 was detected at each location. The highest non-tritium value was 8.25 pCi/g of U-235 at Seep 601.

4.4.1.2. Inorganics and Anions

The inorganic and anion concentrations in soil that were measured above background for this investigation are shown in Figure 4.19. Copper, iron, lead had significant concentrations at location 605.

4.4.1.3. Pesticides/PCBs, VOCs, and SVOCs

The pesticides/PCBs, VOCs, and SVOCs detections above background are shown in Figure 4.20.

4.4.2. Water Results

4.4.2.1. Radionuclides

The radiological concentrations detected in water samples are shown in Table IV.2. Those concentrations, noted in bold type, represent detected contaminants that are above the reported background for groundwater. Radium-226, cesium-137, and cobalt-60 were not detected in the Main Hill Seeps water

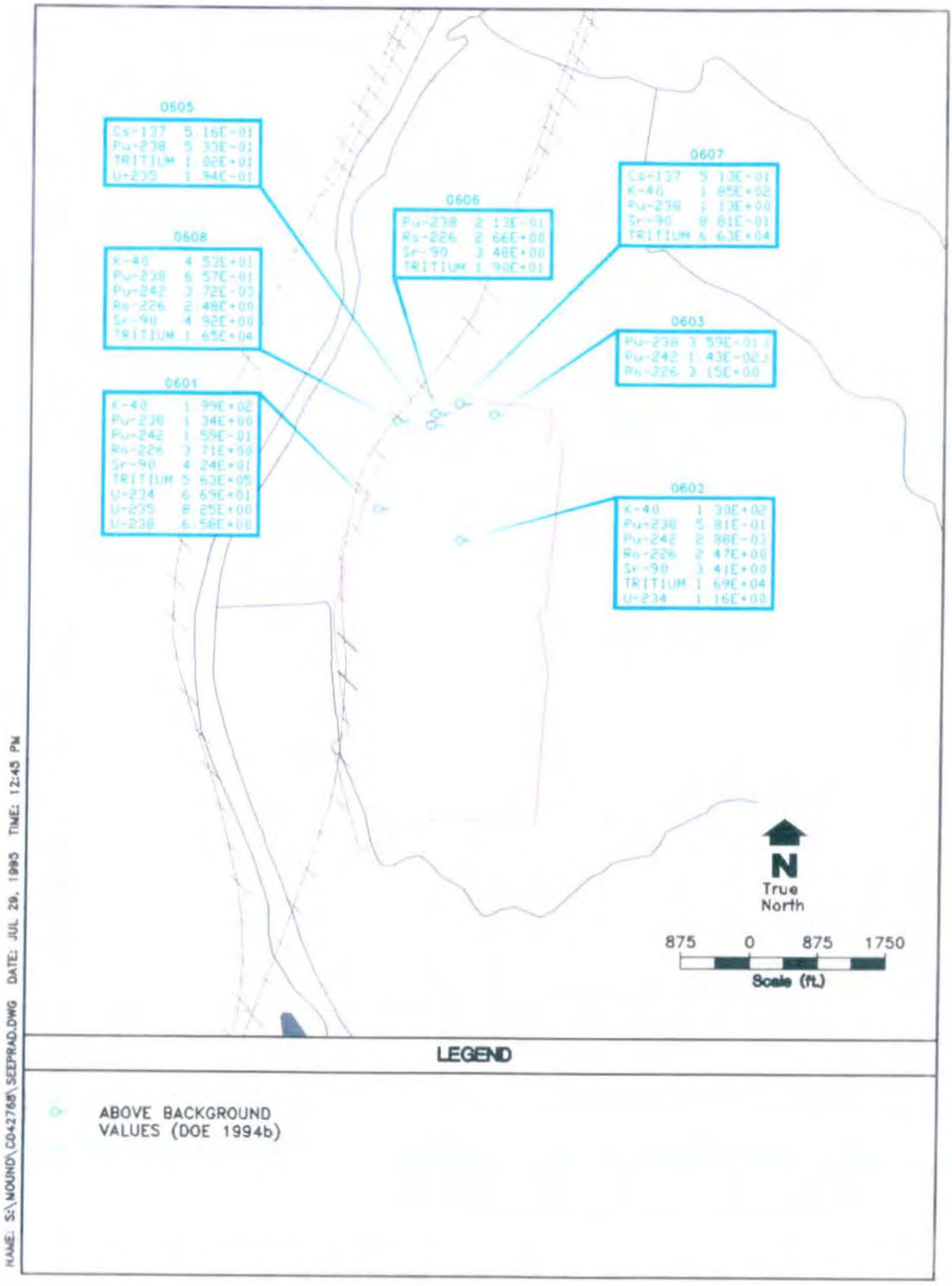


Figure 4.18. Radionuclides Found in the Main Hill Seep Samples (pCi/L).

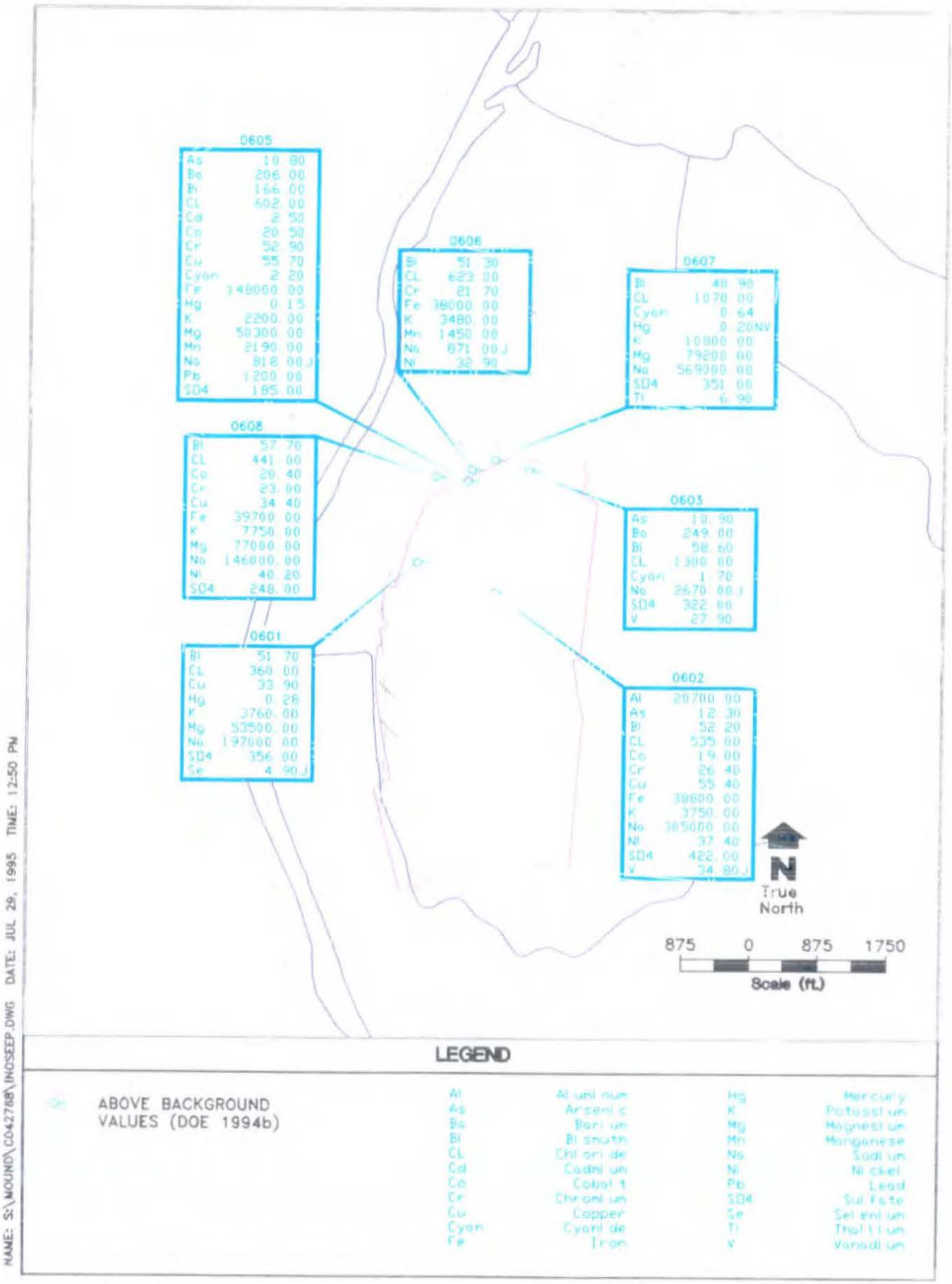


Figure 4.19. Inorganic and Anion Concentrations Above Background in the Main Hill Seeps Soil Samples (mg/kg).

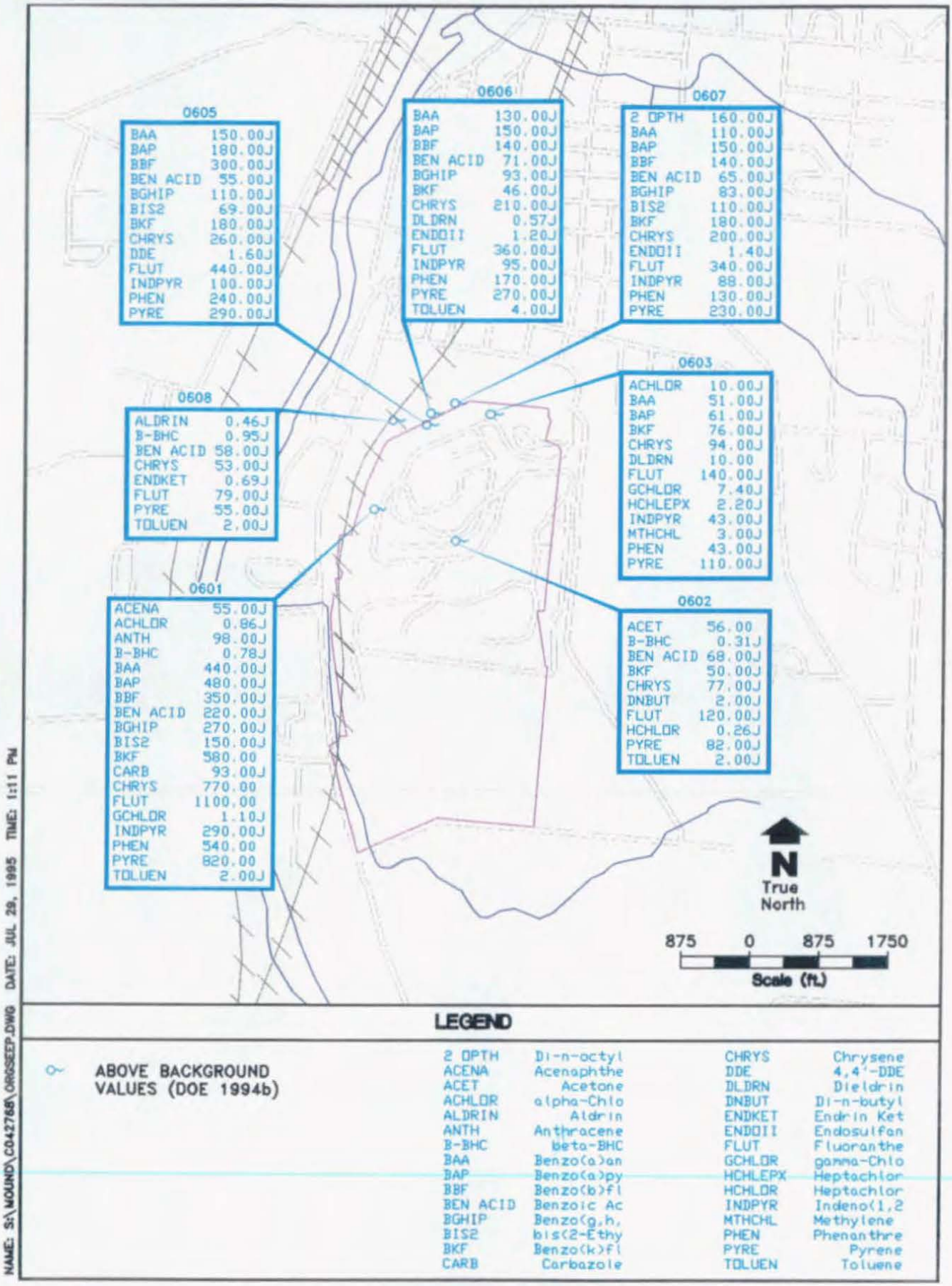


Figure 4.20. Pesticides/PCBs, VOCs, and SVOCs Above Background in the Main Hill Seeps Soil Samples (µg/kg).

Table IV.2. Radionuclide Concentrations in Main Hill Seeps Water Samples

Parameter	Concentration (pCi/L)			
	Location 601	Location 602	Location 607	Location 608
Potassium-40	199	130	185	---
Plutonium-238	**1.98**	---	1.13	---
Strontium-90	**42.4**	---	0.72	4.9
Tritium	**563,000**	16,900	66,300	16,500
Uranium-234	66	---	---	---
Uranium-238	6.6	---	---	---

--- Concentration not above background or analyte not detected
Bold Maximum concentration detected
NA Not available
pCi/L picocuries per liter

samples. Plutonium-238, strontium-90, tritium, uranium-234, and uranium-238 exceeded the background values in at least one sample.

4.4.2.2. Inorganics

The inorganic concentrations in water samples for this investigation are shown in Table IV.3. Cobalt, copper, mercury, and selenium were not detected in the Main Hill Seeps water samples. Analytes aluminum, calcium, iron, magnesium, phosphorus, potassium, silver, sodium, and thallium, for which no background is available for comparison, were also detected.

4.4.2.3. Pesticides/PCBs

No pesticides or PCBs were detected in any of the Main Hill Seeps water samples.

4.4.2.4. VOCs and SVOCs

Three VOCs and two SVOCs were detected in the Main Hill Seeps water samples (Table IV.4) all at Seep 602.

4.4.2.5. Anions

Anions were detected in both onsite and offsite locations in the Main Hill Seeps water samples (Table IV.5). However, no background values are available for comparison. Maximum anion concentrations occur at location 607.

4.5. GEOTECHNICAL SAMPLING RESULTS

Seven soil samples from the Main Hill seeps and seven from borings along the NPDES pipeline were submitted to the contract laboratory for geotechnical analyses. In accordance with the OU9 Site-Wide FSP, specific parameters were selected for geotechnical testing. These parameters, as well as the method of analysis are listed in Table IV.6.

Table IV.3. Inorganic Concentrations in Main Hill Seeps Water Samples

Parameter	Concentration (mg/L)			
	Location 601	Location 602	Location 607	Location 608
Aluminum	81.5	0.304	0.081	2.11
Beryllium	.55	---	---	0.76
Calcium	169	34.1	231	210
Iron	1.91	1.17	0.10	3.77
Magnesium	43.7	7.4	79.2	77
Phosphorous	---	78	---	---
Potassium	3.2	2.5	10.8	7.8
Silver	---	3.2	---	---
Sodium	197	305	569	146
Thallium	---	---	6.9	---

--- Concentration not above background or analyte not detected
NA Not available
mg/L milligrams per liter

Table IV.4. VOC and SVOC Concentrations in Main Hill Seeps Water Samples

Parameter	Concentration (µg/L)
	Location 602
Bromoform	2
Chlorodibromomethane	3
Chloroform	1
Benzoic Acid	1
Di-n-butylphalate	2

NA Not available
µg/L microgram per liter

Table IV.5. Anion Concentrations in Main Hill Seeps Water Samples

Parameter	Concentration (mg/L)			
	Location 601	Location 602	Location 607	Location 608
Chloride	367	226	**1070**	441
Fluoride	0.17	0.17	**0.18**	---
Nitrate/Nitrite	15	1.4	**6.4**	3.7
Sulfate	92	79	**185**	104

--- Analyte not detected
Bold Maximum concentration detected
NA Not available
mg/L milligram per liter

Table IV.6. Geotechnical Sampling: Test Methods Specified vs. Test Methods Used

Test Parameter	Test Method Specified by OU9 Field Sampling Plan	Test Method Used
Moisture Content	ASTM D2974-87	ASTM D2216
Organic Content	ASTM D2974-87	ASTM D2974-87
Particle-Size Analysis	ASTM D422-63	ASTM D422-63
Hydrogen Ion Content (pH)	SW846 9045	SW846 9045
Hydrogen Conductivity	ASTM D2434	ASTM 5084
Specific Gravity	ASTM D854-83	ASTM D854-83
Relative Density	ASTM 4254-83	---
Bulk Density	ASTM 4253-83	---
Cation Exchange Capacity	SW846 9080/9081	SW846 9080/9081

--- Test not performed
ASTM American Society for Testing Materials

In several cases it was not possible to adhere to either the parameter or method listed on this table. For instance, tests for porosity, relative density, and bulk density were not performed due to the nature of the sampling method. In order to perform these tests and produce truly representative results, an undisturbed sample is required. Undisturbed samples are best acquired using a thin-walled tube sampler, such as a shelby tube, and hydraulically pressing it into the soil at the specified depth level. However, thin-walled tube samplers are relatively weak and ineffective in coarse-grained sediments that were encountered in the NPDES pipeline borings. The samples obtained in this investigation using small hand tools and split-spoon samplers, were highly disturbed since the original compaction and arrangement of the soil particles was lost in the collection process. Because the disturbed soil test results would not be representative of in-situ conditions, laboratory tests for these three parameters were not performed.

Additionally, the laboratory could not test for permeability or hydraulic conductivity using the requested method (ASTM D-2434) as that method is limited to disturbed granular soils containing not more than 10% soil passing the No. 200 sieve. Since many of the samples submitted contained more than 10% of the soil finer than a No. 200 sieve, the laboratory tested for permeability using ASTM standard method D5084-90.

No inherent problems were reported in testing for the remaining parameters. Results of the laboratory tests performed on the Main Hill Seep and NPDES geotechnical samples are listed in Table IV.7 which is followed by a brief discussion of the results. Graphs of the particle size distribution analyses for each geotechnical sample are presented in Appendix C.

4.5.1. Moisture Content

Moisture content of the Main Hill Seeps geotechnical samples ranges from 14.6% to 35.7%. The sample from Seep 601, comprised predominantly of sand, has the lowest moisture content (14.6%). Caution should be exercised when using these values of moisture content for comparison. At several seeps, a well-defined flow channel and wetted perimeter was present. It was possible at these sites to collect the samples outside the main flowpath and avoid overly saturated soils. Other seep locations did not have a well-defined seepage pathway but rather an entire area or portion of a hillside was noticeably wet. At these sites, it was not possible to avoid the visibly wet areas and still obtain representative samples.

Table IV.7. Results of Geotechnical Laboratory Analyses for Selected NPDES and Main Hill Seep Sediment Samples

Sample Number	Organic Matter Content (%)[a]	Moisture Content (%)[b]	Hydrogen Ion Content (pH) (std. units)	Cation Exchange Capacity (meq/100g)	Specific Gravity	Permeability (cm/sec)
S11301	2.2	14.6	7.8	7.8	2.70	NA
S21301	3.9	25.7	7.8	21.3	2.71	NA
S31301	4.2	25.8	7.8	12.5	2.72	NA
S51301	5.9	24.1	7.8	15.4	2.78	NA
S61301	3.3	22.9	8.1	7.7	2.75	NA
S71301	6.3	19.8	7.4	13.9	2.74	NA
S81301	1.6	19.9	8.6	7.2	2.82	NA
N03301	3.4	16.8	7.9	667	2.73	7.6E-07
N04301	5.62	23.41	7.9	13.6	2.74	1.9E-07
N05302	1.43	7.42	8.7	16.3	2.76	2.4E-04
N06301	3.23	8.88	8.4	19.5	2.67	2.7E-06
N06302	3.01	22.31	8.1	14.0	2.71	4.6E-08
N07301	1.56	8.618	8.0	22.2	2.77	1.2E-04
N08301	3.91	15.9	8.3	26.7	2.71	1.4E-07

NA Not available
[a] Percent of mass of oven-dried sample.
[b] Ratio of mass of water in pore spaces to the solid mass of material, expressed as a percentage.
% percent
std units Standard units
meq/100g milliequivalents per 100 grams
cm/sec centimeters per second

The range in moisture content of the NPDES samples is between 7.42% and 23.41%. Both sand and gravel samples (N05302 and N07301) have relatively low moisture contents. The sample from the clay unit (N06302) which directly overlies the sand and gravel stratigraphic layer at boring N06 has a relatively high moisture content (22.31%).

4.5.2. Organic Matter Content

Typically, organic matter comprises less than 5% of a soil. Organic materials in soil may effectively immobilize metals by complexation reactions or cation exchange. They can strongly sorb many solutes in soil water, particularly polyvalent cations. Soils with an increased organic matter content generally have a higher cation-exchange capacity and may slow the migration of metals through soil.

The organic matter content in the Main Hill Seep samples ranges between 1.6% and 6.3%. Samples from Seeps 605 and 607 are relatively high in organic matter (5.9% and 6.3% respectively). Sample S81301 obtained at Seep 608 has the lowest organic matter content 1.6% of all seep samples. However, this seep is located on the hillside adjacent to the Conrail tracks in the City of Miamisburg. At this location, shale bedrock is exposed at the surface and very little vegetation is present in the vicinity immediately surrounding the seep. The soil at this site is essentially weathered shale bedrock which could account for the low organic matter content.

Organic matter content of the NPDES samples ranges from 1.43 to 5.62%. The sample from boring N04 has a relatively high organic matter content (5.62%). Organic matter makes up less than 4% of the constituents in the remaining NPDES samples. The three NPDES samples collected at depths greater than 5 feet have lower organic matter contents than the samples obtained from shallower depths.

4.5.3. Particle Size Distribution

Soil texture or particle size is a physical characteristic that can influence the fixation of metals by soils. In general, finely textured soils immobilize trace and heavy metals to a greater extent than coarsely textured soils. Also, finely textured soils usually have a greater cation exchange capacity which is an important factor in heavy metal fixation. Coarse-grained soils typically have higher hydraulic conductivities and increased rates of ground water flow.

Graphs of particle-size distribution, as well as the associated test data sheets, for each NPDES and Main Hill Seep geotechnical soil sample are included in Appendix C. However, a qualitative comparison of the graphs reveal that four samples are comprised of predominantly coarse-grained material. NPDES samples N05302 and N07301 can both be classified as silty sand and gravel. These samples were obtained from the sand and gravel stratigraphic horizon in borings N05 and N07, respectively. The sample from the 1 to 3 foot interval in NPDES boring N06 is comprised of silty sand with gravel. The only seep sample which contained predominantly coarse grained sediments is from seep 601. This sample (S11301) is classified as a silty sand with gravel. All of the remaining seep and NPDES samples are comprised of relatively fine-grained silt and clay mixed with lesser quantities of sand. Approximately 95% of sample S81301, collected at Seep 608, is made up of silt and clay. It is likely that this sample is mostly weathering products from the shale bedrock exposed along the hillside.

4.5.4. Hydrogen Ion Content (pH)

Soil pH plays a very important role in the retention and mobility of trace and heavy metals in soil. The pH is a controlling factor in sorption-desorption reactions and precipitation-solubilization reactions. In addition the cation exchange capacity of soils generally increases with an increase in pH. Even with a soil that has a high affinity for a specific metal, the degree to which the metal is fixed is a function of pH. Soil pH has been determined to be a major factor along with cation exchange capacity for the fixation of lead by soils. Soil pH also influences the retention of such metals as zinc, molybdenum, mercury, and copper. The pH of the samples submitted for analyses range from 7.4 to 8.7 standard units, which indicates that the soils are slightly basic to basic.

4.5.5. Permeability

Laboratory permeability tests were performed on each of the NPDES geotechnical soil samples. Values for the NPDES samples range from 1.2×10^{-4} to 4.6×10^{-8} centimeters per second (cm/sec). As expected, samples N05302 and N07301 exhibit the highest permeability values. Both of these samples were obtained from the sand and gravel stratigraphic horizon penetrated by NPDES boreholes N05 and N07, respectively. The lowest permeability value was found in the 14 to 16 foot depth interval sample from boring N06. This low permeability clay directly overlies the sand and gravel stratigraphic horizon of much higher permeability.

4.5.6. Cation Exchange Capacity

The cation exchange capacity (CEC) of natural soils can range from 2 to 60 milliequivalents per 100 grams (meq/100g) of soil, whereas soils with typical levels of organic matter have a CEC value between 10 and 30. The cation-exchange capacity of peat may range from 300 to 400 meq/100 grams. In general, soils with increased humus or clay content have a higher CEC. Clays are extremely important in adsorption reactions because of their high CEC.

The geotechnical samples analyzed for the NPDES and Main Hill Seep investigation have a CEC ranging from 7.2 to 667 meq/100 grams. However, only one sample has a CEC above 26 meq/100 grams. Although the laboratory quality control (QC) data sheets did not reveal any problems associated with the one anomalous sample value (N03301 at 667 meq/100g), this value is suspect. Excluding sample N03301, the cation-exchange capacity for the seep soil samples are generally slightly lower than that of the NPDES samples. However, no obvious trends between CEC, organic content, pH, or particle-size are apparent.

Section 5

5. REFERENCES

DOE 1992a. "Remedial Investigation/Feasibility Study, Operable Unit 9, Site-Wide Work Plan [FINAL]." U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico. May 1992.

DOE 1992b. "Remedial Investigation/Feasibility Study Operable Unit 9, Site-Wide Field Sampling Plan." U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico. February 1992.

DOE 1992c. "Remedial Investigation/Feasibility Study Operable Unit 9, Site-Wide Quality Assurance Project Plan" [Final]. U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico. February 1992.

DOE 1994a. "Risk-Based Cleanup Guideline Values, Mound Plant, Miamisburg, Ohio [Draft (Revision 1)]." U.S. Department of Energy, Dayton Area Office, Miamisburg, Ohio. March 11, 1994.

DOE 1994b. "OU9 Background Soils Investigation: Soil Chemistry Report". U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico. September 1994.

APPENDIX A

SAMPLE LOCATION CROSS REFERENCE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2001-0001	RAA301	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2001-0002	RAA302	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2001-0003	RAA303	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2001-0004	RAA304	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2001-0005	RAA305	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2001-0006	RAA306	DIRECTION FROM MOUND - NORTH; FENCE LINE
MND23-2002-0001	RBA301	DIRECTION FROM MOUND - NORTH; FENCE LINE+500
MND23-2002-0002	RBA302	DIRECTION FROM MOUND - NORTH; FENCE LINE+500
MND23-2002-0003	RBA303	DIRECTION FROM MOUND - NORTH; FENCE LINE+500
MND23-2002-0004	RBA304	DIRECTION FROM MOUND - NORTH; FENCE LINE+500
MND23-2003-0001	RCA301	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2003-0002	RCA302	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2003-0003	RCA303	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2003-0004	RCA304	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2003-0005	RCA305	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2003-0006	RCA306	DIRECTION FROM MOUND - NORTH; FENCE LINE+1000
MND23-2007-0001	RGA301	DIRECTION FROM MOUND - NORTH; 3000 FT RING
MND23-2007-0002	RGA302	DIRECTION FROM MOUND - NORTH; 3000 FT RING
MND23-2007-0003	RGA303	DIRECTION FROM MOUND - NORTH; 3000 FT RING
MND23-2007-0004	RGA304	DIRECTION FROM MOUND - NORTH; 3000 FT RING
MND23-2008-0001	RHA301	DIRECTION FROM MOUND - NORTH; 3500 FT RING
MND23-2008-0002	RHA302	DIRECTION FROM MOUND - NORTH; 3500 FT RING
MND23-2008-0003	RHA303	DIRECTION FROM MOUND - NORTH; 3500 FT RING
MND23-2008-0004	RHA304	DIRECTION FROM MOUND - NORTH; 3500 FT RING
MND23-2009-0001	RJA301	DIRECTION FROM MOUND - NORTH; 4000 FT RING
MND23-2009-0002	RJA302	DIRECTION FROM MOUND - NORTH; 4000 FT RING
MND23-2009-0003	RJA303	DIRECTION FROM MOUND - NORTH; 4000 FT RING
MND23-2009-0004	RJA304	DIRECTION FROM MOUND - NORTH; 4000 FT RING
MND23-2011-0001	RMA301	DIRECTION FROM MOUND - NORTH; 5000 FT RING
MND23-2011-0002	RMA302	DIRECTION FROM MOUND - NORTH; 5000 FT RING
MND23-2011-0003	RMA303	DIRECTION FROM MOUND - NORTH; 5000 FT RING
MND23-2011-0004	RMA304	DIRECTION FROM MOUND - NORTH; 5000 FT RING
MND23-2012-0001	RNA301	DIRECTION FROM MOUND - NORTH; 6000 FT RING
MND23-2012-0002	RNA302	DIRECTION FROM MOUND - NORTH; 6000 FT RING
MND23-2012-0003	RNA303	DIRECTION FROM MOUND - NORTH; 6000 FT RING
MND23-2012-0004	RNA304	DIRECTION FROM MOUND - NORTH; 6000 FT RING
MND23-2013-0001	RPA301	DIRECTION FROM MOUND - NORTH; 7000 FT RING
MND23-2013-0002	RPA302	DIRECTION FROM MOUND - NORTH; 7000 FT RING
MND23-2013-0003	RPA303	DIRECTION FROM MOUND - NORTH; 7000 FT RING
MND23-2013-0004	RPA304	DIRECTION FROM MOUND - NORTH; 7000 FT RING
MND23-2014-0001	RRA301	DIRECTION FROM MOUND - NORTH; 8000 FT RING
MND23-2014-0002	RRA302	DIRECTION FROM MOUND - NORTH; 8000 FT RING
MND23-2014-0003	RRA303	DIRECTION FROM MOUND - NORTH; 8000 FT RING
MND23-2014-0004	RRA304	DIRECTION FROM MOUND - NORTH; 8000 FT RING
MND23-2015-0001	RSA301	DIRECTION FROM MOUND - NORTH; 9000 FT RING
MND23-2015-0002	RSA302	DIRECTION FROM MOUND - NORTH; 9000 FT RING
MND23-2015-0003	RSA303	DIRECTION FROM MOUND - NORTH; 9000 FT RING

APPENDIX A SAMPLE LOCATION CROSS REFERENCE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2015-0004	RSA304	DIRECTION FROM MOUND - NORTH; 9000 FT RING
MND23-2016-0001	RTA301	DIRECTION FROM MOUND - NORTH; 10,000 FT RING
MND23-2016-0002	RTA302	DIRECTION FROM MOUND - NORTH; 10,000 FT RING
MND23-2016-0003	RTA303	DIRECTION FROM MOUND - NORTH; 10,000 FT RING
MND23-2016-0004	RTA304	DIRECTION FROM MOUND - NORTH; 10,000 FT RING
MND23-2017-0001	RUA301	DIRECTION FROM MOUND - NORTH; 25,000 FT RING
MND23-2017-0002	RUA302	DIRECTION FROM MOUND - NORTH; 25,000 FT RING
MND23-2018-0001	RVA301	DIRECTION FROM MOUND - NORTH; 50,000 FT RING
MND23-2018-0002	RVA302	DIRECTION FROM MOUND - NORTH; 50,000 FT RING
MND23-2019-0001	RXA301	DIRECTION FROM MOUND - NORTH; 75,000 FT RING
MND23-2019-0002	RXA302	DIRECTION FROM MOUND - NORTH; 75,000 FT RING
MND23-2019-0003	RXA303	DIRECTION FROM MOUND - NORTH; 75,000 FT RING
MND23-2019-0004	RXA304	DIRECTION FROM MOUND - NORTH; 75,000 FT RING
MND23-2020-0001	RYA301	DIRECTION FROM MOUND - NORTH; 100,000 FT RING
MND23-2020-0002	RYA302	DIRECTION FROM MOUND - NORTH; 100,000 FT RING
MND23-2021-0001	RAB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2021-0002	RAB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2021-0003	RAB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2021-0004	RAB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2021-0005	RAB305	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2021-0006	RAB306	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE
MND23-2022-0001	RBB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+500
MND23-2022-0002	RBB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+500
MND23-2022-0003	RBB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+500
MND23-2022-0004	RBB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+500
MND23-2023-0001	RCB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2023-0002	RCB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2023-0003	RCB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2023-0004	RCB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2023-0005	RCB305	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2023-0006	RCB306	DIRECTION FROM MOUND - NORTH/NORTHEAST; FENCE LINE+100
MND23-2027-0001	RGB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3000 FT RING
MND23-2027-0002	RGB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3000 FT RING
MND23-2027-0003	RGB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3000 FT RING
MND23-2027-0004	RGB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3000 FT RING
MND23-2028-0001	RHB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3500 FT RING
MND23-2028-0002	RHB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3500 FT RING
MND23-2028-0003	RHB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3500 FT RING
MND23-2028-0004	RHB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 3500 FT RING
MND23-2029-0001	RJB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4000 FT RING
MND23-2029-0002	RJB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4000 FT RING
MND23-2029-0003	RJB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4000 FT RING
MND23-2029-0004	RJB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4000 FT RING
MND23-2030-0001	RKB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4500 FT RING
MND23-2030-0002	RKB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4500 FT RING
MND23-2030-0003	RKB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4500 FT RING
MND23-2030-0004	RKB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 4500 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2031-0001	RMB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 5000 FT RING
MND23-2031-0002	RMB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 5000 FT RING
MND23-2031-0003	RMB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 5000 FT RING
MND23-2031-0004	RMB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 5000 FT RING
MND23-2032-0001	RNB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 6000 FT RING
MND23-2032-0002	RNB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 6000 FT RING
MND23-2032-0003	RNB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 6000 FT RING
MND23-2032-0004	RNB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 6000 FT RING
MND23-2033-0001	RPB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 7000 FT RING
MND23-2033-0002	RPB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 7000 FT RING
MND23-2033-0003	RPB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 7000 FT RING
MND23-2033-0004	RPB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 7000 FT RING
MND23-2034-0001	RRB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 8000 FT RING
MND23-2034-0002	RRB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 8000 FT RING
MND23-2034-0003	RRB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 8000 FT RING
MND23-2034-0004	RRB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 8000 FT RING
MND23-2035-0001	RSB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 9000 FT RING
MND23-2035-0002	RSB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 9000 FT RING
MND23-2035-0003	RSB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 9000 FT RING
MND23-2035-0004	RSB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 9000 FT RING
MND23-2036-0001	RTB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 10,000 FT RING
MND23-2036-0002	RTB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 10,000 FT RING
MND23-2036-0003	RTB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 10,000 FT RING
MND23-2036-0004	RTB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 10,000 FT RING
MND23-2037-0001	RUB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 25,000 FT RING
MND23-2037-0002	RUB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 25,000 FT RING
MND23-2038-0001	RVB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 50,000 FT RING
MND23-2038-0002	RVB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 50,000 FT RING
MND23-2039-0001	RXB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 75,000 FT RING
MND23-2039-0002	RXB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 75,000 FT RING
MND23-2040-0001	RYB301	DIRECTION FROM MOUND - NORTH/NORTHEAST; 100,000 FT RING
MND23-2040-0002	RYB302	DIRECTION FROM MOUND - NORTH/NORTHEAST; 100,000 FT RING
MND23-2040-0003	RYB303	DIRECTION FROM MOUND - NORTH/NORTHEAST; 100,000 FT RING
MND23-2040-0004	RYB304	DIRECTION FROM MOUND - NORTH/NORTHEAST; 100,000 FT RING
MND23-2041-0001	RAC301	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2041-0002	RAC302	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2041-0003	RAC303	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2041-0004	RAC304	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2041-0005	RAC305	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2041-0006	RAC306	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE
MND23-2042-0001	RBC301	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+500
MND23-2042-0002	RBC302	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+500
MND23-2042-0003	RBC303	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+500
MND23-2042-0004	RBC304	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+500
MND23-2043-0001	RCC301	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000
MND23-2043-0002	RCC302	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000
MND23-2043-0003	RCC303	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000

APPENDIX A SAMPLE LOCATION CROSS REFERENCE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2043-0004	RCC304	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000
MND23-2043-0005	RCC305	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000
MND23-2043-0006	RCC306	DIRECTION FROM MOUND - NORTHEAST; FENCE LINE+1000
MND23-2047-0001	RGC301	DIRECTION FROM MOUND - NORTHEAST; 3000 FT RING
MND23-2047-0002	RGC302	DIRECTION FROM MOUND - NORTHEAST; 3000 FT RING
MND23-2047-0003	RGC303	DIRECTION FROM MOUND - NORTHEAST; 3000 FT RING
MND23-2047-0004	RGC304	DIRECTION FROM MOUND - NORTHEAST; 3000 FT RING
MND23-2048-0001	RHC301	DIRECTION FROM MOUND - NORTHEAST; 3500 FT RING
MND23-2048-0002	RHC302	DIRECTION FROM MOUND - NORTHEAST; 3500 FT RING
MND23-2048-0003	RHC303	DIRECTION FROM MOUND - NORTHEAST; 3500 FT RING
MND23-2048-0004	RHC304	DIRECTION FROM MOUND - NORTHEAST; 3500 FT RING
MND23-2049-0001	RJC301	DIRECTION FROM MOUND - NORTHEAST; 4000 FT RING
MND23-2049-0002	RJC302	DIRECTION FROM MOUND - NORTHEAST; 4000 FT RING
MND23-2049-0003	RJC303	DIRECTION FROM MOUND - NORTHEAST; 4000 FT RING
MND23-2049-0004	RJC304	DIRECTION FROM MOUND - NORTHEAST; 4000 FT RING
MND23-2050-0001	RKC301	DIRECTION FROM MOUND - NORTHEAST; 4500 FT RING
MND23-2050-0002	RKC302	DIRECTION FROM MOUND - NORTHEAST; 4500 FT RING
MND23-2050-0003	RKC303	DIRECTION FROM MOUND - NORTHEAST; 4500 FT RING
MND23-2050-0004	RKC304	DIRECTION FROM MOUND - NORTHEAST; 4500 FT RING
MND23-2051-0001	RMC301	DIRECTION FROM MOUND - NORTHEAST; 5000 FT RING
MND23-2051-0002	RMC302	DIRECTION FROM MOUND - NORTHEAST; 5000 FT RING
MND23-2051-0003	RMC303	DIRECTION FROM MOUND - NORTHEAST; 5000 FT RING
MND23-2051-0004	RMC304	DIRECTION FROM MOUND - NORTHEAST; 5000 FT RING
MND23-2052-0001	RNC301	DIRECTION FROM MOUND - NORTHEAST; 6000 FT RING
MND23-2052-0002	RNC302	DIRECTION FROM MOUND - NORTHEAST; 6000 FT RING
MND23-2052-0003	RNC303	DIRECTION FROM MOUND - NORTHEAST; 6000 FT RING
MND23-2052-0004	RNC304	DIRECTION FROM MOUND - NORTHEAST; 6000 FT RING
MND23-2053-0001	RPC301	DIRECTION FROM MOUND - NORTHEAST; 7000 FT RING
MND23-2053-0002	RPC302	DIRECTION FROM MOUND - NORTHEAST; 7000 FT RING
MND23-2053-0003	RPC303	DIRECTION FROM MOUND - NORTHEAST; 7000 FT RING
MND23-2053-0004	RPC304	DIRECTION FROM MOUND - NORTHEAST; 7000 FT RING
MND23-2054-0001	RRC301	DIRECTION FROM MOUND - NORTHEAST; 8000 FT RING
MND23-2054-0002	RRC302	DIRECTION FROM MOUND - NORTHEAST; 8000 FT RING
MND23-2054-0003	RRC303	DIRECTION FROM MOUND - NORTHEAST; 8000 FT RING
MND23-2054-0004	RRC304	DIRECTION FROM MOUND - NORTHEAST; 8000 FT RING
MND23-2056-0001	RTC301	DIRECTION FROM MOUND - NORTHEAST; 10,000 FT RING
MND23-2056-0002	RTC302	DIRECTION FROM MOUND - NORTHEAST; 10,000 FT RING
MND23-2056-0003	RTC303	DIRECTION FROM MOUND - NORTHEAST; 10,000 FT RING
MND23-2056-0004	RTC304	DIRECTION FROM MOUND - NORTHEAST; 10,000 FT RING
MND23-2057-0001	RUC301	DIRECTION FROM MOUND - NORTHEAST; 25,000 FT RING
MND23-2057-0002	RUC302	DIRECTION FROM MOUND - NORTHEAST; 25,000 FT RING
MND23-2057-0003	RUC303	DIRECTION FROM MOUND - NORTHEAST; 25,000 FT RING
MND23-2057-0004	RUC304	DIRECTION FROM MOUND - NORTHEAST; 25,000 FT RING
MND23-2058-0001	RVC301	DIRECTION FROM MOUND - NORTHEAST; 50,000 FT RING
MND23-2058-0002	RVC302	DIRECTION FROM MOUND - NORTHEAST; 50,000 FT RING
MND23-2060-0001	RYC301	DIRECTION FROM MOUND - NORTHEAST; 100,000 FT RING
MND23-2060-0002	RYC302	DIRECTION FROM MOUND - NORTHEAST; 100,000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2061-0001	RAD301	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2061-0002	RAD302	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2061-0003	RAD303	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2061-0004	RAD304	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2061-0005	RAD305	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2061-0006	RAD306	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE
MND23-2062-0001	RBD301	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+500
MND23-2062-0002	RBD302	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+500
MND23-2062-0003	RBD303	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+500
MND23-2062-0004	RBD304	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+500
MND23-2063-0001	RCD301	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2063-0002	RCD302	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2063-0003	RCD303	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2063-0004	RCD304	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2063-0005	RCD305	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2063-0006	RCD306	DIRECTION FROM MOUND - EAST/NORTHEAST; FENCE LINE+1000
MND23-2064-0001	RDD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 1500 FT RING
MND23-2064-0002	RDD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 1500 FT RING
MND23-2064-0003	RDD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 1500 FT RING
MND23-2064-0004	RDD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 1500 FT RING
MND23-2067-0001	RGD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 3000 FT RING
MND23-2067-0002	RGD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 3000 FT RING
MND23-2067-0003	RGD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 3000 FT RING
MND23-2067-0004	RGD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 3000 FT RING
MND23-2068-0001	RHD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 3500 FT RING
MND23-2068-0002	RHD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 3500 FT RING
MND23-2068-0003	RHD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 3500 FT RING
MND23-2068-0004	RHD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 3500 FT RING
MND23-2069-0001	RJD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 4000 FT RING
MND23-2069-0002	RJD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 4000 FT RING
MND23-2069-0003	RJD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 4000 FT RING
MND23-2069-0004	RJD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 4000 FT RING
MND23-2070-0001	RKD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 4500 FT RING
MND23-2070-0002	RKD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 4500 FT RING
MND23-2070-0003	RKD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 4500 FT RING
MND23-2070-0004	RKD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 4500 FT RING
MND23-2071-0001	RMD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 5000 FT RING
MND23-2071-0002	RMD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 5000 FT RING
MND23-2071-0003	RMD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 5000 FT RING
MND23-2071-0004	RMD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 5000 FT RING
MND23-2072-0001	RND301	DIRECTION FROM MOUND - EAST/NORTHEAST; 6000 FT RING
MND23-2072-0002	RND302	DIRECTION FROM MOUND - EAST/NORTHEAST; 6000 FT RING
MND23-2072-0003	RND303	DIRECTION FROM MOUND - EAST/NORTHEAST; 6000 FT RING
MND23-2072-0004	RND304	DIRECTION FROM MOUND - EAST/NORTHEAST; 6000 FT RING
MND23-2073-0001	RPD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 7000 FT RING
MND23-2073-0002	RPD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 7000 FT RING
MND23-2073-0003	RPD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 7000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2073-0004	RPD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 7000 FT RING
MND23-2074-0001	RRD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 8000 FT RING
MND23-2074-0002	RRD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 8000 FT RING
MND23-2074-0003	RRD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 8000 FT RING
MND23-2074-0004	RRD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 8000 FT RING
MND23-2075-0001	RSD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 9000 FT RING
MND23-2075-0002	RSD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 9000 FT RING
MND23-2075-0003	RSD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 9000 FT RING
MND23-2075-0004	RSD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 9000 FT RING
MND23-2076-0001	RTD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 10,000 FT RING
MND23-2076-0002	RTD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 10,000 FT RING
MND23-2076-0003	RTD303	DIRECTION FROM MOUND - EAST/NORTHEAST; 10,000 FT RING
MND23-2076-0004	RTD304	DIRECTION FROM MOUND - EAST/NORTHEAST; 10,000 FT RING
MND23-2077-0001	RUD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 25,000 FT RING
MND23-2077-0002	RUD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 25,000 FT RING
MND23-2078-0001	RVD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 50,000 FT RING
MND23-2078-0002	RVD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 50,000 FT RING
MND23-2079-0001	RXD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 75,000 FT RING
MND23-2079-0002	RXD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 75,000 FT RING
MND23-2080-0001	RYD301	DIRECTION FROM MOUND - EAST/NORTHEAST; 100,000 FT RING
MND23-2080-0002	RYD302	DIRECTION FROM MOUND - EAST/NORTHEAST; 100,000 FT RING
MND23-2081-0001	RAE301	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2081-0002	RAE302	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2081-0003	RAE303	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2081-0004	RAE304	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2081-0005	RAE305	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2081-0006	RAE306	DIRECTION FROM MOUND - EAST; FENCE LINE
MND23-2082-0001	RBE301	DIRECTION FROM MOUND - EAST; FENCE LINE+500
MND23-2082-0002	RBE302	DIRECTION FROM MOUND - EAST; FENCE LINE+500
MND23-2082-0003	RBE303	DIRECTION FROM MOUND - EAST; FENCE LINE+500
MND23-2082-0004	RBE304	DIRECTION FROM MOUND - EAST; FENCE LINE+500
MND23-2083-0001	RCE301	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2083-0002	RCE302	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2083-0003	RCE303	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2083-0004	RCE304	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2083-0005	RCE305	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2083-0006	RCE306	DIRECTION FROM MOUND - EAST; FENCE LINE+1000
MND23-2086-0001	RFE301	DIRECTION FROM MOUND - EAST; 2500 FT RING
MND23-2086-0002	RFE302	DIRECTION FROM MOUND - EAST; 2500 FT RING
MND23-2086-0003	RFE303	DIRECTION FROM MOUND - EAST; 2500 FT RING
MND23-2086-0004	RFE304	DIRECTION FROM MOUND - EAST; 2500 FT RING
MND23-2087-0001	RGE301	DIRECTION FROM MOUND - EAST; 3000 FT RING
MND23-2087-0002	RGE302	DIRECTION FROM MOUND - EAST; 3000 FT RING
MND23-2087-0003	RGE303	DIRECTION FROM MOUND - EAST; 3000 FT RING
MND23-2087-0004	RGE304	DIRECTION FROM MOUND - EAST; 3000 FT RING
MND23-2088-0001	RHE301	DIRECTION FROM MOUND - EAST; 3500 FT RING
MND23-2088-0002	RHE302	DIRECTION FROM MOUND - EAST; 3500 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2088-0003	RHE303	DIRECTION FROM MOUND - EAST; 3500 FT RING
MND23-2088-0004	RHE304	DIRECTION FROM MOUND - EAST; 3500 FT RING
MND23-2089-0001	RJE301	DIRECTION FROM MOUND - EAST; 4000 FT RING
MND23-2089-0002	RJE302	DIRECTION FROM MOUND - EAST; 4000 FT RING
MND23-2089-0003	RJE303	DIRECTION FROM MOUND - EAST; 4000 FT RING
MND23-2089-0004	RJE304	DIRECTION FROM MOUND - EAST; 4000 FT RING
MND23-2090-0001	RKE301	DIRECTION FROM MOUND - EAST; 4500 FT RING
MND23-2090-0002	RKE302	DIRECTION FROM MOUND - EAST; 4500 FT RING
MND23-2090-0003	RKE303	DIRECTION FROM MOUND - EAST; 4500 FT RING
MND23-2090-0004	RKE304	DIRECTION FROM MOUND - EAST; 4500 FT RING
MND23-2091-0001	RME301	DIRECTION FROM MOUND - EAST; 5000 FT RING
MND23-2091-0002	RME302	DIRECTION FROM MOUND - EAST; 5000 FT RING
MND23-2091-0003	RME303	DIRECTION FROM MOUND - EAST; 5000 FT RING
MND23-2091-0004	RME304	DIRECTION FROM MOUND - EAST; 5000 FT RING
MND23-2092-0001	RNE301	DIRECTION FROM MOUND - EAST; 6000 FT RING
MND23-2092-0002	RNE302	DIRECTION FROM MOUND - EAST; 6000 FT RING
MND23-2092-0003	RNE303	DIRECTION FROM MOUND - EAST; 6000 FT RING
MND23-2092-0004	RNE304	DIRECTION FROM MOUND - EAST; 6000 FT RING
MND23-2093-0001	RPE301	DIRECTION FROM MOUND - EAST; 7000 FT RING
MND23-2093-0002	RPE302	DIRECTION FROM MOUND - EAST; 7000 FT RING
MND23-2093-0003	RPE303	DIRECTION FROM MOUND - EAST; 7000 FT RING
MND23-2093-0004	RPE304	DIRECTION FROM MOUND - EAST; 7000 FT RING
MND23-2094-0001	RRE301	DIRECTION FROM MOUND - EAST; 8000 FT RING
MND23-2094-0002	RRE302	DIRECTION FROM MOUND - EAST; 8000 FT RING
MND23-2094-0003	RRE303	DIRECTION FROM MOUND - EAST; 8000 FT RING
MND23-2094-0004	RRE304	DIRECTION FROM MOUND - EAST; 8000 FT RING
MND23-2096-0001	RTE301	DIRECTION FROM MOUND - EAST; 10,000 FT RING
MND23-2096-0002	RTE302	DIRECTION FROM MOUND - EAST; 10,000 FT RING
MND23-2096-0003	RTE303	DIRECTION FROM MOUND - EAST; 10,000 FT RING
MND23-2096-0004	RTE304	DIRECTION FROM MOUND - EAST; 10,000 FT RING
MND23-2097-0001	RUE301	DIRECTION FROM MOUND - EAST; 25,000 FT RING
MND23-2097-0002	RUE302	DIRECTION FROM MOUND - EAST; 25,000 FT RING
MND23-2097-0003	RUE303	DIRECTION FROM MOUND - EAST; 25,000 FT RING
MND23-2097-0004	RUE304	DIRECTION FROM MOUND - EAST; 25,000 FT RING
MND23-2098-0001	RVE301	DIRECTION FROM MOUND - EAST; 50,000 FT RING
MND23-2098-0002	RVE302	DIRECTION FROM MOUND - EAST; 50,000 FT RING
MND23-2098-0003	RVE303	DIRECTION FROM MOUND - EAST; 50,000 FT RING
MND23-2098-0004	RVE304	DIRECTION FROM MOUND - EAST; 50,000 FT RING
MND23-2099-0001	RXE301	DIRECTION FROM MOUND - EAST; 75,000 FT RING
MND23-2099-0002	RXE302	DIRECTION FROM MOUND - EAST; 75,000 FT RING
MND23-2100-0001	RYE301	DIRECTION FROM MOUND - EAST; 100,000 FT RING
MND23-2100-0002	RYE302	DIRECTION FROM MOUND - EAST; 100,000 FT RING
MND23-2101-0001	RAF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE
MND23-2101-0002	RAF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE
MND23-2101-0003	RAF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE
MND23-2101-0004	RAF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE
MND23-2101-0005	RAF305	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2101-0006	RAF306	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE
MND23-2102-0001	RBF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+500
MND23-2102-0002	RBF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+500
MND23-2102-0003	RBF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+500
MND23-2102-0004	RBF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+500
MND23-2103-0001	RCF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2103-0002	RCF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2103-0003	RCF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2103-0004	RCF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2103-0005	RCF305	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2103-0006	RCF306	DIRECTION FROM MOUND - EAST/SOUTHEAST; FENCE LINE+1000
MND23-2106-0001	RFF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 2500 FT RING
MND23-2106-0002	RFF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 2500 FT RING
MND23-2106-0003	RFF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 2500 FT RING
MND23-2106-0004	RFF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 2500 FT RING
MND23-2107-0001	RGF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3000 FT RING
MND23-2107-0002	RGF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3000 FT RING
MND23-2107-0003	RGF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3000 FT RING
MND23-2107-0004	RGF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3000 FT RING
MND23-2108-0001	RHF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3500 FT RING
MND23-2108-0002	RHF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3500 FT RING
MND23-2108-0003	RHF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3500 FT RING
MND23-2108-0004	RHF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 3500 FT RING
MND23-2109-0001	RJF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4000 FT RING
MND23-2109-0002	RJF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4000 FT RING
MND23-2109-0003	RJF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4000 FT RING
MND23-2109-0004	RJF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4000 FT RING
MND23-2110-0001	RKF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4500 FT RING
MND23-2110-0002	RKF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4500 FT RING
MND23-2110-0003	RKF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4500 FT RING
MND23-2110-0004	RKF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 4500 FT RING
MND23-2111-0001	RMF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 5000 FT RING
MND23-2111-0002	RMF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 5000 FT RING
MND23-2111-0003	RMF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 5000 FT RING
MND23-2111-0004	RMF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 5000 FT RING
MND23-2112-0001	RNF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 6000 FT RING
MND23-2112-0002	RNF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 6000 FT RING
MND23-2112-0003	RNF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 6000 FT RING
MND23-2112-0004	RNF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 6000 FT RING
MND23-2113-0001	RPF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 7000 FT RING
MND23-2113-0002	RPF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 7000 FT RING
MND23-2113-0003	RPF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 7000 FT RING
MND23-2113-0004	RPF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 7000 FT RING
MND23-2114-0001	RRF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 8000 FT RING
MND23-2114-0002	RRF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 8000 FT RING
MND23-2114-0003	RRF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 8000 FT RING
MND23-2114-0004	RRF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 8000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2115-0001	RSF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 9000 FT RING
MND23-2115-0002	RSF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 9000 FT RING
MND23-2115-0003	RSF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 9000 FT RING
MND23-2115-0004	RSF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 9000 FT RING
MND23-2116-0001	RTF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 10,000 FT RING
MND23-2116-0002	RTF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 10,000 FT RING
MND23-2116-0003	RTF303	DIRECTION FROM MOUND - EAST/SOUTHEAST; 10,000 FT RING
MND23-2116-0004	RTF304	DIRECTION FROM MOUND - EAST/SOUTHEAST; 10,000 FT RING
MND23-2117-0001	RUF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 25,000 FT RING
MND23-2117-0002	RUF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 25,000 FT RING
MND23-2118-0001	RVF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 50,000 FT RING
MND23-2118-0002	RVF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 50,000 FT RING
MND23-2119-0001	RXF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 75,000 FT RING
MND23-2119-0002	RXF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 75,000 FT RING
MND23-2120-0001	RYF301	DIRECTION FROM MOUND - EAST/SOUTHEAST; 100,000 FT RING
MND23-2120-0002	RYF302	DIRECTION FROM MOUND - EAST/SOUTHEAST; 100,000 FT RING
MND23-2121-0001	RAG301	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2121-0002	RAG302	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2121-0003	RAG303	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2121-0004	RAG304	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2121-0005	RAG305	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2121-0006	RAG306	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE
MND23-2122-0001	RBG301	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+500
MND23-2122-0002	RBG302	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+500
MND23-2122-0003	RBG303	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+500
MND23-2122-0004	RBG304	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+500
MND23-2123-0001	RCG301	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2123-0002	RCG302	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2123-0003	RCG303	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2123-0004	RCG304	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2123-0005	RCG305	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2123-0006	RCG306	DIRECTION FROM MOUND - SOUTHEAST; FENCE LINE+1000
MND23-2127-0001	RGG301	DIRECTION FROM MOUND - SOUTHEAST; 3000 FT RING
MND23-2127-0002	RGG302	DIRECTION FROM MOUND - SOUTHEAST; 3000 FT RING
MND23-2127-0003	RGG303	DIRECTION FROM MOUND - SOUTHEAST; 3000 FT RING
MND23-2127-0004	RGG304	DIRECTION FROM MOUND - SOUTHEAST; 3000 FT RING
MND23-2128-0001	RHG301	DIRECTION FROM MOUND - SOUTHEAST; 3500 FT RING
MND23-2128-0002	RHG302	DIRECTION FROM MOUND - SOUTHEAST; 3500 FT RING
MND23-2128-0003	RHG303	DIRECTION FROM MOUND - SOUTHEAST; 3500 FT RING
MND23-2128-0004	RHG304	DIRECTION FROM MOUND - SOUTHEAST; 3500 FT RING
MND23-2129-0001	RJG301	DIRECTION FROM MOUND - SOUTHEAST; 4000 FT RING
MND23-2129-0002	RJG302	DIRECTION FROM MOUND - SOUTHEAST; 4000 FT RING
MND23-2129-0003	RJG303	DIRECTION FROM MOUND - SOUTHEAST; 4000 FT RING
MND23-2129-0004	RJG304	DIRECTION FROM MOUND - SOUTHEAST; 4000 FT RING
MND23-2130-0001	RKG301	DIRECTION FROM MOUND - SOUTHEAST; 4500 FT RING
MND23-2130-0002	RKG302	DIRECTION FROM MOUND - SOUTHEAST; 4500 FT RING
MND23-2130-0003	RKG303	DIRECTION FROM MOUND - SOUTHEAST; 4500 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2130-0004	RKG304	DIRECTION FROM MOUND - SOUTHEAST; 4500 FT RING
MND23-2131-0001	RMG301	DIRECTION FROM MOUND - SOUTHEAST; 5000 FT RING
MND23-2131-0002	RMG302	DIRECTION FROM MOUND - SOUTHEAST; 5000 FT RING
MND23-2131-0003	RMG303	DIRECTION FROM MOUND - SOUTHEAST; 5000 FT RING
MND23-2131-0004	RMG304	DIRECTION FROM MOUND - SOUTHEAST; 5000 FT RING
MND23-2132-0001	RNG301	DIRECTION FROM MOUND - SOUTHEAST; 6000 FT RING
MND23-2132-0002	RNG302	DIRECTION FROM MOUND - SOUTHEAST; 6000 FT RING
MND23-2132-0003	RNG303	DIRECTION FROM MOUND - SOUTHEAST; 6000 FT RING
MND23-2132-0004	RNG304	DIRECTION FROM MOUND - SOUTHEAST; 6000 FT RING
MND23-2133-0001	RPG301	DIRECTION FROM MOUND - SOUTHEAST; 7000 FT RING
MND23-2133-0002	RPG302	DIRECTION FROM MOUND - SOUTHEAST; 7000 FT RING
MND23-2133-0003	RPG303	DIRECTION FROM MOUND - SOUTHEAST; 7000 FT RING
MND23-2133-0004	RPG304	DIRECTION FROM MOUND - SOUTHEAST; 7000 FT RING
MND23-2134-0001	RRG301	DIRECTION FROM MOUND - SOUTHEAST; 8000 FT RING
MND23-2134-0002	RRG302	DIRECTION FROM MOUND - SOUTHEAST; 8000 FT RING
MND23-2134-0003	RRG303	DIRECTION FROM MOUND - SOUTHEAST; 8000 FT RING
MND23-2134-0004	RRG304	DIRECTION FROM MOUND - SOUTHEAST; 8000 FT RING
MND23-2135-0001	RSG301	DIRECTION FROM MOUND - SOUTHEAST; 9000 FT RING
MND23-2135-0002	RSG302	DIRECTION FROM MOUND - SOUTHEAST; 9000 FT RING
MND23-2135-0003	RSG303	DIRECTION FROM MOUND - SOUTHEAST; 9000 FT RING
MND23-2135-0004	RSG304	DIRECTION FROM MOUND - SOUTHEAST; 9000 FT RING
MND23-2136-0001	RTG301	DIRECTION FROM MOUND - SOUTHEAST; 10,000 FT RING
MND23-2136-0002	RTG302	DIRECTION FROM MOUND - SOUTHEAST; 10,000 FT RING
MND23-2136-0003	RTG303	DIRECTION FROM MOUND - SOUTHEAST; 10,000 FT RING
MND23-2136-0004	RTG304	DIRECTION FROM MOUND - SOUTHEAST; 10,000 FT RING
MND23-2137-0001	RUG301	DIRECTION FROM MOUND - SOUTHEAST; 25,000 FT RING
MND23-2137-0002	RUG302	DIRECTION FROM MOUND - SOUTHEAST; 25,000 FT RING
MND23-2138-0001	RVG301	DIRECTION FROM MOUND - SOUTHEAST; 50,000 FT RING
MND23-2138-0002	RVG302	DIRECTION FROM MOUND - SOUTHEAST; 50,000 FT RING
MND23-2139-0001	RXG301	DIRECTION FROM MOUND - SOUTHEAST; 75,000 FT RING
MND23-2139-0002	RXG302	DIRECTION FROM MOUND - SOUTHEAST; 75,000 FT RING
MND23-2140-0001	RYG301	DIRECTION FROM MOUND - SOUTHEAST; 100,000 FT RING
MND23-2140-0002	RYG302	DIRECTION FROM MOUND - SOUTHEAST; 100,000 FT RING
MND23-2141-0001	RAH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2141-0002	RAH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2141-0003	RAH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2141-0004	RAH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2141-0005	RAH305	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2141-0006	RAH306	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE
MND23-2142-0001	RBH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+500
MND23-2142-0002	RBH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+500
MND23-2142-0003	RBH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+500
MND23-2142-0004	RBH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+500
MND23-2143-0001	RCH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000
MND23-2143-0002	RCH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000
MND23-2143-0003	RCH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000
MND23-2143-0004	RCH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2143-0005	RCH305	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000
MND23-2143-0006	RCH306	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; FENCE LINE+1000
MND23-2148-0001	RHH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 3500 FT RING
MND23-2148-0002	RHH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 3500 FT RING
MND23-2148-0003	RHH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 3500 FT RING
MND23-2148-0004	RHH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 3500 FT RING
MND23-2149-0001	RJH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4000 FT RING
MND23-2149-0002	RJH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4000 FT RING
MND23-2149-0003	RJH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4000 FT RING
MND23-2149-0004	RJH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4000 FT RING
MND23-2150-0001	RKH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4500 FT RING
MND23-2150-0002	RKH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4500 FT RING
MND23-2150-0003	RKH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4500 FT RING
MND23-2150-0004	RKH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 4500 FT RING
MND23-2151-0001	RMH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 5000 FT RING
MND23-2151-0002	RMH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 5000 FT RING
MND23-2151-0003	RMH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 5000 FT RING
MND23-2151-0004	RMH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 5000 FT RING
MND23-2152-0001	RNH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 6000 FT RING
MND23-2152-0002	RNH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 6000 FT RING
MND23-2152-0003	RNH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 6000 FT RING
MND23-2152-0004	RNH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 6000 FT RING
MND23-2153-0001	RPH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 7000 FT RING
MND23-2153-0002	RPH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 7000 FT RING
MND23-2153-0003	RPH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 7000 FT RING
MND23-2153-0004	RPH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 7000 FT RING
MND23-2154-0001	RRH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 8000 FT RING
MND23-2154-0002	RRH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 8000 FT RING
MND23-2154-0003	RRH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 8000 FT RING
MND23-2154-0004	RRH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 8000 FT RING
MND23-2155-0001	RSH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 9000 FT RING
MND23-2155-0002	RSH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 9000 FT RING
MND23-2155-0003	RSH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 9000 FT RING
MND23-2155-0004	RSH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 9000 FT RING
MND23-2156-0001	RTH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 10,000 FT RING
MND23-2156-0002	RTH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 10,000 FT RING
MND23-2156-0003	RTH303	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 10,000 FT RING
MND23-2156-0004	RTH304	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 10,000 FT RING
MND23-2157-0001	RUH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 25,000 FT RING
MND23-2157-0002	RUH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 25,000 FT RING
MND23-2158-0001	RVH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 50,000 FT RING
MND23-2158-0002	RVH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 50,000 FT RING
MND23-2159-0001	RXH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 75,000 FT RING
MND23-2159-0002	RXH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 75,000 FT RING
MND23-2160-0001	RYH301	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 100,000 FT RING
MND23-2160-0002	RYH302	DIRECTION FROM MOUND - SOUTH/SOUTHEAST; 100,000 FT RING
MND23-2161-0001	RAJ301	DIRECTION FROM MOUND - SOUTH; FENCE LINE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2161-0002	RAJ302	DIRECTION FROM MOUND - SOUTH; FENCE LINE
MND23-2161-0003	RAJ303	DIRECTION FROM MOUND - SOUTH; FENCE LINE
MND23-2161-0004	RAJ304	DIRECTION FROM MOUND - SOUTH; FENCE LINE
MND23-2161-0005	RAJ305	DIRECTION FROM MOUND - SOUTH; FENCE LINE
MND23-2161-0006	RAJ306	DIRECTION FROM MOUND - SOUTH; FENCE LINE
MND23-2162-0001	RBJ301	DIRECTION FROM MOUND - SOUTH; FENCE LINE+500
MND23-2162-0002	RBJ302	DIRECTION FROM MOUND - SOUTH; FENCE LINE+500
MND23-2162-0003	RBJ303	DIRECTION FROM MOUND - SOUTH; FENCE LINE+500
MND23-2162-0004	RBJ304	DIRECTION FROM MOUND - SOUTH; FENCE LINE+500
MND23-2163-0001	RCJ301	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2163-0002	RCJ302	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2163-0003	RCJ303	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2163-0004	RCJ304	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2163-0005	RCJ305	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2163-0006	RCJ306	DIRECTION FROM MOUND - SOUTH; FENCE LINE+1000
MND23-2167-0001	RGJ301	DIRECTION FROM MOUND - SOUTH; 3000 FT RING
MND23-2167-0002	RGJ302	DIRECTION FROM MOUND - SOUTH; 3000 FT RING
MND23-2167-0003	RGJ303	DIRECTION FROM MOUND - SOUTH; 3000 FT RING
MND23-2167-0004	RGJ304	DIRECTION FROM MOUND - SOUTH; 3000 FT RING
MND23-2168-0001	RHJ301	DIRECTION FROM MOUND - SOUTH; 3500 FT RING
MND23-2168-0002	RHJ302	DIRECTION FROM MOUND - SOUTH; 3500 FT RING
MND23-2168-0003	RHJ303	DIRECTION FROM MOUND - SOUTH; 3500 FT RING
MND23-2168-0004	RHJ304	DIRECTION FROM MOUND - SOUTH; 3500 FT RING
MND23-2169-0001	RJJ301	DIRECTION FROM MOUND - SOUTH; 4000 FT RING
MND23-2169-0002	RJJ302	DIRECTION FROM MOUND - SOUTH; 4000 FT RING
MND23-2169-0003	RJJ303	DIRECTION FROM MOUND - SOUTH; 4000 FT RING
MND23-2169-0004	RJJ304	DIRECTION FROM MOUND - SOUTH; 4000 FT RING
MND23-2170-0001	RKJ301	DIRECTION FROM MOUND - SOUTH; 4500 FT RING
MND23-2170-0002	RKJ302	DIRECTION FROM MOUND - SOUTH; 4500 FT RING
MND23-2170-0003	RKJ303	DIRECTION FROM MOUND - SOUTH; 4500 FT RING
MND23-2170-0004	RKJ304	DIRECTION FROM MOUND - SOUTH; 4500 FT RING
MND23-2171-0001	RMJ301	DIRECTION FROM MOUND - SOUTH; 5000 FT RING
MND23-2171-0002	RMJ302	DIRECTION FROM MOUND - SOUTH; 5000 FT RING
MND23-2171-0003	RMJ303	DIRECTION FROM MOUND - SOUTH; 5000 FT RING
MND23-2171-0004	RMJ304	DIRECTION FROM MOUND - SOUTH; 5000 FT RING
MND23-2172-0001	RNJ301	DIRECTION FROM MOUND - SOUTH; 6000 FT RING
MND23-2172-0002	RNJ302	DIRECTION FROM MOUND - SOUTH; 6000 FT RING
MND23-2172-0003	RNJ303	DIRECTION FROM MOUND - SOUTH; 6000 FT RING
MND23-2172-0004	RNJ304	DIRECTION FROM MOUND - SOUTH; 6000 FT RING
MND23-2173-0001	RPJ301	DIRECTION FROM MOUND - SOUTH; 7000 FT RING
MND23-2173-0002	RPJ302	DIRECTION FROM MOUND - SOUTH; 7000 FT RING
MND23-2173-0003	RPJ303	DIRECTION FROM MOUND - SOUTH; 7000 FT RING
MND23-2173-0004	RPJ304	DIRECTION FROM MOUND - SOUTH; 7000 FT RING
MND23-2174-0001	RRJ301	DIRECTION FROM MOUND - SOUTH; 8000 FT RING
MND23-2174-0002	RRJ302	DIRECTION FROM MOUND - SOUTH; 8000 FT RING
MND23-2174-0003	RRJ303	DIRECTION FROM MOUND - SOUTH; 8000 FT RING
MND23-2174-0004	RRJ304	DIRECTION FROM MOUND - SOUTH; 8000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2175-0001	RSJ301	DIRECTION FROM MOUND - SOUTH; 9000 FT RING
MND23-2175-0002	RSJ302	DIRECTION FROM MOUND - SOUTH; 9000 FT RING
MND23-2175-0003	RSJ303	DIRECTION FROM MOUND - SOUTH; 9000 FT RING
MND23-2175-0004	RSJ304	DIRECTION FROM MOUND - SOUTH; 9000 FT RING
MND23-2176-0001	RTJ301	DIRECTION FROM MOUND - SOUTH; 10,000 FT RING
MND23-2176-0002	RTJ302	DIRECTION FROM MOUND - SOUTH; 10,000 FT RING
MND23-2176-0003	RTJ303	DIRECTION FROM MOUND - SOUTH; 10,000 FT RING
MND23-2176-0004	RTJ304	DIRECTION FROM MOUND - SOUTH; 10,000 FT RING
MND23-2177-0001	RUJ301	DIRECTION FROM MOUND - SOUTH; 25,000 FT RING
MND23-2177-0002	RUJ302	DIRECTION FROM MOUND - SOUTH; 25,000 FT RING
MND23-2178-0001	RVJ301	DIRECTION FROM MOUND - SOUTH; 50,000 FT RING
MND23-2178-0002	RVJ302	DIRECTION FROM MOUND - SOUTH; 50,000 FT RING
MND23-2179-0001	RXJ301	DIRECTION FROM MOUND - SOUTH; 75,000 FT RING
MND23-2179-0002	RXJ302	DIRECTION FROM MOUND - SOUTH; 75,000 FT RING
MND23-2180-0001	RYJ301	DIRECTION FROM MOUND - SOUTH; 100,000 FT RING
MND23-2180-0002	RYJ302	DIRECTION FROM MOUND - SOUTH; 100,000 FT RING
MND23-2180-0003	RYJ303	DIRECTION FROM MOUND - SOUTH; 100,000 FT RING
MND23-2180-0004	RYJ304	DIRECTION FROM MOUND - SOUTH; 100,000 FT RING
MND23-2181-0001	RAK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2181-0002	RAK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2181-0003	RAK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2181-0004	RAK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2181-0005	RAK305	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2181-0006	RAK306	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE
MND23-2182-0001	RBK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+500
MND23-2182-0002	RBK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+500
MND23-2182-0003	RBK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+500
MND23-2182-0004	RBK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+500
MND23-2183-0001	RCK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2183-0002	RCK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2183-0003	RCK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2183-0004	RCK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2183-0005	RCK305	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2183-0006	RCK306	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; FENCE LINE+100
MND23-2185-0001	REK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 2000 FT RING
MND23-2185-0002	REK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 2000 FT RING
MND23-2185-0003	REK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 2000 FT RING
MND23-2185-0004	REK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 2000 FT RING
MND23-2188-0001	RHK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 3500 FT RING
MND23-2188-0002	RHK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 3500 FT RING
MND23-2188-0003	RHK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 3500 FT RING
MND23-2188-0004	RHK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 3500 FT RING
MND23-2189-0001	RJK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4000 FT RING
MND23-2189-0002	RJK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4000 FT RING
MND23-2189-0003	RJK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4000 FT RING
MND23-2189-0004	RJK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4000 FT RING
MND23-2190-0001	RKK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4500 FT RING

APPENDIX A SAMPLE LOCATION CROSS REFERENCE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2190-0002	RKK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4500 FT RING
MND23-2190-0003	RKK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4500 FT RING
MND23-2190-0004	RKK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 4500 FT RING
MND23-2191-0001	RMK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 5000 FT RING
MND23-2191-0002	RMK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 5000 FT RING
MND23-2191-0003	RMK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 5000 FT RING
MND23-2191-0004	RMK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 5000 FT RING
MND23-2192-0001	RNK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 6000 FT RING
MND23-2192-0002	RNK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 6000 FT RING
MND23-2192-0003	RNK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 6000 FT RING
MND23-2192-0004	RNK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 6000 FT RING
MND23-2193-0001	RPK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 7000 FT RING
MND23-2193-0002	RPK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 7000 FT RING
MND23-2193-0003	RPK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 7000 FT RING
MND23-2193-0004	RPK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 7000 FT RING
MND23-2194-0001	RRK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 8000 FT RING
MND23-2194-0002	RRK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 8000 FT RING
MND23-2194-0003	RRK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 8000 FT RING
MND23-2194-0004	RRK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 8000 FT RING
MND23-2195-0001	RSK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 9000 FT RING
MND23-2195-0002	RSK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 9000 FT RING
MND23-2195-0003	RSK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 9000 FT RING
MND23-2195-0004	RSK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 9000 FT RING
MND23-2196-0001	RTK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 10,000 FT RING
MND23-2196-0002	RTK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 10,000 FT RING
MND23-2196-0003	RTK303	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 10,000 FT RING
MND23-2196-0004	RTK304	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 10,000 FT RING
MND23-2197-0001	RUK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 25,000 FT RING
MND23-2197-0002	RUK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 25,000 FT RING
MND23-2198-0001	RVK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 50,000 FT RING
MND23-2198-0002	RVK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 50,000 FT RING
MND23-2199-0001	RXK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 75,000 FT RING
MND23-2199-0002	RXK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 75,000 FT RING
MND23-2200-0001	RYK301	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 100,000 FT RING
MND23-2200-0002	RYK302	DIRECTION FROM MOUND - SOUTH/SOUTHWEST; 100,000 FT RING
MND23-2201-0001	RAM301	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2201-0002	RAM302	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2201-0003	RAM303	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2201-0004	RAM304	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2201-0005	RAM305	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2201-0006	RAM306	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE
MND23-2202-0001	RBM301	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+500
MND23-2202-0002	RBM302	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+500
MND23-2202-0003	RBM303	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+500
MND23-2202-0004	RBM304	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+500
MND23-2203-0001	RCM301	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000
MND23-2203-0002	RCM302	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2203-0003	RCM303	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000
MND23-2203-0004	RCM304	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000
MND23-2203-0005	RCM305	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000
MND23-2203-0006	RCM306	DIRECTION FROM MOUND - SOUTHWEST; FENCE LINE+1000
MND23-2208-0001	RHM301	DIRECTION FROM MOUND - SOUTHWEST; 3500 FT RING
MND23-2208-0002	RHM302	DIRECTION FROM MOUND - SOUTHWEST; 3500 FT RING
MND23-2208-0003	RHM303	DIRECTION FROM MOUND - SOUTHWEST; 3500 FT RING
MND23-2208-0004	RHM304	DIRECTION FROM MOUND - SOUTHWEST; 3500 FT RING
MND23-2209-0001	RJM301	DIRECTION FROM MOUND - SOUTHWEST; 4000 FT RING
MND23-2209-0002	RJM302	DIRECTION FROM MOUND - SOUTHWEST; 4000 FT RING
MND23-2209-0003	RJM303	DIRECTION FROM MOUND - SOUTHWEST; 4000 FT RING
MND23-2209-0004	RJM304	DIRECTION FROM MOUND - SOUTHWEST; 4000 FT RING
MND23-2211-0001	RMM301	DIRECTION FROM MOUND - SOUTHWEST; 5000 FT RING
MND23-2211-0002	RMM302	DIRECTION FROM MOUND - SOUTHWEST; 5000 FT RING
MND23-2211-0003	RMM303	DIRECTION FROM MOUND - SOUTHWEST; 5000 FT RING
MND23-2211-0004	RMM304	DIRECTION FROM MOUND - SOUTHWEST; 5000 FT RING
MND23-2212-0001	RNM301	DIRECTION FROM MOUND - SOUTHWEST; 6000 FT RING
MND23-2212-0002	RNM302	DIRECTION FROM MOUND - SOUTHWEST; 6000 FT RING
MND23-2212-0003	RNM303	DIRECTION FROM MOUND - SOUTHWEST; 6000 FT RING
MND23-2212-0004	RNM304	DIRECTION FROM MOUND - SOUTHWEST; 6000 FT RING
MND23-2213-0001	RPM301	DIRECTION FROM MOUND - SOUTHWEST; 7000 FT RING
MND23-2213-0002	RPM302	DIRECTION FROM MOUND - SOUTHWEST; 7000 FT RING
MND23-2213-0003	RPM303	DIRECTION FROM MOUND - SOUTHWEST; 7000 FT RING
MND23-2213-0004	RPM304	DIRECTION FROM MOUND - SOUTHWEST; 7000 FT RING
MND23-2214-0001	RRM301	DIRECTION FROM MOUND - SOUTHWEST; 8000 FT RING
MND23-2214-0002	RRM302	DIRECTION FROM MOUND - SOUTHWEST; 8000 FT RING
MND23-2214-0003	RRM303	DIRECTION FROM MOUND - SOUTHWEST; 8000 FT RING
MND23-2214-0004	RRM304	DIRECTION FROM MOUND - SOUTHWEST; 8000 FT RING
MND23-2215-0001	RSM301	DIRECTION FROM MOUND - SOUTHWEST; 9000 FT RING
MND23-2215-0002	RSM302	DIRECTION FROM MOUND - SOUTHWEST; 9000 FT RING
MND23-2215-0003	RSM303	DIRECTION FROM MOUND - SOUTHWEST; 9000 FT RING
MND23-2215-0004	RSM304	DIRECTION FROM MOUND - SOUTHWEST; 9000 FT RING
MND23-2216-0001	RTM301	DIRECTION FROM MOUND - SOUTHWEST; 10,000 FT RING
MND23-2216-0002	RTM302	DIRECTION FROM MOUND - SOUTHWEST; 10,000 FT RING
MND23-2216-0003	RTM303	DIRECTION FROM MOUND - SOUTHWEST; 10,000 FT RING
MND23-2216-0004	RTM304	DIRECTION FROM MOUND - SOUTHWEST; 10,000 FT RING
MND23-2217-0001	RUM301	DIRECTION FROM MOUND - SOUTHWEST; 25,000 FT RING
MND23-2217-0002	RUM302	DIRECTION FROM MOUND - SOUTHWEST; 25,000 FT RING
MND23-2217-0003	RUM303	DIRECTION FROM MOUND - SOUTHWEST; 25,000 FT RING
MND23-2217-0004	RUM304	DIRECTION FROM MOUND - SOUTHWEST; 25,000 FT RING
MND23-2218-0001	RVM301	DIRECTION FROM MOUND - SOUTHWEST; 50,000 FT RING
MND23-2218-0002	RVM302	DIRECTION FROM MOUND - SOUTHWEST; 50,000 FT RING
MND23-2218-0003	RVM303	DIRECTION FROM MOUND - SOUTHWEST; 50,000 FT RING
MND23-2218-0004	RVM304	DIRECTION FROM MOUND - SOUTHWEST; 50,000 FT RING
MND23-2219-0001	RXM301	DIRECTION FROM MOUND - SOUTHWEST; 75,000 FT RING
MND23-2219-0002	RXM302	DIRECTION FROM MOUND - SOUTHWEST; 75,000 FT RING
MND23-2220-0001	RYM301	DIRECTION FROM MOUND - SOUTHWEST; 100,000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2220-0002	RYM302	DIRECTION FROM MOUND - SOUTHWEST; 100,000 FT RING
MND23-2221-0001	RAN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2221-0002	RAN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2221-0003	RAN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2221-0004	RAN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2221-0005	RAN305	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2221-0006	RAN306	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE
MND23-2222-0001	RBN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+500
MND23-2222-0002	RBN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+500
MND23-2222-0003	RBN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+500
MND23-2222-0004	RBN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+500
MND23-2223-0001	RCN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2223-0002	RCN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2223-0003	RCN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2223-0004	RCN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2223-0005	RCN305	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2223-0006	RCN306	DIRECTION FROM MOUND - WEST/SOUTHWEST; FENCE LINE+1000
MND23-2227-0001	RGN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 3000 FT RING
MND23-2227-0002	RGN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 3000 FT RING
MND23-2227-0003	RGN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 3000 FT RING
MND23-2227-0004	RGN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 3000 FT RING
MND23-2229-0001	RJN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4000 FT RING
MND23-2229-0002	RJN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4000 FT RING
MND23-2229-0003	RJN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4000 FT RING
MND23-2229-0004	RJN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4000 FT RING
MND23-2230-0001	RKN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4500 FT RING
MND23-2230-0002	RKN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4500 FT RING
MND23-2230-0003	RKN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4500 FT RING
MND23-2230-0004	RKN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 4500 FT RING
MND23-2231-0001	RMN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 5000 FT RING
MND23-2231-0002	RMN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 5000 FT RING
MND23-2231-0003	RMN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 5000 FT RING
MND23-2231-0004	RMN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 5000 FT RING
MND23-2232-0001	RNN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 6000 FT RING
MND23-2232-0002	RNN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 6000 FT RING
MND23-2232-0003	RNN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 6000 FT RING
MND23-2232-0004	RNN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 6000 FT RING
MND23-2233-0001	RPN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 7000 FT RING
MND23-2233-0002	RPN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 7000 FT RING
MND23-2233-0003	RPN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 7000 FT RING
MND23-2233-0004	RPN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 7000 FT RING
MND23-2234-0001	RRN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 8000 FT RING
MND23-2234-0002	RRN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 8000 FT RING
MND23-2234-0003	RRN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 8000 FT RING
MND23-2234-0004	RRN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 8000 FT RING
MND23-2235-0001	RSN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 9000 FT RING
MND23-2235-0002	RSN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 9000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2235-0003	RSN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 9000 FT RING
MND23-2235-0004	RSN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 9000 FT RING
MND23-2236-0001	RTN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 10,000 FT RING
MND23-2236-0002	RTN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 10,000 FT RING
MND23-2236-0003	RTN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 10,000 FT RING
MND23-2236-0004	RTN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 10,000 FT RING
MND23-2237-0001	RUN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 25,000 FT RING
MND23-2237-0002	RUN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 25,000 FT RING
MND23-2238-0001	RVN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 50,000 FT RING
MND23-2238-0002	RVN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 50,000 FT RING
MND23-2238-0003	RVN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 50,000 FT RING
MND23-2238-0004	RVN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 50,000 FT RING
MND23-2239-0001	RXN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 75,000 FT RING
MND23-2239-0002	RXN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 75,000 FT RING
MND23-2239-0003	RXN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 75,000 FT RING
MND23-2239-0004	RXN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 75,000 FT RING
MND23-2240-0001	RYN301	DIRECTION FROM MOUND - WEST/SOUTHWEST; 100,000 FT RING
MND23-2240-0002	RYN302	DIRECTION FROM MOUND - WEST/SOUTHWEST; 100,000 FT RING
MND23-2240-0003	RYN303	DIRECTION FROM MOUND - WEST/SOUTHWEST; 100,000 FT RING
MND23-2240-0004	RYN304	DIRECTION FROM MOUND - WEST/SOUTHWEST; 100,000 FT RING
MND23-2241-0001	RAP301	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2241-0002	RAP302	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2241-0003	RAP303	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2241-0004	RAP304	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2241-0005	RAP305	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2241-0006	RAP306	DIRECTION FROM MOUND - WEST; FENCE LINE
MND23-2242-0001	RBP301	DIRECTION FROM MOUND - WEST; FENCE LINE+500
MND23-2242-0002	RBP302	DIRECTION FROM MOUND - WEST; FENCE LINE+500
MND23-2242-0003	RBP303	DIRECTION FROM MOUND - WEST; FENCE LINE+500
MND23-2242-0004	RBP304	DIRECTION FROM MOUND - WEST; FENCE LINE+500
MND23-2243-0001	RCP301	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2243-0002	RCP302	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2243-0003	RCP303	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2243-0004	RCP304	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2243-0005	RCP305	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2243-0006	RCP306	DIRECTION FROM MOUND - WEST; FENCE LINE+1000
MND23-2244-0001	RDP301	DIRECTION FROM MOUND - WEST; 1500 FT RING
MND23-2244-0002	RDP302	DIRECTION FROM MOUND - WEST; 1500 FT RING
MND23-2244-0003	RDP303	DIRECTION FROM MOUND - WEST; 1500 FT RING
MND23-2244-0004	RDP304	DIRECTION FROM MOUND - WEST; 1500 FT RING
MND23-2247-0001	RGP301	DIRECTION FROM MOUND - WEST; 3000 FT RING
MND23-2247-0002	RGP302	DIRECTION FROM MOUND - WEST; 3000 FT RING
MND23-2247-0003	RGP303	DIRECTION FROM MOUND - WEST; 3000 FT RING
MND23-2247-0004	RGP304	DIRECTION FROM MOUND - WEST; 3000 FT RING
MND23-2248-0001	RHP301	DIRECTION FROM MOUND - WEST; 3500 FT RING
MND23-2248-0002	RHP302	DIRECTION FROM MOUND - WEST; 3500 FT RING
MND23-2248-0003	RHP303	DIRECTION FROM MOUND - WEST; 3500 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2248-0004	RHP304	DIRECTION FROM MOUND - WEST; 3500 FT RING
MND23-2249-0001	RJP301	DIRECTION FROM MOUND - WEST; 4000 FT RING
MND23-2249-0002	RJP302	DIRECTION FROM MOUND - WEST; 4000 FT RING
MND23-2249-0003	RJP303	DIRECTION FROM MOUND - WEST; 4000 FT RING
MND23-2249-0004	RJP304	DIRECTION FROM MOUND - WEST; 4000 FT RING
MND23-2250-0001	RKP301	DIRECTION FROM MOUND - WEST; 4500 FT RING
MND23-2250-0002	RKP302	DIRECTION FROM MOUND - WEST; 4500 FT RING
MND23-2250-0003	RKP303	DIRECTION FROM MOUND - WEST; 4500 FT RING
MND23-2250-0004	RKP304	DIRECTION FROM MOUND - WEST; 4500 FT RING
MND23-2251-0001	RMP301	DIRECTION FROM MOUND - WEST; 5000 FT RING
MND23-2251-0002	RMP302	DIRECTION FROM MOUND - WEST; 5000 FT RING
MND23-2251-0003	RMP303	DIRECTION FROM MOUND - WEST; 5000 FT RING
MND23-2251-0004	RMP304	DIRECTION FROM MOUND - WEST; 5000 FT RING
MND23-2252-0001	RNP301	DIRECTION FROM MOUND - WEST; 6000 FT RING
MND23-2252-0002	RNP302	DIRECTION FROM MOUND - WEST; 6000 FT RING
MND23-2252-0003	RNP303	DIRECTION FROM MOUND - WEST; 6000 FT RING
MND23-2252-0004	RNP304	DIRECTION FROM MOUND - WEST; 6000 FT RING
MND23-2253-0001	RPP301	DIRECTION FROM MOUND - WEST; 7000 FT RING
MND23-2253-0002	RPP302	DIRECTION FROM MOUND - WEST; 7000 FT RING
MND23-2253-0003	RPP303	DIRECTION FROM MOUND - WEST; 7000 FT RING
MND23-2253-0004	RPP304	DIRECTION FROM MOUND - WEST; 7000 FT RING
MND23-2254-0001	RRP301	DIRECTION FROM MOUND - WEST; 8000 FT RING
MND23-2254-0002	RRP302	DIRECTION FROM MOUND - WEST; 8000 FT RING
MND23-2254-0003	RRP303	DIRECTION FROM MOUND - WEST; 8000 FT RING
MND23-2254-0004	RRP304	DIRECTION FROM MOUND - WEST; 8000 FT RING
MND23-2255-0001	RSP301	DIRECTION FROM MOUND - WEST; 9000 FT RING
MND23-2255-0002	RSP302	DIRECTION FROM MOUND - WEST; 9000 FT RING
MND23-2255-0003	RSP303	DIRECTION FROM MOUND - WEST; 9000 FT RING
MND23-2255-0004	RSP304	DIRECTION FROM MOUND - WEST; 9000 FT RING
MND23-2256-0001	RTP301	DIRECTION FROM MOUND - WEST; 10,000 FT RING
MND23-2256-0002	RTP302	DIRECTION FROM MOUND - WEST; 10,000 FT RING
MND23-2256-0003	RTP303	DIRECTION FROM MOUND - WEST; 10,000 FT RING
MND23-2256-0004	RTP304	DIRECTION FROM MOUND - WEST; 10,000 FT RING
MND23-2257-0001	RUP301	DIRECTION FROM MOUND - WEST; 25,000 FT RING
MND23-2257-0002	RUP302	DIRECTION FROM MOUND - WEST; 25,000 FT RING
MND23-2258-0001	RVP301	DIRECTION FROM MOUND - WEST; 50,000 FT RING
MND23-2258-0002	RVP302	DIRECTION FROM MOUND - WEST; 50,000 FT RING
MND23-2259-0001	RXP301	DIRECTION FROM MOUND - WEST; 75,000 FT RING
MND23-2259-0002	RXP302	DIRECTION FROM MOUND - WEST; 75,000 FT RING
MND23-2260-0001	RYP301	DIRECTION FROM MOUND - WEST; 100,000 FT RING
MND23-2260-0002	RYP302	DIRECTION FROM MOUND - WEST; 100,000 FT RING
MND23-2261-0001	RAR301	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE
MND23-2261-0002	RAR302	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE
MND23-2261-0003	RAR303	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE
MND23-2261-0004	RAR304	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE
MND23-2261-0005	RAR305	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE
MND23-2261-0006	RAR306	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2262-0001	RBR301	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+500
MND23-2262-0002	RBR302	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+500
MND23-2262-0003	RBR303	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+500
MND23-2262-0004	RBR304	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+500
MND23-2263-0001	RCR301	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2263-0002	RCR302	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2263-0003	RCR303	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2263-0004	RCR304	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2263-0005	RCR305	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2263-0006	RCR306	DIRECTION FROM MOUND - WEST/NORTHWEST; FENCE LINE+1000
MND23-2264-0001	RDR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 1500 FT RING
MND23-2264-0002	RDR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 1500 FT RING
MND23-2264-0003	RDR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 1500 FT RING
MND23-2264-0004	RDR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 1500 FT RING
MND23-2267-0001	RGR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 3000 FT RING
MND23-2267-0002	RGR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 3000 FT RING
MND23-2267-0003	RGR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 3000 FT RING
MND23-2267-0004	RGR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 3000 FT RING
MND23-2268-0001	RHR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 3500 FT RING
MND23-2268-0002	RHR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 3500 FT RING
MND23-2268-0003	RHR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 3500 FT RING
MND23-2268-0004	RHR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 3500 FT RING
MND23-2269-0001	RJR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 4000 FT RING
MND23-2269-0002	RJR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 4000 FT RING
MND23-2269-0003	RJR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 4000 FT RING
MND23-2269-0004	RJR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 4000 FT RING
MND23-2270-0001	RKR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 4500 FT RING
MND23-2270-0002	RKR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 4500 FT RING
MND23-2270-0003	RKR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 4500 FT RING
MND23-2270-0004	RKR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 4500 FT RING
MND23-2271-0001	RMR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 5000 FT RING
MND23-2271-0002	RMR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 5000 FT RING
MND23-2271-0003	RMR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 5000 FT RING
MND23-2271-0004	RMR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 5000 FT RING
MND23-2272-0001	RNR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 6000 FT RING
MND23-2272-0002	RNR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 6000 FT RING
MND23-2272-0003	RNR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 6000 FT RING
MND23-2272-0004	RNR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 6000 FT RING
MND23-2273-0001	RPR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 7000 FT RING
MND23-2273-0002	RPR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 7000 FT RING
MND23-2273-0003	RPR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 7000 FT RING
MND23-2273-0004	RPR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 7000 FT RING
MND23-2274-0001	RRR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 8000 FT RING
MND23-2274-0002	RRR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 8000 FT RING
MND23-2274-0003	RRR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 8000 FT RING
MND23-2274-0004	RRR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 8000 FT RING
MND23-2275-0001	RSR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 9000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2275-0002	RSR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 9000 FT RING
MND23-2275-0003	RSR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 9000 FT RING
MND23-2275-0004	RSR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 9000 FT RING
MND23-2276-0001	RTR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 10,000 FT RING
MND23-2276-0002	RTR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 10,000 FT RING
MND23-2276-0003	RTR303	DIRECTION FROM MOUND - WEST/NORTHWEST; 10,000 FT RING
MND23-2276-0004	RTR304	DIRECTION FROM MOUND - WEST/NORTHWEST; 10,000 FT RING
MND23-2277-0001	RUR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 25,000 FT RING
MND23-2277-0002	RUR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 25,000 FT RING
MND23-2278-0001	RVR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 50,000 FT RING
MND23-2278-0002	RVR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 50,000 FT RING
MND23-2279-0001	RXR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 75,000 FT RING
MND23-2279-0002	RXR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 75,000 FT RING
MND23-2280-0001	RYR301	DIRECTION FROM MOUND - WEST/NORTHWEST; 100,000 FT RING
MND23-2280-0002	RYR302	DIRECTION FROM MOUND - WEST/NORTHWEST; 100,000 FT RING
MND23-2281-0001	RAS301	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2281-0002	RAS302	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2281-0003	RAS303	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2281-0004	RAS304	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2281-0005	RAS305	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2281-0006	RAS306	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE
MND23-2282-0001	RBS301	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+500
MND23-2282-0002	RBS302	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+500
MND23-2282-0003	RBS303	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+500
MND23-2282-0004	RBS304	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+500
MND23-2283-0001	RCS301	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2283-0002	RCS302	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2283-0003	RCS303	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2283-0004	RCS304	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2283-0005	RCS305	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2283-0006	RCS306	DIRECTION FROM MOUND - NORTHWEST; FENCE LINE+1000
MND23-2287-0001	RGS301	DIRECTION FROM MOUND - NORTHWEST; 3000 FT RING
MND23-2287-0002	RGS302	DIRECTION FROM MOUND - NORTHWEST; 3000 FT RING
MND23-2287-0003	RGS303	DIRECTION FROM MOUND - NORTHWEST; 3000 FT RING
MND23-2287-0004	RGS304	DIRECTION FROM MOUND - NORTHWEST; 3000 FT RING
MND23-2288-0001	RHS301	DIRECTION FROM MOUND - NORTHWEST; 3500 FT RING
MND23-2288-0002	RHS302	DIRECTION FROM MOUND - NORTHWEST; 3500 FT RING
MND23-2288-0003	RHS303	DIRECTION FROM MOUND - NORTHWEST; 3500 FT RING
MND23-2288-0004	RHS304	DIRECTION FROM MOUND - NORTHWEST; 3500 FT RING
MND23-2289-0001	RJS301	DIRECTION FROM MOUND - NORTHWEST; 4000 FT RING
MND23-2289-0002	RJS302	DIRECTION FROM MOUND - NORTHWEST; 4000 FT RING
MND23-2289-0003	RJS303	DIRECTION FROM MOUND - NORTHWEST; 4000 FT RING
MND23-2289-0004	RJS304	DIRECTION FROM MOUND - NORTHWEST; 4000 FT RING
MND23-2290-0001	RKS301	DIRECTION FROM MOUND - NORTHWEST; 4500 FT RING
MND23-2290-0002	RKS302	DIRECTION FROM MOUND - NORTHWEST; 4500 FT RING
MND23-2290-0003	RKS303	DIRECTION FROM MOUND - NORTHWEST; 4500 FT RING
MND23-2290-0004	RKS304	DIRECTION FROM MOUND - NORTHWEST; 4500 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2291-0001	RMS301	DIRECTION FROM MOUND - NORTHWEST; 5000 FT RING
MND23-2291-0002	RMS302	DIRECTION FROM MOUND - NORTHWEST; 5000 FT RING
MND23-2291-0003	RMS303	DIRECTION FROM MOUND - NORTHWEST; 5000 FT RING
MND23-2291-0004	RMS304	DIRECTION FROM MOUND - NORTHWEST; 5000 FT RING
MND23-2292-0001	RNS301	DIRECTION FROM MOUND - NORTHWEST; 6000 FT RING
MND23-2292-0002	RNS302	DIRECTION FROM MOUND - NORTHWEST; 6000 FT RING
MND23-2292-0003	RNS303	DIRECTION FROM MOUND - NORTHWEST; 6000 FT RING
MND23-2292-0004	RNS304	DIRECTION FROM MOUND - NORTHWEST; 6000 FT RING
MND23-2293-0001	RPS301	DIRECTION FROM MOUND - NORTHWEST; 7000 FT RING
MND23-2293-0002	RPS302	DIRECTION FROM MOUND - NORTHWEST; 7000 FT RING
MND23-2293-0003	RPS303	DIRECTION FROM MOUND - NORTHWEST; 7000 FT RING
MND23-2293-0004	RPS304	DIRECTION FROM MOUND - NORTHWEST; 7000 FT RING
MND23-2294-0001	RRS301	DIRECTION FROM MOUND - NORTHWEST; 8000 FT RING
MND23-2294-0002	RRS302	DIRECTION FROM MOUND - NORTHWEST; 8000 FT RING
MND23-2294-0003	RRS303	DIRECTION FROM MOUND - NORTHWEST; 8000 FT RING
MND23-2294-0004	RRS304	DIRECTION FROM MOUND - NORTHWEST; 8000 FT RING
MND23-2295-0001	RSS301	DIRECTION FROM MOUND - NORTHWEST; 9000 FT RING
MND23-2295-0002	RSS302	DIRECTION FROM MOUND - NORTHWEST; 9000 FT RING
MND23-2295-0003	RSS303	DIRECTION FROM MOUND - NORTHWEST; 9000 FT RING
MND23-2295-0004	RSS304	DIRECTION FROM MOUND - NORTHWEST; 9000 FT RING
MND23-2296-0001	RTS301	DIRECTION FROM MOUND - NORTHWEST; 10,000 FT RING
MND23-2296-0002	RTS302	DIRECTION FROM MOUND - NORTHWEST; 10,000 FT RING
MND23-2296-0003	RTS303	DIRECTION FROM MOUND - NORTHWEST; 10,000 FT RING
MND23-2296-0004	RTS304	DIRECTION FROM MOUND - NORTHWEST; 10,000 FT RING
MND23-2297-0001	RUS301	DIRECTION FROM MOUND - NORTHWEST; 25,000 FT RING
MND23-2297-0002	RUS302	DIRECTION FROM MOUND - NORTHWEST; 25,000 FT RING
MND23-2298-0001	RVS301	DIRECTION FROM MOUND - NORTHWEST; 50,000 FT RING
MND23-2298-0002	RVS302	DIRECTION FROM MOUND - NORTHWEST; 50,000 FT RING
MND23-2299-0002	RXT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 75,000 FT RING
MND23-2300-0001	RYS301	DIRECTION FROM MOUND - NORTHWEST; 100,000 FT RING
MND23-2300-0002	RYS302	DIRECTION FROM MOUND - NORTHWEST; 100,000 FT RING
MND23-2301-0001	RAT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2301-0002	RAT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2301-0003	RAT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2301-0004	RAT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2301-0005	RAT305	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2301-0006	RAT306	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE
MND23-2302-0001	RBT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+500
MND23-2302-0002	RBT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+500
MND23-2302-0003	RBT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+500
MND23-2302-0004	RBT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+500
MND23-2303-0001	RCT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100
MND23-2303-0002	RCT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100
MND23-2303-0003	RCT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100
MND23-2303-0004	RCT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100
MND23-2303-0005	RCT305	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100
MND23-2303-0006	RCT306	DIRECTION FROM MOUND - NORTH/NORTHWEST; FENCE LINE+100

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2307-0001	RGT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3000 FT RING
MND23-2307-0002	RGT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3000 FT RING
MND23-2307-0003	RGT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3000 FT RING
MND23-2307-0004	RGT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3000 FT RING
MND23-2308-0001	RHT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3500 FT RING
MND23-2308-0002	RHT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3500 FT RING
MND23-2308-0003	RHT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3500 FT RING
MND23-2308-0004	RHT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 3500 FT RING
MND23-2309-0001	RJT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4000 FT RING
MND23-2309-0002	RJT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4000 FT RING
MND23-2309-0003	RJT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4000 FT RING
MND23-2309-0004	RJT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4000 FT RING
MND23-2310-0001	RKT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4500 FT RING
MND23-2310-0002	RKT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4500 FT RING
MND23-2310-0003	RKT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4500 FT RING
MND23-2310-0004	RKT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 4500 FT RING
MND23-2311-0001	RMT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 5000 FT RING
MND23-2311-0002	RMT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 5000 FT RING
MND23-2311-0003	RMT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 5000 FT RING
MND23-2311-0004	RMT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 5000 FT RING
MND23-2312-0001	RNT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 6000 FT RING
MND23-2312-0002	RNT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 6000 FT RING
MND23-2312-0003	RNT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 6000 FT RING
MND23-2312-0004	RNT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 6000 FT RING
MND23-2313-0001	RPT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 7000 FT RING
MND23-2313-0002	RPT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 7000 FT RING
MND23-2313-0003	RPT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 7000 FT RING
MND23-2313-0004	RPT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 7000 FT RING
MND23-2314-0001	RRT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 8000 FT RING
MND23-2314-0002	RRT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 8000 FT RING
MND23-2314-0003	RRT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 8000 FT RING
MND23-2314-0004	RRT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 8000 FT RING
MND23-2315-0001	RST301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 9000 FT RING
MND23-2315-0002	RST302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 9000 FT RING
MND23-2315-0003	RST303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 9000 FT RING
MND23-2315-0004	RST304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 9000 FT RING
MND23-2316-0001	RTT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 10,000 FT RING
MND23-2316-0002	RTT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 10,000 FT RING
MND23-2316-0003	RTT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 10,000 FT RING
MND23-2316-0004	RTT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 10,000 FT RING
MND23-2317-0001	RUT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 25,000 FT RING
MND23-2317-0002	RUT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 25,000 FT RING
MND23-2317-0003	RUT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 25,000 FT RING
MND23-2317-0004	RUT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 25,000 FT RING
MND23-2318-0001	RVT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 50,000 FT RING
MND23-2318-0002	RVT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 50,000 FT RING
MND23-2319-0001	RXT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 75,000 FT RING

FSP ORIGINAL SAMPLE ID	RSI SAMPLE	LOCATION DESCRIPTION
MND23-2319-0003	RXT303	DIRECTION FROM MOUND - NORTH/NORTHWEST; 75,000 FT RING
MND23-2319-0004	RXT304	DIRECTION FROM MOUND - NORTH/NORTHWEST; 75,000 FT RING
MND23-2320-0001	RYT301	DIRECTION FROM MOUND - NORTH/NORTHWEST; 100,000 FT RING
MND23-2320-0002	RYT302	DIRECTION FROM MOUND - NORTH/NORTHWEST; 100,000 FT RING

Appendix B

APPENDIX B

SOIL DESCRIPTIONS

The following table contains soil description names as identified in the United States Department of Agriculture Soil Conservation Service's soil surveys of Ohio. Each sample identification is listed along with the type of soil present that was noted during field investigations for the OU9 Regional Soils Investigation.

SAMPLE ID	SOIL DESCRIPTION
RAA	HENNEPIN AND MIAMIAN SILT LOAM
RAB	MILTON SILT LOAM
RAC	MILTON SILT LOAM
RAD	RITCHEY SILT LOAM
RAE	RITCHEY SILT LOAM
RAF	MILTON SILT LOAM
RAG	FAIRMONT SILTY CLAY LOAM
RAH	FAIRMONT SILTY CLAY LOAM
RAJ	MILTON SILT LOAM
RAK	FAIRMONT SILTY CLAY LOAM
RAM	MADE LAND
RAN	FAIRMONT SILTY CLAY LOAM
RAP	FAIRMONT SILTY CLAY LOAM
RAR	FAIRMONT SILTY CLAY LOAM
RAS	FAIRMONT SILTY CLAY LOAM
RAT	HENNEPIN AND MIAMIAN SILT LOAM
RBA	HENNEPIN AND MIAMIAN SILT LOAM
RBB	MIAMIAN-URBAN LAND
RBC	URBAN LAND
RBD	RITCHEY SILT LOAM
RBE	RITCHEY SILT LOAM
RBF	RITCHEY SILT LOAM
RBG	MIAMIAN-SILT-LOAM/URBAN LAND
RBH	MILTON SILTY CLAY LOAM
RBJ	MILTON SILTY CLAY LOAM
RBK	MIAMIAN CLAY LOAM
RBM	ROSS SILT LOAM
RBN	MADE LAND
RBP	MADE LAND
RBR	MADE LAND
RBS	MADE LAND
RBT	FOX URBAN LAND COMPLEX
RCA	FOX URBAN LAND COMPLEX
RCB	MILTON URBAN LAND COMPLEX
RCC	MILTON URBAN LAND COMPLEX
RCD	MIAMIAN SILT LOAM
RCE	RITCHEY SILT LOAM
RCF	RITCHEY SILT LOAM
RCG	MIAMIAN SILT LOAM
RCH	FAIRMONT SILTY CLAY LOAM
RCJ	MILTON SILTY CLAY LOAM
RCK	MIAMIAN CLAY LOAM
RCM	ROSS SILT LOAM
RCN	ROSS SILT LOAM
RCP	ROSS URBAN LAND COMPLEX
RCR	ROSS URBAN LAND COMPLEX
RCS	ROSS URBAN LAND COMPLEX
RCT	FOX URBAN LAND COMPLEX
RDD	RITCHEY SILT LOAM
RDP	HENNEPIN & MIAMIAN SILT LOAMS
RDR	HENNEPIN & MIAMIAN SILT LOAMS
REK	ROSS SILT LOAM
RFE	RITCHEY SILT LOAM
RFF	RITCHEY SILT LOAM
RGA	MADE LAND
RGB	MILTON-URBAN LAND COMPLEX
RGC	MILTON URBAN LAND COMPLEX
RGD	MILTON-URBAN LAND COMPLEX
RGE	MILTON URBAN LAND COMPLEX
RGF	RITCHEY SILT LOAM
RGG	MIAMIAN SILT LOAM
RGJ	FAIRMONT SILTY CLAY LOAM

SAMPLE ID	SOIL DESCRIPTION
RGN	MADE LAND
RGP	ROSS-URBAN LAND COMPLEX
RGR	ROSS URBAN LAND COMPLEX
RGS	ROSS-URBAN LAND COMPLEX
RGT	ROSS URBAN LAND COMPLEX
RHA	FOX URBAN LAND COMPLEX
RHB	MILTON URBAN LAND
RHC	MILTON URBAN LAND
RHD	MILTON URBAN LAND
RHE	MILTON URBAN LAND
RHF	HENNEPIN-MIAMIAN URBAN COMPLEX
RHG	MIAMIAN SILT LOAM
RHH	MILTON SILT LOAM
RHJ	MILTON SILTY CLAY LOAM
RHK	ROSS SILT LOAM
RHM	MADE LAND
RHP	ROSS URBAN LAND COMPLEX
RHR	ROSS-URBAN LAND COMPLEX
RHS	ROSS-URBAN LAND COMPLEX
RHT	ROSS-URBAN LAND COMPLEX
RJA	FOX-URBAN LAND COMPLEX
RJB	MILTON URBAN LAND COMPLEX
RJC	MILTON URBAN LAND COMPLEX
RJD	MILTON URBAN LAND COMPLEX
RJE	MILTON SILT LOAM
RJF	CELINA SILT LOAM
RJG	MIAMIAN SILT LOAM
RJH	MILTON SILT LOAM
RJJ	FAIRMONT SILTY CLAY LOAM
RJK	ROSS SILT LOAM
RJM	ROSS SILT LOAM
RJN	FOX SOILS
RJP	FOX-URBAN LAND COMPLEX
RJR	FOX-URBAN LAND COMPLEX
RJS	MIAMIAN URBAN LAND COMPLEX
RJT	MADE LAND
RKB	URBAN LAND
RKC	MILTON URBAN LAND COMPLEX
RKD	MILTON URBAN COMPLEX
RKE	HENNEPIN MIAMIAN URBAN LAND COMPLEX
RKF	CELINA SILT LOAM
RKG	MIAMIAN SILT LOAM
RKH	MILTON SILTY CLAY LOAM
RKJ	MILTON SILTY CLAY LOAM
RKK	ROSS SILT LOAM
RKN	FOX-URBAN LAND COMPLEX
RKP	FOX-URBAN LAND COMPLEX
RKR	FOX-URBAN LAND COMPLEX
RKS	ROSS-URBAN LAND COMPLEX
RKT	ROSS URBAN LAND COMPLEX OR MADE LAND (LOOKS LIKE BANK RUN FILL)
RMA	FOX URBAN LAND COMPLEX
RMB	FOX URBAN LAND COMPLEX
RMC	FOX-URBAN LAND COMPLEX
RMD	MIAMIAN URBAN LAND COMPLEX
RME	MIAMIAN URBAN LAND COMPLEX
RMF	MIAMIAN URBAN LAND COMPLEX
RMG	MIAMIAN CLAY LOAM
RMH	MIAMIAN SILT LOAM
RMJ	MILTON SILTY CLAY LOAM
RMK	ROSS SILT LOAM
RMM	FAIRMONT SILTY CLAY LOAM
RMN	FAIRMONT SILTY CLAY LOAM

SAMPLE ID	SOIL DESCRIPTION
RMP	KENDALLVILLE SILT LOAM
RMR	CORWIN SILT LOAM
RMS	FAIRMONT SILTY CLAY LOAM
RMT	FAIRMONT SILTY CLAY LOAM
RNA	FOX-URBAN LAND COMPLEX
RNB	FOX URBAN LAND COMPLEX
RNC	FOX URBAN LAND COMPLEX
RND	CROSBY-URBAN LAND COMPLEX
RNE	CELINA SILT LOAM
RNF	CELINA SILT LOAM
RNG	MIAMIAN SILT LOAM
RNH	MIAMIAN SILT LOAM
RNJ	MIAMIAN CLAY LOAM
RNK	ROSS SILT LOAM
RNM	MILTON SILT LOAM
RNN	MILTON SILT LOAM;
RNP	MILTON SILT LOAM
RNR	MIAMIAN SILT LOAM
RNS	RANDOLPH SILT LOAM
RNT	HENNEPIN AND MIAMIAN SILT LOAM
RPA	ROSS URBAN LAND COMPLEX
RPB	FOX URBAN LAND COMPLEX
RPC	FOX URBAN LAND COMPLEX
RPD	MIAMIAN SILT LOAM
RPE	MIAMIAN URBAN LAND COMPLEX
RPF	MIAMIAN SILT LOAM
RPG	MIAMIAN SILT LOAM
RPH	MIAMIAN CLAY LOAM
RPJ	ROSS SILT LOAM
RPK	ROSS SILT LOAM
RPM	PLATTVILLE SILT LOAM
RPN	RITCHEY SILT LOAM
RPP	HENNEPIN AND MIAMIAN SILT LOAMS
RPR	MIAMIAN SILT LOAM
RPS	RANDOLPH SILT LOAM
RPT	HENNEPIN AND MIAMIAN SILT LOAM
RRA	ROSS SILT LOAM
RRB	MIAMIAN-URBAN LAND COMPLEX
RRC	FOX-URBAN LAND COMPLEX
RRD	ROSS SILT LOAM
RRE	MIAMIAN SILT LOAM
RRF	MIAMIAN SILT LOAM
RRG	MIAMIAN SILT LOAM
RRH	MIAMIAN SILT LOAM
RRJ	ROSS SILT LOAM
RRK	FOX SILT LOAM
RRM	BROOKSTON SILTY CLAY LOAM
RRN	MILTON SILT LOAM
RRP	RITCHEY SILT LOAM
RRR	CELINA SILT LOAM
RRS	MILTON SILT LOAM
RRT	HENNEPIN AND MIAMIAN SILT LOAM
RSA	ROSS URBAN LAND COMPLEX
RSB	MIAMIAN-URBAN LAND COMPLEX
RSD	MADE LAND
RSF	MIAMIAN SILT LOAM
RSG	MIAMIAN SILT LOAM
RSH	MIAMIAN SILT LOAM
RSJ	OCKLEY SILT LOAM
RSK	FOX SILT LOAM
RSM	BROOKSTON SILTY CLAY LOAM
RSN	CELINA SILT LOAM

SAMPLE ID	SOIL DESCRIPTION
RSP	RITCHEY SILT LOAM
RSR	CELINA SILT LOAM
RSS	CELINA SILT LOAM
RST	MIAMIAN SILT LOAM
RTA	FOX SANDY LOAM
RTB	MIAMIAN URBAN LAND COMPLEX
RTC	MIAMIAN SILT LOAM
RTD	MIAMI SILT LOAM
RTE	MIAMIAN CLAY LOAM
RTF	MIAMIAN SILT LOAM
RTG	MIAMIAN SILT LOAM
RTH	MIAMIAN SILT LOAM
RTJ	OCKLEY SILT LOAM
RTK	FOX LOAM
RTM	MIAMIAN SILT LOAM
RTN	CELINA SILT LOAM
RTP	CORWIN SILT LOAM
RTR	CORWIN SILT LOAM
RTS	CROSBY SILT LOAM
RTT	MILTON SILT LOAM
RUA	LOOKS LIKE AREA HAS BEEN DISTURBED - NO DESCRIPTION OF SOIL SERIES
RUB	MIAMIAN SILT LOAM
RUC	FOX URBAN LAND COMPLEX
RUD	MIAMIAN SILT LOAM (TOP SOIL LOOKS LIKE A REPLACEMENT - NOT ASSIGNED DESCRIPTION)
RUE	ROSS SILT LOAM
RUF	XENIA SILT LOAM
RUG	MIAMIAN CLAY LOAM
RUH	RUSSELL-MIAMIAN SILT LOAM
RUJ	DOES NOT FIT SOIL SURVEY DESCRIPTIONS
RUK	FOX LOAM
RUM	APPEARS TO BE FROM A FILL AREA - NO SOIL CLASSIFICATION WAS ASSIGNED
RUN	MIAMIAN SILT LOAM
RUP	DOES NOT CORRESPOND TO DESCRIPTION OF SOILS NATIVE TO THE AREA
RUR	MIAMIAN SILT LOAM
RUS	MIAMIAN SERIES
RUT	MIAMIAN SILT LOAM
RVA	GRAVEL AREA, NOT NATURAL. - NO SOIL SERIES ASSIGNED
RVB	MIAMIAN URBAN COMPLEX
RVC	MIAMIAN URBAN LAND COMPLEX
RVD	MIAMIAN-URBAN LAND COMPLEX
RVE	RAUB SILT LOAM
RVF	BROOKSTON SILT LOAM
RVG	RUSSELL-MIAMIAN SILT LOAM
RVH	RUSSELL-MIAMIAN SILT LOAM
RVJ	XENIA SILT LOAM
RVK	RUSSELL-URBAN LAND COMPLEX
RVM	WEA SILT LOAM
RVN	MIAMIAN SILT LOAM
RVP	CELINA SILT LOAM
RVR	BROOKSTON SILTY CLAY LOAM
RVS	CELINA SILT LOAM
RVT	BROOKSTON SILT LOAM
RXA	MIAMIAN SILT LOAM
RXB	MIAMIAN-URBAN LAND COMPLEX
RXD	MIAMIAN-URBAN LAND COMPLEX
RXE	RUSSEL-MIAMIAN SILT LOAMS
RXF	OCKLEY SILT LOAM
RXG	EDEN COMPLEX
RXH	ROSS LOAM
RXJ	HENNEPIN-MIAMIAN SILT LOAM
RXK	PATTON SILTY CLAY LOAM
RXM	TIPPECANOE SILT LOAM

SAMPLE ID	SOIL DESCRIPTION
RXN	RUSSELL-MIAMIAN SILT LOAMS
RXP	MIAMI SILT LOAM
RXR	OCKLEY SILT LOAM
RXT	CELINA SILT LOAM
RYA	PLATTVILLE SILT LOAM
RYB	RITCHEY SILT LOAM
RYC	WARSAW-URBAN LAND COMPLEX
RYD	ELDEAN SILT LOAM
RYE	MIAMIAN SILT LOAM
RYF	RUSSELL SILT LOAM
RYG	CRIDER SILT LOAM
RYH	ROSSMOYNE SILT LOAM
RYJ	RUSSELL-MIAMIAN SILT LOAM
RYK	XENIA SILT LOAM
RYM	GENESEE LOAM
RYN	MIAMIAN-RUSSELL SILT LOAMS
RYP	ROSS LOAM
RYR	MIAMI-CELINA SILT LOAMS
RYS	MIAMI-CELINA SILT LOAMS
RYT	CROSBY SILT LOAM

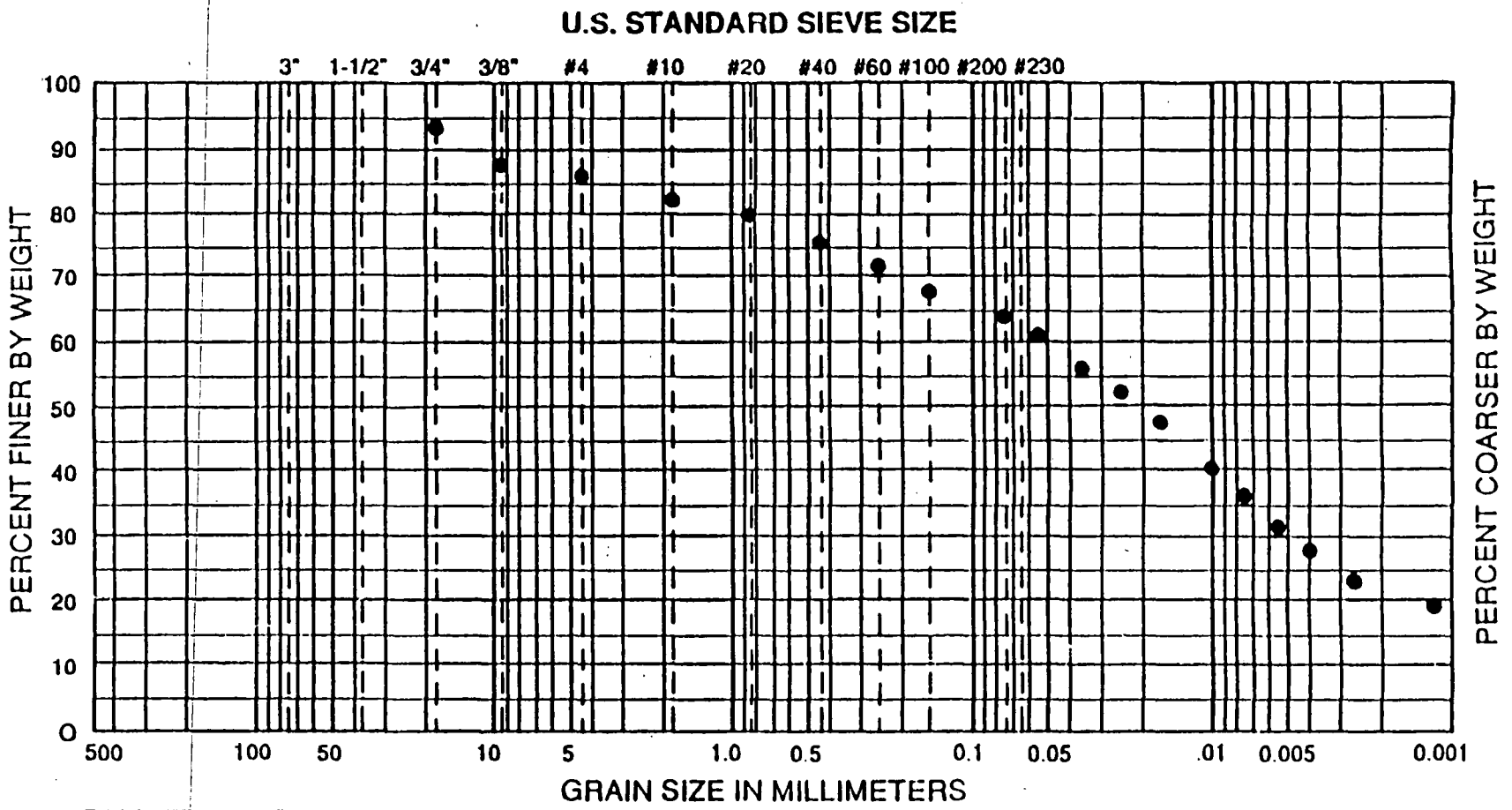
Appendix C

APPENDIX C

GEOTECHNICAL DATA

The locations for the following NPDES Sample Location Geotechnical Data can be referenced by comparison of the sample identification, listed under "wellname" on the form, to the sample locations on Figure 2.3.

ADVANCED TERRA TESTING

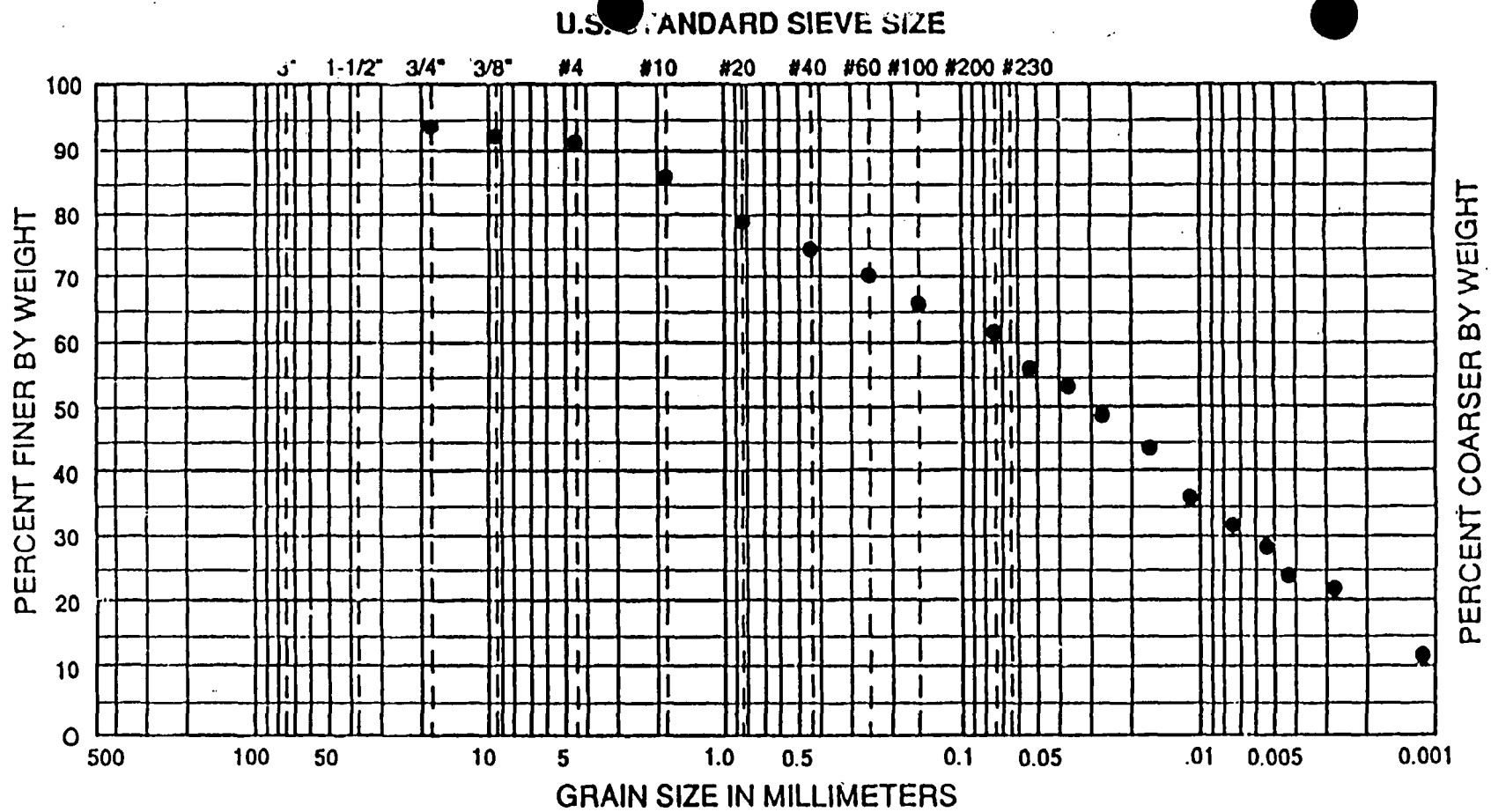


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		COARSE	FINE	COARSE	MEDIUM	FINE				
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N03301 SAMPLE NO.: NO 3 DATE: 7-12-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO# 108333-I	SOIL SUBSURFACE	

ADVANCED TERRA TESTING

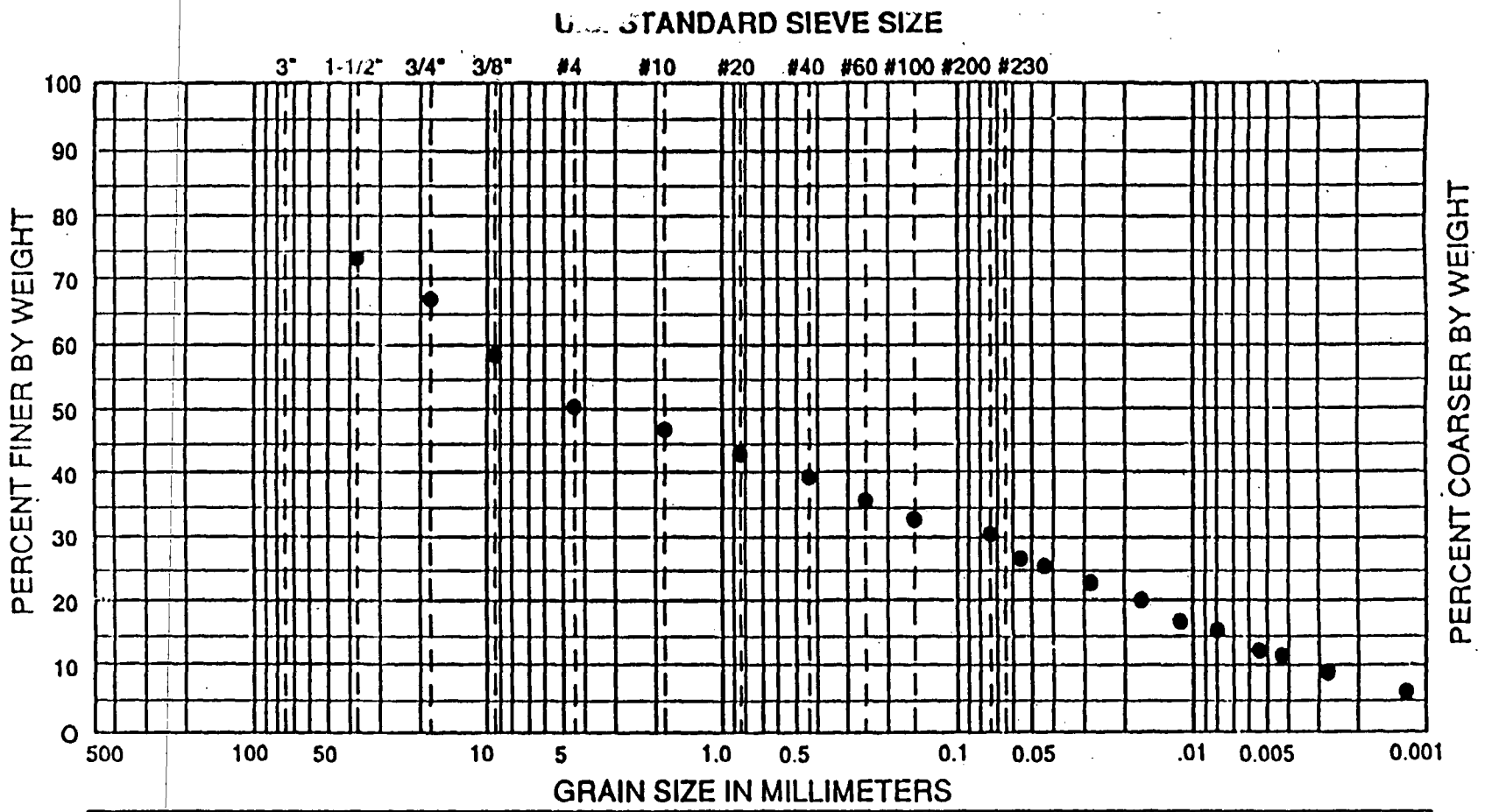


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		COARSE	FINE	COARSE	MEDIUM	FINE				
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N04301 SAMPLE NO.: 36049-5 DATE: 6-23-94 PROJECT NO.: 2174-02

AREA	DEPTH	CLASSIFICATION
	2-4'	

ADVANCED TERRA TESTING

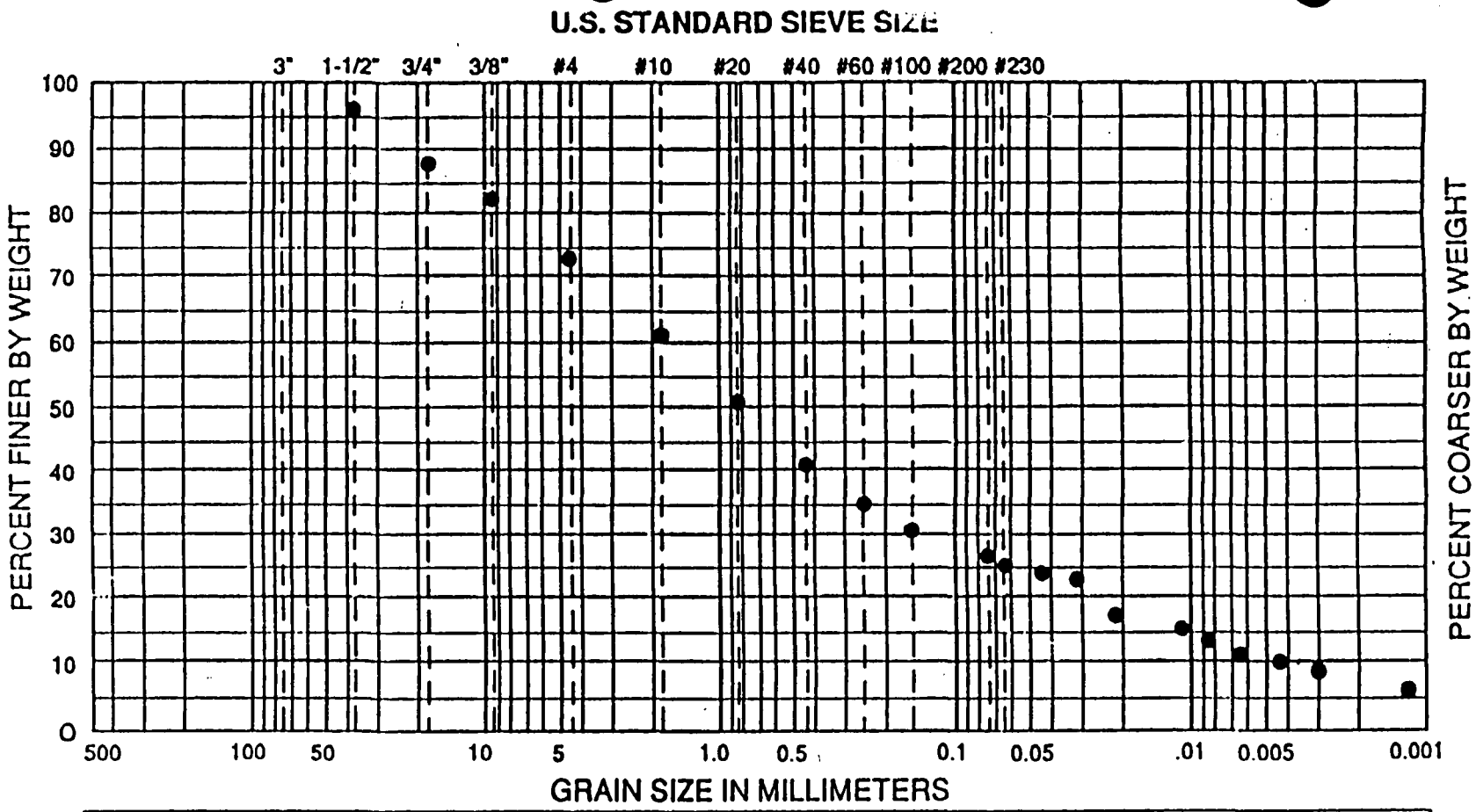


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		COARSE	FINE	COARSE	MEDIUM	FINE				
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N0530Z SAMPLE NO.: 36023-15 DATE: 6-23-94 PROJECT NO.: 2174-02

AREA	DEPTH	CLASSIFICATION
	12-15'	

ADVANCED TERRA TESTING

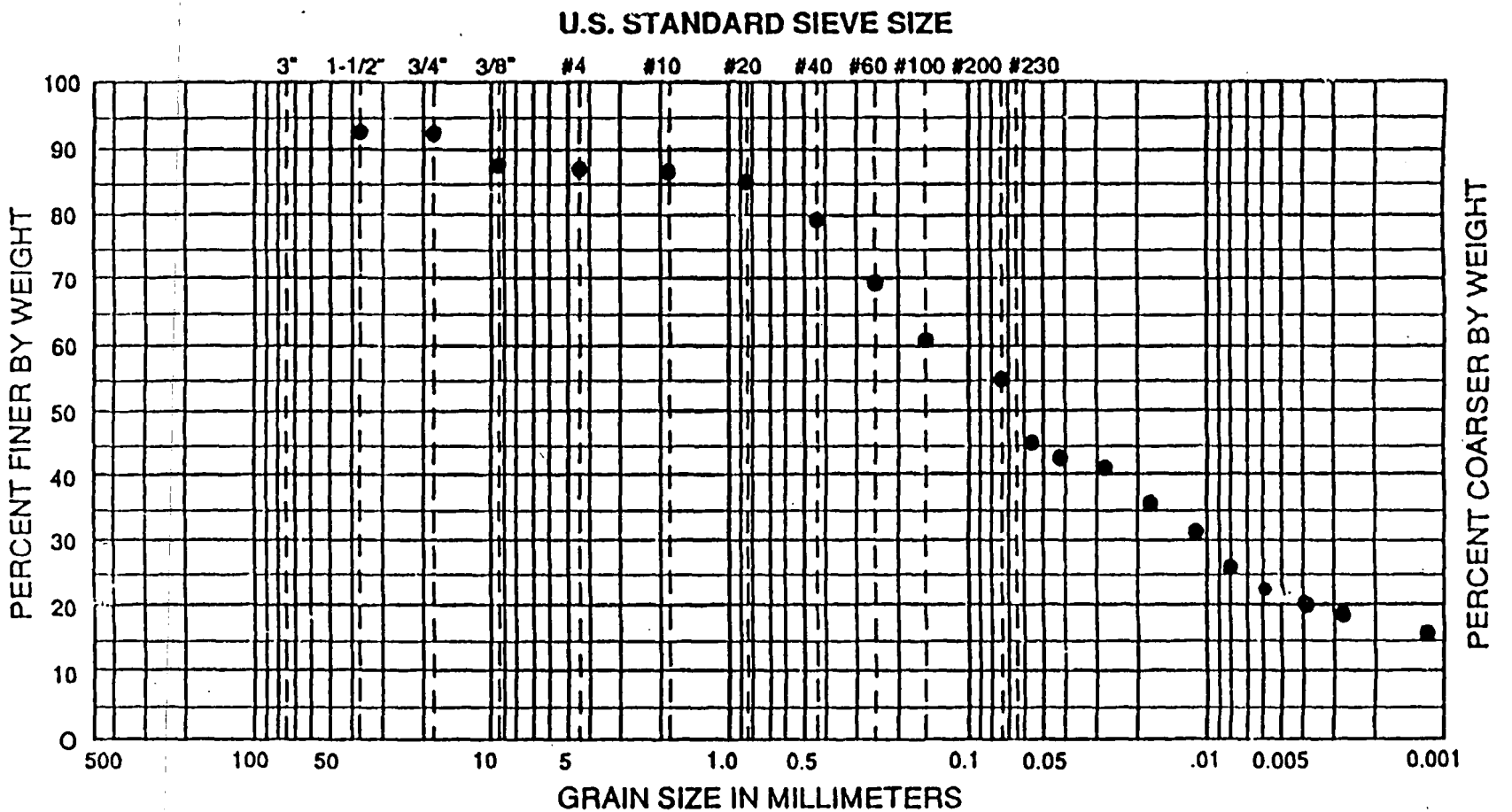


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL			SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N06301 SAMPLE NO.: 35729-20 DATE: 6-21-94 PROJECT NO.: 2174-02

AREA	DEPTH	CLASSIFICATION
	1-3'	

ADVANCED TERRA TESTING

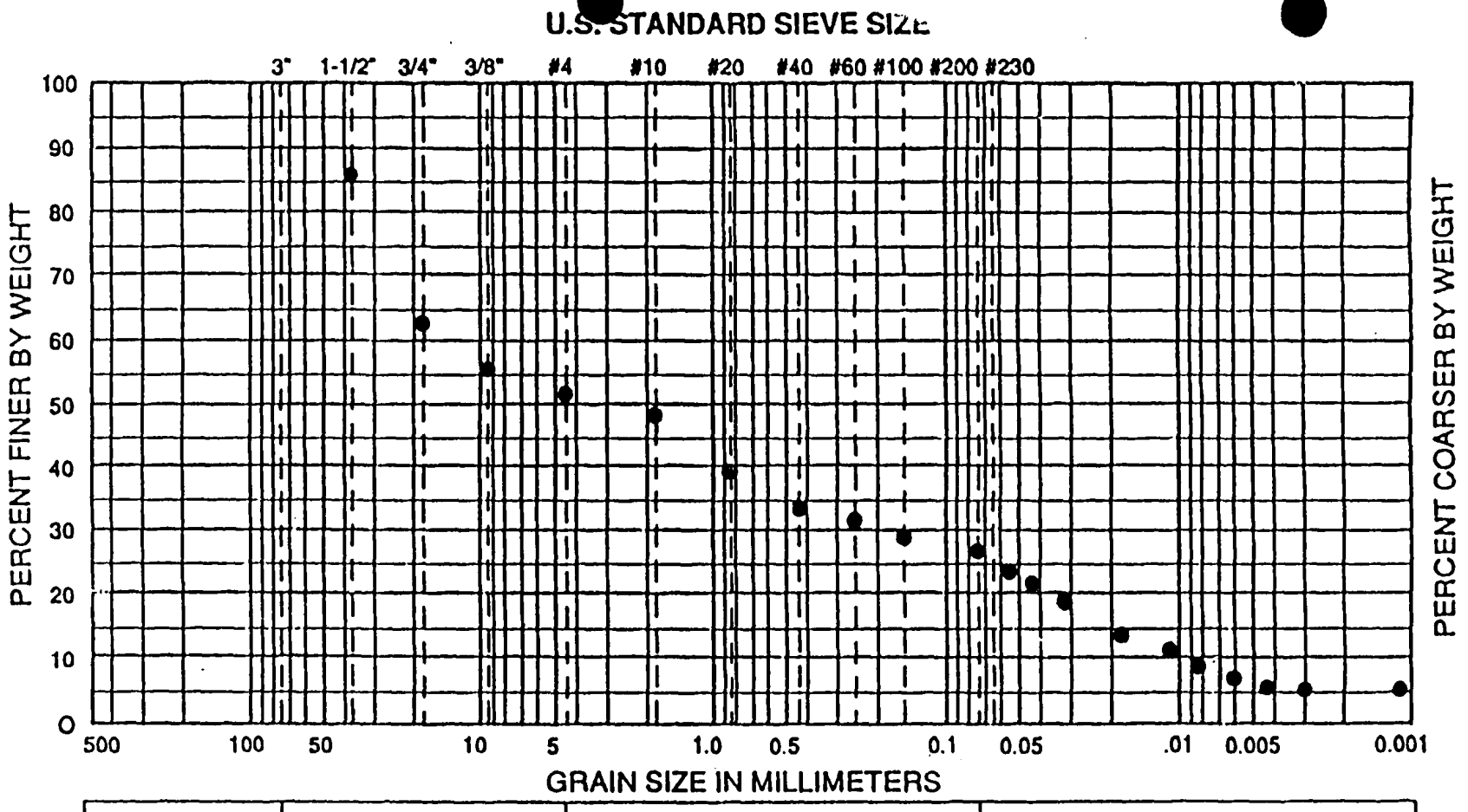


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL			SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N0630Z SAMPLE NO.: 35729-21 DATE: 6-23-94 PROJECT NO.: 2174-02

AREA	DEPTH	CLASSIFICATION
	14-16'	

ADVANCED TERRA TESTING



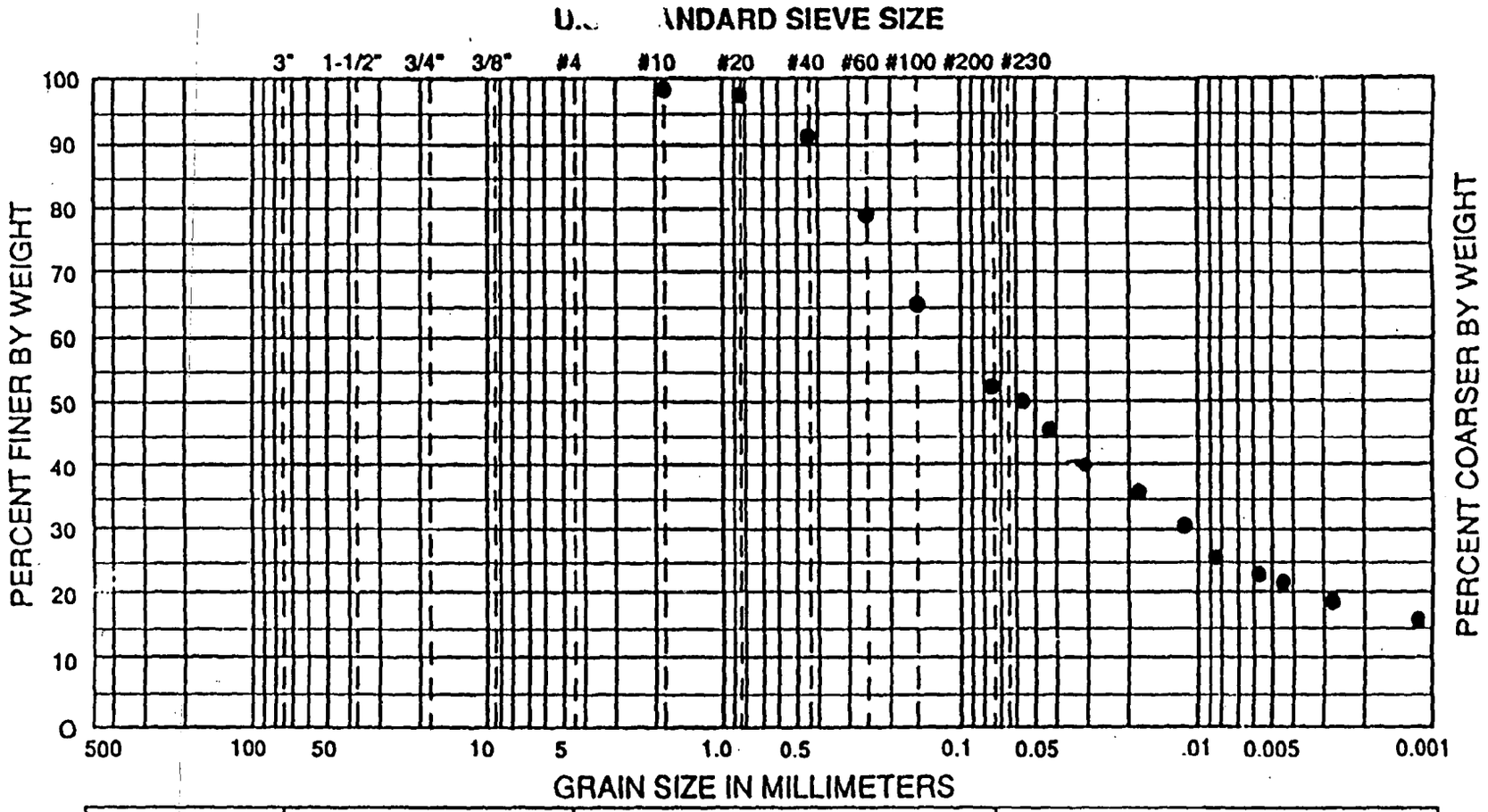
USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	

WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N07301 SAMPLE NO.: 35729-8 DATE: 6-21-94 PROJECT NO.: 2174-0

AREA	DEPTH	CLASSIFICATION

ADVANCED TERRA TESTING



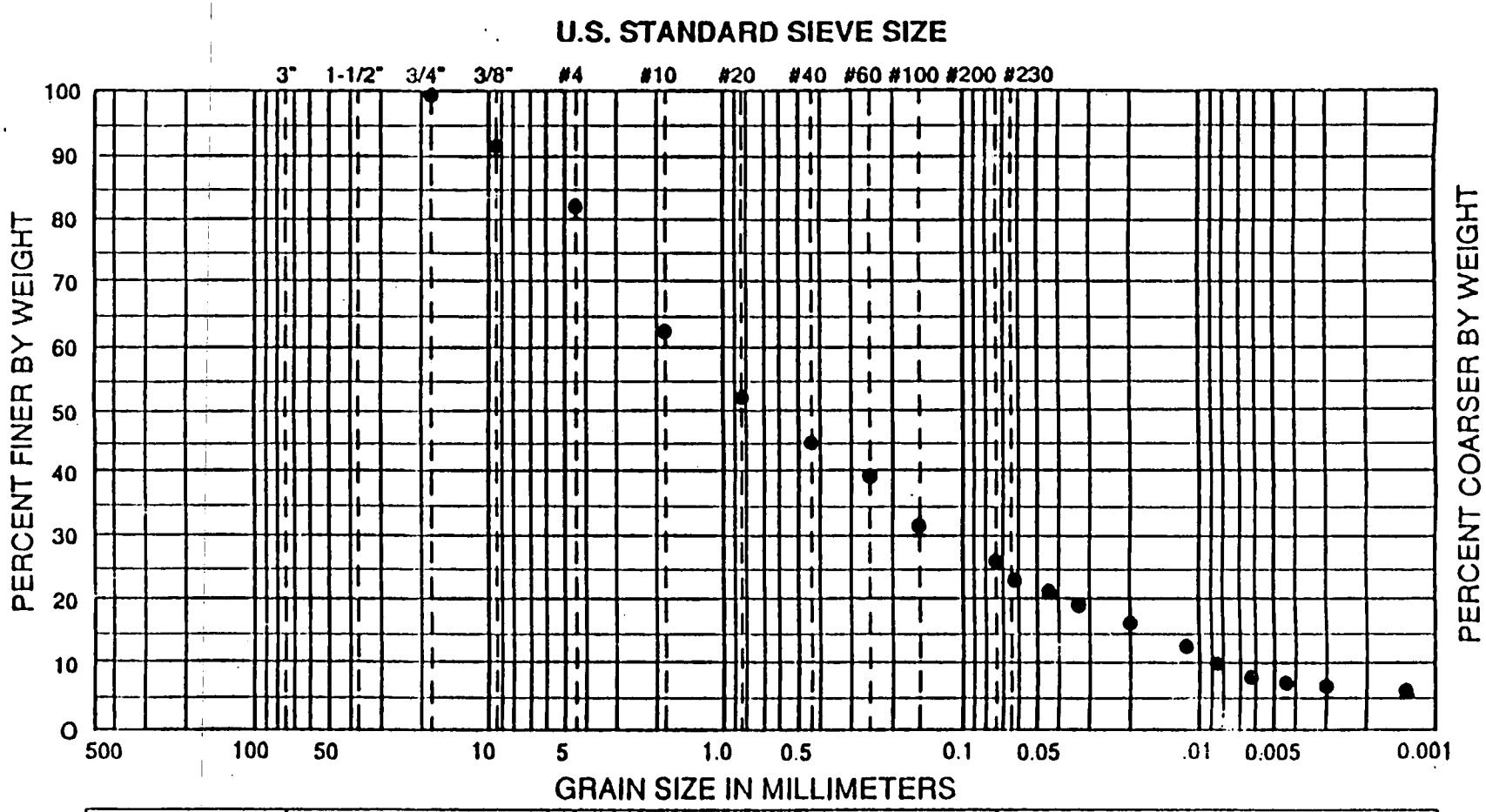
USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL			SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: N08301 SAMPLE NO.: 35729-5 DATE: 6-21-94 PROJECT NO.: 2174-02

AREA	DEPTH	CLASSIFICATION
	12-14'	

The locations for the following Main Hill Seep Sample Location Geotechnical Data can be referenced by comparison of the sample identification. Listed under "wellname" on the form, to the sample locations of Figure 2.4.

ADVANCED TERRA TESTING

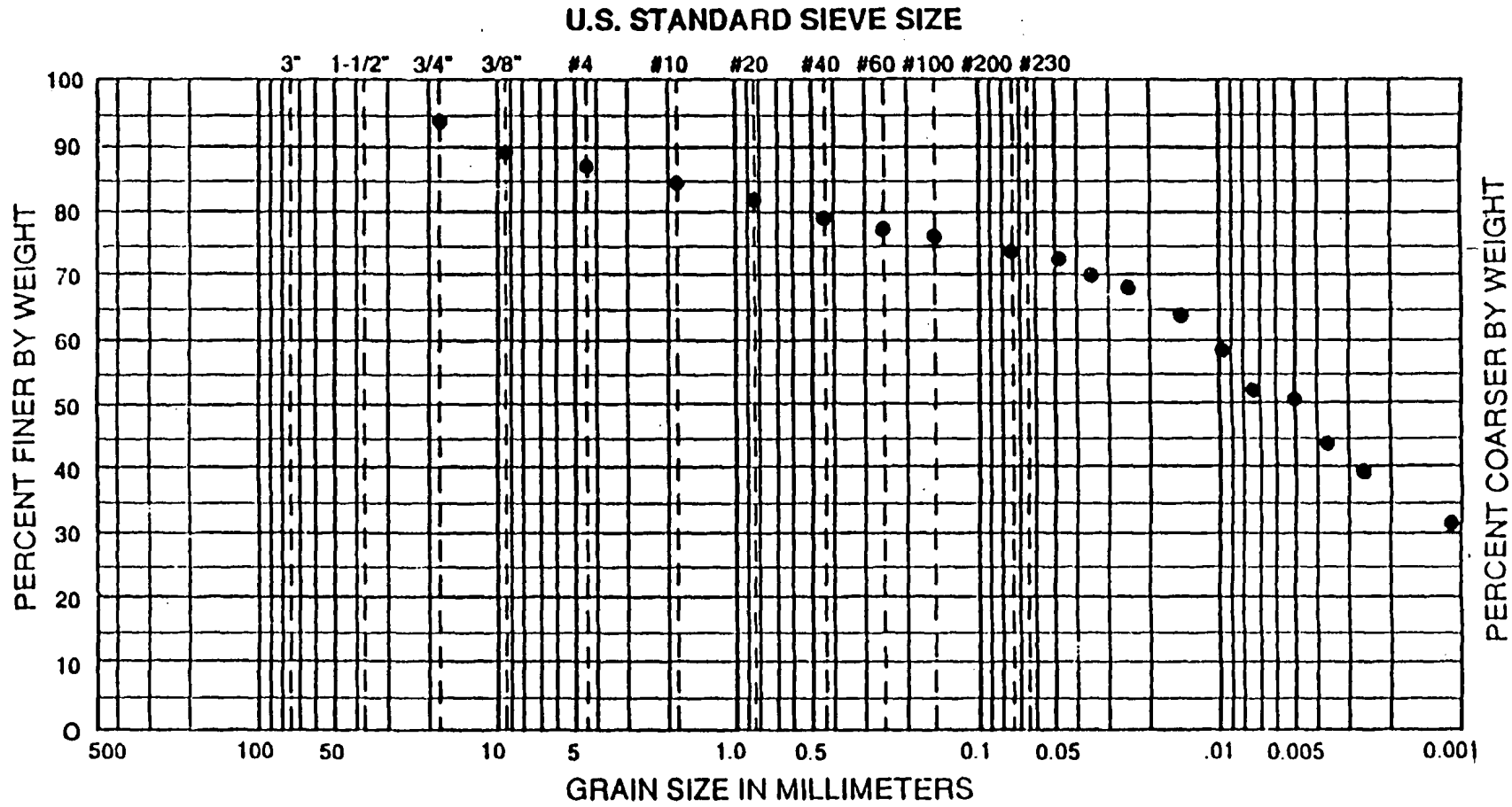


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 511301 SAMPLE NO.: 60100 DATE: 7-8-94 SR PROJECT NO.: 9174-03

AREA	DEPTH	CLASSIFICATION
PO 108333-I	0-6"	

ADVANCED TERRA TESTING



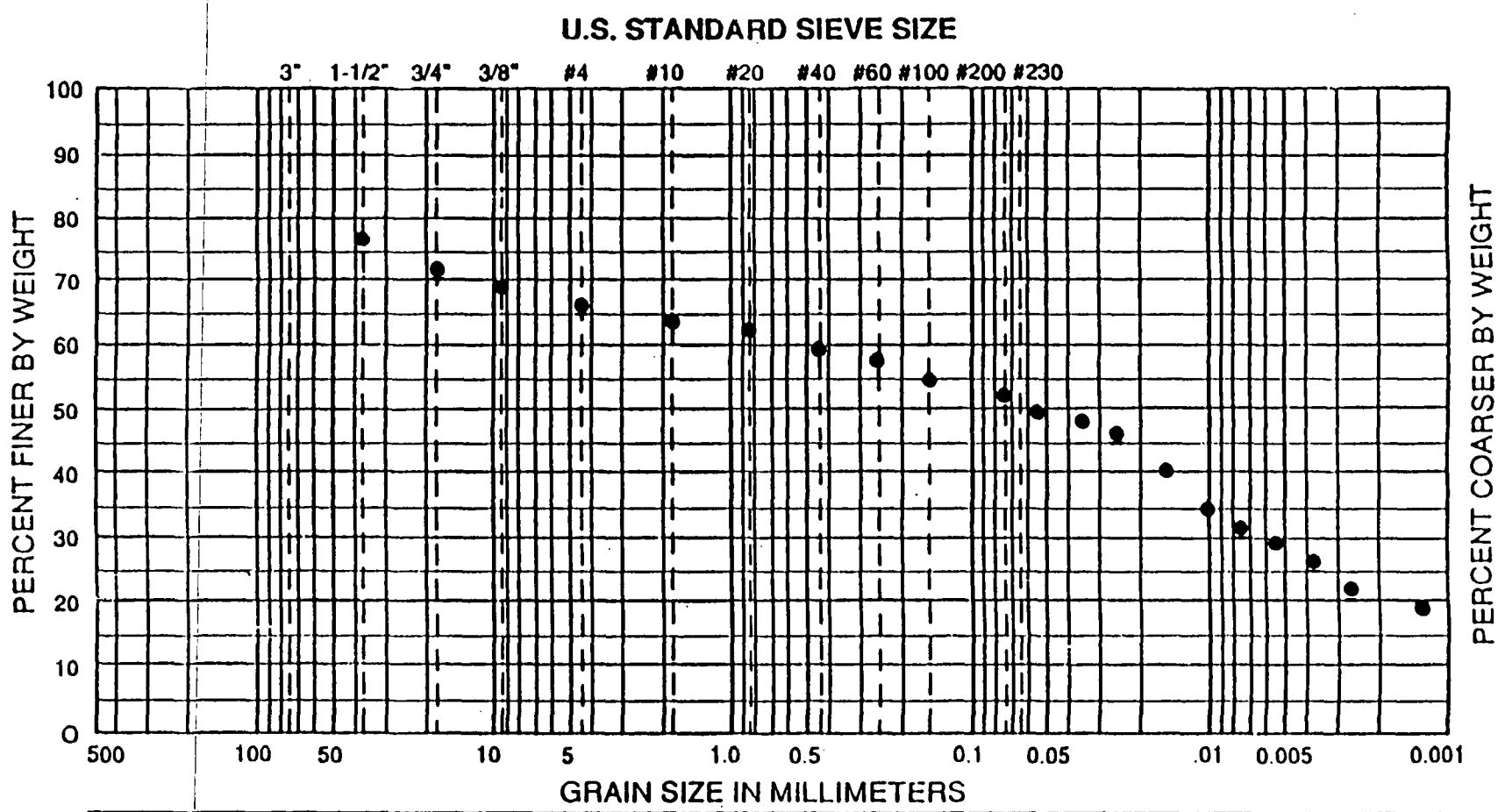
USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		COARSE	FINE	COARSE	MEDIUM	FINE				

WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 521301 SAMPLE NO.: 60200 DATE: 7-8-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO 108333-I	0-6"	

ADVANCED TERRA TESTING

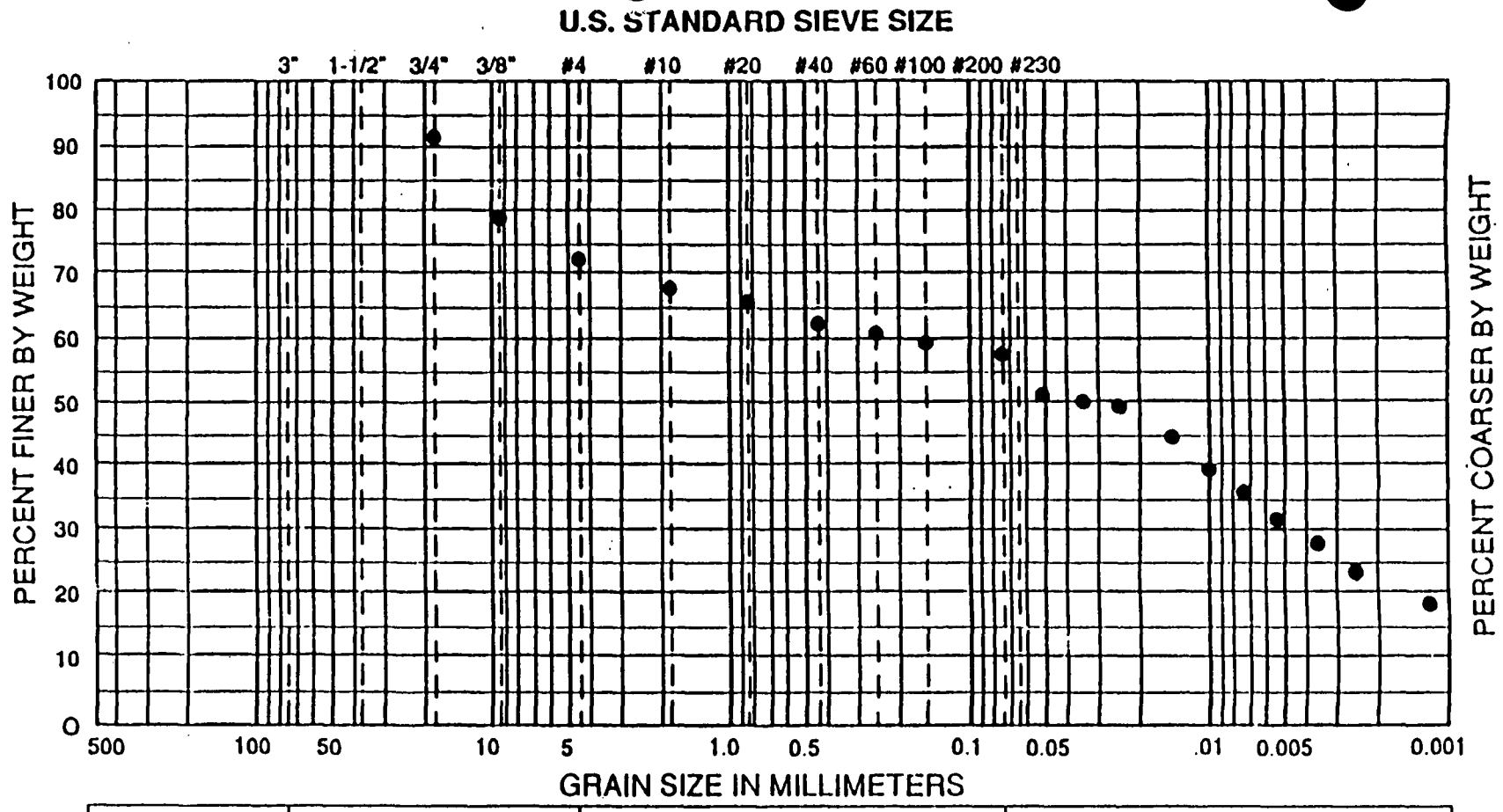


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		COARSE	FINE	COARSE	MEDIUM	FINE				
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 531301 SAMPLE NO.: 60300 DATE: 7-12-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO# 108333-T	0-6"	

ADVANCED TERRA TESTING

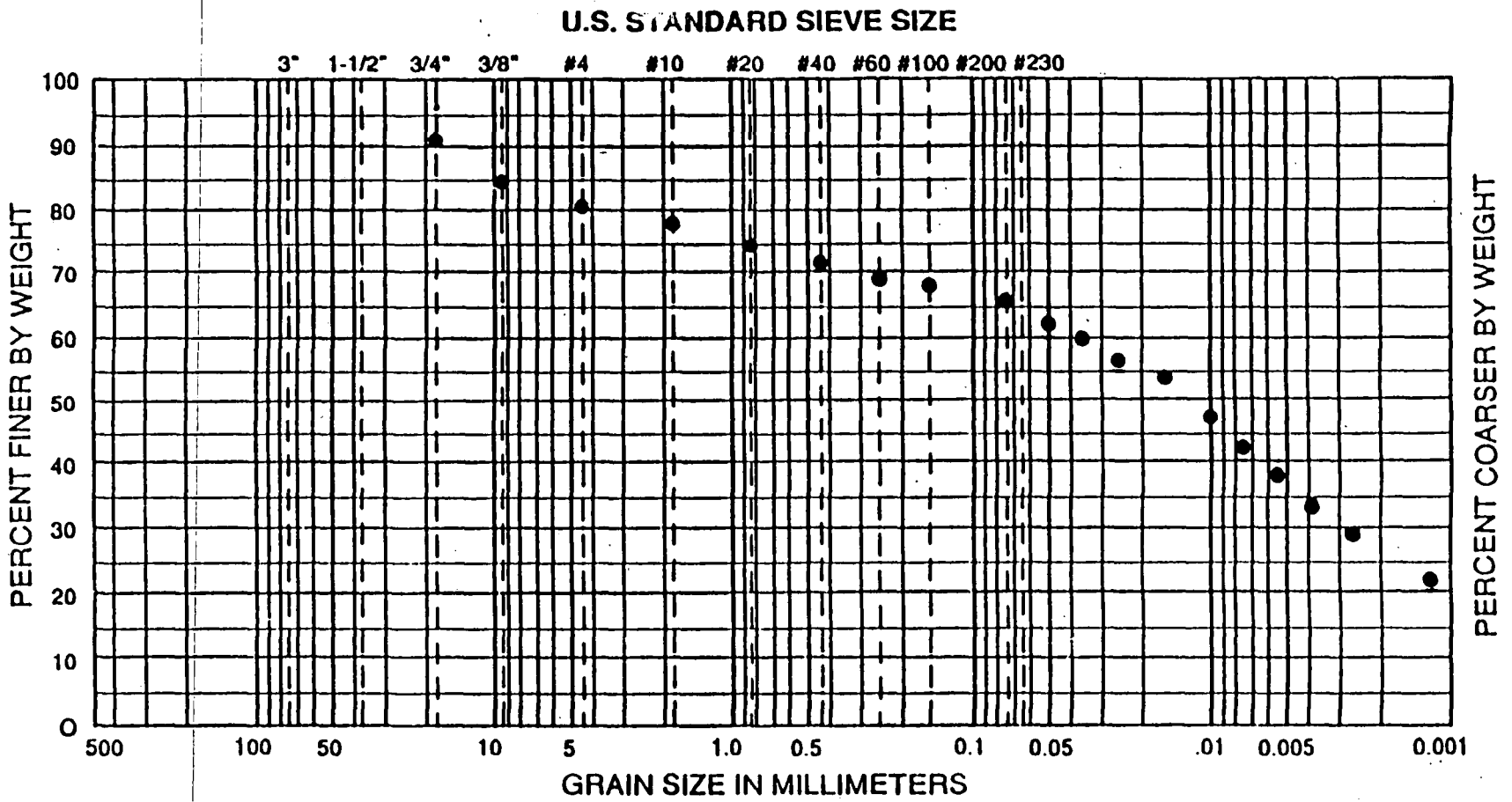


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 551301 SAMPLE NO.: 60500 DATE: 7-12-94 SB PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO #108333-I	0-6"	

ADVANCED TERRA TESTING

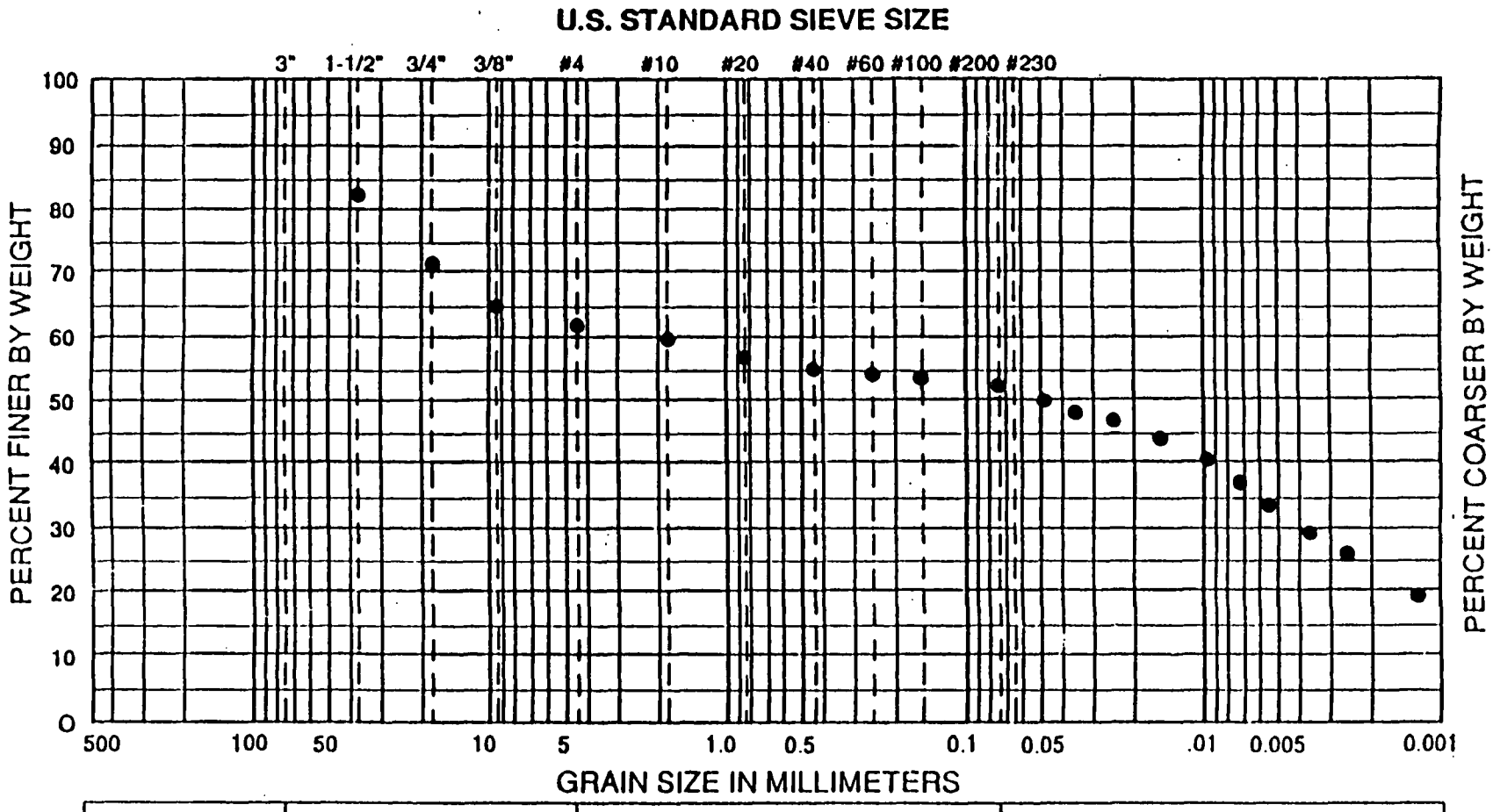


USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL			SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 561301 SAMPLE NO.: 60600 DATE: 7-8-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO 108333-I	0-6"	

ADVANCED TERRA TESTING



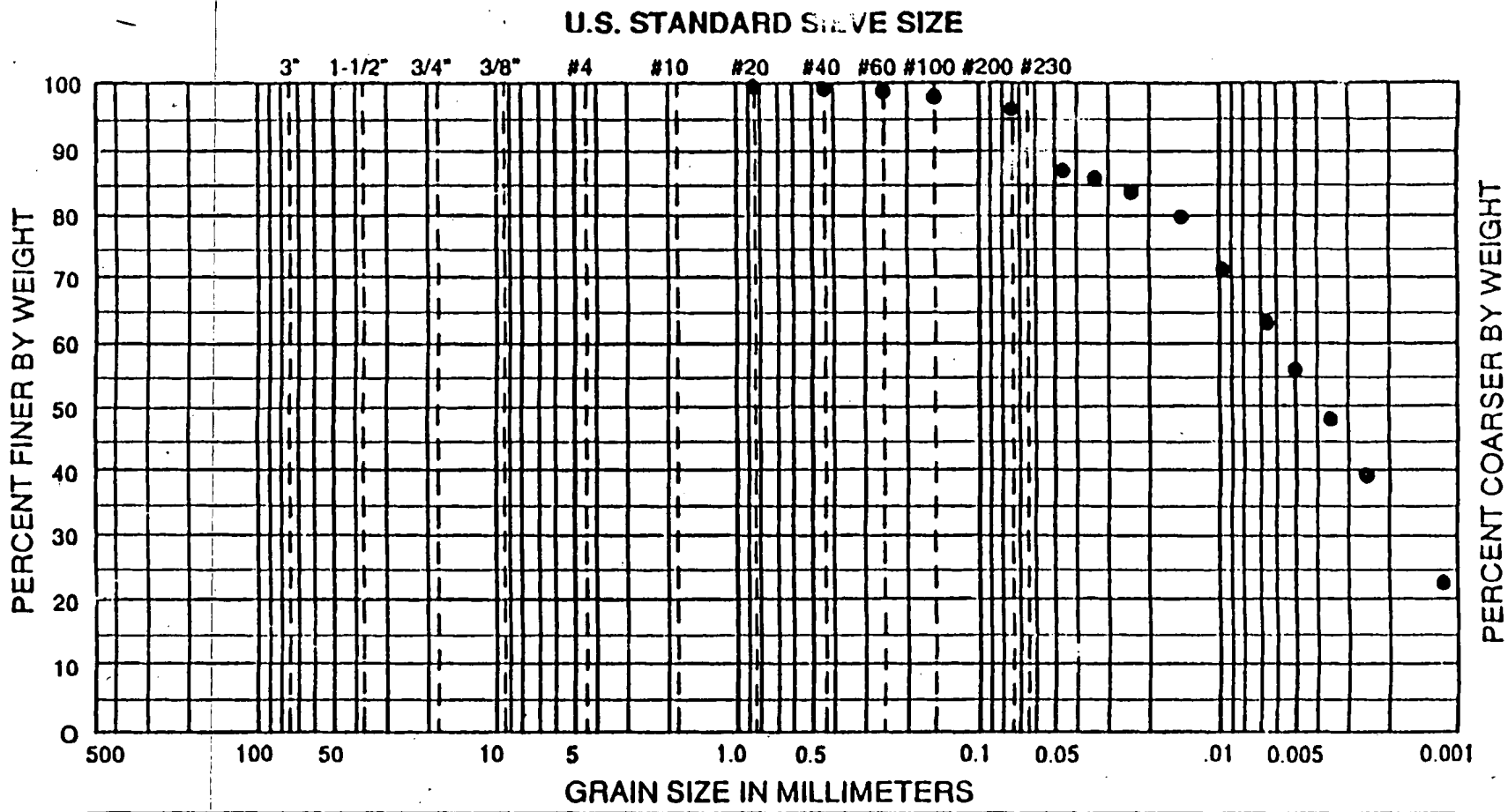
USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			

WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: 571301 SAMPLE NO.: 60700 DATE: 7-8-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
Po 108333-I	0-6"	

ADVANCED TERRA TESTING



USCS	COBBLES	GRAVEL		SAND			SILT OR CLAY		
		COARSE	FINE	COARSE	MEDIUM	FINE			
WENTWORTH	COBBLES TO BOULDERS	PEBBLE GRAVEL				SAND			SILT	CLAY
		COARSE	MED	FINE	GRAN	COARSE	MED	FINE		

WELLNAME: S81301 SAMPLE NO.: 60800 DATE: 7-12-94 SR PROJECT NO.: 2174-03

AREA	DEPTH	CLASSIFICATION
PO# 108333-I	0-6"	

Appendix D

APPENDIX D

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D.1.0. INTRODUCTION

Chemical data are fundamental to an environmental investigation. Inherent in the chemical data are uncertainties arising from the natural variability in the environment and measurement error. Data quality objectives (DQOs) are statements specifying the analytical and statistical goals of a study. DQOs assessed in this appendix were developed during project planning and are presented in the OU9 QAPjP.

This data quality assessment (DQA) evaluates the validity and performance of the data collection program by determining if the data are sufficient, adequate, and usable for supporting project decisions. Specifically, this DQA assesses the organic, inorganic, and radiological data produced from the analysis of environmental samples collected during the OU9 RSI. This DQA also evaluates the impact of all QC measures on the overall data quality and removes all unusable values from the investigation data set.

All sampling and analysis was conducted using the QC requirements and QA objectives outlined in the OU9 QAPjP. A summary of the environmental and field QC samples collected and analyzed during the OU9 RSI are presented in Table D.1-1 on page D-13.

Note: Due to the large amount of tabulated data in this appendix, all tables are located in numerical order beginning on page D-13.

D.1.1. ENVIRONMENTAL ANALYTICAL LABORATORIES

Environmental and field QC samples were analyzed by two laboratories during the OU9 RSI. Ecotek LSI, Atlanta, Ga., performed all radiological analyses. Quanterra Environmental Services (formerly Enseco-Rocky Mountain Analytical Laboratory), Arvada, Colorado, performed the organic, inorganic, and wet chemistry analyses. The laboratories analyzed all environmental samples (i.e., soil and seep water) and field QC samples (i.e., trip blanks, ambient blanks, and equipment rinsates) using U.S. Environmental Protection Agency (EPA) and Mound OU9 QAPjP methods from the following references:

- *Statement of Work for Organic Analysis, Multi-Media, Multi-Concentration,* EPA Contract Laboratory Program, March 1990 and revisions;

- *Statement of Work for Inorganic Analysis, Multi-Media, Multi-Concentration*, EPA Contract Laboratory Program, March 1990 and revisions;

- *Superfund Analytical Methods for Low Concentration Water for Organics Analysis*, EPA, June 1991;

- *Superfund Analytical Methods for Low Concentration Water for Inorganics Analysis*, EPA, June 1991;

- *Contract Laboratory Program Statement of Work Modifications, OU9 Site-Wide QAPjP, Appendix B*, Revision 3, June 1993; and

- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, September 1986, with 1989 revisions.

D.1.2. ANALYTICAL DATA VALIDATION

All analytical data were validated as described in Section D.3.0 using the guidelines and specifications found in the following documents:

- *Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses*, EPA Contract Laboratory Program, February 1988;

- *National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration (OLM01.0) and Low Concentration Water (OLC01.0)*, EPA Contract Laboratory Program, Draft, December 1990, Revised June 1991;

- *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses*, EPA Contract Laboratory Program, February 1988, Revised January 1993; and

- *Data Validation Guidelines for Non-CLP Analyses, OU9 Site-Wide QAPjP, Appendix H*, Revision 3, June 1993.

The validated results, including qualifiers, were incorporated into the OU9 RSI database and used to evaluate the data quality. The data quality summary, rejected data summary, accuracy and precision summary, and completeness calculations were prepared using 100 percent of all concentration records in the OU9 RSI database. Bias and uncertainty were determined using 100 percent of the usable (i.e., unqualified results and estimated data points only) concentration values in the database. Table D.1-2 summarizes all data that were qualified, as well as the associated potential bias and uncertainty.

D.1.3. QUALITY DATA MANAGEMENT

The OU9 RSI database was populated with analytical results collected during the Mound OU9 RSI project. All duplicate, QC blanks, and dilution results were evaluated and the most appropriate data points were selected. The selection processes used are described below:

- All compounds detected in trip blanks were evaluated and the data were adjusted using the following procedures: 1) All environmental samples were linked with the associated trip blanks, based on the applicable chain-of-custody form. 2) All potential contaminants detected in the associated trip blanks were evaluated. These blank concentrations were raised by a factor of 10 (for common laboratory contaminants) or 5 (for all other contaminants) based on the compound detected and applicable validation procedures. These adjusted values became the minimum concentration that would be considered representative in a given environmental sample. 3) All concentration values in the associated environmental samples were compared with the adjusted trip blank result. If the concentration did not exceed the minimum representative concentration, then the value was considered not detected at the concentration reported and was qualified as undetected.

- All detected compounds and elements in the equipment rinsate blanks were evaluated and the reportable data points were adjusted using the following procedures: 1) All environmental samples were linked with the associated equipment rinsate blanks, based on the applicable chain-of-custody form. 2) All potential contaminants detected in the associated rinsate blanks were evaluated. These concentrations were raised by a factor of 10 (for common laboratory contaminants), 5 (for all other contaminants), or 3 (for radiochemical contaminants) based on the compound or element detected and appropriate validation procedures. These values became the minimum concentration that would be

considered representative in a given environmental sample. 3) All concentration values in the associated environmental samples were compared with the adjusted equipment rinsate blank results. If the concentration did not exceed the minimum representative concentration, the value was considered not detected at the concentration reported and was qualified as undetected.

- All data points qualified with "R" were marked to prevent incorporation into the usable data population.

- All laboratory duplicate values for sample identification and analytical method, and all values meeting the duplicate value criteria were evaluated using the following procedure (standard logic): 1) The higher concentration value was selected. 2) The detected value was selected. 3) The most sensitive contract-required quantitation or detection limit (CRQL or CRDL, respectively) was selected for duplicate nondetected values.

- All dilutions results were evaluated for best value and CRQL/CRDL using the following procedure: 1) The diluted sample results were selected for all compounds, with the exception of VOCs methylene chloride, acetone, 2-butanone, and toluene and SVOC phthalate esters. The concentration value reported in the nondiluted sample was selected for those compounds only. 2) The nondiluted sample results was selected to prevent potential false positive value incorporation into the usable data population for duplicate nondetected and detected values. 3) The most sensitive CRQL or CRDL was selected for duplicate nondetected values.

- All reanalyses results were evaluated for best value, based on QC result, and CRQL/CRDL using the standard logic procedure.

- All field duplicate/replicate analyses results were evaluated for best value and CRQL/CRDL to be used in the OU9 RSI data set using the following procedure: 1) Duplicate detected values were averaged if the calculated relative percent difference (RPD) was less than 20 (water) or 35 (soil) percent. The higher concentration value was

selected if the reference RPD value was exceeded. 2) The detected value was selected where the duplicate value was not detected. 3) The most sensitive CRQL/CRDL was selected where both values were not detected.

D.2.0. DATA QUALITY OBJECTIVES

As defined in the QAPjP, the following specific data quality objectives (DQOs) of accuracy, precision, completeness, representativeness and comparability were used to assess the overall quality of the analytical data collected from the RSI. The OU9 RSI DQOs are lised in Tables D.2-1 and D.2-2.

D.2.1. ACCURACY

Accuracy is defined as the degree of difference between measured or calculated values and the true value. Accuracy was determined using matrix spike/matrix spike duplicate (MS/MSD) for organics and matrix spike samples for inorganics and radiochemical analyses. Data were qualified on the basis of percent recoveries (% R) of these spikes in conjunction with other validation criteria. All DQOs for accuracy were met for the OU9 RSI. Laboratory accuracy and precision performance summary tables for each analysis are presented in Section D.4.2.

D.2.2. PRECISION

Precision is defined as the reproducibility, or degree of agreement, among replicate measurements of the same compound or element. No data were rejected due to unacceptable RPD results; therefore, the precision DQOs for the OU9 RSI were met. Laboratory accuracy and precision performance summary tables for each analysis are presented in Section D.4.2.

D.2.3. COMPLETENESS

Completeness is a measure of the amount of valid data obtained from a measurement system that achieves the project goals, compared to the amount expected under normal conditions. For data to be considered valid, they must have met all acceptance criteria, including accuracy and precision, as well as any other criteria specified by the analytical methods used. The project completeness goal per the OU9 QAPjP was 90%. Completeness was calculated by adding the total rejected (150) data points to the data points

planned, but not collected (20), then subtracting this value from the total planned data points (30,170). The resulting value (30,515) was divided by the total planned and multiplied by 100. Results of these calculations indicate that the OU9 RSI project completeness was 99%.

D.2.4. REPRESENTATIVENESS

Representativeness is defined as the degree to which the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling location, a process condition, or an environmental condition. Sample representativeness was ensured during the OU9 RSI by collecting sufficient samples of a population medium, properly distributed with respect to location and time. Representativeness was assessed by reviewing the drilling techniques, sample collection methods, equipment, and sample containers used during the OU9 RSI. Representativeness was also assessed by evaluating the RPD values calculated from the field duplicate samples, duplicate concentration values reported from redundant analyses, and the concentrations of contaminants detected in the field and laboratory QC blanks. The reproducibility of a representative set of samples reflects the degree of heterogeneity of the sampled medium.

D.2.5. COMPARABILITY

Comparability is defined as the confidence with which one data set can be compared to another. To achieve data comparability, the data set used for the OU9 RSI was generated by employing standardized analytical methods and data validation procedures where available (i.e., CLP Methods and Functional Guidelines). Where general guidance was unavailable, Mound specific methods and data validation procedures common to all Mound RIs were used.

Additionally, the laboratories participated in the analysis of performance evaluation (PE) samples for organics and inorganics and cross check (CC) samples for radionuclides. The results of the samples are listed in Tables D.2-3 and D.2-4. The laboratories' performance over the period presented indicates their ability to generate accurate results over time. Based on the overall quality of the PE and CC sample results, and the stringent QC requirements set by the standardized methods, the data generated is considered comparable to other data generated through similar processes.

D.3.0. DATA VALIDATION AND ASSESSMENT

The OU9 RSI data were validated as described in the following subsections. Data quality was assessed and the usable data population was determined using the preparation and selection process described in Section D.1.3.

D.3.1. DATA VALIDATION PROCESS

All data received from the laboratories were subjected to an initial review to ensure that all elements of the required deliverable were submitted. All analytical data were then validated according to the guidelines and procedures described in the documents listed in Section D.1.2.1. All data received full data validation including recalculation of selected data (e.g., QC environmental sample results. Validators were responsible for (1) reviewing the laboratory data (i.e., ensuring that the required information was complete), (2) comparing the laboratory QC results with the required control limits (and using professional judgment where specific limits were not specified), (3) verifying that results were correctly calculated, (4) qualifying affected data, and (5) preparing a technical justification for the validation actions taken.

Wet chemistry data (i.e. chloride, pH, sulfate, etc.) were validated in a similar fashion as the organic, inorganic, and radiochemical data. Wet chemistry methods have fewer laboratory QA requirements and provide more general information than do CLP and CLP type analyses. The results of the wet chemistry analyses were therefore incorporated into the overall assessment of DQOs, but individual QA and method specific results are not presented in this appendix.

D.3.2. DATA VALIDATION REVIEW PROCESS

All analytical data received from the validators were reviewed for completeness and consistency before the validation qualifiers were incorporated into the OU9 RSI database. Approximately 10% of all data validation reports received a secondary review to ensure uniformity in validation procedures among validators. Any qualifiers inconsistently or inappropriately applied were revised, as necessary. All changes were documented.

D.3.3. DATA QUALITY ASSESSMENT

The DQA was conducted using the validated results. The complete OU9 RSI usable data set contained 25,613 (84% of all data collected) concentration records. Bias and uncertainty were evaluated for all estimated (i.e., "J or UJ") data based on 100 percent of the total estimated data set. Of these data, 50% (3,245 concentration values) are considered to have been reported at an artificially lower concentration (i.e., potentially biased low). Approximately 9% (575 concentration values) of the data set are considered to have been reported at a maximum value (i.e., potentially biased high). The direction of bias could not be determined for 41% (2660 records) of the data set with the information provided. Uncertainty was evaluated as the potential for false negative or false positive values. Based on the data evaluated, 23% (1476 concentration values) of the estimated values reported are considered potential false negatives and approximately 9% (571 values) are considered potential false positives.

D.4.0. LABORATORY QUALITY CONTROL SUMMARY

D.4.1. HOLDING TIMES

Holding times are defined as the maximum amount of time allowed to elapse between sample collection and sample analysis. Analyses of samples that have exceeded the contract-required holding times may result in the following: 1) concentrations of compounds that ordinarily would have been detected are undetected due to chemical transformation, compound volatilization, or biodegradation; 2) reported concentrations lower than those originally present, due to the factors previously stated; or 3) reported concentrations greater than those originally present in the sample, due to external contamination of water samples or changes in soil moisture content. No data was rejected due to holding time violations. Approximately 6% (1610 values) of the usable data population were estimated due to exceeded holding times.

D.4.2. ACCURACY AND PRECISION

Laboratory accuracy and precision assessment and matrix effect sample evaluation was conducted using MS/MSD (for organic compounds) and spike and duplicate (for inorganic compounds and radiochemical) analyses. Accuracy and precision were expressed as the percent recovery of the spike compounds, elements or isotopes and the RPD of the concentrations of the spike compounds, respectively. For

samples collected and analyzed for trace metals and other inorganic chemicals, precision was expressed as the percent difference of the concentration of elements detected in the sample and associated analytical duplicate. A MS/MSD or a spike and analytical duplicate analysis was required for every 20 of a similar matrix.

D.4.2.1. Volatile Organic Compound Analyses

Twenty-six soil samples and 18 water samples were analyzed as MS/MSDs using CLP methods. These samples were spiked with the following compounds: acrylonitrile, 1,1-dichloroethene, trichloroethene, benzene, toluene, and chlorobenzene. The analytical accuracy and precision results are summarized in Tables D.4-1 through D.4-4.

D.4.2.2. Semivolatile Organic Compound Analyses

Twenty-two soil and 10 water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: phenol, 2-chlorophenol, 1,4-dichlorobenzene, N-nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methlyphenol, acenaphthene, 4-nitrophenol, 2,4-dinitrotoluene, pentachlorophenol, and pyrene. No sample results were qualified based on percent recovery or difference results. The analytical accuracy and precision results are summarized in Tables D.4-5 through D.4-8.

D.4.2.3. Pesticides/PCBs Analyses

Twenty-four soil and 12 water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: gamma-BHC (lindane), heptachlor, aldrin, dieldrin, endrin, and 4,4'-DDT. A summary of the recovery and difference results is presented in Table D.4-9 through D.4-12.

D.4.2.4. Explosives Analyses

Six soil and 2 water samples were analyzed as MS/MSDs using the CLP SOW. These samples were spiked with the following compounds: RDX, 1,3,5-trinitrobenzene, 2,4,6-trinitrotoluene, 2,6-dinitrotoluene,

and 2,4-dinitrotoluene. A summary of the recovery and difference results is presented in Table D.4-13 through D.4-16.

D.4.2.5. Inorganic Chemical Analyses

Six soil and 4 water samples were analyzed as spike and duplicates using EPA CLP, solid waste, or other regional methods. A summary of the recovery and difference results is presented in Tables D.4-17 through D.4-20.

D.4.2.6. Radionuclide Analyses

Several soil and water samples were analyzed as spike and duplicates using the referenced methods for radiochemical analyses. A summary of the recovery and difference results is presented in Tables D.4-21 through D.4-24.

D.4.3. COMPLETENESS

The analytical completeness goal was 95% as required by the OU9 QAPjP. Analytical completeness was calculated by determining the percentage of samples analyses that were not rejected for each method. No sample analyses were rejected, therefore the analytical completeness was 100% for all methods. Table D.4-25 presents analytical completeness on an analyses level, however, these results do not impact the quality or completeness of the entire data set.

D.4.4. REPRESENTATIVENESS

Representativeness is ensured by conducting all field measurements, sample collection procedures, and laboratory analyses according to the guidelines and specifications described in the OU9 RSI Work Plan, FSP, and QAPjP. All field procedures and any deviations are discussed in Section 2 of the report. Laboratory procedures were evaluated in the data validation process. The data set is considered representative for the purpose of the OU9 RSI.

Rejected values were not included in the usable data population due to the increased potential of using false positive or excluding false negative compounds or elements. As a result, 14 VOC, 7 SVOC, 45

inorganic, and 83 radiochemical data points were not included in the usable data population. Based on the evaluation of the field and laboratory QC results, 99 percent of the total (i.e., 150 data points were removed from 25,763 usable data points) environmental sample data points collected during the OU9 RSI were considered representative and used as the basis for all recommendations presented in this report. Rejected data points are presented in Table D.4-26. Analytical completeness for all matrices collected was 100%.

D.5.0. FIELD QUALITY CONTROL SUMMARIES

Twenty-four trip blanks, 9 ambient blanks, 118 equipment rinsate blanks, and 110 field duplicates were collected during this investigation. Trip, ambient, and sample bank blanks were analyzed for VOCs only. Equipment rinsate blanks and field duplicates were analyzed for the same target compounds or elements as the environmental samples. The analytical results obtained from the field QC blanks were used to assess the efficiency and effectiveness of the sample collection, handling, and equipment decontamination procedures used in the field.

D.5.1. TRIP BLANKS

Trip blanks monitor for VOC contamination during sample transport and storage. Trip blanks were prepared by the laboratory with American Society for Testing and Materials (ASTM) Type II water, stored with the unused sample bottles, and returned to the laboratory with each cooler containing VOC samples. The samples were analyzed for VOCs using the CLP SOW. Table D.5-1 summarizes the concentrations (i.e., greater than the applicable CRQL) of the detected VOCs in the trip blank samples collected during the OU9 RSI. If the concentrations of the compounds detected in the environmental samples did not exceed 10 times (for methylene chloride, acetone, 2-butanone, and toluene) or 5 times (for all other compounds) that detected in the trip blank, the compound was considered not detected in the environmental sample (i.e., U) at the concentrations reported.

D.5.2. AMBIENT AND SAMPLE BANK BLANKS

Ambient blanks and sample bank blanks were collected to monitor for VOCs potentially present in the surrounding environment during sample collection and packaging, respectively. Ambient blanks were collected by filling two 40-ml VOA containers with the ASTM Type II water at the site during the

collection of the primary environmental sample. All ambient blanks were analyzed for CLP VOC. Table D.5-2 summarizes the concentrations of the compounds detected in the ambient blanks.

Sample bank blanks were prepared by filling two 40-ml VOA containers with ASTM type II water at the location where the samples were packaged for shipment. The VOA vials were left uncapped during packaging. After the last environmental sample for a particular shipment had been prepared and placed in the shipping cooler, the vials were sealed and placed into the sample cooler. Sample bank blanks were tested for CLP VOCs.

D.5.3. EQUIPMENT RINSATE BLANKS

Equipment rinsate blanks were collected to evaluate the decontamination technique used for manual sampling equipment. Equipment blanks were collected by pouring ASTM Type II reagent water through a recently decontaminated piece of equipment into a prepared sample container appropriate for the required analysis. Equipment blanks were shipped to the laboratory and analyzed for the same analytes as the environmental samples, which the equipment was used to collect. All detected compounds and elements in the equipment rinsate blanks were evaluated and the reportable data points were adjusted using the procedure described for trip blanks. Table D.5-3 summarizes the concentrations of the compounds and elements detected in the equipment blanks collected during the OU9 RSI.

D.5.4. FIELD REPLICATES

Replicate environmental samples were collected at selected locations to evaluate the precision of the sampling techniques. The RPD value of each detected compound or element was reviewed to assess the sample collection reproducibility and matrix variability. Tables D.5-4 and D.5-5 summarize the calculated RPD values (i.e. less than 20 percent [water samples] and less than 35 percent [soil samples] as requested in the QAPjP) for samples collected and analyzed for trace metals and organic compounds.

All field duplicate analyses results were evaluated for best value and CRQL/CRDL to be used in the OU9 RSI data set using the following procedure: (1) Duplicate detected values were averaged if the calculated RPD was less than or equal to 20 (water) or 35 (soil) percent. The higher concentration value was selected if the reference RPD value was exceeded. (2) The detected value was selected where the duplicate value was not detected. (3) The most sensitive CRQL/CRDL was selected where both values were not detected.

Table D.1-1. Samples Collected and Analyzed During the OU9 RSI

Analysis	Soils		Water		
	Number of Environmental Samples	Number of Field Duplicate Samples	Number of Environmental Samples	Number of Field Duplicate Samples	Number of Field QC Samples
Volatile Organics	125	12	56	1	4
Semivolatile Organics	125	12	15	1	4
Pesticide/PCBs	125	12	15	1	4
Explosives	27	4	4	1	2
Inorganics	125	12	6	1	4
Gamma Spectrometry	125	12	15	1	4
Alpha Spectrometry	597	60	64	1	4
Liquid Scintillation	499	47	53	1	4
GFPC	125	12	15	1	4
Wet Chemistry	125	12	15	1	4

GFPC gas flow proportional counting
PCB polychlorinated biphenyls
QC quality control
RSI Remedial Site Investigation

Table D.1-2. Validated Data Summary
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Validation Requirement	Reason for Qualifying Data	Action Taken	Bias	Uncertainty	Number of Values Qualified
Holding Times	Extraction holding times were exceeded.	All analytical results were estimated ("UJ" or "J")	PBL	PFN	1504
	Analysis holding times were exceeded.	All analytical results were estimated ("UJ" or "J")	PBL	PFN	106
Initial/ Continuing Calibration Organics	Initial calibration RRF was <0.05.	All concentration values were estimated ("J"). All non-detect records "REJ"	PBL	PFN	6
	Initial calibration RSD was >30%.	All analytical results were estimated ("UJ" or "J")	PBU	NA	48
	Initial calibration sequence was not followed as required.	All analytical results were estimated ("UJ" or "J")	PBU	NA	4
	Continuing calibration RRF was <0.05.	All concentration values were estimated ("J"). All non-detect records "REJ"	PBL	PFN	16
	Continuing calibration %D was >25%.	All analytical results were estimated ("UJ" or "J")	PBU	NA	444
	Continuing calibration was not performed at the required frequency.	All analytical results were estimated ("UJ" or "J")	PBU	NA	1
	RPD criteria were not met.	All concentration values were estimated ("J")	PBU	NA	32
	RSD criteria were not met.	All analytical results were estimated ("UJ" or "J")	PBU	NA	18
	Breakdown of endrin or DDT was >20%.	All concentration values were estimated ("J"). All non-detect records "REJ"	PBL	PFN	6
Initial/ Continuing Calibration Organics (Continued)	Professional judgement was used to qualify the data.	Action taken varied, data was qualified estimated or rejected	PBU	NA	104
	Initial calibration did not extend to a level equivalent with the reported CRQL	All non-detect records estimated ("UJ")	PBU	NA	3247

Table D.1-2. Validated Data Summary
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Validation Requirement	Reason for Qualifying Data	Action Taken	Bias	Uncertainty	Number of Values Qualified
Initial/ Continuing Calibration Inorganics	ICV recovery was above the upper control limit.	All concentration values were estimated ("J")	PBH	NA	5
	Standard curve was not established with the minimum number of standards.	All non-detect records estimated ("UJ")	PBU	NA	1
	Correlation coefficient is <0.995.	All analytical results were estimated ("UJ" OR "J")	PBU	NA	4
ICP/Furnace requirement	Interference check sample recovery was outside the control limit.	All analytical results were estimated ("UJ" or "J")	PBH	PFP	16
	Post digestion spike recovery was outside the control limit.	All analytical results were estimated ("UJ" or "J")	PBU	NA	19
	Serial dilution criteria were not met.	All concentration values were estimated ("J")	PBU	NA	68
Blanks	Sample data were qualified as a result of the method blank.	All concentration values are non-detect ("U")	PBH	PFP	402
	Sample data were qualified as a result of the equipment rinsate.	All concentration values are non-detect ("U")	PBH	PFP	48
	Sample data were qualified as a result of the trip blank.	All concentration values are non-detect("U")	PBH	PFP	5

NA	not applicable	ICV	Initial calibration verification
PBH	potentially biased high	CRQL	contract required quantitation limit
PBL	potentially biased low	ICP	inductively coupled plasma
PBU	potential bias unknown	RSD	relative standard deviation
PFN	potential false negative	RPD	relative percent difference
PFP	potential false positive	RRF	relative response factor

Table D.2-1. OU9 RSI Data Quality Objectives for Water Samples

Analysis	Method	Accuracy (% R)*	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	CLP SOW	61-145	14	95%
Semivolatile Organic Compounds	CLP SOW	9-127	50	95%
Pesticides/PCBs	CLP SOW	38-131	27	95%
Inorganics	CLP SOW	75-125	20	95%
Explosives	SW8330	62-102	45	95%
Radionuclides	Various	± 3 x SD	+ 4 x SD	95%

*	Indicates maximum and minimum limits of all compounds. Individual compound limits are likely to be different.
%R	Percent recovery
CLP SOW	Contract Laboratory Program Statement of Work
PCB	polychlorinated biphenyl
RPD	relative percent difference
SD	standard deviation

Table D.2-2. OU9 RSI Data Quality Objectives for Soil Samples

Analysis	Method	Accuracy (% R)*	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	CLP SOW	59-172	24	95%
Semivolatile Organic Compounds	CLP SOW	11-142	50	95%
Pesticides/PCBs	CLP SOW	23-139	50	95%
Inorganics	CLP SOW	75-125	35	95%
Explosives	SW8330	--	--	95%
Radionuclides	Various	± 3 x SD	+ 4 x SD	95%

--	Actual limits not stated in the QAPjP
*	Indicates maximum and minimum limits of all compounds. Individual compound limits are likely to be different.
CLP SOW	Contract Laboratory Program Statement of Work
PCB	polychlorinated biphenyl
RPD	relative percent difference
SD	standard deviation

Table D.2-3. Performance Evaluation Report - Quanterra
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Analyte	Test Date			
	12/27/93		08/05/94	
	Sample 1	Sample 2	Sample 1	Sample 2
Aluminum	Acceptable	Acceptable	Acceptable	Acceptable
Antimony	Acceptable	Acceptable	Acceptable	Acceptable
Arsenic	Acceptable	Acceptable	Acceptable	Acceptable
Beryllium	Acceptable	Acceptable	Acceptable	Acceptable
Calcium	Acceptable	Acceptable	Acceptable	Acceptable
Cadmium	Acceptable	Acceptable	Acceptable	Acceptable
Cobalt	Acceptable	Acceptable	Acceptable	Acceptable
Chromium	Acceptable	Acceptable	Acceptable	Acceptable
Copper	Acceptable	Acceptable	Acceptable	Acceptable
Cyanide	Acceptable	Acceptable	Acceptable	Acceptable
Iron	Acceptable	Acceptable	Acceptable	Acceptable
Mercury	Acceptable	Acceptable	Acceptable	Acceptable
Magnesium	Acceptable	Acceptable	Acceptable	Acceptable
Manganese	Acceptable	Acceptable	Acceptable	Acceptable
Molybdenum	Acceptable	Acceptable	Acceptable	Acceptable
Nickel	Acceptable	Acceptable	Acceptable	Acceptable
Lead	Acceptable	Acceptable	Acceptable	Acceptable
Potassium	Acceptable	Acceptable	Acceptable	Acceptable
Selenium	Acceptable	Acceptable	Acceptable	Acceptable
Sodium	Acceptable	Acceptable	Acceptable	Acceptable
Silver	Acceptable	Acceptable	Acceptable	Acceptable
Thallium	Acceptable	Acceptable	Acceptable	Acceptable
Vanadium	Acceptable	Acceptable	Acceptable	Acceptable
Zinc	Acceptable	Acceptable	Acceptable	Acceptable
Chloride	Acceptable	Warning	Acceptable	Acceptable
Fluoride	Warning	Acceptable	Acceptable	Acceptable
Sulfate	Acceptable	Acceptable	Acceptable	Acceptable

Table D.2-3. Performance Evaluation Report - Quanterra
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Analyte	Test Date			
	12/27/93		08/05/94	
	Sample 1	Sample 2	Sample 1	Sample 2
1,2-Dichloroethane	Warning	Warning	Warning	Not Acceptable
Chloroform	Not Acceptable	Warning	Warning	Not Acceptable
1,1,1-Trichloroethane	Acceptable	Acceptable	Acceptable	Acceptable
Trichloroethene	Acceptable	Warning	Warning	Acceptable
Carbontetrachloride	Acceptable	Acceptable	Acceptable	Acceptable
Tetrachloroethene	Acceptable	Acceptable	Acceptable	Acceptable
Bromodichloroethane	Acceptable	Acceptable	Acceptable	Acceptable
Dibromochloroethane	Acceptable	Acceptable	Acceptable	Acceptable
Bromoform	Acceptable	Acceptable	Acceptable	Acceptable
Methylene Chloride	Warning	Acceptable	Acceptable	Acceptable
Chlorobenzene	Warning	Warning	Not Acceptable	Not Acceptable
Benzene	Acceptable	Acceptable	Acceptable	Acceptable
Ethylbenzene	Acceptable	Acceptable	Acceptable	Acceptable
Toluene	Acceptable	Acceptable	Acceptable	Acceptable
1,2-Dichlorobenzene	Acceptable	Acceptable	Acceptable	Acceptable
1,3-Dichlorobenzene	Acceptable	Acceptable	Acceptable	Acceptable
1,4-Dichlorobenzene	Acceptable	Acceptable	Acceptable	Acceptable
Arochlor-1254	Acceptable	Acceptable	Acceptable	-----
Arochlor-1260	Acceptable	----	-----	-----
Arochlor-1016/1242	Acceptable	----	Acceptable	Acceptable
Arochlor-1248	-----	----	Acceptable	-----
Chlordane	Not Acceptable	Warning	Acceptable	Acceptable
Aldrin	Acceptable	Acceptable	Acceptable	Acceptable
Dieldrin	Acceptable	Acceptable	Acceptable	Acceptable

Table D.2-3. Performance Evaluation Report - Quanterra
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Analyte	Test Date			
	12/27/93		08/05/94	
	Sample 1	Sample 2	Sample 1	Sample 2
DDD	Acceptable	Acceptable	Acceptable	Acceptable
DDE	Acceptable	Acceptable	Acceptable	Acceptable
DDT	Acceptable	Acceptable	Acceptable	Acceptable
Heptachlor	Acceptable	Acceptable	Acceptable	Acceptable
Heptachlor Epoxide	Acceptable	Acceptable	Acceptable	Acceptable

Acceptable	Result ≤ ± 2 Standard Deviations from Actual Concentrations.
Warning	Result between 2 and 3 Standard Deviations from Actual Concentrations.
Unacceptable	Result > ± 3 Standard Deviations from Actual Concentrations.
----	Not Provided.

Table D.2-4. Cross Check Samples - Ecotek

Analyte	Date of Study					
	Jan-94	Feb-94	Mar-94	Apr-94	Jun-94	Aug-94
Cesium-134 in Water	----	-----	----	91%	93%	----
Cesium-137 in Water	----	----	----	103%	101%	----
Cobalt-60 in Water	----	----	----	97%	99%	----
Gross Alpha in Water	----	----	----	113%	*54%	----
Gross Beta in Water	85%	----	----	81%	100%	----
Plutonium-239 in Water	----	----	117%	----	----	----
Radium-226 in Water	----	*128%	----	*192%	116%	----
Radium-228 in Water	----	108%	----	78%	64%	----
Strontium-90 in Water	----	----	----	91%	----	----
Strontium-89 in Water	*39%	----	----	88%	----	----
Tritium in Water	----	----	99%	----	----	98%
Uranium (Natural) in Water	----	126%	----	108%	116%	----

* Outside 3 sigma acceptance criteria
---- Not Provided

Table D.4-1. Volatiles Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
1,1-Dichloroethene	26	26	71	116	59-172
Trichloroethene	26	26	86	104	62-137
Benzene	26	26	81	106	66-142
Toluene	26	26	76	114	59-139
Chlorobenzene	26	26	87	107	60-133
Acrylonitrile	26	21	14	133	60-149

Table D.4-2. Volatiles Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spiked Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
1,1-Dichloroethene	18	18	80	128	61-145
Trichloroethene	18	18	88	105	71-120
Benzene	18	18	86	122	76-127
Toluene	18	18	86	118	76-125
Chlorobenzene	18	18	90	108	75-130
Acrylonitrile	16	13	58	116	70-130

Table D.4-3. Volatiles Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance
1,1-Dichloroethene	13	13	0	16	22
Trichloroethene	13	13	0	8	24
Benzene	13	13	0	4	21
Toluene	13	13	1	21	21
Chlorobenzene	13	13	1	8	21
Acrylonitrile	13	11	3	42	25

RPD relative percent difference

Table D.4-4. Volatiles Precision Summary - Water Samples

Analyte	Number of Spiked Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance
1,1-Dichloroethene	9	9	0	9	14
Trichloroethene	9	9	0	7	14
Benzene	9	9	0	7	11
Toluene	9	9	0	8	13
Chlorobenzene	9	9	0	8	13
Acrylonitrile	8	8	1	8	15

RPD relative percent difference

Table D.4-5. Semivolatiles Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Phenol	22	22	37	88	26-90
2-Chlorophenol	22	22	38	92	25-102
1,4-Dichlorobenzene	22	22	35	81	28-104
n-Nitroso-di-n-propylamine	22	20	36	80	41-126
1,2,4-Trichlorobenzene	22	20	36	83	38-107
4-Chloro-3-methylphenol	22	21	36	104	26-103
Acenaphthene	22	21	47	222	31-137
4-Nitrophenol	22	22	44	100	11-114
2,4-Dinitrotoluene	22	15	29	95	28-89
Pentachlorophenol	22	22	22	78	17-109
Pyrene	22	19	22	776	35-142

Table D.4-6. Semivolatiles Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Phenol	10	10	20	93	12-110
2-Chlorophenol	10	10	42	100	27-123
1,4-Dichlorobenzene	10	10	54	89	36-97
n-Nitroso-di-n-propylamine	10	10	55	95	41-116
1,2,4-Trichlorobenzene	10	10	55	83	39-98
4-Chloro-3-methylphenol	10	10	43	80	23-97
Acenaphthene	10	10	60	79	46-118
4-Nitrophenol	10	8	9	80	10-80
2,4-Dinitrotoluene	10	10	49	88	24-96
Pentachlorophenol	10	10	15	75	9-103
Pyrene	10	10	61	77	26-127

Table D.4-7. Semivolatiles Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Phenol	11	11	0	19	35
2-Chlorophenol	11	11	0	18	50
1,4-Dichlorobenzene	11	11	0	27	27
n-Nitroso-di-n-propylamine	11	11	0	26	38
1,2,4-Trichlorobenzene	11	11	0	20	23
4-Chloro-3-methylphenol	11	11	0	16	33
Acenaphthene	11	10	0	83	19
4-Nitrophenol	11	11	0	22	50
2,4-Dinitrotoluene	11	11	0	39	47
Pentachlorophenol	11	11	0	27	47
Pyrene	11	10	0	180	36

RPD relative percent difference

Table D.4-8. Semivolatiles Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Phenol	5	5	2	15	42
2-Chlorophenol	5	5	2	38	40
1,4-Dichlorobenzene	5	5	3	8	28
n-Nitroso-di-n-propylamine	5	5	0	14	38
1,2,4-Trichlorobenzene	5	5	4	10	38
4-Chloro-3-methylphenol	5	5	0	12	42
Acenaphthene	5	5	0	12	31
4-Nitrophenol	5	5	0	9	50
2,4-Dinitrotoluene	5	5	0	19	38
Pentachlorophenol	5	5	0	8	50
Pyrene	5	5	0	21	31

RPD relative percent difference

Table D.4-9. Pesticide/PCBs Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Lindane	24	21	44	143	46-127
Heptachlor	24	21	50	326	35-130
Aldrin	24	22	40	275	34-132
Dieldrin	24	22	48	288	31-134
Endrin	24	23	54	162	42-139
4,4'-DDT	24	18	52	570	23-134

Table D.4-10. Pesticide/PCBs Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Lindane	12	11	82	135	56-123
Heptachlor	12	11	80	116	40-131
Aldrin	12	12	66	109	40-120
Dieldrin	12	12	95	126	52-126
Endrin	12	11	90	135	56-121
4,4'-DDT	12	8	85	180	38-127

Table D.4-11. Pesticide/PCBs Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Samples	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Lindane	12	12	0	35	50
Heptachlor	12	10	2	115	31
Aldrin	12	12	0	30	43
Dieldrin	12	12	1	24	38
Endrin	12	12	5	31	45
4,4'-DDT	12	12	2	32	50

RPD relative percent difference

Table D.4-12. Pesticide/PCBs Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Samples	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Lindane	6	4	0	22	15
Heptachlor	6	6	0	18	20
Aldrin	6	6	0	19	22
Dieldrin	6	5	0	22	18
Endrin	6	6	0	16	21
4,4'-DDT	6	6	0	18	27

RPD relative percent difference

Table D.4-13. Explosives Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
RDX	6	6	81	88	40-160
1,3,5-Trinitrobenzene	6	6	88	92	40-160
2,4,6-Trinitrotoluene	6	6	87	92	40-160
2,6-Dinitrotoluene	6	6	88	93	40-160
2,4-Dinitrotoluene	6	6	93	102	40-160

Table D.4-14. Explosives Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
RDX	2	0	80	85	49-71
1,3,5-Trinitrobenzene	2	0	80	84	85-108
2,4,6-Trinitrotoluene	2	1	79	84	83-104
2,6-Dinitrotoluene	2	1	69	76	74-96
2,4-Dinitrotoluene	2	1	76	82	77-100

Table D.4-15. Explosives Precision Summary - Soil Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
RDX	3	3	2	6	30
1,3,5-Trinitrobenzene	3	3	1	4	30
2,4,6-Trinitrotoluene	3	3	1	6	30
2,6-Dinitrotoluene	3	3	2	4	30
2,4-Dinitrotoluene	3	3	1	8	30

RPD relative percent difference

Table D.4-16. Explosives Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
RDX	1	1	7	7	19
1,3,5-Trinitrobenzene	1	1	6	6	20
2,4,6-Trinitrotoluene	1	1	6	6	19
2,6-Dinitrotoluene	1	1	10	10	19
2,4-Dinitrotoluene	1	1	8	8	20

RPD relative percent difference

Table D.4-17. Metals Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Aluminum	0	--	--	--	--
Antimony	6	0	17	43	75-125
Arsenic	6	6	82	97	75-125
Barium	6	6	98	108	75-125
Beryllium	6	6	91	107	75-125
Bismuth	5	5	96	103	75-125
Cadmium	6	6	90	105	75-125
Calcium	0	--	--	--	--
Chromium	6	6	93	123	75-125
Cobalt	6	6	98	114	75-125
Copper	6	6	95	120	75-125
Iron	0	--	--	--	75-125
Lead	6	6	89	106	75-125
Magnesium	0	--	--	--	--
Manganese	6	2	0	102	75-125
Mercury	6	5	98	129	75-125
Nickel	6	6	95	119	75-125
Potassium	0	--	--	--	--
Selenium	6	5	42	98	75-125
Silver	6	6	83	106	75-125
Sodium	0	--	--	--	--
Thallium	6	6	88	110	75-125
Vanadium	6	6	86	107	75-125
Zinc	6	6	81	112	75-125
Cyanide	6	5	69	112	75-125

-- Not Applicable

Table D.4-18. Metals Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Aluminum	4	3	96	135	75-125
Antimony	4	4	101	125	75-125
Arsenic	3	3	98	113	75-125
Barium	4	3	96	131	75-125
Beryllium	4	3	96	129	75-125
Bismuth	3	2	0	119	75-125
Cadmium	4	4	91	111	75-125
Calcium	0	--	--	--	--
Chromium	4	3	98	127	75-125
Cobalt	4	3	96	129	75-125
Copper	4	3	97	133	75-125
Iron	4	3	93	130	75-125
Lead	3	3	100	109	75-125
Magnesium	0	--	--	--	--
Manganese	4	3	95	129	75-125
Mercury	4	4	93	105	75-125
Nickel	4	3	94	129	75-125
Potassium	0	--	--	--	--
Selenium	3	2	110	127	75-125
Silver	4	4	91	125	75-125
Sodium	0	--	--	--	--
Thallium	3	3	107	116	75-125
Vanadium	4	2	13	131	75-125
Zinc	4	3	95	130	75-125
Cyanide	4	4	85	125	75-125

-- Not Applicable

Table D.4-19. Metals Precision Summary - Soil Samples

Analyte	Number of Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Aluminum	6	6	1	19	35
Antimony	0	--	--	--	--
Arsenic	6	6	1	19	35
Barium	6	6	3	14	35
Beryllium	6	6	1	24	35
Bismuth	6	6	2	101	35
Cadmium	1	1	6	6	35
Calcium	6	6	1	67	35
Chromium	6	6	1	33	35
Cobalt	6	6	1	25	35
Copper	6	5	2	40	35
Iron	6	5	4	58	35
Lead	6	6	0	15	35
Magnesium	6	6	2	42	35
Manganese	6	5	2	33	35
Mercury	0	--	--	--	--
Nickel	6	6	1	30	35
Potassium	6	6	1	28	NA
Selenium	1	0	49	49	35
Silver	0	--	--	--	--
Sodium	0	--	--	--	--
Thallium	1	1	12	12	35
Vanadium	6	6	1	19	35
Zinc	6	5	3	53	35
Cyanide	0	--	--	--	--

-- not applicable
RPD relative percent difference

Table D.4-20. Metals Precision Summary - Water Samples

Analyte	Number of Spike Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Aluminum	3	1	1	40	20
Antimony	1	1	8	8	20
Arsenic	0	--	--	--	--
Barium	4	3	1	31	20
Beryllium	2	1	1	44	20
Bismuth	3	3	8	22	20
Cadmium	1	1	6	6	20
Calcium	5	4	1	26	20
Chromium	1	1	0	1	20
Cobalt	1	1	2	2	20
Copper	2	2	1	9	20
Iron	4	2	1	125	20
Lead	0	--	--	--	--
Lithium	0	--	--	--	--
Magnesium	2	2	1	2	20
Manganese	3	1	1	101	20
Mercury	0	--	--	--	--
Molybdenum	2	1	1	33	20
Nickel	1	1	0	1	20
Potassium	2	2	1	1	20
Selenium	0	--	--	--	--
Silver	1	1	1	1	20
Sodium	4	2	1	51	20
Thallium	3	1	12	42	20
Tin	0	--	--	--	--
Vanadium	1	1	6	6	20
Zinc	4	2	0	49	20
Cyanide	0	--	--	--	--

-- not applicable
RPD relative percent difference

Table D.4-21. Radionuclides Accuracy Summary - Soil Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Uranium-238	13	12	89	127	75-125
Plutonium-238	40	37	76	137	75-125
Thorium-230	12	11	64	114	75-125
Tritium	39	37	78	143	75-125
Strontium-90	16	7	13	186	75-125
Radium-226	4	2	21	97	75-125
Americium-241	0	0	0	0	75-125

Table D.4-22. Radionuclides Accuracy Summary - Water Samples

Analyte	Number of Spiked Samples	Spiked Recoveries Within Limits	Minimum Spike Recovery (%)	Maximum Spike Recovery (%)	Lab Acceptance Limits
Uranium-238	6	6	100	112	75-125
Plutonium-238	6	6	114	117	75-125
Thorium-230	4	4	98	109	75-125
Tritium	9	8	73	98	75-125
Strontium-90	7	5	54	96	75-125
Radium-226	3	2	68	102	75-125
Americium-241	3	3	83	96	75-125

Table D.4-23. Radionuclides Precision Summary - Soil Samples

Analyte	Number of Spiked Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Uranium-234	12	12	2	20	50
Uranium-235	10	5	7	129	50
Uranium-238	13	12	0	119	50
Plutonium-238	23	15	2	180	50
Plutonium-239/240	24	17	0	171	50
Plutonium-242	26	18	0	199	50
Thorium-228	12	12	1	26	50
Thorium-230	12	11	0	54	50
Thorium-232	12	12	1	13	50
Tritium	37	36	0	51	50
Strontium-90	9	9	1	41	50
Radium-226	5	5	1	33	50
Potassium-40	9	9	1	8	50
Cobalt-60	9	9	2	36	50
Cesium-137	9	9	1	38	50
Bismuth-207	9	9	3	36	50
Bismuth-210	9	9	3	41	50
Bismuth-214	1	1	3	3	50
Americium-241	9	6	2	66	50
Lead-212	1	1	3	3	50
Lead-214	1	1	9	9	50
Actinium-228	1	1	14	14	50

RPD relative percent difference

Table D.4-24. Radionuclides Precision Summary - Water Samples

Analyte	Number of Spiked Duplicate Pairs	Number of Calculated RPDs Within Limits	Minimum RPD	Maximum RPD	Lab Acceptance Limits
Uranium-234	6	6	2	44	50
Uranium-235	5	5	6	31	50
Uranium-238	5	5	0	42	50
Plutonium-238	8	7	4	63	50
Plutonium-239/240	10	6	0	121	50
Plutonium-242	10	9	0	109	50
Thorium-228	6	4	9	139	50
Thorium-230	6	3	13	131	50
Thorium-232	6	2	7	146	50
Tritium	9	9	0	14	50
Strontium-90	9	9	1	41	50
Radium-226	4	2	16	65	50
Americium-241	4	3	6	117	50
Potassium-40	6	3	14	109	50
Cobalt-60	6	6	1	38	50
Cesium-137	7	7	2	50	50
Bismuth-207	5	5	1	41	50
Bismuth-210	5	5	1	50	50

RPD relative percent difference

Table D.4-25. Summary of Analytical Completeness

Analysis	Number of Samples Collected and Analyzed	Number of Concentration Values from Samples	Number of Concentration Values Rejected	Completeness (%)	Reason for Rejected Concentration Values
VOC	129	5160	4	99	Unacceptable QC results
SVOC	129	8493	7	99	Unacceptable QC results
Pesticides/PCBs	129	3612	0	100	NA
Explosives	129	319	0	100	NA
Inorganics (trace metals and cyanide)	144	3204	45	99	Unacceptable QC results
Alpha Spectrometry[a]	845	2600	50	98	Unacceptable QC results
Tritium	503	503	27	95	Unacceptable QC results
Gamma Spectrometry[b]	129	886	0	100	NA
Strontium-90	129	129	6	95	Unacceptable QC results

[a] Alpha spectrometry included the analysis of plutonium, uranium, thorium, and americium-241 (in water samples only).
[b] Gamma spectrometry included the analysis of potassium-40, cesium-137, cobalt-60, bismuth-207, bismuth-210, radium-226, and americium-241 (in soils only).
NA Not applicable
PCB polychlorinated biphenyls
QC quality control
SVOC semivolatile organic compound
VOC volatile organic compound

Table D.4-26. Rejected Data Summary
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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
N01301	Inorganics	Antimony	0.77	MG/KG	MS recovery was <30%.
N01311	Inorganics	Antimony	0.77	MG/KG	MS recovery was <30%.
N02301	Inorganics	Antimony	0.72	MG/KG	MS recovery was <30%.
N02301	Liquid Scintillation	Tritium	0.203	PCI/G	Sample data was qualified as a result of the method blank.
N02302	Inorganics	Antimony	0.72	MG/KG	MS recovery was <30%.
N02302	Liquid Scintillation	Tritium	1.06	PCI/G	Sample data was qualified as a result of the method blank.
N02303	Inorganics	Antimony	0.71	MG/KG	MS recovery was <30%.
N02303	Liquid Scintillation	Tritium	1.01	PCI/G	Sample data was qualified as a result of the method blank.
N02304	Inorganics	Antimony	0.73	MG/KG	MS recovery was <30%.
N02304	Liquid Scintillation	Tritium	0.831	PCI/G	Sample data was qualified as a result of the method blank.
N03301	Liquid Scintillation	Tritium	0.101	PCI/G	Sample data was qualified as a result of the method blank.
N03302	Liquid Scintillation	Tritium	0.32	PCI/G	Sample data was qualified as a result of the method blank.
N03303	Liquid Scintillation	Tritium	0.381	PCI/G	Sample data was qualified as a result of the method blank.
N03304	Liquid Scintillation	Tritium	1.49	PCI/G	Sample data was qualified as a result of the method blank.
N03305	Liquid Scintillation	Tritium	1.49	PCI/G	Sample data was qualified as a result of the method blank.
N03306	Liquid Scintillation	Tritium	0.869	PCI/G	Sample data was qualified as a result of the method blank.
N03307	Liquid Scintillation	Tritium	0.377	PCI/G	Sample data was qualified as a result of the method blank.
N03312	Inorganics	Antimony	0.74	MG/KG	MS recovery was <30%.
N03312	Liquid Scintillation	Tritium	0.228	PCI/G	Sample data was qualified as a result of the method blank.
N03312	GFPC	Sr-90	0.34	PCI/G	Sample data was qualified as a result of the method blank.
N04301	Inorganics	Antimony	0.77	MG/KG	MS recovery was <30%.

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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
N04301	Liquid Scintillation	Tritium	0.703	PCI/G	Sample data was qualified as a result of the method blank.
N04302	Inorganics	Antimony	0.73	MG/KG	MS recovery was <30%.
N04302	Liquid Scintillation	Tritium	0.124	PCI/G	Sample data was qualified as a result of the method blank.
N04303	Inorganics	Antimony	0.71	MG/KG	MS recovery was <30%.
N04303	Liquid Scintillation	Tritium	0.133	PCI/G	Sample data was qualified as a result of the method blank.
N04304	Inorganics	Antimony	0.68	MG/KG	MS recovery was <30%.
N04304	Liquid Scintillation	Tritium	0.0982	PCI/G	Sample data was qualified as a result of the method blank.
N05311	Conventional Chemistry	Sulfate	561	MG/KG	Professional judgement was used to qualify the data.
N06303	Alpha Spectrometry	Pu-238	0.0762	PCI/G	Sample data was qualified as a result of the method blank.
N06304	Alpha Spectrometry	Pu-238	0.0578	PCI/G	Sample data was qualified as a result of the method blank.
N08302	Alpha Spectrometry	Th-230	0.0762	PCI/G	Sample data was qualified as a result of the equipment rinsate.
N92003	Volatile Organics	Acetonitrile	100	UG/L	Initial calibration RRF was <0.05; concentration of the contaminent was detected at a level below CRQL.
N93002	Volatile Organics	Acetonitrile	100	UG/L	Initial calibration RRF was <0.05; concentration of the contaminent was detected at a level below CRQL.
N97002	Volatile Organics	Acetonitrile	100	UG/L	Initial calibration RRF was <0.05; concentration of the contaminent was detected at a level below CRQL.
NPS001	Volatile Organics	1,1,2-Trichlorotrifluoroethane	9	UG/KG	Sample data was qualified as a result of the trip blank.
NPS001	Volatile Organics	Hexane	11	UG/KG	Sample data was qualified as a result of the trip blank.
NPS001	Alpha Spectrometry	Pu-238	0.094	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.

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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
NPS001	Alpha Spectrometry	Pu-239	0.0194	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
NPS001	Alpha Spectrometry	Pu-242	0.0194	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
NPS003	Volatile Organics	1,1,2-Trichlorotrifluoroethane	11	UG/KG	Sample data was qualified as a result of the method blank.
NPS003	Volatile Organics	Hexane	15	UG/KG	Sample data was qualified as a result of the method blank.
RAC305	Semi-volatile Organics	Pentachlorophenol	46	UG/KG	Qualitative criteria were not met.
RAC305	Semi-volatile Organics	Phenol	65	UG/KG	Qualitative criteria were not met.
RAM305	Semi-volatile Organics	Chrysene	100	UG/KG	Qualitative criteria were not met.
RAN306	Semi-volatile Organics	Chrysene	42	UG/KG	Qualitative criteria were not met.
RAN306	GFPC	Sr-90	0.614	PCI/G	Professional judgement was used to qualify the data.
RAN313	Alpha Spectrometry	Pu-238	1.34	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAN313	Alpha Spectrometry	Pu-239/240	0.0484	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAN313	Alpha Spectrometry	Pu-242	0.0143	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAN316	Semi-volatile Organics	Chrysene	100	UG/KG	Qualitative criteria were not met.
RAP305	Semi-volatile Organics	Chrysene	180	UG/KG	Qualitative criteria were not met.
RAR303	Alpha Spectrometry	Th-228	1.03	PCI/G	Sample data was qualified as a result of the method blank.
RAS303	Alpha Spectrometry	Pu-238	0.104	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAS303	Alpha Spectrometry	Pu-239/240	0.00616	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.

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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
RAS303	Alpha Spectrometry	Pu-242	0.00615	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAS304	Alpha Spectrometry	Pu-238	0.0984	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAS304	Alpha Spectrometry	Pu-239/240	0.00636	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAS304	Alpha Spectrometry	Pu-242	0.00635	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT303	Alpha Spectrometry	Pu-238	0.147	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT303	Alpha Spectrometry	Pu-239/240	0.0235	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT303	Alpha Spectrometry	Pu-242	0.00863	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT304	Alpha Spectrometry	Pu-238	0.203	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT304	Alpha Spectrometry	Pu-239/240	0.00655	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT304	Alpha Spectrometry	Pu-242	0.00655	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RAT306	Semi-volatile Organics	Chrysene	51	UG/KG	Qualitative criteria were not met.
RBA303	Alpha Spectrometry	Th-228	1.41	PCI/G	Radiological chemical recovery was <20%.
RBA303	Alpha Spectrometry	Th-230	1.5	PCI/G	Radiological chemical recovery was <20%.
RBA303	Alpha Spectrometry	Th-232	1.23	PCI/G	Radiological chemical recovery was <20%.
RBK301	Liquid Scintillation	Tritium	0.149	PCI/G	Sample data was qualified as a result of the method blank.

Table D.4-26. Rejected Data Summary
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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
RBK302	Liquid Scintillation	Tritium	0.151	PCI/G	Sample data was qualified as a result of the method blank.
RBM303	Alpha Spectrometry	Th-228	0.955	PCI/G	Radiological chemical recovery was <20%.
RBM303	Alpha Spectrometry	Th-230	1.47	PCI/G	Radiological chemical recovery was <20%.
RBM303	Alpha Spectrometry	Th-232	0.871	PCI/G	Radiological chemical recovery was <20%.
RBT304	Alpha Spectrometry	Pu-242	0.0026	PCI/G	Sample data was qualified as a result of the method blank.
RCA301	Liquid Scintillation	Tritium	0.152	PCI/G	Sample data was qualified as a result of the method blank.
RCA302	Liquid Scintillation	Tritium	0.0648	PCI/G	Sample data was qualified as a result of the method blank.
RCA303	Alpha Spectrometry	Pu-238	0.171	PCI/G	Sample data was qualified as a result of the method blank.
RCA305	GFPC	Sr-90	0.495	PCI/G	Sample data was qualified as a result of the method blank.
RCB305	Inorganics	Antimony	0.74	MG/KG	MS recovery was <30%.
RCB306	Inorganics	Antimony	0.71	MG/KG	MS recovery was <30%.
RCC305	Inorganics	Antimony	0.69	MG/KG	MS recovery was <30%.
RCC306	Inorganics	Antimony	0.7	MG/KG	MS recovery was <30%.
RCD303	Alpha Spectrometry	Pu-238	0.691	PCI/G	Sample data was qualified as a result of the method blank.
RCD304	Alpha Spectrometry	Pu-238	0.56	PCI/G	Sample data was qualified as a result of the method blank.
RCE304	Alpha Spectrometry	Pu-238	0.737	PCI/G	Sample data was qualified as a result of the method blank.
RCF303	Alpha Spectrometry	Pu-238	0.535	PCI/G	Sample data was qualified as a result of the method blank.
RCF304	Alpha Spectrometry	Pu-238	0.175	PCI/G	Sample data was qualified as a result of the method blank.
RCG305	GFPC	Sr-90	1.13	PCI/G	Sample data was qualified as a result of the method blank.
RCH303	Alpha Spectrometry	Pu-238	0.172	PCI/G	Sample data was qualified as a result of the method blank.
RCJ302	Liquid Scintillation	Tritium	0.0732	PCI/G	Sample data was qualified as a result of the method blank.

Table D.4-26. Rejected Data Summary
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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
RCJ303	Alpha Spectrometry	Pu-238	0.162	PCI/G	Sample data was qualified as a result of the method blank.
RCJ303	Alpha Spectrometry	Th-230	1.64	PCI/G	Sample data was qualified as a result of the equipment rinsate.
RCJ304	Alpha Spectrometry	Pu-238	0.16	PCI/G	Sample data was qualified as a result of the method blank.
RCJ313	Alpha Spectrometry	Pu-238	0.151	PCI/G	Sample data was qualified as a result of the method blank.
RCK306	GFPC	Sr-90	0.993	PCI/G	Sample data was qualified as a result of the method blank.
RCS305	Inorganics	Antimony	0.69	MG/KG	MS recovery was <30%.
RCS306	Inorganics	Antimony	0.67	MG/KG	MS recovery was <30%.
RHA304	Alpha Spectrometry	Pu-238	0.0585	PCI/G	Sample data was qualified as a result of the method blank.
RJA303	Alpha Spectrometry	Th-230	2.55	PCI/G	Professional judgement was used to qualify the data.
RJK303	Alpha Spectrometry	Pu-238	5.6	PCI/G	Professional judgement was used to qualify the data.
RKJ303	Alpha Spectrometry	Pu-238	0.185	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RKJ303	Alpha Spectrometry	Pu-239/240	0.0206	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RKJ303	Alpha Spectrometry	Pu-242	0.0112	PCI/G	Surrogate / radiologial chemical recovery was below the lower control limit.
RKK304	Alpha Spectrometry	Pu-238	5.22	PCI/G	Professional judgement was used to qualify the data.
RTJ303	Alpha Spectrometry	Th-230	4.55	PCI/G	Professional judgement was used to qualify the data.
RTK303	Alpha Spectrometry	Th-230	2.84	PCI/G	Professional judgement was used to qualify the data.
RYH302	Alpha Spectrometry	Pu-238	0.0915	PCI/G	Sample data was qualified as a result of the method blank.
S11301	Inorganics	Antimony	0.81	MG/KG	MS recovery was <30%.
S11301	Liquid Scintillation	Tritium	0.324	PCI/G	Sample data was qualified as a result of the method blank.

Table D.4-26. Rejected Data Summary
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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
S11302	Inorganics	Antimony	0.76	MG/KG	MS recovery was <30%.
S11302	Liquid Scintillation	Tritium	0.43	PCI/G	Sample data was qualified as a result of the method blank.
S12301	Inorganics	Antimony	0.84	MG/KG	MS recovery was <30%.
S13301	Inorganics	Antimony	0.97	MG/KG	MS recovery was <30%.
S21301	Inorganics	Antimony	0.84	MG/KG	MS recovery was <30%.
S21302	Inorganics	Antimony	0.79	MG/KG	MS recovery was <30%.
S22301	Inorganics	Antimony	0.82	MG/KG	MS recovery was <30%.
S23301	Inorganics	Antimony	0.9	MG/KG	MS recovery was <30%.
S31301	Inorganics	Antimony	0.78	MG/KG	MS recovery was <30%.
S31301	Liquid Scintillation	Tritium	0.175	PCI/G	Sample data was qualified as a result of the method blank.
S32301	Inorganics	Antimony	0.83	MG/KG	MS recovery was <30%.
S32301	Liquid Scintillation	Tritium	0.17	PCI/G	Sample data was qualified as a result of the method blank.
S33301	Inorganics	Antimony	0.74	MG/KG	MS recovery was <30%.
S33301	Liquid Scintillation	Tritium	0.127	PCI/G	Sample data was qualified as a result of the method blank.
S51301	Inorganics	Antimony	0.96	MG/KG	MS recovery was <30%.
S52301	Inorganics	Antimony	0.93	MG/KG	MS recovery was <30%.
S52301	GFPC	Sr-90	0.469	PCI/G	Sample data was qualified as a result of the method blank.
S53301	Inorganics	Antimony	0.79	MG/KG	MS recovery was <30%.
S61301	Inorganics	Antimony	0.76	MG/KG	MS recovery was <30%.
S61302	Inorganics	Antimony	0.73	MG/KG	MS recovery was <30%.
S62301	Inorganics	Antimony	0.99	MG/KG	MS recovery was <30%.

Table D.4-26. Rejected Data Summary
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Sampling ID	Analysis Type	Parameter	Results	Units	Rejection Explanation
S62311	Inorganics	Antimony	1	MG/KG	MS recovery was <30%.
S63301	Inorganics	Antimony	0.84	MG/KG	MS recovery was <30%.
S71301	Inorganics	Antimony	0.77	MG/KG	MS recovery was <30%.
S72301	Inorganics	Antimony	0.75	MG/KG	MS recovery was <30%.
S73301	Inorganics	Antimony	0.99	MG/KG	MS recovery was <30%.
S81301	Inorganics	Antimony	0.77	MG/KG	MS recovery was <30%.
S81302	Inorganics	Antimony	0.79	MG/KG	MS recovery was <30%.
S81311	Inorganics	Antimony	0.75	MG/KG	MS recovery was <30%.
S82301	Inorganics	Antimony	0.95	MG/KG	MS recovery was <30%.
S83301	Inorganics	Antimony	0.98	MG/KG	MS recovery was <30%.

CRQL contract required quantitiation limit
GFPC gas flow proportional counting
MG/KG milligrams per kilogram
MS matrix spike
PCI/G picocuries per gram
Pu plutonium
RRF relative response factor
Sr strontium
Th thorium
UG/L micrograms per liter

Table D.5-1. Summary of Trip Blank Detections

Collection Date	Trip Blank Sample ID	Parameter	Results (µg/L)	Data Qualifier
18-Apr-94	RZB004	Acetone	5	J
19-Apr-94	RZB005	Acetone	5	J
21-Apr-94	RZB007	Tetrachloroethene	5	J
	S92006	1,1-Dichloroethene	3	J
		Acetone	31	---
22-Jun-94	S92007	Acetone	22	---
		Chloroform	14	---
		Hexane	4	J
23-Jun-94	S92008	Acetone	17	
		Chloroform	8	J
		Hexane	1	J

ID identification
µg/L micrograms per liter
J estimated quantity
--- No qualifier in the Data Qualifier column indicates that the data was not qualified.

Table D.5-2. Summary of Ambient Blank Detections

Collection Date	Ambient Blank Sample ID	Parameter	Results (µg/L)	Data Qualifier
12-Apr-94	RZC001	Chloroform	24	
19-Apr-94	RZC002	Bromodichloromethane	5	J
		Chloroform	34	
05-May-94	RZC003	Bromodichloromethane	4.	J
		Chloroform	28.	
06-Jun-94	RZC006	Bromodichloromethane	5	J
		Chloroform	42	
07-Jun-94	N93001	Bromodichloromethane	5	J
		Chloroform	38	
09-Jun-94	RZC007	Bromodichloromethane	3	J
		Chloroform	18	
13-Jun-94	N93002	Acetone	11	
		Bromodichloromethane	2	J
		Chloroform	14	
		Hexane	2	J
16-Jun-94	N93003	Bromodichloromethane	3	J
		Chloroform	32	
21-Jun-94	S93001	Acetone	37	
		Bromodichloromethane	3	J
		Chlorobenzene	1	J
		Chloroform	10	
		Hexane	1	J

ID identification
µg/L micrograms per liter
J estimated quantity
Note: No qualifier in the Data Qualifier column indicates that the data was not qualified.

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
12-Apr-94	RZA009	Bromodichloromethane	4	J	µg/L
		Chloroform	28		µg/L
		Thallium	11.1		mg/L
12-Apr-94	RZA005	U-234	0.359		pCi/L
		U-238	0.359		pCi/L
13-Apr-94	RZA010	Bromodichloromethane	4	J	µg/L
		Chloroform	28		µg/L
	RZA017	Pu-238	0.324		pCi/L
	RZA010	Thallium	6.8		mg/L
		bis(2-Ethylhexyl)phthalate	2	J	µg/L
19-Apr-94	RZA006	Pu-238	0.848		pCi/L
		Th-230	0.632	J	pCi/L
	RZA011	Aluminum	11.6		mg/L
		Bromodichloromethane	5	J	µg/L
		Chloroform	41		µg/L
		Hexane	3	J	µg/L
		Thallium	7.5		mg/L
		bis(2-Ethylhexyl)phthalate	1	J	µg/L
	RZA098	Pu-238	0.71		pCi/L
20-Apr-94	RZA012	Acetone	3	J	µg/L
		Aluminum	16.2		mg/L
		Bromodichloromethane	4	J	µg/L
		Chloroform	35		µg/L
		Thallium	5		mg/L
	RZA020	Pu-238	7.12		pCi/L
	RZA099	Pu-238	1.62		pCi/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
21-Apr-94	RZA100	Pu-238	0.355		pCi/L
		Pu-239/240	0.0948		pCi/L
		Pu-242	0.071		pCi/L
25-Apr-94	RZA016	Tritium	3,010	J	pCi/L
26-Apr-94	RZA114	Tritium	20,200	J	pCi/L
27-Apr-94	RZA018	Th-230	0.388	J	pCi/L
	RZA033	Tritium	21,100		pCi/L
03-May-94	RZA055	Pu-238	0.146		pCi/L
	RZA083	Pu-238	1.01		pCi/L
	RZA082	Th-230	0.477		pCi/L
		U-234	0.528		pCi/L
		U-238	0.162		pCi/L
04-May-94	RZA107	Pu-238	0.585		pCi/L
05-May-94	RZA120	Bromodichloromethane	4	J	µg/L
		Chloroform	27		µg/L
		Copper	4.7		mg/L
		Mercury	0.19		mg/L
		Pu-239	0.0709		pCi/L
		Th-230	0.425	J	pCi/L
	RZA056	Pu-238	0.344		pCi/L
10-May-94	RZA112	Pu-238	0.459		pCi/L
		Pu-242	0.106		pCi/L
11-May-94	RZA113	Pu-238	0.619		pCi/L
16-May-94	RZA049	Th-230	0.224		pCi/L
		Th-232	0.112		pCi/L
		U-234	1.17		pCi/L
		U-238	0.218		pCi/L
19-May-94	RZA062	Pu-238	0.207		pCi/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
23-May-94	RZA081	Pu-238	0.291		pCi/L
		Th-230	0.504		pCi/L
01-Jun-94	N94001	1,1-Dichloroethene	1	J	µg/L
		Aluminum	24.4		mg/L
		Bromodichloromethane	5	J	µg/L
		Chloroform	44		µg/L
		Hexane	7	J	µg/L
		Iron	2950	J	mg/L
		Magnesium	75.7		mg/L
		Manganese	16.3		mg/L
		Pu-238	0.473		pCi/L
		Th-230	0.598		pCi/L
		U-234	0.205		pCi/L
		U-238	0.308		pCi/L
03-Jun-94	RZA105	Pu-238	0.355		pCi/L
		Pu-239/240	0.0761		pCi/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
06-Jun-94	N94002	Aluminum	15.4		mg/L
		Antimony	3.1		mg/L
		Bromodichloromethane	4	J	µg/L
		Chloroform	33		µg/L
		Hexane	2	J	µg/L
		Iron	659	J	mg/L
		Pu-238	0.314		pCi/L
		Sr-90	2.32		pCi/L
		Th-230	0.262		pCi/L
		Total Organic Carbon	1.0		µg/L
		Total Organic Carbon	1.1		µg/L
		Total Organic Carbon	1.2		µg/L
		U-238	0.238		pCi/L
	RZA025 RZA025	Th-230	0.354		pCi/L
		U-234	0.194		pCi/L
	RZA027	Pu-238	0.263		pCi/L
	RZA030	Aluminum	14.8		mg/L
		Bromodichloromethane	5	J	µg/L
		Chloroform	41		µg/L
		Hexane	1	J	µg/L
		Iron	1370	J	mg/L
		K-40	65.9		pCi/L
		Ra-226	1,670		pCi/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
07-Jun-94	RZA029	Aluminum	16.4		mg/L
		Bromodichloromethane	4	J	µg/L
		Chloroform	30		µg/L
		Hexane	7	J	µg/L
		Iron	1090	J	mg/L
		Lead	6.2	J	mg/L
		Sr-90	1.12		pCi/L
09-Jun-94	N94003	Aluminum	19.2		mg/L
		Arsenic	4.7		mg/L
		Beryllium	0.54		mg/L
		Iron	1340	J	mg/L
		Pu-238	0.664		pCi/L
		Pu-242	0.0276		pCi/L
		Th-230	0.599		pCi/L
		U-238	0.159		pCi/L
	RZA026	Pu-238	0.485		pCi/L
		Th-230	0.179		pCi/L
	RZA028	Pu-238	2.01		pCi/L
		Pu-239/240	0.198		pCi/L
	RZA031	Aluminum	8.9		mg/L
		Acetone	14		µg/L
		Iron	695	J	mg/L
	RZA032	Aluminum	10.9		mg/L
		1,1-Dichloroethene	2	J	µg/L
		bis(2-Ethylhexyl)phthalate	1	J	µg/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
14-Jun-94	N94004	Aluminum	13.2		mg/L
		Bromodichloromethane	5	J	µg/L
		Chloroform	32		µg/L
		K-40	259		pCi/L
		Magnesium	136		mg/L
		Pu-238	0.244		pCi/L
		Sr-90	1.85		pCi/L
		Total Organic Carbon	1		µg/L
		Total Organic Carbon	1.1		µg/L
		Total Organic Carbon	1.2		µg/L
		bis(2-Ethylhexyl)phthalate	2	J	µg/L
15-Jun-94	RZA091	Pu-238	0.218		pCi/L
	RZA092	Pu-238	0.269		pCi/L
20-Jun-94	RZA093	Pu-238	0.239		pCi/L
21-Jun-94	RZA094	Pu-238	0.303		pCi/L
	S94101	Bromodichloromethane	5	J	µg/L
		Carbon Tetrachloride	2	J	µg/L
		Chloroform	47		µg/L
		Fluoride	0.1		mg/L
		Hexane	1	J	µg/L
		Magnesium	80.7		mg/L
		Pu-238	0.18		pCi/L
		Th-230	0.469		pCi/L
		U-234	0.134		pCi/L
		U-235	0.067		pCi/L
		U-238	0.134		pCi/L

Table D.5-3. Summary of Equipment Rinsate Detections
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Collection Date	Equipment Rinsate Sample ID	Parameter	Results	Qualifier	Units
22-Jun-94	RZA095	Pu-238	0.299		pCi/L
		Pu-239/240	0.0313		pCi/L
	S94102	Acetone	23		µg/L
		Aluminum	17.8		mg/L
		Chloroform	17		µg/L
		Magnesium	231		mg/L
		Pu-238	1.24		pCi/L
		Th-230	0.495		pCi/L
		Total Organic Carbon	1.3		µg/L
		Total Organic Carbon	1.4		µg/L
		U-238	0.137		pCi/L
27-Jun-94	RZA096	Pu-238	0.373		pCi/L

ID identification
J estimated quantity
µg/L micorgrams per liter
mg/L milligrams per liter
pCi/L picocuries per liter
Note: No qualifier in the Data Qualifier column indicates that the data was not qualified.

Table D.5-4. Field Precision Summary - Soil Samples
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Parameter	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Limits	Percentage Within Limits
4,4'-DDE	1	0.00	9.50	1	100.00
Aldrin	1	4.30	4.30	1	100.00
Aluminum	8	0.50	11.00	8	100.00
Aroclor-1260	1	4.70	4.70	1	100.00
Arsenic	8	2.20	30.60	8	100.00
Barium	8	1.90	121.00	7	87.50
Benzo(a)anthracene	3	9.30	120.00	1	33.33
Benzo(a)pyrene	3	22.20	106.00	2	66.67
Benzo(b)fluoranthene	4	28.10	130.00	2	50.00
Benzo(g,h,i)perylene	3	15.80	65.40	2	66.67
Benzo(k)fluoranthene	1	5.40	5.40	1	100.00
Benzoic Acid	5	1.20	23.60	5	100.00
Beryllium	8	1.50	12.00	8	100.00
Bismuth	4	1.60	9.60	4	100.00
Calcium	9	7.60	64.00	7	77.78
Chloride	2	6.10	14.70	2	100.00
Chromium	8	5.90	121.00	7	87.50
Chrysene	5	19.50	116.00	3	60.00
Cobalt	8	1.40	129.00	7	87.50
Copper	8	3.40	120.00	6	75.00
Cs-137	5	8.40	64.50	3	60.00
Endrin Ketone	1	16.80	16.80	1	100.00
Fluoranthene	6	2.40	119.00	3	50.00
Fluoride	7	0.00	47.10	6	85.71
Indeno(1,2,3-c,d)pyrene	3	22.50	80.70	2	66.67
Iron	8	3.20	121.00	7	87.50
K-40	8	0.00	21.60	8	100.00
Lead	8	2.30	47.30	6	75.00

Table D.5-4. Field Precision Summary - Soil Samples
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Parameter	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Limits	Percentage Within Limits
Magnesium	8	2.70	51.50	6	75.00
Manganese	8	0.40	126.00	6	75.00
Methylene Chloride	3	4.80	28.60	3	100.00
Nickel	8	0.00	121.00	7	87.50
Nitrate/Nitrite (NO3/NO2-N)	2	5.80	34.80	2	100.00
pH	1	11.00	11.00	1	100.00
Phenanthrene	2	17.30	59.50	1	50.00
Potassium	8	1.90	100.00	7	87.50
Pu-238	27	2.40	162.00	10	37.04
Pu-239/240	13	3.70	119.00	6	46.15
Pyrene	6	17.10	114.00	3	50.00
Ra-226	2	7.10	21.10	2	100.00
Sodium	1	5.90	5.90	1	100.00
Sr-90	1	100.00	163.00	0	0.00
Sulfate	1	4.00	4.00	1	100.00
Th-228	9	0.40	12.50	9	100.00
Th-230	8	3.60	51.50	7	87.50
Th-232	9	0.00	15.10	9	100.00
Total Organic Carbon	2	24.70	33.30	2	100.00
Trichlorotrifluoroethane	2	0.00	0.00	2	100.00
Tritium	4	8.60	49.80	2	50.00
U-234	8	0.60	24.70	8	100.00
U-235	5	2.60	50.20	3	60.00
U-238	8	0.00	12.20	8	100.00
Vanadium	8	0.60	12.70	8	100.00
Zinc	8	2.90	112.00	7	87.50

RPD relative percent difference

Table D.5-5. Field Precision Summary - Water Samples

Parameter	Number of Field Duplicate Pairs	Minimum RPD	Maximum RPD	Number Within Limits	Percentage Within Limits
Alkalinity, Total as CaCO3 at	1	0.30	0.30	1	100.00
Barium	1	16.80	16.80	1	100.00
Calcium	2	5.90	9.00	2	100.00
Fluoride	1	0.00	0.00	1	100.00
Magnesium	2	6.00	14.40	2	100.00
Manganese	1	63.90	63.90	0	0.00
Potassium	2	10.10	14.10	2	100.00
Pu-238	1	29.20	29.20	0	0.00
Sodium	1	1.00	1.00	1	100.00
Sr-90	1	10.30	10.30	1	100.00
Tetrachloroethene	1	12.50	12.50	1	100.00
Th-230	1	43.40	43.40	0	0.00
Total Organic Carbon	1	8.70	8.70	1	100.00
Tritium	2	0.20	2.70	2	100.00
U-234	1	12.70	12.70	1	100.00
U-238	2	100.00	147.00	0	0.00

RPD relative percent difference

APPENDIX E

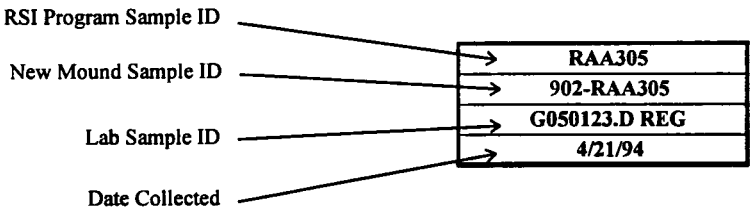
ANALYTICAL RESULTS

INTRODUCTION

This document contains all validated data from the Regional Soils, NPDES, Main Hill Seep sampling events. The following paragraphs focus on some of the information provided in this report and explain the qualifiers as used by the data validators.

IDENTIFYING A SAMPLE

A sample can be identified using the following diagram (shown below).



TENTATIVELY IDENTIFIED COMPOUNDS

If a laboratory package reported any tentatively identified compounds (TICs) associated with a sample, the number of TICs reported is given in the last row of the "RESULTS" column for that sample. Appendix E contains a detail listing of all samples collected.

DATA VALIDATION QUALIFIERS

Data validation qualifiers are attached to sample results by SAIC data reviewers according to QC criteria associated with the analysis procedures. The data validation qualifiers that have been applied to the data are as follows:

U — The analyte was included in the analysis, but was not detected above the reported sample quantitation limit.

J — The analyte has been positively identified; however, quality control results indicate that the reported value may not be accurate. The associated numerical value is the approximate concentration of the analyte in the sample (i.e., an estimated value).

UJ — The analyte has not been detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R — The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.

OTHER ABBREVIATIONS USED IN APPENDIX E

MG/KG	Milligram per kilogram
UG/KG	Microgram per kilogram
UG/G	Microgram per gram
PCI/G	Pico curies per gram
RESULT	The numeric value assigned to the analysis by the analytical laboratory
VAL	The qualifier assigned by the data validator to the result
UNC	The bounds of the range (+/-) assigned by the analytical laboratory that is associated to the result as an uncertainty factor.
NA	Not applicable
NS	The analyte was not required to be collected for the sample
NR	Not required

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH									
		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		J0027.D REG		J0068.D REG		H4317.D REG		H4320.D REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	12	U	13	U	11	U	11	U
Acetonitrile	UG/KG	122	UJ	132	UJ	112	U	112	U
Acrylonitrile	UG/KG	122	U	132	U	112	U	112	U
Benzene	UG/KG	6	UJ	7	UJ	11	U	11	U
Bromodichloromethane	UG/KG	6	UJ	7	UJ	11	U	11	U
Bromoform	UG/KG	6	UJ	7	UJ	11	U	11	U
Bromomethane	UG/KG	12	U	13	U	11	U	11	U
2-Butanone	UG/KG	12	U	13	U	11	U	11	U
Carbon Disulfide	UG/KG	6	UJ	7	UJ	11	U	11	U
Carbon Tetrachloride	UG/KG	6	UJ	7	UJ	11	U	11	U
Chlorobenzene	UG/KG	6	UJ	7	UJ	11	U	11	U
Chlorodibromomethane	UG/KG	6	UJ	7	UJ	11	U	11	U
Chloroethane	UG/KG	12	U	13	U	11	U	11	U
Chloroform	UG/KG	6	UJ	7	UJ	11	U	11	U
Chloromethane	UG/KG	12	U	13	U	11	U	11	U
1,1-Dichloroethane	UG/KG	6	UJ	7	UJ	11	U	11	U
1,2-Dichloroethane	UG/KG	1	J	7	UJ	11	U	11	U
1,1-Dichloroethene	UG/KG	6	UJ	7	UJ	11	U	11	U
1,2-Dichloroethene	UG/KG	6	UJ	7	UJ	11	U	11	U
1,2-Dichloropropane	UG/KG	6	UJ	7	UJ	11	U	11	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	7	UJ	11	U	11	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	7	UJ	11	U	11	U
1,2-Diethylbenzene	UG/KG	24	U	26	U	22	U	22	U
Ethylbenzene	UG/KG	6	UJ	7	UJ	11	U	11	U
Hexane	UG/KG	12	U	13	U	11	U	11	U
2-Hexanone	UG/KG	12	U	13	U	11	U	11	U
Iodomethane	UG/KG	12	U	13	U	11	U	11	U
4-Methyl-2-pentanone	UG/KG	12	U	13	U	11	U	11	U
Methylene Chloride	UG/KG	12	U	13	U	7	J	5	J
Styrene	UG/KG	6	UJ	7	UJ	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	7	UJ	11	U	11	U
Tetrachloroethene	UG/KG	6	UJ	7	UJ	11	U	11	U
Toluene	UG/KG	6	UJ	7	UJ	11	U	1	J
1,1,1-Trichloroethane	UG/KG	6	UJ	7	UJ	11	U	11	U
1,1,2-Trichloroethane	UG/KG	6	UJ	7	UJ	11	U	11	U
Trichloroethene	UG/KG	6	UJ	7	UJ	11	U	11	U
Trichlorotrifluoroethane	UG/KG	12	U	13	U	11	U	11	U
Vinyl Acetate	UG/KG	12	U	13	U	11	U	11	U
Vinyl Chloride	UG/KG	12	U	13	U	11	UJ	11	UJ
Xylene, Total	UG/KG	6	UJ	7	UJ	11	U	11	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH									
		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		G0501823.D REG		G1501812.D REG		A0501815.D REG		A0601816.D REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	530	J	440	U	65	J	370	U
Acenaphthylene	UG/KG	1600	U	440	U	72	J	370	U
Anthracene	UG/KG	760	J	440	U	120	J	370	U
Benzo(a)anthracene	UG/KG	3300	J	140	J	820		370	U
Benzo(a)pyrene	UG/KG	3600	J	150	J	920		370	U
Benzo(b)fluoranthene	UG/KG	3100	J	150	J	1700		370	U
Benzo(g,h,i)perylene	UG/KG	1700	J	83	J	610		370	U
Benzo(k)fluoranthene	UG/KG	4400	J	190	J	370	UJ	370	UJ
Benzoic Acid	UG/KG	8100	U	94	J	42	J	1800	UJ
Benzyl Alcohol	UG/KG	1600	U	440	U	370	U	370	U
2-Benzyl-4-Chlorophenol	UG/KG	1600	U	440	U	370	U	370	U
bis(2-Chloroethoxy)methane	UG/KG	1600	U	440	U	370	U	370	U
bis(2-Chloroethyl)ether	UG/KG	1600	U	440	U	370	U	370	U
bis(2-Ethylhexyl)phthalate	UG/KG	470	J	440	U	48	J	370	U
4-Bromophenyl-phenylether	UG/KG	1600	U	440	U	370	U	370	U
Butylbenzylphthalate	UG/KG	1600	U	440	U	370	U	370	U
Carbazole	UG/KG	710	J	440	U	120	J	370	U
4-Chloro-3-methylphenol	UG/KG	1600	U	440	U	370	U	370	U
4-Chloroaniline	UG/KG	1600	U	440	U	370	U	370	U
2-Chloronaphthalene	UG/KG	1600	U	440	U	370	U	370	U
2-Chlorophenol	UG/KG	1600	U	440	U	370	U	370	U
4-Chlorophenyl-phenylether	UG/KG	1600	U	440	U	370	U	370	U
Chrysene	UG/KG	4900	J	250	J	1200		370	U
Di-n-butylphthalate	UG/KG	1600	U	440	U	370	U	370	U
Di-n-octylphthalate	UG/KG	1600	UJ	440	U	370	U	370	U
Dibenzo(a,h)anthracene	UG/KG	1600	UJ	440	U	370	U	370	U
Dibenzofuran	UG/KG	240	J	440	U	44	J	370	U
1,2-Dichlorobenzene	UG/KG	1600	U	440	U	370	U	370	U
1,3-Dichlorobenzene	UG/KG	1600	U	440	U	370	U	370	U
1,4-Dichlorobenzene	UG/KG	1600	U	440	U	370	U	370	U
3,3'-Dichlorobenzidine	UG/KG	1600	UJ	440	U	370	U	370	U
2,4-Dichlorophenol	UG/KG	1600	U	440	U	370	U	370	U
Diethylphthalate	UG/KG	1600	U	440	U	370	U	370	U
2,4-Dimethylphenol	UG/KG	1600	U	440	U	370	U	370	U
Dimethylphthalate	UG/KG	1600	U	440	U	370	U	370	U
4,6-Dinitro-2-methylphenol	UG/KG	4100	U	1100	U	900	U	900	U
2,4-Dinitrophenol	UG/KG	4100	U	1100	U	900	UJ	900	UJ
2,4-Dinitrotoluene	UG/KG	1600	U	440	U	370	U	370	U
2,6-Dinitrotoluene	UG/KG	1600	U	440	U	370	U	370	U
Fluoranthene	UG/KG	6500		400	J	1600		370	U
Fluorene	UG/KG	420	J	440	U	69	J	370	U
Hexachlorobenzene	UG/KG	1600	U	440	U	370	U	370	U
Hexachlorobutadiene	UG/KG	1600	U	440	U	370	U	370	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH									
		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		G0501823.D REG		G1501812.D REG		A0501815.D REG		A0601816.D REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Hexachlorocyclopentadiene	UG/KG	1600	U	440	U	370	U	370	U
Hexachloroethane	UG/KG	1600	U	440	U	370	U	370	U
Indeno(1,2,3-c,d)pyrene	UG/KG	2000	J	88	J	650		370	U
Isophorone	UG/KG	1600	U	440	U	370	U	370	U
2-Methylnaphthalene	UG/KG	1600	U	440	U	56	J	370	U
2-Methylphenol	UG/KG	1600	U	440	U	370	U	370	U
4-Methylphenol	UG/KG	1600	U	440	U	370	U	370	U
N-Nitroso-di-n-propylamine	UG/KG	1600	U	440	U	370	U	370	U
N-Nitrosodiphenylamine	UG/KG	1600	U	440	U	370	U	370	U
Naphthalene	UG/KG	260	J	440	U	370	U	370	U
2-Nitroaniline	UG/KG	4100	U	1100	U	900	U	900	U
3-Nitroaniline	UG/KG	4100	U	1100	U	900	U	900	U
4-Nitroaniline	UG/KG	4100	U	1100	U	900	U	900	U
Nitrobenzene	UG/KG	1600	U	440	U	370	U	370	U
2-Nitrophenol	UG/KG	1600	U	440	U	370	U	370	U
4-Nitrophenol	UG/KG	4100	U	1100	U	900	U	900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	1600	U	440	U	370	U	370	U
Pentachlorophenol	UG/KG	4100	U	1100	U	900	U	900	U
Phenanthrene	UG/KG	4600		210	J	780		370	U
Phenol	UG/KG	1600	U	440	U	370	U	370	U
Pyrene	UG/KG	8800	J	350	J	1500	J	370	UJ
1,2,4-Trichlorobenzene	UG/KG	1600	U	440	U	370	U	370	U
2,4,5-Trichlorophenol	UG/KG	4100	U	1100	U	900	U	900	U
2,4,6-Trichlorophenol	UG/KG	1600	U	440	U	370	U	370	U
Tentatively Identified Compounds		25		22		30		20	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH									
		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		34973-15 REG		34973-16 REG		36132-13 REG		36132-14 REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
alpha-BHC	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
alpha-Chlordane	UG/KG	1.6	U	1.8	U	1.6	J	0.76	U
Aroclor 1232	UG/KG	32	U	35	U	37	U	15	U
Aroclor-1016	UG/KG	32	U	35	U	37	U	15	U
Aroclor-1221	UG/KG	65	U	70	U	75	U	30	U
Aroclor-1242	UG/KG	32	U	35	U	37	U	15	U
Aroclor-1248	UG/KG	32	U	35	U	37	U	15	U
Aroclor-1254	UG/KG	32	U	35	U	37	U	15	U
Aroclor-1260	UG/KG	130	J	35	U	37	U	15	U
beta-BHC	UG/KG	1.6	U	1.8	U	1.9	U	0.46	J
4,4'-DDD	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
4,4'-DDE	UG/KG	8.5	J	3.5	U	4.4	J	1.5	U
4,4'-DDT	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
delta-BHC	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
Dieldrin	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
Endosulfan I	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
Endosulfan II	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
Endosulfan Sulfate	UG/KG	3.2	U	3.5	U	3.7	UJ	1.5	UJ
Endrin	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
Endrin Aldehyde	UG/KG	3.2	U	3.5	U	3.7	U	1.5	U
Endrin Ketone	UG/KG	3.2	U	3.5	U	5.3	J	1.5	U
gamma-BHC (Lindane)	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
gamma-Chlordane	UG/KG	1.6	U	1.8	U	2.2	J	0.76	U
Heptachlor	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
Heptachlor Epoxide	UG/KG	1.6	U	1.8	U	1.9	U	0.76	U
p,p'-Methoxychlor	UG/KG	16	U	18	U	19	U	7.6	U
Toxaphene	UG/KG	160	U	180	U	190	U	76	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH									
		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		3497515 REG		3497516 REG		3613313 REG		3613314 REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	9490		22800		13500		10200	
Antimony	MG/KG	0.75	UJ	0.82	UJ	0.7	UJ	0.91	UJ
Arsenic	MG/KG	6.5	U	8.4		8.8		5.2	
Barium	MG/KG	104	U	144		156		144	
Beryllium	MG/KG	0.76	U	1.1		1.2		0.81	
Bismuth	MG/KG	6.2	U	8.2		37.6		33	
Cadmium	MG/KG	2.4	U	0.61	U	0.52		0.52	U
Calcium	MG/KG	55900	U	9990		8070		8830	
Chromium	MG/KG	24.6	U	27.1		15.3		14.8	
Cobalt	MG/KG	8.5	U	16.2		12		12.7	
Copper	MG/KG	21.6	U	23.3		31	J	26	J
Cyanide	MG/KG	0.61	U	0.66	U	0.56	U	0.56	U
Iron	MG/KG	21400	U	46200		23100		24300	
Lead	MG/KG	260	U	21.9		84.9		22.9	
Magnesium	MG/KG	21700	U	5850		4580		5170	
Manganese	MG/KG	708	U	1240		1240		1580	
Mercury	MG/KG	0.12	U	0.13	U	0.23		0.11	U
Nickel	MG/KG	22.4		36.8		23		23.6	
Potassium	MG/KG	1270		2380		1510		1630	
Selenium	MG/KG	1.1	U	1.2	U	1	U	1.7	J
Silver	MG/KG	1.2	U	1.3	U	1.1	U	1.1	U
Sodium	MG/KG	460	U	499	U	425	U	425	U
Thallium	MG/KG	0.88	U	0.95	U	0.81	U	0.81	U
Vanadium	MG/KG	25	J	29.9	J	27.9	J	19.3	J
Zinc	MG/KG	535		90.5		355		233	

		RAA305		RAA306		RCA305		RCA306	
		902-RAA305		902-RAA306		902-RCA305		902-RCA306	
		0349740017SA REG		0349740018SA REG		0361340013SA REG		0361340014SA REG	
		4/21/94		4/21/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	18.2	U	24.8		16.9	U	16.8	U
Fluoride	MG/KG	0.97		3		0.92		1.3	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.7		0.66	U	3.1		1.3	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH					
		RCA305		RCA306	
		902-RCA305		902-RCA306	
		0361340013SA REG		0361340014SA REG	
		6/9/94		6/9/94	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.25	U	0.25	U
1,3-Dinitrobenzene	UG/G	0.25	U	0.25	U
2,4-Dinitrotoluene	UG/G	0.25	U	0.25	U
2,6-Dinitrotoluene	UG/G	0.26	U	0.26	U
HMX	UG/G	2.2	U	2.2	U
Nitrobenzene	UG/G	0.26	U	0.26	U
PETN	UG/G	1	U	1	U
RDX	UG/G	1	U	1	U
TETRYL	UG/G	0.65	U	0.65	U
1,3,5-Trinitrobenzene	UG/G	0.25	U	0.25	U
2,4,6-Trinitrotoluene	UG/G	0.25	U	0.25	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RAA301			RAA302			RAA303			RAA304			RAA305		
		902-RAA301			902-RAA302			902-RAA303			902-RAA304			902-RAA305		
		3202115 REG			3202116 REG			3202117 REG			3202118 REG			3202119 REG		
		34445			34445			34445			34445			34445		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.143	NA	U	0.19	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			3.95	0.535		2.06	0.277		NS		
Pu-239/240	PCI/G	NS			NS			0.0284	0.013		0.0299	0.0119		NS		
Pu-242	PCI/G	NS			NS			0.0126	NA	U	0.00289	NA	U	NS		
Th-228	PCI/G	NS			NS			0.827	0.146	J	NS			NS		
Th-230	PCI/G	NS			NS			0.936	0.158		NS			NS		
Th-232	PCI/G	NS			NS			0.761	0.137		NS			NS		
U-234	PCI/G	NS			NS			0.691	0.126		NS			NS		
U-235	PCI/G	NS			NS			0.0304	0.0214		NS			NS		
U-238	PCI/G	NS			NS			0.818	0.142		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0865	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0217	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0257	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0267	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			1.07	0.124	
K-40	PCI/G	NS			NS			NS			NS			17.3	1.85	
Ra-226	PCI/G	NS			NS			NS			NS			1.71	0.621	
Sr-90	PCI/G	NS			NS			NS			NS			0.382	NA	UJ

		RAA306			RBA301			RBA302			RBA303			RBA304		
		902-RAA306			902-RBA301			902-RBA302			902-RBA303			902-RBA304		
		3202120 REG			3204234 REG			3204235 REG			3204237 REG			3204238 REG		
		34445			34449			34449			34449			34449		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.12	0.0693		0.185	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0761	0.0226	J	0.0199	0.0133	J
Pu-239/240	PCI/G	NS			NS			NS			0.0343	0.0144	J	0.00862	NA	UJ
Pu-242	PCI/G	NS			NS			NS			0.00344	NA	UJ	0.00317	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.41	0.372	R	NS		
Th-230	PCI/G	NS			NS			NS			1.5	0.377	R	NS		
Th-232	PCI/G	NS			NS			NS			1.23	0.335	R	NS		
U-234	PCI/G	NS			NS			NS			1.03	0.171		NS		
U-235	PCI/G	NS			NS			NS			0.0661	0.0313		NS		
U-238	PCI/G	NS			NS			NS			0.983	0.165		NS		
Am-241	PCI/G	0.124	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0312	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0362	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0411	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0933	0.0297		NS			NS			NS			NS		
K-40	PCI/G	29.2	3.15		NS			NS			NS			NS		
Ra-226	PCI/G	2.5	0.852		NS			NS			NS			NS		
Sr-90	PCI/G	0.472	NA	UJ	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RBA312			RCA301			RCA302			RCA303			RCA304		
		902-RBA312			902-RCA301			902-RCA302			902-RCA303			902-RCA304		
		3204236 REG			3224123 REG			3224124 REG			3224125 REG			3224126 REG		
		04/25/94DUPE			34494			34494			34494			34494		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.18	NA	U	0.152	0.0455	R	0.0648	0.0396	R	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.171	0.0364	R	0.287	0.0512	
Pu-239/240	PCI/G	NS			NS			NS			0.0141	NA	U	0.00886	0.00677	
Pu-242	PCI/G	NS			NS			NS			0.00318	NA	U	0.00754	NA	U
Th-228	PCI/G	NS			NS			NS			0.58	0.108		NS		
Th-230	PCI/G	NS			NS			NS			1.02	0.161		NS		
Th-232	PCI/G	NS			NS			NS			0.473	0.0912		NS		
U-234	PCI/G	NS			NS			NS			0.602	0.114		NS		
U-235	PCI/G	NS			NS			NS			0.0436	0.0255		NS		
U-238	PCI/G	NS			NS			NS			0.652	0.121		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS						NS		

		RCA305			RCA306			RGA301			RGA302			RGA303		
		902-RCA305			902-RCA306			902-RGA301			902-RGA302			902-RGA303		
		3224127 REG			3224128 REG			3205303 REG			3205304 REG			3205305 REG		
		34494			34494			34451			34451			34451		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0443	NA	U	0.0597	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.0452	NA	UJ
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0254	NA	UJ
Pu-242	PCI/G	NS			NS			NS			NS			0.00933	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.087	NA	U	0.0708	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0201	NA	U	0.0183	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.023	NA	U	0.0191	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0268	NA	U	0.0263	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.101	0.0426		0.0202	NA	U	NS			NS			NS		
K-40	PCI/G	16.9	1.79		22.7	2.41		NS			NS			NS		
Ra-226	PCI/G	2.3	0.528		0.533	NA	U	NS			NS			NS		
Sr-90	PCI/G	0.495	0.181	R	0.386	NA	U	NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RGA304			RHA301			RHA302			RHA303			RHA304		
		902-RGA304			902-RHA301			902-RHA302			902-RHA303			902-RHA304		
		3205306 REG			3222411 REG			3222412 REG			3222413 REG			3222414 REG		
		34451			34488			34488			34488			34488		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0123	NA	U	0.063	0.0349		NS			NS		
Pu-238	PCI/G	0.0399	NA	UJ	NS			NS			0.0908	0.0187	U	0.0585	0.0144	R
Pu-239/240	PCI/G	0.00912	0.0106	J	NS			NS			0.00606	0.00452	U	0.00709	NA	U
Pu-242	PCI/G	0.00823	NA	UJ	NS			NS			0.0182	NA	U	0.00178	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJA301			RJA302			RJA303			RJA304			RMA301		
		902-RJA301			902-RJA302			902-RJA303			902-RJA304			902-RMA301		
		3208417 REG			3208418 REG			3208419 REG			3208420 REG			3216948 REG		
		34458			34458			34458			34458			34473		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.189	NA	U	0.173	NA	U	NS			NS			0.0597	0.032	
Pu-238	PCI/G	NS			NS			0.472	0.116		0.208	0.0498		NS		
Pu-239/240	PCI/G	NS			NS			0.0348	NA	UJ	0.0057	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.0509	NA	UJ	0.00569	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.838	0.14		NS			NS		
Th-230	PCI/G	NS			NS			2.55	0.347	R	NS			NS		
Th-232	PCI/G	NS			NS			0.853	0.141		NS			NS		
U-234	PCI/G	NS			NS			0.807	0.136		NS			NS		
U-235	PCI/G	NS			NS			0.00731	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.698	0.122		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RMA302			RMA303			RMA304			RMA314			RNA301		
		902-RMA302			902-RMA303			902-RMA304			902-RMA314			902-RNA301		
		3216949 REG			3216950 REG			3216951 REG			3216952 REG			3212812 REG		
		34473			34473			34473			05/19/94DUPE			34466		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0751	NA	U	NS			NS			NS			0.122	0.0691	
Pu-238	PCI/G	NS			0.195	0.0831	J	0.0494	0.0238		0.111	0.0459		NS		
Pu-239/240	PCI/G	NS			0.0152	NA	UJ	0.00497	NA	U	0.00774	NA	U	NS		
Pu-242	PCI/G	NS			0.0151	NA	UJ	0.00496	NA	U	0.021	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNA302			RNA303			RNA304			RPA301			RPA302		
		902-RNA302			902-RNA303			902-RNA304			902-RPA301			902-RPA302		
		3212813 REG			3212814 REG			3212815 REG			3212806 REG			3212808 REG		
		34466			34466			34466			34466			34466		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0898	NA	U	NS			NS			0.0624	NA	U	0.0548	NA	U
Pu-238	PCI/G	NS			0.136	0.0441		0.0733	0.0316		NS			NS		
Pu-239/240	PCI/G	NS			0.0219	0.0164		0.0166	0.0127		NS			NS		
Pu-242	PCI/G	NS			0.0179	NA	U	0.00641	NA	U	NS			NS		
Th-228	PCI/G	NS			0.679	0.128		NS			NS			NS		
Th-230	PCI/G	NS			1.35	0.211		NS			NS			NS		
Th-232	PCI/G	NS			0.651	0.123		NS			NS			NS		
U-234	PCI/G	NS			0.731	0.143		NS			NS			NS		
U-235	PCI/G	NS			0.0107	NA	U	NS			NS			NS		
U-238	PCI/G	NS			0.759	0.146		NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RPA303			RPA304			RPA311			RPA313			RRA301		
		902-RPA303			902-RPA304			902-RPA311			902-RPA313			902-RRA301		
		3212809 REG			3212811 REG			3212807 REG			3212810 REG			3220913 REG		
		34466			34466			05/12/94DUPE			05/12/94DUPE			34487		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0623	NA	U	NS			0.0461	NA	U
Pu-238	PCI/G	0.0692	0.0477	J	0.1	NA	UJ	NS			0.0889	0.0524	J	NS		
Pu-239/240	PCI/G	0.0122	0.0142	J	0.049	NA	UJ	NS			0.0469	NA	UJ	NS		
Pu-242	PCI/G	0.03	NA	UJ	0.018	NA	UJ	NS			0.0468	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRA302			RRA303			RRA304			RSA301			RSA302		
		902-RRA302			902-RRA303			902-RRA304			902-RSA301			902-RSA302		
		3220914 REG			3220915 REG			3220916 REG			3220908 REG			3220909 REG		
		34487			34487			34487			34487			34487		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0373	NA	U	NS			NS			0.0738	NA	U	0.102	NA	U
Pu-238	PCI/G	NS			0.0429	NA	UJ	0.0429	NA	U	NS			NS		
Pu-239/240	PCI/G	NS			0.0266	NA	UJ	0.00667	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.00773	NA	UJ	0.0181	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RSA303			RSA304			RTA301			RTA302			RTA303		
		902-RSA303			902-RSA304			902-RTA301			902-RTA302			902-RTA303		
		3220910 REG			3220911 REG			3216967 REG			3216968 REG			3216969 REG		
		34487			34487			34473			34473			34473		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.084	NA	U	0.0916	NA	U	NS		
Pu-238	PCI/G	0.0425	0.0257		0.0788	0.0302		NS			NS			0.068	0.0277	
Pu-239/240	PCI/G	0.0131	NA	U	0.0189	0.0126		NS			NS			0.00567	0.00659	
Pu-242	PCI/G	0.0048	NA	U	0.00464	NA	U	NS			NS			0.00512	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTA304			RUA301			RUA302			RVA301			RVA302		
		902-RTA304			902-RUA301			902-RUA302			902-RVA301			902-RVA302		
		3216970 REG			3210707 REG			3210708 REG			3211214 REG			3211215 REG		
		34473			34458			34458			34463			34463		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0684	0.0284		0.129	0.0451	U	0.173	0.0652	U	0.247	0.105	J	0.204	0.0605	J
Pu-239/240	PCI/G	0.0205	NA	U	0.0191	NA	U	0.012	NA	U	0.0203	NA	UJ	0.0076	NA	UJ
Pu-242	PCI/G	0.00598	NA	U	0.00701	NA	U	0.012	NA	U	0.0203	NA	UJ	0.0206	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH																
		RXA301			RXA302			RXA303			RXA304			RXA312		
		902-RXA301			902-RXA302			902-RXA303			902-RXA304			902-RXA312		
		3219702 REG			3219703 REG			3219705 REG			3219706 REG			3219703 REG		
		34481			34481			34481			34481			05/27/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0708	NA	U	0.0739	NA	U	NS		
Pu-238	PCI/G	0.0708	0.0275		0.0325	NA	U	NS			NS			0.101	0.0528	J
Pu-239/240	PCI/G	0.0168	0.0126		0.00691	0.00803		NS			NS			0.0168	0.017	J
Pu-242	PCI/G	0.00505	NA	U	0.00623	NA	U	NS			NS			0.0114	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RYA301			RYA302		
		902-RYA301			902-RYA302		
		3211249 REG			3211250 REG		
		34464			34464		
		Result	UNC	Val	Result	UNC	Val
Radiological	**Units**						
Tritium	PCI/G	NS			NS		
Pu-238	PCI/G	0.128	0.0366		0.108	0.0419	J
Pu-239/240	PCI/G	0.0294	0.0161		0.0222	NA	UJ
Pu-242	PCI/G	0.00497	NA	U	0.00814	NA	UJ
Th-228	PCI/G	NS			NS		
Th-230	PCI/G	NS			NS		
Th-232	PCI/G	NS			NS		
U-234	PCI/G	NS			NS		
U-235	PCI/G	NS			NS		
U-238	PCI/G	NS			NS		
Am-241	PCI/G	NS			NS		
Bi-207	PCI/G	NS			NS		
Bi-210m	PCI/G	NS			NS		
Co-60	PCI/G	NS			NS		
Cs-137	PCI/G	NS			NS		
K-40	PCI/G	NS			NS		
Ra-226	PCI/G	NS			NS		
Sr-90	PCI/G	NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST									
		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		J9923.D REG		J9933.D REG		H4258.D REG		H4243.D REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	12	U	11	U	12	U	12	U
Acetonitrile	UG/KG	119	U	111	U	119	U	115	U
Acrylonitrile	UG/KG	119	U	111	U	119	U	115	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	12	U	11	U	12	U	12	U
2-Butanone	UG/KG	12	U	11	U	12	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	12	U	11	U	12	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	12	U	11	U	12	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	22	U	24	U	23	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	12	U	11	U	12	U	12	U
2-Hexanone	UG/KG	12	U	11	U	12	U	12	U
Iodomethane	UG/KG	12	U	11	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	11	U	12	U	12	U
Methylene Chloride	UG/KG	33		28		6	UJ	6	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	2	J	3	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	11	U	12	U	12	U
Vinyl Acetate	UG/KG	12	U	11	U	12	U	12	U
Vinyl Chloride	UG/KG	12	U	11	U	12	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds						1		2	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST									
		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		G0901788.D REG		G1201791.D REG		A0601773.D REG		A0701774.D REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	400	UJ	370	UJ	400	U	380	U
Acenaphthylene	UG/KG	400	UJ	370	UJ	400	U	380	U
Anthracene	UG/KG	400	UJ	370	UJ	400	U	380	U
Benzo(a)anthracene	UG/KG	98	J	370	UJ	140	J	380	U
Benzo(a)pyrene	UG/KG	110	J	370	UJ	170	J	380	U
Benzo(b)fluoranthene	UG/KG	160	J	370	UJ	280	J	380	U
Benzo(g,h,i)perylene	UG/KG	50	J	370	UJ	110	J	380	U
Benzo(k)fluoranthene	UG/KG	100	J	370	UJ	400	U	380	U
Benzoic Acid	UG/KG	110	J	81	J	2000	U	1900	U
Benzyl Alcohol	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	400	UJ	370	UJ	400	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	400	UJ	370	UJ	400	U	380	U
bis(2-Chloroethyl)ether	UG/KG	400	UJ	370	UJ	400	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Bromophenyl-phenylether	UG/KG	400	UJ	370	UJ	400	U	380	U
Butylbenzylphthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
Carbazole	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Chloro-3-methylphenol	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Chloroaniline	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Chloronaphthalene	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Chlorophenol	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Chlorophenyl-phenylether	UG/KG	400	UJ	370	UJ	400	U	380	U
Chrysene	UG/KG	170	J	370	UJ	210	J	380	U
Di-n-butylphthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
Di-n-octylphthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
Dibenzo(a,h)anthracene	UG/KG	400	UJ	370	UJ	400	U	380	U
Dibenzofuran	UG/KG	400	UJ	370	UJ	400	U	380	U
1,2-Dichlorobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U
1,3-Dichlorobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U
1,4-Dichlorobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U
3,3'-Dichlorobenzidine	UG/KG	400	UJ	370	UJ	400	U	380	U
2,4-Dichlorophenol	UG/KG	400	UJ	370	UJ	400	U	380	U
Diethylphthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
2,4-Dimethylphenol	UG/KG	400	UJ	370	UJ	400	U	380	U
Dimethylphthalate	UG/KG	400	UJ	370	UJ	400	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	990	UJ	920	UJ	950	U	920	U
2,4-Dinitrophenol	UG/KG	990	UJ	920	UJ	950	U	920	U
2,4-Dinitrotoluene	UG/KG	400	UJ	370	UJ	400	U	380	U
2,6-Dinitrotoluene	UG/KG	400	UJ	370	UJ	400	U	380	U
Fluoranthene	UG/KG	220	J	370	UJ	280	J	380	U
Fluorene	UG/KG	400	UJ	370	UJ	400	U	380	U
Hexachlorobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST									
		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		G0901788.D REG		G1201791.D REG		A0601773.D REG		A0701774.D REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Hexachlorobutadiene	UG/KG	400	UJ	370	UJ	400	U	380	U
Hexachlorocyclopentadiene	UG/KG	400	UJ	370	UJ	400	U	380	U
Hexachloroethane	UG/KG	400	UJ	370	UJ	400	U	380	U
Indeno(1,2,3-c,d)pyrene	UG/KG	58	J	370	UJ	120	J	380	U
Isophorone	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Methylnaphthalene	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Methylphenol	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Methylphenol	UG/KG	400	UJ	370	UJ	400	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	400	UJ	370	UJ	400	U	380	U
N-Nitrosodiphenylamine	UG/KG	400	UJ	370	UJ	400	U	380	U
Naphthalene	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Nitroaniline	UG/KG	990	UJ	920	UJ	950	U	920	U
3-Nitroaniline	UG/KG	990	UJ	920	UJ	950	U	920	U
4-Nitroaniline	UG/KG	990	UJ	920	UJ	950	U	920	U
Nitrobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U
2-Nitrophenol	UG/KG	400	UJ	370	UJ	400	U	380	U
4-Nitrophenol	UG/KG	990	UJ	920	UJ	950	U	920	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	UJ	370	UJ	400	U	380	U
Pentachlorophenol	UG/KG	990	UJ	920	UJ	950	U	920	U
Phenanthrene	UG/KG	93	J	370	UJ	110	J	380	U
Phenol	UG/KG	66	J	370	UJ	400	U	380	U
Pyrene	UG/KG	210	J	370	UJ	310	J	380	U
1,2,4-Trichlorobenzene	UG/KG	400	UJ	370	UJ	400	U	380	U
2,4,5-Trichlorophenol	UG/KG	990	UJ	920	UJ	950	U	920	U
2,4,6-Trichlorophenol	UG/KG	400	UJ	370	UJ	400	U	380	U
Tentatively Identified Compounds		25		17		29		25	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST									
		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		34797-19 REG		34797-20 REG		36046-01 REG		36046-02 REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
alpha-BHC	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
alpha-Chlordane	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
Aroclor 1232	UG/KG	16	U	7.3	UJ	7.8	U	7.6	U
Aroclor-1016	UG/KG	16	U	7.3	UJ	7.8	U	7.6	U
Aroclor-1221	UG/KG	32	U	15	UJ	16	U	15	U
Aroclor-1242	UG/KG	16	U	7.3	UJ	7.8	U	7.6	U
Aroclor-1248	UG/KG	16	U	7.3	UJ	7.8	U	7.6	U
Aroclor-1254	UG/KG	16	U	7.3	UJ	7.8	U	7.6	U
Aroclor-1260	UG/KG	16	U	7.3	UJ	8.1	J	7.6	U
beta-BHC	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
4,4'-DDD	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
4,4'-DDE	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
4,4'-DDT	UG/KG	1.6	U	0.73	UJ	0.78	UJ	0.76	UJ
delta-BHC	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
Dieldrin	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
Endosulfan I	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
Endosulfan II	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
Endosulfan Sulfate	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
Endrin	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
Endrin Aldehyde	UG/KG	1.6	U	0.73	UJ	0.78	U	0.76	U
Endrin Ketone	UG/KG	1.6	U	0.73	UJ	0.87	NJ	0.76	U
gamma-BHC (Lindane)	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
gamma-Chlordane	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
Heptachlor	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
Heptachlor Epoxide	UG/KG	0.81	U	0.38	UJ	0.4	U	0.39	U
p,p'-Methoxychlor	UG/KG	8.1	U	3.8	UJ	4	U	3.9	U
Toxaphene	UG/KG	81	U	38	UJ	40	U	39	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST									
		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		3479819 REG		3479820 REG		3604801 REG		3604802 REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	11200		5110		8450		8950	
Antimony	MG/KG	0.74	UJ	0.69	UJ	0.74	R	0.71	R
Arsenic	MG/KG	9.8		5		6.9		5.1	
Barium	MG/KG	69.7		32.7		87.7		86	
Beryllium	MG/KG	0.6		0.31		0.64		0.59	
Bismuth	MG/KG	6.1	U	5.7	U	26.5		25.9	
Cadmium	MG/KG	0.55	U	0.51	U	0.55	U	0.53	U
Calcium	MG/KG	69900		138000		4570		4690	
Chromium	MG/KG	13.5		5.7		12.2		12.7	
Cobalt	MG/KG	9.7		5.8		11.3		12	
Copper	MG/KG	20.6		13.8		19.1		16.3	
Cyanide	MG/KG	0.6	U	0.55	U	0.59	U	0.57	U
Iron	MG/KG	21100		13400		19800		20300	
Lead	MG/KG	20.3		9		31.9		13.1	
Magnesium	MG/KG	41100		52200		2990		3240	
Manganese	MG/KG	494		326		979		1110	
Mercury	MG/KG	0.12	U	0.11	U	0.12	U	0.11	U
Nickel	MG/KG	21.6		15.1		16.8		18.2	
Potassium	MG/KG	1140		1070		1250		957	U
Selenium	MG/KG	1.1	U	1	U	1.6		1.1	U
Silver	MG/KG	1.1	U	1.1	U	1.1	U	1.1	U
Sodium	MG/KG	451	U	419	U	448	U	433	U
Thallium	MG/KG	0.86	U	0.8	U	0.85	U	0.83	U
Vanadium	MG/KG	22.8		11.2		17.9		17.3	
Zinc	MG/KG	185		37.8		84.4		50.2	

		RAB305		RAB306		RCB305		RCB306	
		902-RAB305		902-RAB306		902-RCB305		902-RCB306	
		0347990021SA REG		0347990022SA REG		0360490001SA REG		0360490002SA REG	
		4/18/94		4/18/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	17.9	U	16.6	U	17.8	U	17.2	U
Fluoride	MG/KG	1.8		2.4		1.9	J	2.1	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.9		0.55	U	1.9	J	2.2	J
Sulfate	MG/KG	29.8	U	27.7	U	29.7	UJ	29.3	J

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RAB301			RAB302			RAB303			RAB304			RAB305		
		902-RAB301			902-RAB302			902-RAB303			902-RAB304			902-RAB305		
		3200220 REG			3200221 REG			3200222 REG			3200223 REG			3200224 REG		
		4/18/94			4/18/94			4/18/94			4/18/94			4/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.225	0.118	J	0.0748	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.399	0.076	J	0.224	0.0479	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0223	0.0127	J	0.0101	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00464	NA	UJ	0.00372	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.734	0.199	J	NS			NS		
Th-230	PCI/G	NS			NS			1.36	0.288	J	NS			NS		
Th-232	PCI/G	NS			NS			0.989	0.231	J	NS			NS		
U-234	PCI/G	NS			NS			0.689	0.136		NS			NS		
U-235	PCI/G	NS			NS			0.0294	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.805	0.152		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0764	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0223	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0253	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0276	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.412	5.15E-02	
K-40	PCI/G	NS			NS			NS			NS			16.2	1.79E+00	
Ra-226	PCI/G	NS			NS			NS			NS			2.85	6.37E-01	
Sr-90	PCI/G	NS			NS			NS			NS			0.366	NA	U

		RAB306			RBB301			RBB302			RBB303			RBB304		
		902-RAB306			902-RBB301			902-RBB302			902-RBB303			902-RBB304		
		REG			3204249 REG			3204250 REG			3204251 REG			3204252 REG		
		34442			4/26/94			4/26/94			4/26/94			4/26/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0705	NA	U	0.316	0.0708	J	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.33	0.0588	J	0.105	4.04E-02	J
Pu-239/240	PCI/G	NS			NS			NS			0.0294	0.0124	J	0.00697	NA	UJ
Pu-242	PCI/G	NS			NS			NS			0.00318	NA	UJ	0.00696	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.1	0.199		NS		
Th-230	PCI/G	NS			NS			NS			1.49	0.247		NS		
Th-232	PCI/G	NS			NS			NS			0.944	0.176		NS		
U-234	PCI/G	NS			NS			NS			0.836	0.141		NS		
U-235	PCI/G	NS			NS			NS			0.0452	0.0232		NS		
U-238	PCI/G	NS			NS			NS			0.889	0.148		NS		
Am-241	PCI/G	0.076	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0189	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0215	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0245	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.022	NA	U	NS			NS			NS			NS		
K-40	PCI/G	13.2	1.42		NS			NS			NS			NS		
Ra-226	PCI/G	1.79	0.53		NS			NS			NS			NS		
Sr-90	PCI/G	0.354	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RCB301			RCB302			RCB303			RCB304			RCB305		
		902-RCB301			902-RCB302			902-RCB303			902-RCB304			902-RCB305		
		3223001 REG			3223002 REG			3223003 REG			3223004 REG			3223005 REG		
		6/8/94			6/8/94			6/8/94			6/8/94			6/8/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0932	NA	U	0.0709	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.567	0.0652	U	0.368	0.0562	U	NS		
Pu-239/240	PCI/G	NS			NS			0.018	0.00879	U	0.0149	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00879	NA	U	0.0101	NA	U	NS		
Th-228	PCI/G	NS			NS			1.02	0.172		NS			NS		
Th-230	PCI/G	NS			NS			1.45	0.224		NS			NS		
Th-232	PCI/G	NS			NS			1.02	0.169		NS			NS		
U-234	PCI/G	NS			NS			1.04	0.176		NS			NS		
U-235	PCI/G	NS			NS			0.117	0.0428		NS			NS		
U-238	PCI/G	NS			NS			0.967	0.167		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.078	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0182	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.02	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0232	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.327	4.00E-02	
K-40	PCI/G	NS			NS			NS			NS			19.9	2.09E+00	
Ra-226	PCI/G	NS			NS			NS			NS			0.538	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.354	NA	U

		RCB306			RGB301			RGB302			RGB303			RGB304		
		902-RCB306			902-RGB301			902-RGB302			902-RGB303			902-RGB304		
		3223006 REG			3207725 REG			3207726 REG			3207727 REG			3207728 REG		
		6/8/94			5/3/94			5/3/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0807	NA	U	0.0912	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.3	0.0734		0.112	4.45E-02	J
Pu-239/240	PCI/G	NS			NS			NS			0.0235	0.016		0.00963	1.12E-02	J
Pu-242	PCI/G	NS			NS			NS			0.00708	NA	U	0.00869	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.09	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0212	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0245	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0271	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.317	0.042		NS			NS			NS			NS		
K-40	PCI/G	21.5	2.22		NS			NS			NS			NS		
Ra-226	PCI/G	0.591	NA	U	NS			NS			NS			NS		
Sr-90	PCI/G	0.347	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RHB301			RHB302			RHB303			RHB304			RJB301		
		902-RHB301			902-RHB302			902-RHB303			902-RHB304			902-RJB301		
		3204240 REG			3204241 REG			3204242 REG			3204243 REG			3204244 REG		
		4/25/94			4/25/94			4/25/94			4/25/94			4/25/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0883	NA	U	0.148	NA	U	NS			NS			0.076	NA	U
Pu-238	PCI/G	NS			NS			0.318	0.0501	J	0.0576	0.0169	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0186	0.00792	J	0.00258	0.003	J	NS		
Pu-242	PCI/G	NS			NS			0.0021	NA	U	0.00233	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJB302			RJB303			RJB304			RKB301			RKB302		
		902-RJB302			902-RJB303			902-RJB304			902-RKB301			902-RKB302		
		3204245 REG			3204246 REG			3204247 REG			3204268 REG			3204269 REG		
		4/25/94			4/25/94			4/25/94			4/26/94			4/26/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	1.4	0.138	J	NS			NS			0.0659	NA	U	0.0783	NA	U
Pu-238	PCI/G	NS			0.138	0.0288	J	0.0269	NA	UJ	NS			NS		
Pu-239/240	PCI/G	NS			0.02	0.00872	J	0.00573	0.00666	J	NS			NS		
Pu-242	PCI/G	NS			0.00236	NA	U	0.00517	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RKB303			RKB304			RMB301			RMB302			RMB303		
		902-RKB303			902-RKB304			902-RMB301			902-RMB302			902-RMB303		
		3204270 REG			3204271 REG			3207133 REG			3207134 REG			3207135 REG		
		4/26/94			4/26/94			5/2/94			5/2/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.28	0.131		0.28	0.153		NS		
Pu-238	PCI/G	0.081	0.0191	J	0.0358	0.0168	J	NS			NS			0.114	2.44E-02	
Pu-239/240	PCI/G	0.00548	NA	U	0.0091	NA	UJ	NS			NS			0.00426	3.84E-03	
Pu-242	PCI/G	0.00201	NA	U	0.00334	NA	UJ	NS			NS			0.00231	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RMB304			RNB301			RNB302			RNB303			RNB304		
		902-RMB304			902-RNB301			902-RNB302			902-RNB303			902-RNB304		
		3207136 REG			3218108 REG			3218109 REG			3218110 REG			3218111 REG		
		5/2/94			5/23/94			5/23/94			5/23/94			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.079	NA	U	0.0859	NA	U	NS			NS		
Pu-238	PCI/G	0.0596	0.0163		NS			NS			0.163	0.0378	J	0.118	3.52E-02	J
Pu-239/240	PCI/G	0.0115	0.00609		NS			NS			0.0089	0.00736		0.0169	1.15E-02	
Pu-242	PCI/G	0.00207	NA	U	NS			NS			0.00401	NA	U	0.00507	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RPB301			RPB302			RPB303			RPB304			RRB301		
		902-RPB301			902-RPB302			902-RPB303			902-RPB304			902-RRB301		
		3218104 REG			3218105 REG			3218106 REG			3218107 REG			3226427 REG		
		5/23/94			5/23/94			5/23/94			5/23/94			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0766	NA	U	0.0789	NA	U	NS			NS			0.0495	NA	U
Pu-238	PCI/G	NS			NS			0.151	0.0424	J	0.35	0.0761	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00745	0.00751		0.0067	0.00779		NS		
Pu-242	PCI/G	NS			NS			0.00504	NA	U	0.0164	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRB302			RRB303			RRB304			RSB301			RSB302		
		902-RRB302			902-RRB303			902-RRB304			902-RSB301			902-RSB302		
		3226428 REG			3226429 REG			3226430 REG			3226451 REG			3226452 REG		
		6/15/94			6/15/94			6/15/94			6/16/94			6/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0436	NA	U	NS			NS			0.0509	NA	U	0.0687	NA	U
Pu-238	PCI/G	NS			0.258	0.0477		0.336	0.0568		NS			NS		
Pu-239/240	PCI/G	NS			0.0165	0.0106		0.00643	0.00646		NS			NS		
Pu-242	PCI/G	NS			0.00448	NA	U	0.00436	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RSB303			RSB304			RTB301			RTB302			RTB303		
		902-RSB303			902-RSB304			902-RTB301			902-RTB302			902-RTB303		
		3226453 REG			3226454 REG			3226455 REG			3226456 REG			3226457 REG		
		6/16/94			6/16/94			6/16/94			6/16/94			6/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0419	NA	U	0.0477	NA	U	NS		
Pu-238	PCI/G	0.113	0.037	J	0.232	0.0618	J	NS			NS			0.116	3.51E-02	J
Pu-239/240	PCI/G	0.0568	0.0252	J	0.0306	NA	UJ	NS			NS			0.0229	NA	UJ
Pu-242	PCI/G	0.00945	0.00953	J	0.00767	NA	UJ	NS			NS			0.0177	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTB304			RTB312			RUB301			RUB302			RVB301		
		902-RTB304			902-RTB312			902-RUB301			902-RUB302			902-RVB301		
		3226458 REG			3226459 REG			3211212 REG			3211213 REG			3210701 REG		
		6/16/94			06/16/94DUPE			5/9/94			5/9/94			5/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0494	NA	U	NS			NS			NS		
Pu-238	PCI/G	0.0353	0.0246	J	NS			0.267	0.107	J	0.125	0.0539	J	0.0627	3.30E-02	U
Pu-239/240	PCI/G	0.0206	NA	UJ	NS			0.0173	NA	UJ	0.0307	NA	UJ	0.00654	NA	U
Pu-242	PCI/G	0.00597	NA	UJ	NS			0.0469	NA	UJ	0.0113	NA	UJ	0.0178	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHEAST																
		RVB302			RXB301			RXB302			RYB301			RYB302		
		902-RVB302			902-RXB301			902-RXB302			902-RYB301			902-RYB302		
		3210702 REG			3211247 REG			3211248 REG			3216959 REG			3216960 REG		
		5/6/94			5/10/94			5/10/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			0.104	NA	U	0.113	NA	U
Pu-238	PCI/G	0.0626	0.0275	U	0.0672	0.0303		0.0994	0.0371		NS			NS		
Pu-239/240	PCI/G	0.0154	NA	U	0.0177	NA	U	0.0198	NA	U	NS			NS		
Pu-242	PCI/G	0.00566	NA	U	0.00651	NA	U	0.025	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RYB303			RYB304		
		902-RYB303			902-RYB304		
		3216961 REG			3216962 REG		
		5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val
Radiological	**Units**						
Tritium	PCI/G	NS			NS		
Pu-238	PCI/G	0.0344	0.0211		0.0432	0.0207	
Pu-239/240	PCI/G	0.0127	NA	U	0.00692	0.00698	
Pu-242	PCI/G	0.00466	NA	U	0.00469	NA	U
Th-228	PCI/G	NS			NS		
Th-230	PCI/G	NS			NS		
Th-232	PCI/G	NS			NS		
U-234	PCI/G	NS			NS		
U-235	PCI/G	NS			NS		
U-238	PCI/G	NS			NS		
Am-241	PCI/G	NS			NS		
Bi-207	PCI/G	NS			NS		
Bi-210m	PCI/G	NS			NS		
Co-60	PCI/G	NS			NS		
Cs-137	PCI/G	NS			NS		
K-40	PCI/G	NS			NS		
Ra-226	PCI/G	NS			NS		
Sr-90	PCI/G	NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST									
		RAC305		RAC306		RCC305		RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC306	
		J9878.D REG		J9879.D REG		H4259.D REG		H4260.D REG	
		4/12/94		4/12/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	12	U	12	U	11	U	11	U
Acetonitrile	UG/KG	122	U	116	U	111	U	112	U
Acrylonitrile	UG/KG	122	U	116	U	111	U	112	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	12	U	12	U	11	U	11	U
2-Butanone	UG/KG	12	U	12	U	11	U	11	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	12	U	12	U	11	U	11	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	12	UJ	12	UJ	11	U	11	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	23	U	22	U	22	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	12	U	12	U	11	U	11	U
2-Hexanone	UG/KG	12	U	12	U	11	U	11	U
Iodomethane	UG/KG	12	U	12	U	11	U	11	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	11	U	11	U
Methylene Chloride	UG/KG	4	J	4	J	6	UJ	6	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	2	J	6	UJ
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	2	J	11	U	11	U
Vinyl Acetate	UG/KG	12	U	12	U	11	U	11	U
Vinyl Chloride	UG/KG	12	U	12	U	11	U	11	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds						1		2	

DIRECTION FROM MOUND - NORTHEAST														
		RAC305		RAC306		RCC305		RCC305		RCC306			RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC305		902-RCC306			902-RCC306	
		G0501747.D REG		G0601748.D REG		A0501794.D DIL		A1601783.D REG		A0601795.D DIL			A1701784.D REG	
		4/12/94		4/12/94		6/8/94		6/8/94		6/8/94			6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val		Result	Val
Semi-volatile Organics	Units											Units		
Acenaphthene	UG/KG	44	J	390	UJ	260	J	280	J	220	J	UG/KG	200	J
Acenaphthylene	UG/KG	410	UJ	390	UJ	1500	U	67	J	1500	U	UG/KG	110	J
Anthracene	UG/KG	410	UJ	390	UJ	300	J	280	J	340	J	UG/KG	260	J
Benzo(a)anthracene	UG/KG	120	J	100	J	2200		2500		1900	J	UG/KG	1800	
Benzo(a)pyrene	UG/KG	130	J	100	J	2300		2000		2200	J	UG/KG	1800	
Benzo(b)fluoranthene	UG/KG	230	J	180	J	4000		2400		2400	J	UG/KG	2000	
Benzo(g,h,i)perylene	UG/KG	93	J	43	J	1400	J	1300		1400	J	UG/KG	1200	
Benzo(k)fluoranthene	UG/KG	410	UJ	390	UJ	1500	U	1400	J	1700	J	UG/KG	1400	J
Benzoic Acid	UG/KG	2000	UJ	72	J	7200	U	48	J	7200	U	UG/KG	50	J
Benzyl Alcohol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Benzyl-4-Chlorophenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
bis(2-Chloroethoxy)methane	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
bis(2-Chloroethyl)ether	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
bis(2-Ethylhexyl)phthalate	UG/KG	44	J	390	UJ	1500	U	150	J	1500	U	UG/KG	130	J
4-Bromophenyl-phenylether	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Butylbenzylphthalate	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Carbazole	UG/KG	410	UJ	390	UJ	240	J	230	J	290	J	UG/KG	250	J
4-Chloro-3-methylphenol	UG/KG	47	J	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
4-Chloroaniline	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Chloronaphthalene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Chlorophenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
4-Chlorophenyl-phenylether	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Chrysene	UG/KG	200	J	160	J	2800		2600		2600	J	UG/KG	2100	
Di-n-butylphthalate	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Di-n-octylphthalate	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Dibenzo(a,h)anthracene	UG/KG	410	UJ	390	UJ	1500	U	670		1500	U	UG/KG	560	
Dibenzofuran	UG/KG	410	UJ	390	UJ	1500	U	92	J	1500	U	UG/KG	88	J
1,2-Dichlorobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
1,3-Dichlorobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
1,4-Dichlorobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
3,3'-Dichlorobenzidine	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2,4-Dichlorophenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Diethylphthalate	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2,4-Dimethylphenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Dimethylphthalate	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
2,4-Dinitrophenol	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
2,4-Dinitrotoluene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2,6-Dinitrotoluene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Fluoranthene	UG/KG	290	J	250	J	5200		3300		4700	J	UG/KG	2800	
Fluorene	UG/KG	410	UJ	390	UJ	200	J	250	J	210	J	UG/KG	230	J
Hexachlorobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Hexachlorobutadiene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Hexachlorocyclopentadiene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST														
		RAC305		RAC306		RCC305		RCC305		RCC306			RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC305		902-RCC306			902-RCC306	
		G0501747.D REG		G0601748.D REG		A0501794.D DIL		A1601783.D REG		A0601795.D DIL			A1701784.D REG	
		4/12/94		4/12/94		6/8/94		6/8/94		6/8/94			6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val		Result	Val
Semi-volatile Organics	Units											Units		
Hexachloroethane	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Indeno(1,2,3-c,d)pyrene	UG/KG	87	J	59	J	1500		1400		1500	J	UG/KG	1200	
Isophorone	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Methylnaphthalene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Methylphenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
4-Methylphenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
N-Nitroso-di-n-propylamine	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
N-Nitrosodiphenylamine	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Naphthalene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Nitroaniline	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
3-Nitroaniline	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
4-Nitroaniline	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
Nitrobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2-Nitrophenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
4-Nitrophenol	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
2,2'-oxybis(1-Chloropropane)	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Pentachlorophenol	UG/KG	46	R	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
Phenanthrene	UG/KG	100	J	95	J	1300	J	1300		1500	J	UG/KG	1100	
Phenol	UG/KG	65	R	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Pyrene	UG/KG	280	J	190	J	4100		4400		3700	J	UG/KG	3400	
1,2,4-Trichlorobenzene	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
2,4,5-Trichlorophenol	UG/KG	1000	UJ	970	UJ	3600	U	880	U	3600	U	UG/KG	900	U
2,4,6-Trichlorophenol	UG/KG	410	UJ	390	UJ	1500	U	370	U	1500	U	UG/KG	370	U
Tentatively Identified Compounds		20		21		30		30		28			30	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST									
		RAC305		RAC306		RCC305		RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC306	
		34797-01 REG		34797-02 REG		36046-09 REG		36046-10 REG	
		4/12/94		4/12/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.79	U	0.38	U	75	U	76	U
alpha-BHC	UG/KG	0.79	U	0.38	U	75	U	76	U
alpha-Chlordane	UG/KG	0.9	J	0.38	U	770	J	700	J
Aroclor 1232	UG/KG	15	U	7.3	U	1500	U	1500	U
Aroclor-1016	UG/KG	15	U	7.3	U	1500	U	1500	U
Aroclor-1221	UG/KG	31	U	15	U	3000	U	3000	U
Aroclor-1242	UG/KG	15	U	7.3	U	1500	U	1500	U
Aroclor-1248	UG/KG	15	U	7.3	U	1500	U	1500	U
Aroclor-1254	UG/KG	15	U	7.3	U	1500	U	1500	U
Aroclor-1260	UG/KG	15	U	7.3	U	1500	U	1500	U
beta-BHC	UG/KG	0.79	U	0.38	U	75	U	76	U
4,4'-DDD	UG/KG	1.5	U	0.73	U	150	U	150	U
4,4'-DDE	UG/KG	1.5	U	0.73	U	150	U	150	U
4,4'-DDT	UG/KG	1.5	U	0.73	U	150	UJ	150	UJ
delta-BHC	UG/KG	0.79	U	0.25	J	75	U	76	U
Dieldrin	UG/KG	1.5	U	0.73	U	150	U	150	U
Endosulfan I	UG/KG	0.79	U	0.38	U	75	U	76	U
Endosulfan II	UG/KG	1.5	U	0.73	U	150	U	150	U
Endosulfan Sulfate	UG/KG	1.5	U	0.73	U	150	U	150	U
Endrin	UG/KG	1.5	U	0.73	U	150	U	150	U
Endrin Aldehyde	UG/KG	1.5	U	0.73	U	150	U	150	U
Endrin Ketone	UG/KG	1.5	U	0.73	U	150	U	150	U
gamma-BHC (Lindane)	UG/KG	0.79	U	0.38	U	75	U	76	U
gamma-Chlordane	UG/KG	0.84	J	0.38	U	660	J	540	J
Heptachlor	UG/KG	0.79	U	0.38	U	75	U	76	U
Heptachlor Epoxide	UG/KG	0.79	U	0.38	U	160	J	300	J
p,p'-Methoxychlor	UG/KG	7.9	U	3.8	U	750	U	760	U
Toxaphene	UG/KG	79	U	38	U	7500	U	7600	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST									
		RAC305		RAC306		RCC305		RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC306	
		3479801 REG		3479802 REG		3604809 REG		3604810 REG	
		4/12/94		4/12/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	6160		9330		7300		7600	
Antimony	MG/KG	0.75	UJ	0.72	UJ	0.69	R	0.7	R
Arsenic	MG/KG	5.2		6.4		61.9		32.8	
Barium	MG/KG	54		56.1		59		65.2	
Beryllium	MG/KG	0.37		0.44		0.43		0.47	
Bismuth	MG/KG	6.2	U	6	U	52.4		55.1	
Cadmium	MG/KG	0.56	U	0.54	U	0.51	U	0.52	U
Calcium	MG/KG	81100		67300		64800		63600	
Chromium	MG/KG	11.7		13.6		11.8		10.5	
Cobalt	MG/KG	8		7.3		7.6		8.8	
Copper	MG/KG	16		13.7		27.8		26.6	
Cyanide	MG/KG	0.61	U	0.58	U	0.55	U	0.56	U
Iron	MG/KG	15300		15000		16600		17500	
Lead	MG/KG	163		33.4		28.8		24.9	
Magnesium	MG/KG	39900		28600		34400		25000	
Manganese	MG/KG	469		480		496		511	
Mercury	MG/KG	0.12	U	0.12	U	0.11	U	0.11	U
Nickel	MG/KG	15.3		13.3		16.9		18.3	
Potassium	MG/KG	859		808		1220		1110	
Selenium	MG/KG	1.1	U	1.1	U	1	U	1	U
Silver	MG/KG	1.2	U	1.1	U	1.1	U	1.1	U
Sodium	MG/KG	809	J	722	J	418	U	426	U
Thallium	MG/KG	0.87	U	0.84	U	0.8	U	0.81	U
Vanadium	MG/KG	14.4		19.6		15.5		16.7	
Zinc	MG/KG	311		57.7		401		101	

		RAC305		RAC306		RCC305		RCC306	
		902-RAC305		902-RAC306		902-RCC305		902-RCC306	
		0347990001SA REG		0347990002SA REG		0360490009SA REG		0360490010SA REG	
		4/12/94		4/12/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	137	J	248	J	16.6	U	16.9	U
Fluoride	MG/KG	7.8		3.8		1.3	J	1.2	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.1		1.1		7.1		4.2	
Sulfate	MG/KG	30.3	U	39		27.7	UJ	28.2	UJ

DIRECTION FROM MOUND - NORTHEAST					
		RCC305		RCC306	
		902-RCC305		902-RCC306	
		0360490009SA REG		0360490010SA REG	
		6/8/94		6/8/94	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.28	U	0.28	U
1,3-Dinitrobenzene	UG/G	0.28	U	0.28	U
2,4-Dinitrotoluene	UG/G	0.28	U	0.28	U
2,6-Dinitrotoluene	UG/G	0.29	U	0.29	U
HMX	UG/G	2.4	U	2.5	U
Nitrobenzene	UG/G	0.29	U	0.29	U
PETN	UG/G	1.1	U	1.1	U
RDX	UG/G	1.1	U	1.1	U
TETRYL	UG/G	0.72	U	0.73	U
1,3,5-Trinitrobenzene	UG/G	0.28	U	0.28	U
2,4,6-Trinitrotoluene	UG/G	0.28	U	0.28	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST																
		RAC301			RAC302			RAC303			RAC304			RAC305		
		902-RAC301			902-RAC302			902-RAC303			902-RAC304			902-RAC305		
		3197403 REG			3197404 REG			3197405 REG			3197406 REG			3197407 REG		
		4/12/94			4/12/94			4/12/94			4/12/94			4/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.162	NA	U	0.0425	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0907	0.0245	J	1.12	0.169	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00847	NA	UJ	0.0119	0.00855	J	NS		
Pu-242	PCI/G	NS			NS			0.00311	NA	UJ	0.00402	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.519	0.241	J	NS			NS		
Th-230	PCI/G	NS			NS			1.27	0.357	J	NS			NS		
Th-232	PCI/G	NS			NS			0.718	0.242	J	NS			NS		
U-234	PCI/G	NS			NS			0.679	0.153	U	NS			NS		
U-235	PCI/G	NS			NS			0.0682	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.571	0.137	U	NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0729	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0196	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0211	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0246	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.27	4.04E-02	J
K-40	PCI/G	NS			NS			NS			NS			13.7	1.52E+00	J
Ra-226	PCI/G	NS			NS			NS			NS			0.575	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			1.02	NA	U

		RAC306			RBC301			RBC302			RBC303			RBC304		
		902-RAC306			902-RBC301			902-RBC302			902-RBC303			902-RBC304		
		3197408 REG			3202125 REG			3202126 REG			3202103 REG			3202102 REG		
		4/12/94			4/21/94			4/21/94			4/21/94			4/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.12	NA	U	0.228	0.0941		NS			NS		
Pu-238	PCI/G	NS			NS			NS			1.37	0.253	J	0.248	5.32E-02	
Pu-239/240	PCI/G	NS			NS			NS			0.0357	NA	UJ	0.0136	NA	U
Pu-242	PCI/G	NS			NS			NS			0.0131	NA	UJ	0.00499	NA	U
Th-228	PCI/G	NS			NS			NS			1.29	0.207	J	NS		
Th-230	PCI/G	NS			NS			NS			1.71	0.259	J	NS		
Th-232	PCI/G	NS			NS			NS			1.36	0.216	J	NS		
U-234	PCI/G	NS			NS			NS			1.3	0.206		NS		
U-235	PCI/G	NS			NS			NS			0.0724	0.0332		NS		
U-238	PCI/G	NS			NS			NS			1.4	0.219		NS		
Am-241	PCI/G	0.0704	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0168	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0199	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0232	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0755	0.0205	J	NS			NS			NS			NS		
K-40	PCI/G	11.6	1.31	J	NS			NS			NS			NS		
Ra-226	PCI/G	0.489	NA	U	NS			NS			NS			NS		
Sr-90	PCI/G	0.912	NA	U	NS			NS			NS			NS		

DIRECTION FROM MOUND - NORTHEAST																
		RCC301			RCC302			RCC303			RCC304			RCC305		
		902-RCC301			902-RCC302			902-RCC303			902-RCC304			902-RCC305		
		3223013 REG			3223014 REG			3223015 REG			3223016 REG			3223017 REG		
		6/8/94			6/8/94			6/8/94			6/8/94			6/8/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0522	NA	U	0.0654	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.888	0.103	UJ	0.469	0.0542	U	NS		
Pu-239/240	PCI/G	NS			NS			0.0703	0.0209	UJ	0.0308	0.0102	U	NS		
Pu-242	PCI/G	NS			NS			0.0138	0.00878	J	0.00709	0.00526		NS		
Th-228	PCI/G	NS			NS			0.814	0.2		NS			NS		
Th-230	PCI/G	NS			NS			1.24	0.143		NS			NS		
Th-232	PCI/G	NS			NS			0.792	0.157		NS			NS		
U-234	PCI/G	NS			NS			0.772	0.134		NS			NS		
U-235	PCI/G	NS			NS			0.0551	0.0262		NS			NS		
U-238	PCI/G	NS			NS			0.948	0.157		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0707	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0202	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0228	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0262	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.266	3.63E-02	
K-40	PCI/G	NS			NS			NS			NS			14	1.56E+00	
Ra-226	PCI/G	NS			NS			NS			NS			2.23	5.66E-01	
Sr-90	PCI/G	NS			NS			NS			NS			0.512	NA	U

		RCC306			RGC301			RGC302			RGC303			RGC304		
		902-RCC306			902-RGC301			902-RGC302			902-RGC303			902-RGC304		
		3223018 REG			3204264 REG			3204265 REG			3204266 REG			3204267 REG		
		6/8/94			4/26/94			4/26/94			4/26/94			4/26/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0838	NA	U	0.125	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0342	NA	UJ	0.0308	1.33E-02	J
Pu-239/240	PCI/G	NS			NS			NS			0.021	NA	UJ	0.0071	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00771	NA	UJ	0.00261	NA	U
Th-228	PCI/G	NS			NS			NS			0.947	0.163		NS		
Th-230	PCI/G	NS			NS			NS			1.65	0.252		NS		
Th-232	PCI/G	NS			NS			NS			0.999	0.169		NS		
U-234	PCI/G	NS			NS			NS			0.906	0.149		NS		
U-235	PCI/G	NS			NS			NS			0.0197	NA	U	NS		
U-238	PCI/G	NS			NS			NS			0.989	0.159		NS		
Am-241	PCI/G	0.0815	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0194	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0219	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0247	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.558	0.0686		NS			NS			NS			NS		
K-40	PCI/G	14.7	1.56		NS			NS			NS			NS		
Ra-226	PCI/G	1.96	0.514		NS			NS			NS			NS		
Sr-90	PCI/G	0.635	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST																
		RGC313			RHC301			RHC302			RHC303			RHC304		
		902-RGC313			902-RHC301			902-RHC302			902-RHC303			902-RHC304		
		3204272 REG			3204258 REG			3204259 REG			3204261 REG			3204262 REG		
		04/26/94DUPE			4/26/94			4/26/94			4/26/94			4/26/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			1.11	0.116	J	0.125	0.0524	J	NS			NS		
Pu-238	PCI/G	0.114	0.0332		NS			NS			0.337	0.0574	J	0.0677	1.76E-02	J
Pu-239/240	PCI/G	0.0231	0.0131		NS			NS			0.0167	0.00913	J	0.00968	5.96E-03	J
Pu-242	PCI/G	0.00841	NA	U	NS			NS			0.00283	NA	U	0.00238	NA	U
Th-228	PCI/G	0.951	0.23	J	NS			NS			NS			NS		
Th-230	PCI/G	1.82	0.352	J	NS			NS			NS			NS		
Th-232	PCI/G	0.914	0.22	J	NS			NS			NS			NS		
U-234	PCI/G	0.937	0.152		NS			NS			NS			NS		
U-235	PCI/G	0.0377	0.022		NS			NS			NS			NS		
U-238	PCI/G	0.894	0.147		NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RHC312			RHC313			RJC301			RJC302			RJC303		
		902-RHC312			902-RHC313			902-RJC301			902-RJC302			902-RJC303		
		3204260 REG			3204263 REG			REG			REG			3210514 REG		
		04/26/94DUPE			04/26/94DUPE			5/5/94			5/5/94			5/5/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.208	0.054	J	NS			0.0597	NA	U	0.0539	NA	U	NS		
Pu-238	PCI/G	NS			0.496	0.108	J	NS			NS			0.0588	NA	UJ
Pu-239/240	PCI/G	NS			0.0349	0.0223	J	NS			NS			0.0135	1.57E-02	J
Pu-242	PCI/G	NS			0.00786	NA	UJ	NS			NS			0.0121	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			0.57	1.93E-01	J
Th-230	PCI/G	NS			NS			NS			NS			1.27	3.04E-01	J
Th-232	PCI/G	NS			NS			NS			NS			0.485	1.67E-01	J
U-234	PCI/G	NS			NS			NS			NS			0.805	1.50E-01	U
U-235	PCI/G	NS			NS			NS			NS			0.0371	2.39E-02	U
U-238	PCI/G	NS			NS			NS			NS			0.802	1.49E-01	U
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND - NORTHEAST																
		RJC304			RKC301			RKC302			RKC303			RKC304		
		902-RJC304			902-RKC301			902-RKC302			902-RKC303			902-RKC304		
		3210515 REG			3222407 REG			3222408 REG			3222409 REG			3222410 REG		
		5/5/94			6/3/94			6/3/94			6/3/94			6/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0274	NA	U	0.0288	NA	U	NS			NS		
Pu-238	PCI/G	0.0447	NA	UJ	NS			NS			0.203	0.0395		0.0831	2.19E-02	
Pu-239/240	PCI/G	0.0914	NA	UJ	NS			NS			0.0195	0.0112		0.00832	6.64E-03	
Pu-242	PCI/G	0.0447	NA	UJ	NS			NS			0.0031	NA	U	0.00282	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RMC301			RMC302			RMC303			RMC304			RNC301		
		902-RMC301			902-RMC302			902-RMC303			902-RMC304			902-RNC301		
		3207717 REG			3207718 REG			3207719 REG			3207720 REG			3226438 REG		
		5/3/94			5/3/94			5/3/94			5/3/94			6/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.224	NA	U	0.166	NA	U	NS			NS			0.457	NA	U
Pu-238	PCI/G	NS			NS			0.172	0.052	J	0.111	0.0787	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0185	0.0153	J	0.048	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00834	NA	UJ	0.0176	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.79	0.131	J	NS			NS		
Th-230	PCI/G	NS			NS			2.07	0.285	J	NS			NS		
Th-232	PCI/G	NS			NS			0.892	0.142	J	NS			NS		
U-234	PCI/G	NS			NS			0.823	0.137		NS			NS		
U-235	PCI/G	NS			NS			0.0192	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.927	0.15		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST																
		RNC302			RNC303			RNC304			RPC301			RPC302		
		902-RNC302			902-RNC303			902-RNC304			902-RPC301			902-RPC302		
		3226439 REG			3226440 REG			3226441 REG			3216930 REG			3216931 REG		
		6/16/94			6/16/94			6/16/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0374	NA	U	NS			NS			0.0754	NA	U	0.081	NA	U
Pu-238	PCI/G	NS			0.0969	0.0448		0.0889	0.0366	J	NS			NS		
Pu-239/240	PCI/G	NS			0.0286	NA	U	0.0162	0.0133	J	NS			NS		
Pu-242	PCI/G	NS			0.036	NA	U	0.0073	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPC303			RPC304			RRC301			RRC302			RRC303		
		902-RPC303			902-RPC304			902-RRC301			902-RRC302			902-RRC303		
		3216932 REG			3216933 REG			3226442 REG			3226443 REG			3226444 REG		
		5/19/94			5/19/94			6/16/94			6/16/94			6/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.00358	NA	U	0.0559	NA	U	NS		
Pu-238	PCI/G	0.164	0.0384		0.154	0.0405		NS			NS			0.162	2.92E-02	
Pu-239/240	PCI/G	0.00906	0.00749		0.0159	NA	U	NS			NS			0.0158	8.00E-03	
Pu-242	PCI/G	0.0111	NA	U	0.0126	NA	U	NS			NS			0.00689	5.24E-03	
Th-228	PCI/G	0.786	0.14		NS			NS			NS			NS		
Th-230	PCI/G	1.48	0.225		NS			NS			NS			NS		
Th-232	PCI/G	0.775	0.137		NS			NS			NS			NS		
U-234	PCI/G	0.802	0.15		NS			NS			NS			NS		
U-235	PCI/G	0.0536	0.0314	J	NS			NS			NS			NS		
U-238	PCI/G	0.775	0.147		NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND - NORTHEAST																
		RRC304			RTC301			RTC302			RTC303			RTC304		
		902-RRC304			902-RTC301			902-RTC302			902-RTC303			902-RTC304		
		3226445 REG			3229409 REG			3229410 REG			3229411 REG			3229412 REG		
		6/16/94			6/23/94			6/23/94			6/23/94			6/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0429	NA	U	0.0385	NA	U	NS			NS		
Pu-238	PCI/G	0.525	0.0897	J	NS			NS			0.116	0.0342		0.0905	3.22E-02	
Pu-239/240	PCI/G	0.0163	0.0121	J	NS			NS			0.0118	NA	U	0.0179	NA	U
Pu-242	PCI/G	0.00489	NA	UJ	NS			NS			0.0118	NA	U	0.0179	NA	U
Th-228	PCI/G	NS			NS			NS			0.842	0.159		NS		
Th-230	PCI/G	NS			NS			NS			1.4	0.226		NS		
Th-232	PCI/G	NS			NS			NS			0.705	0.138		NS		
U-234	PCI/G	NS			NS			NS			0.805	0.137		NS		
U-235	PCI/G	NS			NS			NS			0.0341	NA	U	NS		
U-238	PCI/G	NS			NS			NS			0.885	0.148		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RUC301			RUC302			RUC303			RUC304			RUC311		
		902-RUC301			902-RUC302			902-RUC303			902-RUC304			902-RUC311		
		3211216 REG			3211218 REG			3211219 REG			3211220 REG			3211217 REG		
		5/9/94			5/9/94			5/9/94			5/9/94			05/09/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0885	NA	U	0.105	NA	U	NS		
Pu-238	PCI/G	0.268	0.0695	J	0.124	0.0571		NS			NS			0.229	6.70E-02	J
Pu-239/240	PCI/G	0.0233	0.0167	J	0.0285	NA	U	NS			NS			0.0209	BA	UJ
Pu-242	PCI/G	0.00788	NA	UJ	0.036	NA	U	NS			NS			0.00767	BA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHEAST																
		RVC301			RVC302			RYC301			RYC302			RYC312		
		902-RVC301			902-RVC302			902-RYC301			902-RYC302			902-RYC312		
		3210710 REG			3210711 REG			3207137 REG			3207138 REG			3207139 REG		
		5/6/94			5/6/94			4/29/94			4/29/94			04/29/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0625	0.0299	U	0.0957	0.0441	UJ	0.00816	NA	U	0.0272	0.0118		0.0201	NA	UJ
Pu-239/240	PCI/G	0.0169	0.0129		0.0294	NA	UJ	0.0141	0.00724		0.0107	0.0061		0.012	8.48E-03	J
Pu-242	PCI/G	0.00652	NA	U	0.0108	NA	UJ	0.00238	NA	U	0.00608	NA	U	0.00326	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST									
		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		J9880.D REG		J9881.D REG		J1093.D REG		J1074.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units								
Acetone	UG/KG	13	U	13	U	12	U	12	U
Acetonitrile	UG/KG	126	U	130	U	115	U	115	U
Acrylonitrile	UG/KG	126	U	130	U	115	U	115	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	13	U	13	U	12	U	12	U
2-Butanone	UG/KG	13	U	13	U	12	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	13	U	13	U	12	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	13	UJ	13	UJ	12	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	25	U	26	U	23	U	23	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	13	U	13	U	12	U	3	J
2-Hexanone	UG/KG	13	U	13	U	12	U	12	U
Iodomethane	UG/KG	13	U	13	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	13	U	12	U	12	U
Methylene Chloride	UG/KG	5	J	10		12	U	12	U
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	3	J	3	J	12	U	12	U
Vinyl Acetate	UG/KG	13	U	13	U	12	U	12	U
Vinyl Chloride	UG/KG	13	U	13	U	12	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds								1	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST									
		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		G0701749.D REG		G0801750.D REG		G1201392.D REG		G1301393.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	420	UJ	430	UJ	380	U	380	U
Acenaphthylene	UG/KG	420	UJ	430	UJ	380	U	380	U
Anthracene	UG/KG	420	UJ	430	UJ	380	U	380	U
Benzo(a)anthracene	UG/KG	140	J	430	UJ	130	J	380	U
Benzo(a)pyrene	UG/KG	170	J	430	UJ	200	J	380	U
Benzo(b)fluoranthene	UG/KG	170	J	430	UJ	230	J	380	U
Benzo(g,h,i)perylene	UG/KG	100	J	430	UJ	130	J	380	U
Benzo(k)fluoranthene	UG/KG	200	J	430	UJ	220	J	380	U
Benzoic Acid	UG/KG	88	J	75	J	81	J	42	J
Benzyl Alcohol	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	420	UJ	430	UJ	380	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	420	UJ	430	UJ	380	U	380	U
bis(2-Chloroethyl)ether	UG/KG	420	UJ	430	UJ	380	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	UJ	430	UJ	2000		110	J
4-Bromophenyl-phenylether	UG/KG	420	UJ	430	UJ	380	U	380	U
Butylbenzylphthalate	UG/KG	420	UJ	430	UJ	380	U	72	J
Carbazole	UG/KG	420	UJ	430	UJ	380	U	380	U
4-Chloro-3-methylphenol	UG/KG	420	UJ	430	UJ	380	U	380	U
4-Chloroaniline	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Chloronaphthalene	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Chlorophenol	UG/KG	420	UJ	430	UJ	380	U	380	U
4-Chlorophenyl-phenylether	UG/KG	420	UJ	430	UJ	380	U	380	U
Chrysene	UG/KG	220	J	430	UJ	300	J	380	U
Di-n-butylphthalate	UG/KG	420	UJ	430	UJ	380	U	130	J
Di-n-octylphthalate	UG/KG	420	UJ	430	UJ	66	J	380	U
Dibenzo(a,h)anthracene	UG/KG	420	UJ	430	UJ	380	U	380	U
Dibenzofuran	UG/KG	420	UJ	430	UJ	380	U	380	U
1,2-Dichlorobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
1,3-Dichlorobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
1,4-Dichlorobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
3,3'-Dichlorobenzidine	UG/KG	420	UJ	430	UJ	380	U	380	U
2,4-Dichlorophenol	UG/KG	420	UJ	430	UJ	380	U	380	U
Diethylphthalate	UG/KG	420	UJ	430	UJ	380	U	380	U
2,4-Dimethylphenol	UG/KG	420	UJ	430	UJ	380	U	380	U
Dimethylphthalate	UG/KG	420	UJ	430	UJ	380	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	UJ	1100	UJ	960	U	960	U
2,4-Dinitrophenol	UG/KG	1000	UJ	1100	UJ	960	U	960	U
2,4-Dinitrotoluene	UG/KG	420	UJ	430	UJ	380	U	380	U
2,6-Dinitrotoluene	UG/KG	420	UJ	430	UJ	380	U	380	U
Fluoranthene	UG/KG	320	J	430	UJ	350	J	380	U
Fluorene	UG/KG	420	UJ	430	UJ	380	U	380	U
Hexachlorobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
Hexachlorobutadiene	UG/KG	420	UJ	430	UJ	380	U	380	U
Hexachlorocyclopentadiene	UG/KG	420	UJ	430	UJ	380	U	380	U
Hexachloroethane	UG/KG	420	UJ	430	UJ	380	U	380	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST									
		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		G0701749.D REG		G0801750.D REG		G1201392.D REG		G1301393.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Indeno(1,2,3-c,d)pyrene	UG/KG	120	J	430	UJ	130	J	380	U
Isophorone	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Methylnaphthalene	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Methylphenol	UG/KG	420	UJ	430	UJ	380	U	380	U
4-Methylphenol	UG/KG	420	UJ	430	UJ	380	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	420	UJ	430	UJ	380	U	380	U
N-Nitrosodiphenylamine	UG/KG	420	UJ	430	UJ	380	U	380	U
Naphthalene	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Nitroaniline	UG/KG	1000	UJ	1100	UJ	960	U	960	U
3-Nitroaniline	UG/KG	1000	UJ	1100	UJ	960	U	960	U
4-Nitroaniline	UG/KG	1000	UJ	1100	UJ	960	U	960	U
Nitrobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
2-Nitrophenol	UG/KG	420	UJ	430	UJ	380	U	380	U
4-Nitrophenol	UG/KG	1000	UJ	1100	UJ	960	U	960	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	UJ	430	UJ	380	U	380	U
Pentachlorophenol	UG/KG	1000	UJ	1100	UJ	960	U	960	U
Phenanthrene	UG/KG	76	J	430	UJ	190	J	380	U
Phenol	UG/KG	420	UJ	430	UJ	380	U	380	U
Pyrene	UG/KG	260	J	430	UJ	280	J	380	U
1,2,4-Trichlorobenzene	UG/KG	420	UJ	430	UJ	380	U	380	U
2,4,5-Trichlorophenol	UG/KG	1000	UJ	1100	UJ	960	U	960	U
2,4,6-Trichlorophenol	UG/KG	420	UJ	430	UJ	380	U	380	U
Tentatively Identified Compounds		25		17		25		21	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST									
		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		34797-03 REG		34797-04 REG		35929-07 REG		35929-08 REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
alpha-BHC	UG/KG	0.38	UJ	0.43	UJ	0.39	UJ	0.39	UJ
alpha-Chlordane	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
Aroclor 1232	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
Aroclor-1016	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
Aroclor-1221	UG/KG	15	UJ	17	UJ	15	U	15	UJ
Aroclor-1242	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
Aroclor-1248	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
Aroclor-1254	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
Aroclor-1260	UG/KG	7.4	UJ	8.3	UJ	7.6	U	7.6	UJ
beta-BHC	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
4,4'-DDD	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
4,4'-DDE	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
4,4'-DDT	UG/KG	0.74	UJ	0.83	UJ	0.86	J	0.76	UJ
delta-BHC	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
Dieldrin	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
Endosulfan I	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
Endosulfan II	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
Endosulfan Sulfate	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
Endrin	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
Endrin Aldehyde	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
Endrin Ketone	UG/KG	0.74	UJ	0.83	UJ	0.76	U	0.76	UJ
gamma-BHC (Lindane)	UG/KG	0.38	UJ	0.43	UJ	0.39	UJ	0.39	UJ
gamma-Chlordane	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
Heptachlor	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
Heptachlor Epoxide	UG/KG	0.38	UJ	0.43	UJ	0.39	U	0.39	UJ
p,p'-Methoxychlor	UG/KG	3.8	UJ	4.3	UJ	4.2	J	3.9	UJ
Toxaphene	UG/KG	38	UJ	43	UJ	39	U	39	UJ

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST									
		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		3479803 REG		3479804 REG		3593007 REG		3593008 REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	14700		24500		7080		13500	
Antimony	MG/KG	0.79	UJ	0.8	UJ	0.71	U	0.72	U
Arsenic	MG/KG	9		12.8		38.1	J	14	J
Barium	MG/KG	71.8		102		51.7		87.8	
Beryllium	MG/KG	0.7		1.1		0.44		0.92	
Bismuth	MG/KG	6.5	U	6.6	U	31.6		39	
Cadmium	MG/KG	0.58	U	0.6	U	0.53	U	0.53	U
Calcium	MG/KG	6270		5240		13000		3150	
Chromium	MG/KG	19.1		27.3		9.2		22.2	
Cobalt	MG/KG	11.1		20.4		6.4		19.3	
Copper	MG/KG	20		25.1		17.5		31.4	
Cyanide	MG/KG	0.63	U	0.65	U	0.57	U	0.58	U
Iron	MG/KG	25800		38800		14400	J	30200	J
Lead	MG/KG	39		23.2		28.2		16.5	
Magnesium	MG/KG	3430		3890		6950		3440	
Manganese	MG/KG	483		733		310	J	472	J
Mercury	MG/KG	0.13	U	0.13	U	0.11	U	0.12	U
Nickel	MG/KG	20.7		26.6		11.8		25.8	
Potassium	MG/KG	1380		1510		843		1100	
Selenium	MG/KG	1.2	U	1.2	U	1.1	U	1.5	
Silver	MG/KG	1.2	U	1.2	U	1.1	U	1.1	U
Sodium	MG/KG	483	J	489	U	433	U	436	U
Thallium	MG/KG	0.91	U	0.93	U	0.82	U	0.83	U
Vanadium	MG/KG	27.7		40		17.1		30.1	
Zinc	MG/KG	118		76.1		973		85.4	

		RAD305		RAD306		RCD305		RCD306	
		902-RAD305		902-RAD306		902-RCD305		902-RCD306	
		0347990004SA REG		0347990005SA REG		0357290014SA REG		0357290015SA REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	19	UJ	19.4	UJ	17.2	U	17.3	U
Fluoride	MG/KG	1.5		2.7		0.57	U	1.1	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.93		0.65	U	3.7		0.58	U
Sulfate	MG/KG	31.7	U	32.3	U	88.2		646	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RAD301			RAD302			RAD303			RAD304			RAD305		
		902-RAD301			902-RAD302			902-RAD303			902-RAD304			902-RAD305		
		3197412 REG			3197413 REG			3197414 REG			3197415 REG			3197416 REG		
		4/13/94			4/13/94			4/13/94			4/13/94			4/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	1.73E-01	NA	U	2.09E-01	1.13E-01										
Pu-238	PCI/G							3.84E+00	5.05E-01		5.80E-01	9.84E-02	J			
Pu-239/240	PCI/G							3.15E-02	1.26E-02		6.35E-03	6.41E-03	J			
Pu-242	PCI/G							2.85E-03	NA	U	4.30E-03	NA	UJ			
Th-228	PCI/G							9.89E-01	6.39E-01	J						
Th-230	PCI/G							1.43E+00	6.92E-01	J						
Th-232	PCI/G							1.09E+00	5.46E-01	J						
U-234	PCI/G							8.59E-01	1.64E-01							
U-235	PCI/G							5.12E-02	3.03E-02							
U-238	PCI/G							9.66E-01	1.80E-01							
Am-241	PCI/G													1.51E-01	NA	U
Bi-207	PCI/G													2.18E-02	NA	U
Bi-210m	PCI/G													2.58E-02	NA	U
Co-60	PCI/G													2.83E-02	NA	U
Cs-137	PCI/G													4.92E-01	6.25E-02	J
K-40	PCI/G													2.12E+01	2.29E+00	J
Ra-226	PCI/G													2.24E+00	5.76E-01	
Sr-90	PCI/G													9.89E-01	NA	U

		RAD306			RBD301			RBD302			RBD303			RBD304		
		902-RAD306			902-RBD301			902-RBD302			902-RBD303			902-RBD304		
		3197417 REG			3213705 REG			3213706 REG			3213707 REG			3213708 REG		
		4/13/94			5/13/94			5/13/94			5/13/94			5/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G				3.98E-01	8.24E-02	J	1.09E-01	NA	U						
Pu-238	PCI/G										1.31E+00	2.16E-01		3.98E-01	1.05E-01	J
Pu-239/240	PCI/G										2.97E-02	2.02E-02		1.15E-02	NA	UJ
Pu-242	PCI/G										6.69E-03	NA	U	1.15E-02	NA	UJ
Th-228	PCI/G										1.09E+00	1.72E-01				
Th-230	PCI/G										1.42E+00	2.11E-01				
Th-232	PCI/G										1.01E+00	1.61E-01				
U-234	PCI/G										9.31E-01	1.70E-01				
U-235	PCI/G										1.45E-01	5.35E-02				
U-238	PCI/G										9.74E-01	1.75E-01				
Am-241	PCI/G	9.83E-02	NA	U												
Bi-207	PCI/G	2.42E-02	NA	U												
Bi-210m	PCI/G	2.71E-02	NA	U												
Co-60	PCI/G	3.13E-02	NA	U												
Cs-137	PCI/G	3.06E-02	NA	U												
K-40	PCI/G	2.40E+01	2.49E+00	J												
Ra-226	PCI/G	3.49E+00	6.83E-01													
Sr-90	PCI/G	1.58E+00	6.97E-01													

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RCD301			RCD302			RCD303			RCD304			RCD305		
		902-RCD301			902-RCD302			902-RCD303			902-RCD304			902-RCD305		
		3222444 REG			3222445 REG			3222446 REG			3222447 REG			3222448 REG		
		6/6/94			6/6/94			6/6/94			6/6/94			6/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	8.04E-02	NA	U	7.50E-02	NA	U									
Pu-238	PCI/G							6.91E-01	8.68E-02	R	5.60E-01	1.01E-01	R			
Pu-239/240	PCI/G							3.76E-02	1.20E-02		2.72E-02	1.67E-02	J			
Pu-242	PCI/G							6.02E-03	NA	U	1.82E-02	NA	UJ			
Th-228	PCI/G							8.75E-01	1.47E-01							
Th-230	PCI/G							1.12E+00	1.75E-01							
Th-232	PCI/G							8.75E-01	1.47E-01							
U-234	PCI/G							8.06E-01	1.40E-01							
U-235	PCI/G							3.92E-02	2.23E-02							
U-238	PCI/G							9.23E-01	1.55E-01							
Am-241	PCI/G													9.22E-02	NA	U
Bi-207	PCI/G													2.16E-02	NA	U
Bi-210m	PCI/G													2.55E-02	NA	U
Co-60	PCI/G													2.95E-02	NA	U
Cs-137	PCI/G													5.86E-01	7.53E-02	
K-40	PCI/G													1.66E+01	1.78E+00	
Ra-226	PCI/G													6.06E-01	NA	U
Sr-90	PCI/G													4.93E-01	NA	U

		RCD306			RDD301			RDD302			RDD303			RDD304		
		902-RCD306			902-RDD301			902-RDD302			902-RDD303			902-RDD304		
		3222449 REG			3213701 REG			3213702 REG			3213703 REG			3213704 REG		
		6/6/94			5/13/94			5/13/94			5/13/94			5/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G				9.15E-02	NA	U	9.41E-02	NA	U						
Pu-238	PCI/G										1.89E+00	3.38E-01		2.74E-01	7.06E-02	J
Pu-239/240	PCI/G										3.13E-02	2.26E-02		2.13E-02	NA	UJ
Pu-242	PCI/G										1.06E-02	NA	U	7.82E-03	NA	UJ
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G	9.15E-02	NA	U												
Bi-207	PCI/G	2.67E-02	NA	U												
Bi-210m	PCI/G	3.06E-02	NA	U												
Co-60	PCI/G	3.22E-02	NA	U												
Cs-137	PCI/G	3.25E-02	2.78E-02													
K-40	PCI/G	2.06E+01	2.26E+00													
Ra-226	PCI/G	3.35E+00	7.29E-01													
Sr-90	PCI/G	5.29E-01	2.31E-01													

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RGD301			RGD302			RGD303			RGD304			RHD301		
		902-RGD301			902-RGD302			902-RGD303			902-RGD304			902-RHD301		
		3205307 REG			3205308 REG			3205309 REG			3205310 REG			3207105 REG		
		4/27/94			4/27/94			4/27/94			4/27/94			4/28/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	1.03E-01	NA	U	1.82E-01	NA	U							5.01E-02	NA	U
Pu-238	PCI/G							4.05E-01	8.34E-02	J	4.82E-02	NA	UJ			
Pu-239/240	PCI/G							1.60E-02	1.23E-02	J	2.52E-02	NA	UJ			
Pu-242	PCI/G							6.19E-03	NA	UJ	9.25E-03	NA	UJ			
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RHD302			RHD303			RHD304			RJD301			RJD302		
		902-RHD302			902-RHD303			902-RHD304			902-RJD301			902-RJD302		
		3207106 REG			3207107 REG			3207108 REG			3205709 REG			3205710 REG		
		4/28/94			4/28/94			4/28/94			4/28/94			4/28/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	1.25E-01	NA	U							1.31E-01	NA	U	7.95E-02	NA	U
Pu-238	PCI/G				8.11E-02	2.34E-02		7.15E-02	2.38E-02	J						
Pu-239/240	PCI/G				1.02E-02	NA	U	1.21E-02	NA	UJ						
Pu-242	PCI/G				2.97E-03	NA	U	9.58E-03	NA	UJ						
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RJD303			RJD304			RJD312			RJD314			RKD301		
		902-RJD303			902-RJD304			902-RJD312			902-RJD314			902-RKD301		
		3205712 REG			3205713 REG			3205711 REG			3205714 REG			3207109 REG		
		4/28/94			4/28/94			04/28/94DUPE			04/28/94DUPE			4/29/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G							8.67E-02	NA	U				7.26E-01	1.67E-01	
Pu-238	PCI/G	9.78E-01	1.36E-01		2.42E-01	4.91E-02	J				4.82E-02	1.67E-02	J			
Pu-239/240	PCI/G	1.49E-02	7.84E-03		1.01E-02	NA	UJ				7.40E-03	NA	U			
Pu-242	PCI/G	2.36E-03	NA	U	3.72E-03	NA	UJ				2.72E-03	NA	U			
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RKD302			RKD303			RKD304			RMD301			RMD302		
		902-RKD302			902-RKD303			902-RKD304			902-RMD301			902-RMD302		
		3207110 REG			3207111 REG			3207112 REG			3205311 REG			3205312 REG		
		4/29/94			4/29/94			4/29/94			4/27/94			4/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	1.58E-01	NA	U							1.62E-01	NA	U	1.43E-01	NA	U
Pu-238	PCI/G				2.24E-01	4.93E-02	J	4.90E-02	1.79E-02							
Pu-239/240	PCI/G				9.59E-03	7.93E-03	J	7.69E-03	NA	U						
Pu-242	PCI/G				4.33E-03	NA	U	2.83E-03	NA	U						
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RMD303			RMD304			RMD312			RMD314			RND301		
		902-RMD303			902-RMD304			902-RMD312			902-RMD314			902-RND301		
		3205314 REG			3205315 REG			3205313 REG			3205316 REG			3218112 REG		
		4/27/94			4/27/94			04/27/94DUPE			04/27/94DUPE			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G							1.30E-01	NA	U				1.25E-01	6.18E-02	
Pu-238	PCI/G	2.03E-01	4.43E-02		2.60E-01	5.71E-02					3.74E-02	NA	U			
Pu-239/240	PCI/G	1.18E-02	NA	U	5.42E-03	NA	U				7.72E-03	NA	U			
Pu-242	PCI/G	4.33E-03	NA	U	1.47E-02	NA	U				8.54E-03	9.98E-03				
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RND302			RND303			RND304			RPD301			RPD302		
		902-RND302			902-RND303			902-RND304			902-RPD301			902-RPD302		
		3218113 REG			3218114 REG			3218115 REG			3216934 REG			3216935 REG		
		5/23/94			5/23/94			5/23/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	7.12E-02	NA	U							5.51E-02	NA	U	5.51E-02	NA	U
Pu-238	PCI/G				1.24E-01	3.76E-02	J	2.85E-01	7.32E-02	J						
Pu-239/240	PCI/G				1.70E-02	NA	U	2.08E-02	NA	UJ						
Pu-242	PCI/G				4.94E-03	NA	U	7.64E-03	NA	UJ						
Th-228	PCI/G				1.09E+00	1.70E-01										
Th-230	PCI/G				1.55E+00	2.25E-01										
Th-232	PCI/G				9.28E-01	1.48E-01										
U-234	PCI/G				1.12E+00	1.99E-01										
U-235	PCI/G				8.72E-02	4.05E-02	J									
U-238	PCI/G				1.15E+00	2.03E-01										
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RPD303			RPD304			RRD301			RRD302			RRD303		
		902-RPD303			902-RPD304			902-RRD301			902-RRD302			902-RRD303		
		3216936 REG			3216937 REG			3220917 REG			3220918 REG			3220919 REG		
		5/19/94			5/19/94			6/2/94			6/2/94			6/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G							7.01E-02	NA	U	8.82E-02	NA	U			
Pu-238	PCI/G	2.29E-01	5.13E-02		1.05E-01	3.49E-02	U							3.66E-02	2.14E-02	
Pu-239/240	PCI/G	4.57E-03	NA	U	5.16E-03	NA	U							1.43E-02	9.75E-03	
Pu-242	PCI/G	4.57E-03	NA	U	5.16E-03	NA	U							1.17E-02	NA	U
Th-228	PCI/G													7.22E-01	1.27E-01	
Th-230	PCI/G													1.24E+00	1.89E-01	
Th-232	PCI/G													8.01E-01	1.35E-01	
U-234	PCI/G													8.85E-01	1.49E-01	
U-235	PCI/G													3.70E-02	2.10E-02	
U-238	PCI/G													8.54E-01	1.45E-01	
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RRD304			RRD312			RSD301			RSD302			RSD303		
		902-RRD304			902-RRD312			902-RSD301			902-RSD302			902-RSD303		
		3220920 REG			3220918 REG			3216942 REG			3216943 REG			3216944 REG		
		6/2/94			06/02/94DUPE			5/19/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G				8.13E-02	NA	U	9.18E-02	NA	U	5.08E-02	NA	U			
Pu-238	PCI/G	9.09E-02	3.10E-02											2.25E-01	5.47E-02	
Pu-239/240	PCI/G	1.03E-02	8.52E-03											2.45E-02	1.57E-02	
Pu-242	PCI/G	4.65E-03	NA	U										5.53E-03	NA	U
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RSD304			RSD311			RTD301			RTD302			RTD303		
		902-RSD304			902-RSD311			902-RTD301			902-RTD302			902-RTD303		
		3216945 REG			3216947 REG			3216938 REG			3216939 REG			3216940 REG		
		5/19/94			05/19/94DUPE			5/19/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G				9.04E-02	NA	U	6.10E-02	NA	U	6.84E-02	NA	U			
Pu-238	PCI/G	4.43E-02	NA	UJ										9.11E-02	3.27E-02	U
Pu-239/240	PCI/G	3.82E-02	NA	UJ										1.16E-02	9.63E-03	
Pu-242	PCI/G	1.11E-02	NA	UJ										5.25E-03	NA	U
Th-228	PCI/G													4.56E-01	8.94E-02	
Th-230	PCI/G													9.88E-01	1.56E-01	
Th-232	PCI/G													4.96E-01	9.36E-02	
U-234	PCI/G													6.36E-01	1.30E-01	
U-235	PCI/G													3.25E-02	2.34E-02	J
U-238	PCI/G													6.81E-01	1.37E-01	
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RTD304			RTD314			RUD301			RUD302			RVD301		
		902-RTD304			902-RTD314			902-RUD301			902-RUD302			902-RVD301		
		3216941 REG			3216946 REG			3211245 REG			3211246 REG			3210712 REG		
		5/19/94			05/19/94DUPE			5/10/94			5/10/94			5/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G															
Pu-238	PCI/G	1.04E-01	3.02E-02	U	4.51E-02	2.17E-02		9.20E-02	3.66E-02	J	8.22E-02	2.94E-02		9.50E-02	3.86E-02	U
Pu-239/240	PCI/G	1.09E-02	NA	U	1.28E-02	NA	U	7.34E-03	NA	UJ	5.57E-03	NA	U	7.92E-03	9.21E-03	
Pu-242	PCI/G	1.09E-02	NA	U	4.71E-03	NA	U	7.34E-03	NA	UJ	1.51E-02	NA	U	7.15E-03	NA	U
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/NORTHEAST																
		RVD302			RVD312			RXD301			RXD302			RYD301		
		902-RVD302			902-RVD312			902-RXD301			902-RXD302			902-RYD301		
		3210713 REG			3210714 REG			3207140 REG			3207141 REG			3207142 REG		
		5/6/94			05/06/94DUPE			4/29/94			4/29/94			4/29/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G															
Pu-238	PCI/G	5.89E-02	3.01E-02	U	1.52E-01	4.42E-02	U	2.25E-02	8.94E-03		3.82E-02	NA	UJ	9.21E-03	NA	U
Pu-239/240	PCI/G	2.61E-02	NA	U	1.68E-02	NA	U	5.54E-03	NA	U	2.47E-02	NA	UJ	1.23E-02	6.31E-03	
Pu-242	PCI/G	7.60E-03	NA	U	6.16E-03	NA	U	8.10E-03	NA	U	6.20E-03	NA	UJ	2.07E-03	NA	U
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RYD302		
		902-RYD302		
		3207143 REG		
		4/29/94		
		Result	UNC	Val
Radiological	**Units**			
Tritium	PCI/G			
Pu-238	PCI/G	1.17E-02	NA	U
Pu-239/240	PCI/G	5.73E-03	NA	U
Pu-242	PCI/G	2.11E-03	NA	U
Th-228	PCI/G			
Th-230	PCI/G			
Th-232	PCI/G			
U-234	PCI/G			
U-235	PCI/G			
U-238	PCI/G			
Am-241	PCI/G			
Bi-207	PCI/G			
Bi-210m	PCI/G			
Co-60	PCI/G			
Cs-137	PCI/G			
K-40	PCI/G			
Ra-226	PCI/G			
Sr-90	PCI/G			

DIRECTION FROM MOUND - EAST									
		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		J9888.D REG		J9883.D REG		J1075.D REG		J1097.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	13	U	12	U	11	U	12	U
Acetonitrile	UG/KG	128	U	125	U	114	U	120	U
Acrylonitrile	UG/KG	128	U	125	U	114	U	120	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	13	U	12	U	11	U	12	U
2-Butanone	UG/KG	13	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	13	U	12	U	11	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	13	UJ	12	UJ	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	26	U	25	U	23	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	13	U	12	U	2	J	12	U
2-Hexanone	UG/KG	13	U	12	U	11	U	12	U
Iodomethane	UG/KG	13	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	4	J	8	J	11	U	12	U
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	13	U	3	J	11	U	12	U
Vinyl Acetate	UG/KG	13	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	13	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ

DIRECTION FROM MOUND - EAST									
		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		G0901751.D REG		G1001752.D REG		G1401394.D REG		G1501395.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	430	UJ	420	UJ	380	U	400	U
Acenaphthylene	UG/KG	430	UJ	420	UJ	380	U	400	U
Anthracene	UG/KG	430	UJ	420	UJ	380	U	400	U
Benzo(a)anthracene	UG/KG	350	J	420	UJ	40	J	400	U
Benzo(a)pyrene	UG/KG	430	J	420	UJ	53	J	400	U
Benzo(b)fluoranthene	UG/KG	430	J	420	UJ	60	J	400	U
Benzo(g,h,i)perylene	UG/KG	260	J	420	UJ	380	U	400	U
Benzo(k)fluoranthene	UG/KG	490	J	420	UJ	52	J	400	U
Benzoic Acid	UG/KG	120	J	70	J	42	J	41	J
Benzyl Alcohol	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	430	UJ	420	UJ	380	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	430	UJ	420	UJ	380	U	400	U
bis(2-Chloroethyl)ether	UG/KG	430	UJ	420	UJ	380	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	46	J	420	UJ	380	U	400	U
4-Bromophenyl-phenylether	UG/KG	430	UJ	420	UJ	380	U	400	U
Butylbenzylphthalate	UG/KG	430	UJ	420	UJ	380	U	400	U
Carbazole	UG/KG	430	UJ	420	UJ	380	U	400	U
4-Chloro-3-methylphenol	UG/KG	430	UJ	420	UJ	380	U	400	U
4-Chloroaniline	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Chloronaphthalene	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Chlorophenol	UG/KG	430	UJ	420	UJ	380	U	400	U
4-Chlorophenyl-phenylether	UG/KG	430	UJ	420	UJ	380	U	400	U
Chrysene	UG/KG	610	J	420	UJ	76	J	400	U
Di-n-butylphthalate	UG/KG	430	UJ	420	UJ	380	U	400	U
Di-n-octylphthalate	UG/KG	430	UJ	420	UJ	380	U	400	U
Dibenzo(a,h)anthracene	UG/KG	430	UJ	420	UJ	380	U	400	U
Dibenzofuran	UG/KG	430	UJ	420	UJ	380	U	400	U
1,2-Dichlorobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
1,3-Dichlorobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
1,4-Dichlorobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
3,3'-Dichlorobenzidine	UG/KG	430	UJ	420	UJ	380	U	400	U
2,4-Dichlorophenol	UG/KG	430	UJ	420	UJ	380	U	400	U
Diethylphthalate	UG/KG	430	UJ	420	UJ	380	U	400	U
2,4-Dimethylphenol	UG/KG	430	UJ	420	UJ	380	U	400	U
Dimethylphthalate	UG/KG	430	UJ	420	UJ	380	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
2,4-Dinitrotoluene	UG/KG	430	UJ	420	UJ	380	U	400	U
2,6-Dinitrotoluene	UG/KG	430	UJ	420	UJ	380	U	400	U
Fluoranthene	UG/KG	810	J	420	UJ	97	J	400	U
Fluorene	UG/KG	430	UJ	420	UJ	380	U	400	U
Hexachlorobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
Hexachlorobutadiene	UG/KG	430	UJ	420	UJ	380	U	400	U
Hexachlorocyclopentadiene	UG/KG	430	UJ	420	UJ	380	U	400	U
Hexachloroethane	UG/KG	430	UJ	420	UJ	380	U	400	U

DIRECTION FROM MOUND - EAST									
		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		G0901751.D REG		G1001752.D REG		G1401394.D REG		G1501395.D REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	270	J	420	UJ	380	U	400	U
Isophorone	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Methylnaphthalene	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Methylphenol	UG/KG	430	UJ	420	UJ	380	U	400	U
4-Methylphenol	UG/KG	430	UJ	420	UJ	380	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	430	UJ	420	UJ	380	U	400	U
N-Nitrosodiphenylamine	UG/KG	430	UJ	420	UJ	380	U	400	U
Naphthalene	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Nitroaniline	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
3-Nitroaniline	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
4-Nitroaniline	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
Nitrobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
2-Nitrophenol	UG/KG	430	UJ	420	UJ	380	U	400	U
4-Nitrophenol	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	430	UJ	420	UJ	380	U	400	U
Pentachlorophenol	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
Phenanthrene	UG/KG	250	J	420	UJ	38	J	400	U
Phenol	UG/KG	430	UJ	420	UJ	380	U	400	U
Pyrene	UG/KG	700	J	420	UJ	85	J	400	U
1,2,4-Trichlorobenzene	UG/KG	430	UJ	420	UJ	380	U	400	U
2,4,5-Trichlorophenol	UG/KG	1100	UJ	1000	UJ	950	U	1000	U
2,4,6-Trichlorophenol	UG/KG	430	UJ	420	UJ	380	U	400	U
Tentatively Identified Compounds		25		22		25		22	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST									
		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		34797-05 REG		34797-06 REG		35929-09 REG		35929-10 REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
alpha-BHC	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	UJ
alpha-Chlordane	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
Aroclor 1232	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
Aroclor-1016	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
Aroclor-1221	UG/KG	66	U	16	UJ	15	UJ	16	U
Aroclor-1242	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
Aroclor-1248	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
Aroclor-1254	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
Aroclor-1260	UG/KG	33	U	8.1	UJ	7.5	UJ	8	U
beta-BHC	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
4,4'-DDD	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
4,4'-DDE	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
4,4'-DDT	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	UJ
delta-BHC	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
Dieldrin	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
Endosulfan I	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
Endosulfan II	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
Endosulfan Sulfate	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
Endrin	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
Endrin Aldehyde	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
Endrin Ketone	UG/KG	3.3	U	0.81	UJ	0.75	UJ	0.8	U
gamma-BHC (Lindane)	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	UJ
gamma-Chlordane	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
Heptachlor	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
Heptachlor Epoxide	UG/KG	1.7	U	0.42	UJ	0.39	UJ	0.41	U
p,p'-Methoxychlor	UG/KG	17	U	4.2	UJ	3.9	UJ	4.1	UJ
Toxaphene	UG/KG	170	U	42	UJ	39	UJ	41	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST									
		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		3479805 REG		3479806 REG		3593009 REG		3593010 REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	12300		15400		12000		16900	
Antimony	MG/KG	0.79	UJ	0.77	UJ	0.71	U	0.75	U
Arsenic	MG/KG	14.6		10.7		8.2	J	8.3	J
Barium	MG/KG	82.5		109		147		183	
Beryllium	MG/KG	0.69		0.71		0.92		0.9	
Bismuth	MG/KG	6.5	U	6.4	U	34.8		47.2	
Cadmium	MG/KG	0.59	U	0.57	U	0.53	U	0.56	U
Calcium	MG/KG	13800		34000		6000		69400	
Chromium	MG/KG	22.3		20.3		16.2		18	
Cobalt	MG/KG	11.1		9.2		11.9		11.8	
Copper	MG/KG	18.2		21.8		23		19.4	
Cyanide	MG/KG	0.64	U	0.62	U	0.57	U	0.6	U
Iron	MG/KG	21300		27000		25000	J	26700	J
Lead	MG/KG	88.3		17.6		25.4		12.6	
Magnesium	MG/KG	7020		23400		3300		9460	
Manganese	MG/KG	444		505		998	J	1030	J
Mercury	MG/KG	0.13	U	0.12	U	0.11	U	0.12	U
Nickel	MG/KG	18.4		25.5		25.6		28	
Potassium	MG/KG	1160		1260		1570		2030	
Selenium	MG/KG	1.2	U	1.1	U	1.5		1.1	U
Silver	MG/KG	1.2	U	1.2	U	1.1	U	1.2	U
Sodium	MG/KG	811	J	471	U	433	U	457	U
Thallium	MG/KG	0.92	U	0.9	U	0.83	U	0.87	U
Vanadium	MG/KG	26.6		29.8		24.9		29.2	
Zinc	MG/KG	328		80.1		283		78	

		RAE305		RAE306		RCE305		RCE306	
		902-RAE305		902-RAE306		902-RCE305		902-RCE306	
		0347990006SA REG		0347990007SA REG		0357290016SA REG		0357290017SA REG	
		4/13/94		4/13/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	203	J	86.8	J	17.1	U	18.1	U
Fluoride	MG/KG	1.9		1.9		0.57	U	1.3	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	11.1		6.7		5		3.1	
Sulfate	MG/KG	31.9	U	31.2	U	44		44.7	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST																
		RAE301			RAE302			RAE303			RAE304			RAE305		
		902-RAE301			902-RAE302			902-RAE303			902-RAE304			902-RAE305		
		3197418 REG			3197419 REG			3197420 REG			3197421 REG			3197422 REG		
		4/13/94			4/13/94			4/13/94			4/13/94			4/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.136	NA	U	0.159	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			8.17	1.05		5.33	0.714	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0361	0.0132		0.0293	0.0133	J	NS		
Pu-242	PCI/G	NS			NS			0.00848	0.00615		0.00378	NA	UJ	NS		
Th-228	PCI/G	NS			NS			1.32	0.335	J	NS			NS		
Th-230	PCI/G	NS			NS			1.47	0.356	J	NS			NS		
Th-232	PCI/G	NS			NS			1.37	0.337	J	NS			NS		
U-234	PCI/G	NS			NS			0.773	0.152		NS			NS		
U-235	PCI/G	NS			NS			0.0689	0.0395		NS			NS		
U-238	PCI/G	NS			NS			0.851	0.166		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.113	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0267	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0326	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0339	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.681	8.33E-02	J
K-40	PCI/G	NS			NS			NS			NS			16.3	1.82E+00	J
Ra-226	PCI/G	NS			NS			NS			NS			2.53	6.08E-01	
Sr-90	PCI/G	NS			NS			NS			NS			0.859	NA	U

		RAE306			RBE301			RBE302			RBE303			RBE304		
		902-RAE306			902-RBE301			902-RBE302			902-RBE303			902-RBE304		
		3197423 REG			3213709 REG			3213710 REG			3213711 REG			3213712 REG		
		4/13/94			5/13/94			5/13/94			5/13/94			5/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0954	NA	U	0.0909	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			1.63	0.288	J	0.731	1.87E-01	J
Pu-239/240	PCI/G	NS			NS			NS			0.0143	0.0144	J	0.0165	NA	UJ
Pu-242	PCI/G	NS			NS			NS			0.00967	NA	UJ	0.0165	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.07	0.169		NS		
Th-230	PCI/G	NS			NS			NS			1.52	0.223		NS		
Th-232	PCI/G	NS			NS			NS			1.07	0.167		NS		
U-234	PCI/G	NS			NS			NS			1	0.178		NS		
U-235	PCI/G	NS			NS			NS			0.0761	0.037		NS		
U-238	PCI/G	NS			NS			NS			0.952	0.171		NS		
Am-241	PCI/G	0.0862	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0258	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0285	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0311	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0297	NA	U	NS			NS			NS			NS		
K-40	PCI/G	14.6	1.65	J	NS			NS			NS			NS		
Ra-226	PCI/G	2.3	0.606		NS			NS			NS			NS		
Sr-90	PCI/G	1.12	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST																
		RCE301			RCE302			RCE303			RCE304			RCE305		
		902-RCE301			902-RCE302			902-RCE303			902-RCE304			902-RCE305		
		3222450 REG			3222451 REG			3222452 REG			3222453 REG			3222454 REG		
		6/6/94			6/6/94			6/6/94			6/6/94			6/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.157	NA	U	0.0953	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			3.03	0.335		0.737	0.122	R	NS		
Pu-239/240	PCI/G	NS			NS			0.013	0.00776		0.0232	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00562	NA	U	0.00996	0.01	J	NS		
Th-228	PCI/G	NS			NS			0.986	0.159		NS			NS		
Th-230	PCI/G	NS			NS			1.36	0.201		NS			NS		
Th-232	PCI/G	NS			NS			1.06	0.164		NS			NS		
U-234	PCI/G	NS			NS			0.87	0.147		NS			NS		
U-235	PCI/G	NS			NS			0.0491	0.0259		NS			NS		
U-238	PCI/G	NS			NS			0.959	0.159		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0809	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0185	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0211	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.025	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.406	4.89E-02	
K-40	PCI/G	NS			NS			NS			NS			19.8	2.08E+00	
Ra-226	PCI/G	NS			NS			NS			NS			0.566	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.557	NA	U

		RCE306			RFE301			RFE302			RFE303			RFE304		
		902-RCE306			902-RFE301			902-RFE302			902-RFE303			902-RFE304		
		3222455 REG			3213720 REG			3213721 REG			3213722 REG			3213724 REG		
		6/6/94			5/16/94			5/16/94			5/16/94			5/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0953	NA	U	0.0833	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.177	0.0671	J	0.152	4.84E-02	U
Pu-239/240	PCI/G	NS			NS			NS			0.0424	NA	UJ	0.00737	NA	U
Pu-242	PCI/G	NS			NS			NS			0.0123	NA	UJ	0.00736	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0824	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0188	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0218	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.025	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0867	0.0219		NS			NS			NS			NS		
K-40	PCI/G	21.6	2.34		NS			NS			NS			NS		
Ra-226	PCI/G	0.556	NA	U	NS			NS			NS			NS		
Sr-90	PCI/G	0.541	NA	U	NS			NS			NS			NS		

DIRECTION FROM MOUND - EAST																
		RFE314			RGE301			RGE302			RGE303			RGE304		
		902-RFE314			902-RGE301			902-RGE302			902-RGE303			902-RGE304		
		3213723 REG			3205705 REG			3205706 REG			3205707 REG			3205708 REG		
		05/16/94DUPE			4/28/94			4/28/94			4/28/94			4/28/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0781	NA	U	0.142	NA	U	NS			NS		
Pu-238	PCI/G	0.161	0.0636	J	NS			NS			0.382	0.0605		0.0892	2.16E-02	
Pu-239/240	PCI/G	0.0313	NA	UJ	NS			NS			0.00623	0.0478		0.0101	6.43E-03	
Pu-242	PCI/G	0.0115	NA	UJ	NS			NS			0.00241	NA	U	0.00228	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RHE301			RHE302			RHE303			RHE304			RJE301		
		902-RHE301			902-RHE302			902-RHE303			902-RHE304			902-RJE301		
		3207113 REG			3207114 REG			3207115 REG			3207116 REG			3231220 REG		
		4/29/94			4/29/94			4/29/94			4/29/94			6/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0758	NA	U	0.117	NA	U	NS			NS			0.112	NA	U
Pu-238	PCI/G	NS			NS			0.291	0.0598	J	0.162	0.0311		NS		
Pu-239/240	PCI/G	NS			NS			0.00977	0.00808	J	0.0152	0.00739		NS		
Pu-242	PCI/G	NS			NS			0.012	NA	UJ	0.00228	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND - EAST																
		RJE302			RJE303			RJE304			RKE301			RKE302		
		902-RJE302			902-RJE303			902-RJE304			902-RKE301			902-RKE302		
		3231221 REG			3231222 REG			3231223 REG			3207101 REG			3207102 REG		
		6/27/94			6/27/94			6/27/94			4/28/94			4/28/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0664	NA	U	NS			NS			0.0847	NA	U	0.175	NA	U
Pu-238	PCI/G	NS			0.272	0.044	U	0.0687	0.0279	U	NS			NS		
Pu-239/240	PCI/G	NS			0.0257	0.0108		0.0212	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.00851	NA	U	0.00477	NA	U	NS			NS		
Th-228	PCI/G	NS			0.977	0.163		NS			NS			NS		
Th-230	PCI/G	NS			1.67	0.248		NS			NS			NS		
Th-232	PCI/G	NS			1.04	0.169		NS			NS			NS		
U-234	PCI/G	NS			1.18	0.202		NS			NS			NS		
U-235	PCI/G	NS			0.234	0.0673		NS			NS			NS		
U-238	PCI/G	NS			1.15	0.197		NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKE303			RKE304			RME301			RME302			RME303		
		902-RKE303			902-RKE304			902-RME301			902-RME302			902-RME303		
		3207103 REG			3207104 REG			3210722 REG			3210723 REG			3210720 REG		
		4/28/94			4/28/94			5/9/94			5/9/94			5/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.109	NA	U	0.0934	NA	U	NS		
Pu-238	PCI/G	0.679	0.117		0.0405	0.0195	J	NS			NS			0.148	7.46E-02	UJ
Pu-239/240	PCI/G	0.0195	0.0126		0.00379	NA	UJ	NS			NS			0.0205	2.07E-02	J
Pu-242	PCI/G	0.00527	NA	U	0.00379	NA	UJ	NS			NS			0.0139	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND - EAST																
		RME304			RNE301			RNE302			RNE303			RNE304		
		902-RME304			902-RNE301			902-RNE302			902-RNE303			902-RNE304		
		3210721 REG			3218512 REG			3218513 REG			3218514 REG			3218515 REG		
		5/9/94			5/25/94			5/25/94			5/25/94			5/25/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0923	NA	U	0.106	NA	U	NS			NS		
Pu-238	PCI/G	0.0724	NA	UJ	NS			NS			0.523	0.117	J	0.255	5.34E-02	
Pu-239/240	PCI/G	0.0118	NA	UJ	NS			NS			0.00915	NA	UJ	0.0154	NA	U
Pu-242	PCI/G	0.032	NA	UJ	NS			NS			0.00914	NA	UJ	0.00448	NA	U
Th-228	PCI/G	NS			NS			NS			0.0739	NA	U	NS		
Th-230	PCI/G	NS			NS			NS			0.0509	0.0345		NS		
Th-232	PCI/G	NS			NS			NS			0.0394	NA	U	NS		
U-234	PCI/G	NS			NS			NS			0.938	0.156		NS		
U-235	PCI/G	NS			NS			NS			0.05	0.025		NS		
U-238	PCI/G	NS			NS			NS			1.06	0.171		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPE301			RPE302			RPE303			RPE304			RPE311		
		902-RPE301			902-RPE302			902-RPE303			902-RPE304			902-RPE311		
		3218516 REG			3218517 REG			3218518 REG			3218519 REG			3218520 REG		
		5/25/94			5/25/94			5/25/94			5/25/94			05/25/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0734	NA	U	0.0869	NA	U	NS			NS			0.0695	NA	U
Pu-238	PCI/G	NS			NS			0.279	0.0588		0.0544	0.0328		NS		
Pu-239/240	PCI/G	NS			NS			0.023	0.0131		0.0211	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00479	NA	U	0.0266	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST																
		RRE301			RRE302			RRE303			RRE304			RRE313		
		902-RRE301			902-RRE302			902-RRE303			902-RRE304			902-RRE313		
		3226446 REG			3226447 REG			3226448 REG			3226449 REG			3226450 REG		
		6/16/94			6/16/94			6/16/94			6/16/94			06/16/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0612	NA	U	0.0454	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0317	NA	UJ	0.164	0.0312		0.0429	NA	UJ
Pu-239/240	PCI/G	NS			NS			0.0337	0.0184	J	0.0125	0.00821		0.0224	NA	UJ
Pu-242	PCI/G	NS			NS			0.00632	0.00734	J	0.00242	NA	U	0.0243	1.75E-02	J
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTE301			RTE302			RTE303			RTE304			RTE314		
		902-RTE301			902-RTE302			902-RTE303			902-RTE304			902-RTE314		
		3218503 REG			3218504 REG			3218505 REG			3218506 REG			3218507 REG		
		5/25/94			5/25/94			5/25/94			5/25/94			05/25/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.114	NA	U	0.111	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0541	0.0255		0.0915	0.0327		0.054	2.28E-02	
Pu-239/240	PCI/G	NS			NS			0.0243	0.0148		0.0159	0.0115		0.0117	8.41E-03	
Pu-242	PCI/G	NS			NS			0.0137	NA	U	0.00539	NA	U	0.00396	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST																
		RUE301			RUE302			RUE303			RUE304			RUE313		
		902-RUE301			902-RUE302			902-RUE303			902-RUE304			902-RUE313		
		3207712 REG			3207713 REG			3207714 REG			3207715 REG			3207716 REG		
		5/2/94			5/2/94			5/2/94			5/2/94			05/02/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.102	NA	U	0.128	NA	U	0.11	NA	U
Pu-238	PCI/G	0.0835	NA	UJ	0.0695	NA	UJ	NS			NS			NS		
Pu-239/240	PCI/G	0.0466	NA	UJ	0.0407	NA	UJ	NS			NS			NS		
Pu-242	PCI/G	0.0136	NA	UJ	0.0323	NA	UJ	NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RVE301			RVE302			RVE303			RVE304			RXE301		
		902-RVE301			902-RVE302			902-RVE303			902-RVE304			902-RXE301		
		3207708 REG			3207709 REG			3207710 REG			3207711 REG			3207705 REG		
		5/2/94			5/2/94			5/2/94			5/2/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.114	NA	U	0.122	NA	U	NS		
Pu-238	PCI/G	0.0214	NA	U	0.0467	0.0355	J	NS			NS			0.0538	NA	UJ
Pu-239/240	PCI/G	0.029	0.0204		0.028	0.0232	J	NS			NS			0.0103	NA	UJ
Pu-242	PCI/G	0.0312	NA	U	0.0127	NA	UJ	NS			NS			0.0103	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST													
		RXE302			RXE312			RYE301			RYE302		
		902-RXE302			902-RXE312			902-RYE301			902-RYE302		
		3207706 REG			3207707 REG			3212401 REG			3212402 REG		
		5/2/94			05/02/94DUPE			5/10/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**												
Tritium	PCI/G	NS			NS			NS			NS		
Pu-238	PCI/G	0.0929	NA	UJ	0.121	NA	UJ	0.197	0.0557	U	0.117	0.0391	U
Pu-239/240	PCI/G	0.0168	NA	UJ	0.0536	NA	UJ	0.0219	0.0149		0.0179	NA	U
Pu-242	PCI/G	0.0455	NA	UJ	0.0197	NA	UJ	0.0179	NA	U	0.00658	NA	U
Th-228	PCI/G	NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST									
		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		J0026.D REG		J9932.D REG		J1098.D REG		J1078.D REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	14	U	2	UJ	12	U	12	U
Acetonitrile	UG/KG	137	U	135	U	118	U	119	U
Acrylonitrile	UG/KG	137	U	135	U	118	U	119	U
Benzene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Bromoform	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	14	U	14	U	12	U	12	U
2-Butanone	UG/KG	14	U	14	U	12	U	12	U
Carbon Disulfide	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	14	U	14	U	12	U	12	U
Chloroform	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	14	U	14	U	12	U	12	U
1,1-Dichloroethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	2	J	7	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	27	U	27	U	24	UJ	24	U
Ethylbenzene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Hexane	UG/KG	14	U	14	U	12	U	3	J
2-Hexanone	UG/KG	14	U	14	U	12	UJ	12	U
Iodomethane	UG/KG	14	U	14	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	14	U	14	U	12	UJ	12	U
Methylene Chloride	UG/KG	4	UJ	22		12	U	13	U
Styrene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Toluene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,1,1-Trichloroethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	14	U	14	U	12	U	12	U
Vinyl Acetate	UG/KG	14	U	14	U	12	U	12	U
Vinyl Chloride	UG/KG	14	U	14	U	12	U	12	U
Xylene, Total	UG/KG	7	UJ	7	UJ	6	UJ	6	UJ
Tentatively Identified Compounds						1		1	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST									
		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		G0701786.D REG		G0801787.D REG		G1601396.D REG		G1701397.D REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	460	UJ	450	UJ	140	J	400	U
Acenaphthylene	UG/KG	460	UJ	450	UJ	97	J	400	U
Anthracene	UG/KG	48	J	450	UJ	340	J	400	U
Benzo(a)anthracene	UG/KG	540	J	450	UJ	1500		400	U
Benzo(a)pyrene	UG/KG	640	J	450	UJ	1600		400	U
Benzo(b)fluoranthene	UG/KG	830	J	450	UJ	1700		400	U
Benzo(g,h,i)perylene	UG/KG	320	J	450	UJ	830		400	U
Benzo(k)fluoranthene	UG/KG	580	J	450	UJ	1400		400	U
Benzoic Acid	UG/KG	140	J	90	J	120	J	43	J
Benzyl Alcohol	UG/KG	460	UJ	450	UJ	390	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	460	UJ	450	UJ	390	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	460	UJ	450	UJ	390	U	400	U
bis(2-Chloroethyl)ether	UG/KG	460	UJ	450	UJ	390	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
4-Bromophenyl-phenylether	UG/KG	460	UJ	450	UJ	390	U	400	U
Butylbenzylphthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
Carbazole	UG/KG	460	UJ	450	UJ	330	J	400	U
4-Chloro-3-methylphenol	UG/KG	460	UJ	450	UJ	390	U	400	U
4-Chloroaniline	UG/KG	460	UJ	450	UJ	390	U	400	U
2-Chloronaphthalene	UG/KG	460	UJ	450	UJ	390	U	400	U
2-Chlorophenol	UG/KG	460	UJ	450	UJ	390	U	400	U
4-Chlorophenyl-phenylether	UG/KG	460	UJ	450	UJ	390	U	400	U
Chrysene	UG/KG	840	J	450	UJ	2200		400	U
Di-n-butylphthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
Di-n-octylphthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
Dibenzo(a,h)anthracene	UG/KG	460	UJ	450	UJ	390	U	400	U
Dibenzofuran	UG/KG	460	UJ	450	UJ	160	J	400	U
1,2-Dichlorobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
1,3-Dichlorobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
1,4-Dichlorobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
3,3'-Dichlorobenzidine	UG/KG	460	UJ	450	UJ	390	U	400	U
2,4-Dichlorophenol	UG/KG	460	UJ	450	UJ	390	U	400	U
Diethylphthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
2,4-Dimethylphenol	UG/KG	460	UJ	450	UJ	390	U	400	U
Dimethylphthalate	UG/KG	460	UJ	450	UJ	390	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	UJ	1100	UJ	980	U	990	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1100	UJ	980	U	990	U
2,4-Dinitrotoluene	UG/KG	460	UJ	450	UJ	390	U	400	U
2,6-Dinitrotoluene	UG/KG	460	UJ	450	UJ	390	U	400	U
Fluoranthene	UG/KG	1000	J	450	UJ	2600		400	U
Fluorene	UG/KG	460	UJ	450	UJ	260	J	400	U
Hexachlorobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
Hexachlorobutadiene	UG/KG	460	UJ	450	UJ	390	U	400	U
Hexachlorocyclopentadiene	UG/KG	460	UJ	450	UJ	390	U	400	U
Hexachloroethane	UG/KG	[illegible]	UJ	450	UJ	390	U	400	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST									
		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		G0701786.D REG		G0801787.D REG		G1601396.D REG		G1701397.D REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Indeno(1,2,3-c,d)pyrene	UG/KG	330	J	450	UJ	860		400	U
Isophorone	UG/KG	460	UJ	450	UJ	390	U	400	U
2-Methylnaphthalene	UG/KG	460	UJ	450	UJ	82	J	400	U
2-Methylphenol	UG/KG	460	UJ	450	UJ	390	U	400	U
4-Methylphenol	UG/KG	460	UJ	450	UJ	390	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	460	UJ	450	UJ	390	U	400	U
N-Nitrosodiphenylamine	UG/KG	460	UJ	450	UJ	390	U	400	U
Naphthalene	UG/KG	460	UJ	450	UJ	80	J	400	U
2-Nitroaniline	UG/KG	1100	UJ	1100	UJ	980	U	990	U
3-Nitroaniline	UG/KG	1100	UJ	1100	UJ	980	U	990	U
4-Nitroaniline	UG/KG	1100	UJ	1100	UJ	980	U	990	U
Nitrobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
2-Nitrophenol	UG/KG	460	UJ	450	UJ	390	U	400	U
4-Nitrophenol	UG/KG	1100	UJ	1100	UJ	980	U	990	U
2,2'-oxybis(1-Chloropropane)	UG/KG	460	UJ	450	UJ	390	U	400	U
Pentachlorophenol	UG/KG	1100	UJ	1100	UJ	980	U	990	U
Phenanthrene	UG/KG	320	J	450	UJ	1800		400	U
Phenol	UG/KG	460	UJ	450	UJ	390	U	400	U
Pyrene	UG/KG	1100	J	450	UJ	2100		400	U
1,2,4-Trichlorobenzene	UG/KG	460	UJ	450	UJ	390	U	400	U
2,4,5-Trichlorophenol	UG/KG	1100	UJ	1100	UJ	980	U	990	U
2,4,6-Trichlorophenol	UG/KG	460	UJ	450	UJ	390	U	400	U
Tentatively Identified Compounds		25		20		25		25	

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST									
		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		34797-17 REG		34797-18 REG		35929-11 REG		35929-12 REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
alpha-BHC	UG/KG	1.9	UJ	0.46	UJ	0.4	UJ	0.4	UJ
alpha-Chlordane	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
Aroclor 1232	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
Aroclor-1016	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
Aroclor-1221	UG/KG	73	UJ	18	UJ	16	U	16	U
Aroclor-1242	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
Aroclor-1248	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
Aroclor-1254	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
Aroclor-1260	UG/KG	36	UJ	8.9	UJ	7.8	U	7.9	U
beta-BHC	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
4,4'-DDD	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
4,4'-DDE	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
4,4'-DDT	UG/KG	3.6	UJ	0.89	UJ	0.78	UJ	0.79	UJ
delta-BHC	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
Dieldrin	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
Endosulfan I	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
Endosulfan II	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
Endosulfan Sulfate	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
Endrin	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
Endrin Aldehyde	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
Endrin Ketone	UG/KG	3.6	UJ	0.89	UJ	0.78	U	0.79	U
gamma-BHC (Lindane)	UG/KG	1.9	UJ	0.46	UJ	0.4	UJ	0.4	UJ
gamma-Chlordane	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
Heptachlor	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
Heptachlor Epoxide	UG/KG	1.9	UJ	0.46	UJ	0.4	U	0.4	U
p,p'-Methoxychlor	UG/KG	19	UJ	4.6	UJ	4	UJ	4	UJ
Toxaphene	UG/KG	190	UJ	46	UJ	40	U	40	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST									
		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		3479817 REG		3479818 REG		3593011 REG		3593012 REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	14200		19600		16400		21700	
Antimony	MG/KG	0.85	UJ	0.84	UJ	0.73	U	0.74	U
Arsenic	MG/KG	8		10.3		9.6	J	8.6	J
Barium	MG/KG	123		165		168		216	
Beryllium	MG/KG	0.76		1		1		1.1	
Bismuth	MG/KG	7	U	7	U	37		46.6	
Cadmium	MG/KG	0.63	U	0.63	U	0.54	U	0.55	
Calcium	MG/KG	32400		4930		6330		13200	
Chromium	MG/KG	17.6		21.8		22.3		27.6	
Cobalt	MG/KG	10.1		10.9		12.7		16.7	
Copper	MG/KG	17.8		17.8		21.9		24.6	
Cyanide	MG/KG	0.68	U	0.68	U	0.59	U	0.6	U
Iron	MG/KG	22800		29600		29500	J	38400	J
Lead	MG/KG	66.6		16.6		27.9		15	
Magnesium	MG/KG	15200		4160		3930		6070	
Manganese	MG/KG	733		596		1040	J	1440	J
Mercury	MG/KG	0.14	U	0.14	U	0.12	U	0.12	U
Nickel	MG/KG	20.7		24.4		23.2		37.5	
Potassium	MG/KG	1100		1060		2140		2170	
Selenium	MG/KG	1.3	U	1.3	U	2.2		1.2	
Silver	MG/KG	1.3	U	1.3	U	1.1	U	1.1	U
Sodium	MG/KG	516	U	948	J	445	U	451	U
Thallium	MG/KG	0.98	U	0.98	U	0.85	U	0.86	U
Vanadium	MG/KG	28		36.5		30.7		35.1	
Zinc	MG/KG	264		69.2		80.5		74.9	

		RAF305		RAF306		RCF305		RCF306	
		902-RAF305		902-RAF306		902-RCF305		902-RCF306	
		0347990019SA REG		0347990020SA REG		0357290018SA REG		0357290019SA REG	
		4/18/94		4/18/94		6/6/94		6/6/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	206		329		17.7	U	17.9	U
Fluoride	MG/KG	3.1		2.2		0.59	U	0.6	U
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.68	U	0.68	U	2		1.1	
Sulfate	MG/KG	34.1	U	85.7		146		29.8	U

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RAF301			RAF302			RAF303			RAF304			RAF305		
		902-RAF301			902-RAF302			902-RAF303			902-RAF304			902-RAF305		
		3200214 REG			3200215 REG			3200216 REG			3200217 REG			3200218 REG		
		4/18/94			4/18/94			4/18/94			4/18/94			4/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.272	NA	U	0.212	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			4.66	0.625	J	3.45	0.451		NS		
Pu-239/240	PCI/G	NS			NS			0.0236	0.0113	J	0.0331	0.0126		NS		
Pu-242	PCI/G	NS			NS			0.00336	NA	UJ	0.00426	0.00432		NS		
Th-228	PCI/G	NS			NS			1.24	0.279	J	NS			NS		
Th-230	PCI/G	NS			NS			1.68	0.335	J	NS			NS		
Th-232	PCI/G	NS			NS			1.29	0.277	J	NS			NS		
U-234	PCI/G	NS			NS			0.821	0.159		NS			NS		
U-235	PCI/G	NS			NS			0.0429	0.0302		NS			NS		
U-238	PCI/G	NS			NS			0.868	0.165		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0999	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0245	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0291	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0324	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.27	4.24E-02	
K-40	PCI/G	NS			NS			NS			NS			16	1.76E+00	
Ra-226	PCI/G	NS			NS			NS			NS			2.46	6.93E-01	
Sr-90	PCI/G	NS			NS			NS			NS			0.468	NA	U

		RAF306			RBF301			RBF302			RBF303			RBF304		
		902-RAF306			902-RBF301			902-RBF302			902-RBF303			902-RBF304		
		3200219 REG			3213731 REG			3213732 REG			3213733 REG			3213734 REG		
		4/18/94			5/16/94			5/16/94			5/16/94			5/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0924	NA	U	0.0735	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			2.64	0.418	J	0.546	1.18E-01	U
Pu-239/240	PCI/G	NS			NS			NS			0.041	0.0143	J	0.0252	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00793	NA	UJ	0.00924	NA	U
Th-228	PCI/G	NS			NS			NS			1.26	0.385	J	NS		
Th-230	PCI/G	NS			NS			NS			2.44	0.56	J	NS		
Th-232	PCI/G	NS			NS			NS			1.07	0.328	J	NS		
U-234	PCI/G	NS			NS			NS			0.81	0.168	U	NS		
U-235	PCI/G	NS			NS			NS			0.0528	0.0372	U	NS		
U-238	PCI/G	NS			NS			NS			0.884	0.179	U	NS		
Am-241	PCI/G	0.108	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0266	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0315	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.033	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0287	NA	U	NS			NS			NS			NS		
K-40	PCI/G	18.1	2.01		NS			NS			NS			NS		
Ra-226	PCI/G	2.57	0.691		NS			NS			NS			NS		
Sr-90	PCI/G	0.468	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RBF313			RCF301			RCF302			RCF303			RCF304		
		902-RBF313			902-RCF301			902-RCF302			902-RCF303			902-RCF304		
		3213726 REG			3222456 REG			3222457 REG			3222458 REG			3222459 REG		
		05/16/94DUPE			6/6/94			6/6/94			6/6/94			6/6/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.088	NA	U	0.0853	NA	U	NS			NS		
Pu-238	PCI/G	2.2	0.345		NS			NS			0.535	0.0773	R	0.175	3.35E-02	R
Pu-239/240	PCI/G	0.0248	NA	U	NS			NS			0.0288	0.0164	J	0.0112	NA	UJ
Pu-242	PCI/G	0.00723	NA	U	NS			NS			0.00459	NA	UJ	0.00327	NA	UJ
Th-228	PCI/G	1.12	0.177		NS			NS			1.13	0.178		NS		
Th-230	PCI/G	1.44	0.216		NS			NS			1.37	0.206		NS		
Th-232	PCI/G	1.14	0.18		NS			NS			1.01	0.162		NS		
U-234	PCI/G	0.876	0.161		NS			NS			1.06	0.178		NS		
U-235	PCI/G	0.0413	0.0276		NS			NS			0.055	0.0276		NS		
U-238	PCI/G	1.07	0.186		NS			NS			0.938	0.161		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RCF305			RCF306			RFF301			RFF302			RFF303		
		902-RCF305			902-RCF306			902-RFF301			902-RFF302			902-RFF303		
		3222460 REG			REG			3213728 REG			3213729 REG			3213730 REG		
		6/6/94			6/6/94			5/16/94			5/16/94			5/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.108	NA	U	0.103	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.481	1.17E-01	J
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0122	1.43E-02	J
Pu-242	PCI/G	NS			NS			NS			NS			0.0111	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			0.736	1.26E-01	
Th-230	PCI/G	NS			NS			NS			NS			1.23	1.86E-01	
Th-232	PCI/G	NS			NS			NS			NS			0.785	1.31E-01	
U-234	PCI/G	NS			NS			NS			NS			0.811	1.50E-01	U
U-235	PCI/G	NS			NS			NS			NS			0.0274	NA	U
U-238	PCI/G	NS			NS			NS			NS			0.659	1.30E-01	U
Am-241	PCI/G	0.138	NA	U	0.0943	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0226	NA	U	0.0238	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0268	NA	NV	0.0272	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0298	NA	U	0.0316	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.442	0.0554		0.0289	NA	U	NS			NS			NS		
K-40	PCI/G	19.3	2.12		23.8	2.49		NS			NS			NS		
Ra-226	PCI/G	0.646	NA	U	2.93	0.67		NS			NS			NS		
Sr-90	PCI/G	0.583	NA	U	0.933	NA	U	NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RFF304			RGF301			RGF302			RGF303			RGF304		
		902-RFF304			902-RGF301			902-RGF302			902-RGF303			902-RGF304		
		3213727 REG			3213715 REG			3213717 REG			3213718 REG			3213719 REG		
		5/16/94			5/16/94			5/16/94			5/16/94			5/16/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0782	NA	U	0.104	NA	U	NS			NS		
Pu-238	PCI/G	0.643	0.143	J	NS			NS			0.237	0.0683	J	0.0708	4.10E-02	J
Pu-239/240	PCI/G	0.0284	NA	UJ	NS			NS			0.0254	NA	UJ	0.0237	NA	UJ
Pu-242	PCI/G	0.0104	NA	UJ	NS			NS			0.00931	NA	UJ	0.0299	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.02	0.162		NS		
Th-230	PCI/G	NS			NS			NS			1.49	0.219		NS		
Th-232	PCI/G	NS			NS			NS			1.04	0.164		NS		
U-234	PCI/G	NS			NS			NS			1.01	0.179		NS		
U-235	PCI/G	NS			NS			NS			0.0367	NA	U	NS		
U-238	PCI/G	NS			NS			NS			1.04	0.183		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RGF312			RHF301			RHF302			RHF303			RHF304		
		902-RGF312			902-RHF301			902-RHF302			902-RHF303			902-RHF304		
		3213716 REG			3207125 REG			3207126 REG			3207127 REG			3207128 REG		
		05/16/94DUPE			4/29/94			4/29/94			4/29/94			4/29/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0953	NA	U	1.34	0.176		0.129	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.287	0.0467		0.192	3.78E-02	
Pu-239/240	PCI/G	NS			NS			NS			0.01	0.00569		0.0122	7.19E-03	
Pu-242	PCI/G	NS			NS			NS			0.00209	NA	U	0.00275	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RJF301			RJF302			RJF303			RJF304			RKF301		
		902-RJF301			902-RJF302			902-RJF303			902-RJF304			902-RKF301		
		3205701 REG			3205702 REG			3205703 REG			3205704 REG			3207129 REG		
		4/28/94			4/28/94			4/28/94			4/28/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0914	NA	U	0.0537	NA	U	NS			NS			0.112	NA	U
Pu-238	PCI/G	NS			NS			0.0673	0.0182		0.393	0.0625		NS		
Pu-239/240	PCI/G	NS			NS			0.00758	0.00514		0.00647	0.00496		NS		
Pu-242	PCI/G	NS			NS			0.00228	NA	U	0.0025	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKF302			RKF303			RKF304			RMF301			RMF302		
		902-RKF302			902-RKF303			902-RKF304			902-RMF301			902-RMF302		
		3207130 REG			3207131 REG			3207132 REG			3210717 REG			3210718 REG		
		5/2/94			5/2/94			5/2/94			5/9/94			5/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.132	NA	U	NS			NS			0.109	NA	U	0.128	NA	U
Pu-238	PCI/G	NS			0.193	0.0394	J	0.0603	NA	UJ	NS			NS		
Pu-239/240	PCI/G	NS			0.0105	0.00782	J	0.039	NA	UJ	NS			NS		
Pu-242	PCI/G	NS			0.00314	NA	UJ	0.00978	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RMF303			RMF304			RMF312			RNF301			RNF302		
		902-RMF303			902-RMF304			902-RMF312			902-RNF301			902-RNF302		
		3210715 REG			3210716 REG			3210719 REG			3231212 REG			3231213 REG		
		5/9/94			5/9/94			05/09/94DUPE			6/27/94			6/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.131	NA	U	0.0951	NA	U	0.0822	NA	U
Pu-238	PCI/G	0.212	0.0699	J	0.057	0.0355	UJ	NS			NS			NS		
Pu-239/240	PCI/G	0.0157	0.0159	J	0.00859	NA	UJ	NS			NS			NS		
Pu-242	PCI/G	0.0106	NA	UJ	0.00859	NA	UJ	NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNF303			RNF304			RNF312			RPF301			RPF302		
		902-RNF303			902-RNF304			902-RNF312			902-RPF301			902-RPF302		
		3231214 REG			3231215 REG			3231224 REG			3228604 REG			3228605 REG		
		6/27/94			6/27/94			06/27/94DUPE			6/20/94			6/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0715	NA	U	0.0428	NA	U	0.0464	NA	U
Pu-238	PCI/G	0.0391	0.0133	U	0.0388	0.0126	U	NS			NS			NS		
Pu-239/240	PCI/G	0.0105	0.00613		0.00762	0.00534		NS			NS			NS		
Pu-242	PCI/G	0.00699	NA	U	0.00706	NA	U	NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RPF303			RPF304			RRF301			RRF302			RRF303		
		902-RPF303			902-RPF304			902-RRF301			902-RRF302			902-RRF303		
		3228606 REG			3228607 REG			3207735 REG			3207736 REG			3207737 REG		
		6/20/94			6/20/94			5/3/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.114	NA	U	0.0646	NA	U	NS		
Pu-238	PCI/G	0.0996	0.021	U	0.0904	0.018	U	NS			NS			0.0746	2.71E-02	
Pu-239/240	PCI/G	0.0105	0.00661		0.0101	0.00544		NS			NS			0.0156	1.06E-02	
Pu-242	PCI/G	0.00237	NA	U	0.00287	0.00288		NS			NS			0.0047	NA	U
Th-228	PCI/G	NS			NS			NS			NS			0.752	1.32E-01	J
Th-230	PCI/G	NS			NS			NS			NS			1.55	2.30E-01	J
Th-232	PCI/G	NS			NS			NS			NS			0.785	1.34E-01	J
U-234	PCI/G	NS			NS			NS			NS			0.771	1.32E-01	
U-235	PCI/G	NS			NS			NS			NS			0.0437	2.25E-02	
U-238	PCI/G	NS			NS			NS			NS			0.861	1.43E-01	
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRF304			RSF301			RSF302			RSF303			RSF304		
		902-RRF304			902-RSF301			902-RSF302			902-RSF303			902-RSF304		
		3207738 REG			3207739 REG			3207740 REG			3207741 REG			3207742 REG		
		5/3/94			5/3/94			5/3/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0936	NA	U	0.0982	NA	U	NS			NS		
Pu-238	PCI/G	0.0838	NA	UJ	NS			NS			0.0512	NA	UJ	0.127	6.59E-02	J
Pu-239/240	PCI/G	0.0514	NA	UJ	NS			NS			0.0341	0.0245	J	0.0192	NA	UJ
Pu-242	PCI/G	0.0189	NA	UJ	NS			NS			0.0115	NA	UJ	0.0192	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST																
		RTF301			RTF302			RTF303			RTF304			RUF301		
		902-RTF301			902-RTF302			902-RTF303			902-RTF304			902-RUF301		
		3207743 REG			3207744 REG			3207745 REG			3207746 REG			3200211 REG		
		5/3/94			5/3/94			5/3/94			5/3/94			4/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.103	NA	U	0.11	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.116	NA	UJ	0.0405	NA	UJ	0.0182	NA	U
Pu-239/240	PCI/G	NS			NS			0.0277	0.028	J	0.0249	NA	UJ	0.0138	8.14E-03	
Pu-242	PCI/G	NS			NS			0.0188	NA	UJ	0.00913	NA	UJ	0.00311	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RUF302			RVF301			RVF302			RXF301			RXF302		
		902-RUF302			902-RVF301			902-RVF302			902-RXF301			902-RXF302		
		3200212 REG			3200213 REG			3200227 REG			3200228 REG			3200229 REG		
		4/19/94			4/19/94			4/19/94			4/19/94			4/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.021	NA	UJ	0.0219	NA	UJ	0.0251	NA	UJ	0.0205	0.0123	J	0.0708	2.44E-02	J
Pu-239/240	PCI/G	0.00641	0.00646	J	0.00834	0.00754	J	0.0111	NA	UJ	0.00913	0.00731	J	0.00868	7.18E-03	J
Pu-242	PCI/G	0.00434	NA	UJ	0.00451	NA	UJ	0.00407	NA	UJ	0.00309	NA	UJ	0.00392	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DESPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - EAST/SOUTHEAST							
		RYF301			RYF302		
		902-RYF301			902-RYF302		
		3200230 REG			3200231 REG		
		4/19/94			4/19/94		
		Result	UNC	Val	Result	UNC	Val
Radiological	Units						
Tritium	PCI/G	NS			NS		
Pu-238	PCI/G	0.021	NA	UJ	0.0321	0.0111	U
Pu-239/240	PCI/G	0.0167	NA	UJ	0.022	0.00903	
Pu-242	PCI/G	0.00612	NA	UJ	0.00229	NA	U
Th-228	PCI/G	NS			NS		
Th-230	PCI/G	NS			NS		
Th-232	PCI/G	NS			NS		
U-234	PCI/G	NS			NS		
U-235	PCI/G	NS			NS		
U-238	PCI/G	NS			NS		
Am-241	PCI/G	NS			NS		
Bi-207	PCI/G	NS			NS		
Bi-210m	PCI/G	NS			NS		
Co-60	PCI/G	NS			NS		
Cs-137	PCI/G	NS			NS		
K-40	PCI/G	NS			NS		
Ra-226	PCI/G	NS			NS		
Sr-90	PCI/G	NS			NS		

DIRECTION FROM MOUND SOUTHEAST													
		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		J9884.D REG		J9885.D REG		J9886.D REG		J9887.D REG		H4321.D REG		H4322.D REG	
		34437		34437		04/13/94DUPE		04/13/94DUPE		34494		34494	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units												
Acetone	UG/KG	13	U	2	J	13	U	13	U	12	U	12	U
Acetonitrile	UG/KG	128	U	130	U	130	U	130	U	119	U	119	U
Acrylonitrile	UG/KG	128	U	130	U	130	U	130	U	119	U	119	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Bromomethane	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
2-Butanone	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Chloroethane	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Chloromethane	UG/KG	13	UJ	13	UJ	13	UJ	13	UJ	12	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,2-Diethylbenzene	UG/KG	26	U	26	U	26	U	26	U	24	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Hexane	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
2-Hexanone	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
Iodomethane	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
Methylene Chloride	UG/KG	5	J	9	J	8	J	12		2	J	12	U
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Toluene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Trichlorotrifluoroethane	UG/KG	3	J	2	J	3	J	2	J	12	U	12	U
Vinyl Acetate	UG/KG	13	U	13	U	13	U	13	U	12	U	12	U
Vinyl Chloride	UG/KG	13	U	13	U	13	U	13	U	12	UJ	12	UJ
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	12	U	12	U
Tentatively Identified Compounds										2		1	

DIRECTION FROM MOUND SOUTHEAST													
		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		G1101753.D REG		G1201754.D REG		G1301755.D REG		G1401756.D REG		A0701817.D REG		A0801818.D REG	
		4/13/94		4/13/94		04/13/94DUPE		04/13/94DUPE		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units												
Acenaphthene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Acenaphthylene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Anthracene	UG/KG	430	UJ	430	UJ	65	J	430	UJ	400	U	400	U
Benzo(a)anthracene	UG/KG	230	J	430	UJ	680	J	430	UJ	95	J	400	U
Benzo(a)pyrene	UG/KG	320	J	45	J	820	J	430	UJ	130	J	400	U
Benzo(b)fluoranthene	UG/KG	540	J	52	J	940	J	69	J	140	J	400	U
Benzo(g,h,i)perylene	UG/KG	200	J	430	UJ	540	J	430	UJ	69	J	400	U
Benzo(k)fluoranthene	UG/KG	430	UJ	55	J	820	J	430	UJ	130	J	400	UJ
Benzoic Acid	UG/KG	78	J	83	J	99	J	84	J	2000	UJ	2000	UJ
Benzyl Alcohol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
bis(2-Chloroethyl)ether	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4-Bromophenyl-phenylether	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Butylbenzylphthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Carbazole	UG/KG	430	UJ	430	UJ	67	J	430	UJ	400	U	400	U
4-Chloro-3-methylphenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4-Chloroaniline	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Chloronaphthalene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Chlorophenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4-Chlorophenyl-phenylether	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Chrysene	UG/KG	400	J	62	J	1000	J	51	J	160	J	400	U
Di-n-butylphthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Di-n-octylphthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Dibenzo(a,h)anthracene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Dibenzofuran	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
1,2-Dichlorobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
1,3-Dichlorobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
1,4-Dichlorobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
3,3'-Dichlorobenzidine	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2,4-Dichlorophenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Diethylphthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2,4-Dimethylphenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Dimethylphthalate	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	UJ	950	UJ
2,4-Dinitrotoluene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2,6-Dinitrotoluene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Fluoranthene	UG/KG	640	J	97	J	1600	J	74	J	260	J	400	U
Fluorene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Hexachlorobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Hexachlorobutadiene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Hexachlorocyclopentadiene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Hexachloroethane	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U

DIRECTION FROM MOUND SOUTHEAST													
		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		G1101753.D REG		G1201754.D REG		G1301755.D REG		G1401756.D REG		A0701817.D REG		A0801818.D REG	
		4/13/94		4/13/94		04/13/94DUPE		04/13/94DUPE		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units												
Indeno(1,2,3-c,d)pyrene	UG/KG	210	J	430	UJ	570	J	430	UJ	81	J	400	U
Isophorone	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Methylnaphthalene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Methylphenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4-Methylphenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
N-Nitrosodiphenylamine	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Naphthalene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Nitroaniline	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
3-Nitroaniline	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
4-Nitroaniline	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
Nitrobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2-Nitrophenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
4-Nitrophenol	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
2,2'-oxybis(1-Chloropropane)	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Pentachlorophenol	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
Phenanthrene	UG/KG	170	J	430	UJ	440	J	430	UJ	90	J	400	U
Phenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Pyrene	UG/KG	570	J	89	J	1300	J	75	J	220	J	400	UJ
1,2,4-Trichlorobenzene	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
2,4,5-Trichlorophenol	UG/KG	1100	UJ	1100	UJ	1100	UJ	1100	UJ	950	U	950	U
2,4,6-Trichlorophenol	UG/KG	430	UJ	430	UJ	430	UJ	430	UJ	400	U	400	U
Tentatively Identified		23		18		25		17		22		22	

DIRECTION FROM MOUND SOUTHEAST													
		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		34797-07 REG		34797-08 REG		34797-09 REG		34797-10 REG		36132-15 REG		36132-16 REG	
		4/13/94		4/13/94		04/13/94DUPE		04/13/94DUPE		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units												
Aldrin	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
alpha-BHC	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
alpha-Chlordane	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
Aroclor 1232	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
Aroclor-1016	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
Aroclor-1221	UG/KG	17	U	15	UJ	63	U	17	UJ	32	U	16	U
Aroclor-1242	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
Aroclor-1248	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
Aroclor-1254	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
Aroclor-1260	UG/KG	8.3	U	7.6	UJ	31	U	8.2	UJ	16	U	7.8	U
beta-BHC	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
4,4'-DDD	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
4,4'-DDE	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
4,4'-DDT	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
delta-BHC	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
Dieldrin	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
Endosulfan I	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
Endosulfan II	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
Endosulfan Sulfate	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	UJ	0.78	UJ
Endrin	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
Endrin Aldehyde	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
Endrin Ketone	UG/KG	0.83	U	0.76	UJ	3.1	U	0.82	UJ	1.6	U	0.78	U
gamma-BHC (Lindane)	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
gamma-Chlordane	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
Heptachlor	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
Heptachlor Epoxide	UG/KG	0.43	U	0.39	UJ	1.6	U	0.42	UJ	0.81	U	0.4	U
p,p'-Methoxychlor	UG/KG	3	J	3.9	UJ	16	U	4.2	UJ	8.1	U	4	U
Toxaphene	UG/KG	43	U	39	UJ	160	U	42	UJ	81	U	40	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND SOUTHEAST													
		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		3479807 REG		3479808 REG		3479809 REG		3479810 REG		3613315 REG		3613316 REG	
		4/13/94		4/13/94		04/13/94DUPE		04/13/94DUPE		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units												
Aluminum	MG/KG	13900		23500		16900		22300		7170		16000	
Antimony	MG/KG	0.8	UJ	0.8	UJ	0.81	UJ	0.8	UJ	0.74	UJ	0.74	UJ
Arsenic	MG/KG	13.8		16.2		10.9		11.9		6.8		6.2	
Barium	MG/KG	109		174		116		163		109		223	
Beryllium	MG/KG	0.75		0.93		0.85		0.9		0.69		1.2	
Bismuth	MG/KG	6.6	U	6.6	U	8.1		6.6	U	20.6		38.5	
Cadmium	MG/KG	0.59	U	0.6	U	0.6	U	0.6	U	0.55		0.55	
Calcium	MG/KG	5830		6670		4800		6180		3320		4380	
Chromium	MG/KG	20.8		29.2		25.4		23.8		12.1		19.2	
Cobalt	MG/KG	12.6		13		14.2		13.6		7.3		12.6	
Copper	MG/KG	20.8		30.9		22.7		27.1		12.2	J	24.2	J
Cyanide	MG/KG	0.64	U	0.65	U	0.65	U	0.65	U	0.6	U	0.6	U
Iron	MG/KG	25200		40100		30500		37200		18400		27200	
Lead	MG/KG	49.7	J	18.6		21.9	J	16.5		23.3		14.3	
Magnesium	MG/KG	3720		5310		3610		5010		2070		4520	
Manganese	MG/KG	571		813		642		701		660		688	
Mercury	MG/KG	0.13	U	0.13	U	0.13	U	0.13	U	0.18		0.12	U
Nickel	MG/KG	19.6		57.2		25.8		46.9		9.5		24.1	
Potassium	MG/KG	1160		1760		1480		1370		572		646	
Selenium	MG/KG	1.2	U	1.2	U	1.2	U	1.2	U	2.4	J	1.1	U
Silver	MG/KG	1.2	U	1.2	U	1.3	U	1.2	U	1.1	U	1.1	U
Sodium	MG/KG	485	U	490	U	493	U	490	U	450	U	450	U
Thallium	MG/KG	0.92	U	0.93	U	0.94	U	0.93	U	0.86	U	0.86	U
Vanadium	MG/KG	27.8		31.2		33.1		31		23	J	30.7	J
Zinc	MG/KG	141	J	85		78.3	J	79.6		49		59.7	

		RAG305		RAG306		RAG315		RAG316		RCG305		RCG306	
		902-RAG305		902-RAG306		902-RAG315		902-RAG316		902-RCG305		902-RCG306	
		0347990008SA RE		0347990009SA RE		0347990010SA RE		0347990011SA RE		0361340015SA RE		0361340016SA REG	
		34437		34437		04/13/94DUPE		04/13/94DUPE		34494		34494	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units												
Chloride	MG/KG	19.3	UJ	19.4	UJ	19.6	UJ	19.5	UJ	51.8		114	
Fluoride	MG/KG	1.5	J	3.8		2.9	J	3.8		1.9		2.3	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.81		0.65	U	0.65	U	0.65	U	4.8		0.61	
Sulfate	MG/KG	32.1	U	32.4	U	32.6	U	32.4	U	29.8	U	220	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND SOUTHEAST																
		RAG301			RAG302			RAG303			RAG304			RAG305		
		902-RAG301			902-RAG302			902-RAG303			902-RAG304			902-RAG305		
		3197434 REG			3197436 REG			3197438 REG			3197432 REG			3197428 REG		
		4/13/94			4/13/94			4/13/94			4/13/94			4/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.28	NA	U	0.217	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.618	0.0996	J	0.471	0.0819	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00914	0.00701	J	0.00753	0.00681	J	NS		
Pu-242	PCI/G	NS			NS			0.00961	NA	UJ	0.00408	NA	UJ	NS		
Th-228	PCI/G	NS			NS			1.25	0.333	J	NS			NS		
Th-230	PCI/G	NS			NS			1.64	0.378	J	NS			NS		
Th-232	PCI/G	NS			NS			1.38	0.338	J	NS			NS		
U-234	PCI/G	NS			NS			0.72	0.14		NS			NS		
U-235	PCI/G	NS			NS			0.132	0.053		NS			NS		
U-238	PCI/G	NS			NS			0.948	0.172		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0959	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.023	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0257	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0293	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.327	0.0471	J
K-40	PCI/G	NS			NS			NS			NS			18.7	1.96	J
Ra-226	PCI/G	NS			NS			NS			NS			0.631	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			1.27	NA	U

		RAG306			RAG311			RAG312			RAG313			RAG314		
		902-RAG306			902-RAG311			902-RAG312			902-RAG313			902-RAG314		
		3197430 REG			3197435 REG			3197437 REG			3197439 REG			3197433 REG		
		4/13/94			04/13/94DUPE			04/13/94DUPE			04/13/94DUPE			04/13/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.211	NA	U	0.203	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.437	0.0754	J	0.195	0.0435	J
Pu-239/240	PCI/G	NS			NS			NS			0.0164	0.00972	J	0.0127	0.00863	J
Pu-242	PCI/G	NS			NS			NS			0.0037	NA	UJ	0.00382	NA	UJ
Th-228	PCI/G	NS			NS			NS			0.959	0.23	J	NS		
Th-230	PCI/G	NS			NS			NS			1.53	0.306	J	NS		
Th-232	PCI/G	NS			NS			NS			1.05	0.235	J	NS		
U-234	PCI/G	NS			NS			NS			0.868	0.162		NS		
U-235	PCI/G	NS			NS			NS			0.107	0.0442		NS		
U-238	PCI/G	NS			NS			NS			1	0.181		NS		
Am-241	PCI/G	0.0967	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0228	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0256	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0304	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.028	NA	U	NS			NS			NS			NS		
K-40	PCI/G	25.4	2.75	J	NS			NS			NS			NS		
Ra-226	PCI/G	2.84	0.633		NS			NS			NS			NS		
Sr-90	PCI/G	0.453	NA	U	NS			NS			NS			NS		

DIRECTION FROM MOUND SOUTHEAST																
		RAG315			RAG316			RBG301			RBG302			RBG303		
		902-RAG315			902-RAG316			902-RBG301			902-RBG302			902-RBG303		
		3197429 REG			3197431 REG			3204253 REG			3204254 REG			3204255 REG		
		04/13/94DUPE			04/13/94DUPE			4/26/94			4/26/94			4/26/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0677	NA	U	0.39	0.118	J	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.0625	0.0314	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.00679	NA	U
Pu-242	PCI/G	NS			NS			NS			NS			0.0184	NA	U
Th-228	PCI/G	NS			NS			NS			NS			0.705	0.129	
Th-230	PCI/G	NS			NS			NS			NS			1.21	0.194	
Th-232	PCI/G	NS			NS			NS			NS			0.58	0.113	
U-234	PCI/G	NS			NS			NS			NS			0.659	0.118	
U-235	PCI/G	NS			NS			NS			NS			0.0308	0.019	
U-238	PCI/G	NS			NS			NS			NS			0.728	0.128	
Am-241	PCI/G	0.0742	NA	U	0.128	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0194	NA	U	0.0286	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0205	NA	U	0.0317	NA	U	NS			NS			NS		
Co-60	PCI/G	0.025	NA	U	0.0384	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.179	0.0325	J	0.0311	NA	U	NS			NS			NS		
K-40	PCI/G	19.2	2.08	J	24.4	2.69	J	NS			NS			NS		
Ra-226	PCI/G	3.18	0.587		3.27	0.788		NS			NS			NS		
Sr-90	PCI/G	1.01	NA	U	0.416	NA	U	NS			NS			NS		

		RBG304			RCG301			RCG302			RCG303			RCG304		
		902-RBG304			902-RCG301			902-RCG302			902-RCG303			902-RCG304		
		3204256 REG			3224129 REG			3224130 REG			3224131 REG			3224132 REG		
		4/26/94			6/9/94			6/9/94			6/9/94			6/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0868	NA	U	0.102	NA	U	NS			NS		
Pu-238	PCI/G	0.0554	0.0241	J	NS			NS			0.308	0.051		0.304	0.0558	
Pu-239/240	PCI/G	0.00537	0.00624	J	NS			NS			0.026	0.0112		0.0104	NA	U
Pu-242	PCI/G	0.00485	NA	UJ	NS			NS			0.00673	NA	U	0.00821	NA	U
Th-228	PCI/G	NS			NS			NS			1.01	0.157		NS		
Th-230	PCI/G	NS			NS			NS			1.3	0.192		NS		
Th-232	PCI/G	NS			NS			NS			0.961	0.15		NS		
U-234	PCI/G	NS			NS			NS			0.941	0.16		NS		
U-235	PCI/G	NS			NS			NS			0.047	0.0265		NS		
U-238	PCI/G	NS			NS			NS			1.03	0.172		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND SOUTHEAST																
		RCG305			RCG306			RGG301			RGG302			RGG303		
		902-RCG305			902-RCG306			902-RGG301			902-RGG302			902-RGG303		
		3224133 REG			3224134 REG			3208442 REG			3208443 REG			3208444 REG		
		6/9/94			6/9/94			5/4/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.223	NA	U	0.2	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.625	0.116	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.288	0.0184	
Pu-242	PCI/G	NS			NS			NS			NS			0.0223	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0807	NA	U	0.0977	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0189	NA	U	0.0229	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0202	NA	U	0.0256	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0249	NA	U	0.031	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.458	0.0548		0.0266	NA	U	NS			NS			NS		
K-40	PCI/G	14.4	1.55		17	1.9		NS			NS			NS		
Ra-226	PCI/G	0.576	NA	U	3.19	0.668		NS			NS			NS		
Sr-90	PCI/G	1.13	0.248	R	0.437	NA	U	NS			NS			NS		

		RGG304			RHG301			RHG302			RHG303			RHG304		
		902-RGG304			902-RHG301			902-RHG302			902-RHG303			902-RHG304		
		3208445 REG			3208446 REG			3208447 REG			3208449 REG			3208450 REG		
		5/4/94			5/4/94			5/4/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.194	NA	U	0.164	NA	U	NS			NS		
Pu-238	PCI/G	0.0801	0.0369	J	NS			NS			0.506	0.0267		0.0521	0.0312	
Pu-239/240	PCI/G	0.0219	NA	UJ	NS			NS			0.0187	NA	U	0.00782	0.00909	
Pu-242	PCI/G	0.00804	NA	UJ	NS			NS			0.00686	NA	U	0.00705	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND SOUTHEAST																
		RHG312			RJG301			RJG302			RJG303			RJG304		
		902-RHG312			902-RJG301			902-RJG302			902-RJG303			902-RJG304		
		3208448 REG			REG			REG			3210505 REG			3210506 REG		
		05/04/94DUPE			5/5/94			5/5/94			5/5/94			5/5/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.181	NA	U	0.11	NA	U	0.0866	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0364	0.0256		0.0246	NA	U
Pu-239/240	PCI/G	NS			NS			NS			0.0146	0.012		0.00717	NA	U
Pu-242	PCI/G	NS			NS			NS			0.0179	NA	U	0.00716	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKG301			RKG302			RKG303			RKG304			RKG313		
		902-RKG301			902-RKG302			902-RKG303			902-RKG304			902-RKG313		
		REG			REG			3210509 REG			3210511 REG			3210510 REG		
		5/5/94			5/5/94			5/5/94			5/5/94			05/05/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.104	NA	U	0.0889	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0784	0.0456	J	0.0619	NA	UJ	0.0353	0.023	
Pu-239/240	PCI/G	NS			NS			0.0124	0.0144	J	0.04	NA	UJ	0.0186	NA	U
Pu-242	PCI/G	NS			NS			0.0112	NA	UJ	0.0101	NA	UJ	0.00684	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND SOUTHEAST																
		RMG301			RMG302			RMG303			RMG304			RMG314		
		902-RMG301			902-RMG302			902-RMG303			902-RMG304			902-RMG314		
		3212431 REG			3212432 REG			3212433 REG			3212434 REG			3212435 REG		
		5/11/94			5/11/94			5/11/94			5/11/94			05/11/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0645	NA	U	0.0546	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.3	0.08	UJ	0.381	0.118	UJ	0.222	0.0988	UJ
Pu-239/240	PCI/G	NS			NS			0.0109	0.0126	J	0.0499	NA	UJ	0.0564	NA	UJ
Pu-242	PCI/G	NS			NS			0.0098	NA	UJ	0.0395	NA	UJ	0.207	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNG301			RNG302			RNG303			RNG304			RPG301		
		902-RNG301			902-RNG302			902-RNG303			902-RNG304			902-RPG301		
		3207731 REG			3207732 REG			3207733 REG			3207734 REG			3228608 REG		
		5/3/94			5/3/94			5/3/94			5/3/94			6/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.113	NA	U	0.0995	NA	U	NS			NS			0.0599	NA	U
Pu-238	PCI/G	NS			NS			0.0452	NA	U	0.099	0.0554	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0222	NA	U	0.0259	0.0214	J	NS		
Pu-242	PCI/G	NS			NS			0.00814	NA	U	0.0117	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND SOUTHEAST																
		RPG302			RPG303			RPG304			RRG301			RRG302		
		902-RPG302			902-RPG303			902-RPG304			902-RRG301			902-RRG302		
		3228609 REG			3228610 REG			3228611 REG			3208409 REG			3208410 REG		
		6/20/94			6/20/94			6/20/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0645	NA	U	NS			NS			0.162	NA	U	0.178	NA	U
Pu-238	PCI/G	NS			0.0539	0.0171	U	0.0385	0.0144	U	NS			NS		
Pu-239/240	PCI/G	NS			0.0163	0.00908		0.00351	0.00353		NS			NS		
Pu-242	PCI/G	NS			0.00795	NA	U	0.00645	NA	U	NS			NS		
Th-228	PCI/G	NS			0.935	0.15		NS			NS			NS		
Th-230	PCI/G	NS			1.37	0.201		NS			NS			NS		
Th-232	PCI/G	NS			0.979	0.155		NS			NS			NS		
U-234	PCI/G	NS			0.842	0.15		NS			NS			NS		
U-235	PCI/G	NS			0.0709	0.0362		NS			NS			NS		
U-238	PCI/G	NS			1.03	0.175		NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRG303			RRG304			RSG301			RSG302			RSG303		
		902-RRG303			902-RRG304			902-RSG301			902-RSG302			902-RSG303		
		3208411 REG			3208412 REG			3208403 REG			3208404 REG			3208405 REG		
		5/4/94			5/4/94			5/4/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.167	NA	U	0.18	NA	U	NS		
Pu-238	PCI/G	0.219	0.0505		0.286	0.0635		NS			NS			0.149	0.045	
Pu-239/240	PCI/G	0.0138	NA	UJ	0.0161	NA	UJ	NS			NS			0.0169	0.0129	
Pu-242	PCI/G	0.00507	NA	UJ	0.00592	NA	UJ	NS			NS			0.0178	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND SOUTHEAST																
		RSG304			RSG311			RSG313			RTG301			RTG302		
		902-RSG304			902-RSG311			902-RSG313			902-RTG301			902-RTG302		
		3208406 REG			3208407 REG			3208408 REG			3208413 REG			3208414 REG		
		5/4/94			05/04/94DUPE			05/04/94DUPE			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.191	NA	U	NS			0.191	NA	U	0.15	NA	U
Pu-238	PCI/G	0.783	0.189	J	NS			0.27	0.0673		NS			NS		
Pu-239/240	PCI/G	0.018	NA	UJ	NS			0.0268	0.0173		NS			NS		
Pu-242	PCI/G	0.018	NA	UJ	NS			0.00726	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTG303			RTG304			RUG301			RUG302			RVG301		
		902-RTG303			902-RTG304			902-RUG301			902-RUG302			902-RVG301		
		3208415 REG			3208416 REG			3202127 REG			3202128 REG			3201359 REG		
		5/4/94			5/4/94			4/21/94			4/21/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.222	0.0493		0.194	0.0448	J	0.0229	0.0555		0.398	0.0831		0.0489	0.0212	U
Pu-239/240	PCI/G	0.0134	NA	UJ	0.00512	0.00594	J	0.0162	0.0124		0.00697	NA	U	0.0118	0.00971	
Pu-242	PCI/G	0.00493	NA	UJ	0.0126	NA	UJ	0.0171	NA	U	0.00696	NA	U	0.0053	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

DIRECTION FROM MOUND SOUTHEAST																
		RVG302			RVG311			RXG301			RXG302			RYG301		
		902-RVG302			902-RVG311			902-RXG301			902-RXG302			902-RYG301		
		3201358 REG			3201356 REG			3201357 REG			3201355 REG			3200232 REG		
		4/20/94			04/20/94DUPE			4/20/94			4/20/94			4/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0511	0.0337	J	0.0542	NA	UJ	0.0371	0.0262		0.0418	NA	UJ	0.0303	0.0145	U
Pu-239/240	PCI/G	0.0264	NA	UJ	0.0171	0.0154	J	0.0203	NA	U	0.00803	NA	UJ	0.00405	0.00408	
Pu-242	PCI/G	0.0209	NA	UJ	0.00925	NA	UJ	0.00591	NA	U	0.00802	NA	UJ	0.00274	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RYG302		
		902-RYG302		
		3200233 REG		
		4/19/94		
		Result	UNC	Val
Radiological	Units			
Tritium	PCI/G	NS		
Pu-238	PCI/G	0.0576	0.0182	J
Pu-239/240	PCI/G	0.013	0.0083	J
Pu-242	PCI/G	0.00294	NA	UJ
Th-228	PCI/G	NS		
Th-230	PCI/G	NS		
Th-232	PCI/G	NS		
U-234	PCI/G	NS		
U-235	PCI/G	NS		
U-238	PCI/G	NS		
Am-241	PCI/G	NS		
Bi-207	PCI/G	NS		
Bi-210m	PCI/G	NS		
Co-60	PCI/G	NS		
Cs-137	PCI/G	NS		
K-40	PCI/G	NS		
Ra-226	PCI/G	NS		
Sr-90	PCI/G	NS		

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		J9929.D REG		J9930.D REG		H4291.D REG		H4298.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	12		13	U	12	U	12	U
Acetonitrile	UG/KG	123	U	126	U	119	U	118	U
Acrylonitrile	UG/KG	123	U	126	U	119	U	118	U
Benzene	UG/KG	6	UJ	6	UJ	12	U	12	U
Bromodichloromethane	UG/KG	6	UJ	6	UJ	12	U	12	U
Bromoform	UG/KG	6	UJ	6	UJ	12	U	12	U
Bromomethane	UG/KG	12	U	13	U	12	UJ	12	UJ
2-Butanone	UG/KG	12	U	13	U	12	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	12	U	12	U
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	12	U	12	U
Chlorobenzene	UG/KG	6	UJ	6	UJ	12	U	12	U
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	12	U	12	U
Chloroethane	UG/KG	12	U	13	U	12	UJ	12	UJ
Chloroform	UG/KG	6	UJ	6	UJ	12	U	12	U
Chloromethane	UG/KG	12	U	13	U	12	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	12	U	12	U
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	12	U	12	U
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	12	U	12	U
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	12	U	12	U
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	12	U	12	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	12	U	12	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	12	U	12	U
1,2-Diethylbenzene	UG/KG	25	U	25	U	24	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	12	U	12	U
Hexane	UG/KG	12	U	13	U	12	U	12	U
2-Hexanone	UG/KG	12	U	13	U	12	U	12	U
Iodomethane	UG/KG	12	U	13	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	13	U	12	U	12	U
Methylene Chloride	UG/KG	56		66		12	U	12	U
Styrene	UG/KG	6	UJ	6	UJ	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	12	U	12	U
Tetrachloroethene	UG/KG	6	UJ	6	UJ	12	U	12	U
Toluene	UG/KG	6	UJ	6	UJ	12	U	12	U
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	12	U	12	U
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	12	U	12	U
Trichloroethene	UG/KG	6	UJ	6	UJ	12	U	12	U
Trichlorotrifluoroethane	UG/KG	12	U	13	U	12	U	12	U
Vinyl Acetate	UG/KG	12	U	13	U	12	U	12	U
Vinyl Chloride	UG/KG	12	U	13	U	12	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	12	U	12	U
Tentatively Identified Compounds						3			

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		G1901761.D REG		G0601785.D REG		A0901819.D REG		A1201822.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	410		420	UJ	400	U	390	U
Acenaphthylene	UG/KG	410	UJ	420	UJ	400	U	390	U
Anthracene	UG/KG	410	UJ	420	UJ	400	U	390	U
Benzo(a)anthracene	UG/KG	410	UJ	420	UJ	400	U	390	U
Benzo(a)pyrene	UG/KG	410	UJ	420	UJ	40	J	390	U
Benzo(b)fluoranthene	UG/KG	410	UJ	420	UJ	91	J	390	U
Benzo(g,h,i)perylene	UG/KG	410	UJ	420	UJ	400	U	390	U
Benzo(k)fluoranthene	UG/KG	410	UJ	420	UJ	400	UJ	390	UJ
Benzoic Acid	UG/KG	92	J	82	J	2000	UJ	1900	UJ
Benzyl Alcohol	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	410	UJ	420	UJ	400	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	410	UJ	420	UJ	400	U	390	U
bis(2-Chloroethyl)ether	UG/KG	410	UJ	420	UJ	400	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Bromophenyl-phenylether	UG/KG	410	UJ	420	UJ	400	U	390	U
Butylbenzylphthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
Carbazole	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Chloro-3-methylphenol	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Chloroaniline	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Chloronaphthalene	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Chlorophenol	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Chlorophenyl-phenylether	UG/KG	410	UJ	420	UJ	400	U	390	U
Chrysene	UG/KG	410	UJ	420	UJ	52	J	390	U
Di-n-butylphthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
Di-n-octylphthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
Dibenzo(a,h)anthracene	UG/KG	410	UJ	420	UJ U	400	U	390	U
Dibenzofuran	UG/KG	410	UJ	420	UJ	400	U	390	U
1,2-Dichlorobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
1,3-Dichlorobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
1,4-Dichlorobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
3,3'-Dichlorobenzidine	UG/KG	410	UJ	420	UJ	400	U	390	U
2,4-Dichlorophenol	UG/KG	410	UJ	420	UJ	400	U	390	U
Diethylphthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
2,4-Dimethylphenol	UG/KG	410	UJ	420	UJ	400	U	390	U
Dimethylphthalate	UG/KG	410	UJ	420	UJ	400	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	UJ	1000	UJ	950	U	940	U
2,4-Dinitrophenol	UG/KG	1000	UJ	1000	UJ	950	UJ	940	UJ
2,4-Dinitrotoluene	UG/KG	410	UJ	420	UJ	400	U	390	U
2,6-Dinitrotoluene	UG/KG	410	UJ	420	UJ	400	U	390	U
Fluoranthene	UG/KG	410	UJ	420	UJ	76	J	390	U
Fluorene	UG/KG	410	UJ	420	UJ	400	U	390	U
Hexachlorobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
Hexachlorobutadiene	UG/KG	410	UJ	420	UJ	400	U	390	U
Hexachlorocyclopentadiene	UG/KG	410	UJ	420	UJ	400	U	390	U
Hexachloroethane	UG/KG	410	UJ	420	UJ	400	U	390	U

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		G1901761.D REG		G0601785.D REG		A0901819.D REG		A1201822.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Indeno(1,2,3-c,d)pyrene	UG/KG	410	UJ	420	UJ	400	U	390	U
Isophorone	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Methylnaphthalene	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Methylphenol	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Methylphenol	UG/KG	410	UJ	420	UJ	400	U	390	U
N-Nitroso-di-n-propylamine	UG/KG	410	UJ	420	UJ	400	U	390	U
N-Nitrosodiphenylamine	UG/KG	410	UJ	420	UJ	400	U	390	U
Naphthalene	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Nitroaniline	UG/KG	1000	UJ	1000	UJ	950	U	940	U
3-Nitroaniline	UG/KG	1000	UJ	1000	UJ	950	U	940	U
4-Nitroaniline	UG/KG	1000	UJ	1000	UJ	950	U	940	U
Nitrobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
2-Nitrophenol	UG/KG	410	UJ	420	UJ	400	U	390	U
4-Nitrophenol	UG/KG	1000	UJ	1000	UJ	950	U	940	U
2,2'-oxybis(1-Chloropropane)	UG/KG	410	UJ	420	UJ	400	U	390	U
Pentachlorophenol	UG/KG	1000	UJ	1000	UJ	950	U	940	U
Phenanthrene	UG/KG	410	UJ	420	UJ	400	U	390	U
Phenol	UG/KG	410	UJ	420	UJ	400	U	390	U
Pyrene	UG/KG	410	UJ	420	UJ	52	J	390	UJ
1,2,4-Trichlorobenzene	UG/KG	410	UJ	420	UJ	400	U	390	U
2,4,5-Trichlorophenol	UG/KG	1000	UJ	1000	UJ	950	U	940	U
2,4,6-Trichlorophenol	UG/KG	410	UJ	420	UJ	400	U	390	U
Tentatively Identified Compounds		25		22		29		23	

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		34797-15 REG		34797-16 REG		36132-17 REG		36132-18 REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.42		0.42	UJ	0.4	U	0.4	U
alpha-BHC	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
alpha-Chlordane	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
Aroclor 1232	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
Aroclor-1016	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
Aroclor-1221	UG/KG	16	UJ	16	UJ	16	U	16	U
Aroclor-1242	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
Aroclor-1248	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
Aroclor-1254	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
Aroclor-1260	UG/KG	8.1	UJ	8.1	UJ	7.8	U	7.7	U
beta-BHC	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
4,4'-DDD	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
4,4'-DDE	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
4,4'-DDT	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
delta-BHC	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
Dieldrin	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
Endosulfan I	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
Endosulfan II	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
Endosulfan Sulfate	UG/KG	0.81	UJ	0.81	UJ	0.78	UJ	0.77	UJ
Endrin	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
Endrin Aldehyde	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
Endrin Ketone	UG/KG	0.81	UJ	0.81	UJ	0.78	U	0.77	U
gamma-BHC (Lindane)	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
gamma-Chlordane	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
Heptachlor	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
Heptachlor Epoxide	UG/KG	0.42	UJ	0.42	UJ	0.4	U	0.4	U
p,p'-Methoxychlor	UG/KG	4.2	UJ	4.2	UJ	4	U	4	U
Toxaphene	UG/KG	42	UJ	42	UJ	40	U	40	U

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		0347990017SA REG		0347990018SA REG		0361340017SA REG		0361340018SA REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units								
2-Amino-4,6-dinitrotoluene	UG/G	0.31		0.32	UJ	0.25	U	0.25	U
1,3-Dinitrobenzene	UG/G	0.31	UJ	0.32	UJ	0.25	U	0.25	U
2,4-Dinitrotoluene	UG/G	0.31	UJ	0.32	UJ	0.25	U	0.25	U
2,6-Dinitrotoluene	UG/G	0.32	UJ	0.33	UJ	0.26	U	0.26	U
HMX	UG/G	2.7	UJ	2.8	UJ	2.2	U	2.2	U
Nitrobenzene	UG/G	0.32	UJ	0.33	UJ	0.26	U	0.26	U
PETN	UG/G	1.2	UJ	1.3	UJ	1	U	1	U
RDX	UG/G	1.2	UJ	1.3	UJ	1	U	1	U
TETRYL	UG/G	0.8	UJ	0.82	UJ	0.65	U	0.65	U
1,3,5-Trinitrobenzene	UG/G	0.31	UJ	0.32	UJ	0.25	U	0.25	U
2,4,6-Trinitrotoluene	UG/G	0.31	UJ	0.32	UJ	0.25	U	0.25	U

DIRECTION FROM MOUND - SOUTH/SOUTHEAST									
		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		3479815 REG		3479816 REG		3613317 REG		3613318 REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	8150		21500		13500		12900	
Antimony	MG/KG	0.77	UJ	0.78	UJ	0.74	UJ	0.73	UJ
Arsenic	MG/KG	8.7		15.8		6.2		5.6	
Barium	MG/KG	41		113		133		124	
Beryllium	MG/KG	0.4		0.89		0.94		0.85	
Bismuth	MG/KG	6.3	U	6.5	U	35		38	
Cadmium	MG/KG	0.57	U	0.58	U	0.55	U	0.54	U
Calcium	MG/KG	2180		5010		16100		35300	
Chromium	MG/KG	13.2		29.6		17.6		15.7	
Cobalt	MG/KG	7.3		13.3		14.3		12.5	
Copper	MG/KG	12.1		33.1		21.2	J	18.7	J
Cyanide	MG/KG	0.62	U	0.63	U	0.6	U	0.59	U
Iron	MG/KG	17400		43600		30300		28900	
Lead	MG/KG	21.3		19.8		21.2		16.6	
Magnesium	MG/KG	1720		5210		3410		3660	
Manganese	MG/KG	265		649		963		836	
Mercury	MG/KG	0.12	U	0.13	U	0.12	U	0.12	U
Nickel	MG/KG	12.6		41.9		24.5		23.3	
Potassium	MG/KG	734		1310		1670		1810	
Selenium	MG/KG	1.1	U	1.2	U	1.1	U	1.6	J
Silver	MG/KG	1.2	U	1.2	U	1.1	U	1.1	U
Sodium	MG/KG	468	U	478	U	451	U	444	U
Thallium	MG/KG	0.89	U	0.91	U	0.86	U	0.85	U
Vanadium	MG/KG	18.7		38.3		23.9	J	20.4	J
Zinc	MG/KG	238		125		90.2		70.7	

		RAH305		RAH306		RCH305		RCH306	
		902-RAH305		902-RAH306		902-RCH305		902-RCH306	
		0347990017SA REG		0347990018SA REG		0361340017SA REG		0361340018SA REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	18.6		34.4		17.9	U	17.6	U
Fluoride	MG/KG	2.2		1.4		2.1		2.6	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.62	U	0.63	U	5		7.4	
Sulfate	MG/KG	30.9	U	31.6	U	29.8	U	29.3	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RAH301			RAH302			RAH303			RAH304			RAH305		
		902-RAH301			902-RAH302			902-RAH303			902-RAH304			902-RAH305		
		3198929 REG			3198930 REG			3198931 REG			3198932 REG			3198933 REG		
		4/14/94			4/14/94			4/14/94			4/14/94			4/14/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.218	NA		0.165	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			1.4	0.233		0.234	0.0769	U	NS		
Pu-239/240	PCI/G	NS			NS			0.0308	NA	U	0.0368	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.0113	NA	U	0.0135	NA	U	NS		
Th-228	PCI/G	NS			NS			0.899	0.171	J	NS			NS		
Th-230	PCI/G	NS			NS			1.37	0.229	J	NS			NS		
Th-232	PCI/G	NS			NS			0.907	0.168	J	NS			NS		
U-234	PCI/G	NS			NS			0.724	0.145		NS			NS		
U-235	PCI/G	NS			NS			0.0408	0.0287		NS			NS		
U-238	PCI/G	NS			NS			0.907	0.167		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0869	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0208	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0232	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0276	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.296	0.048	
K-40	PCI/G	NS			NS			NS			NS			16.6	1.84	
Ra-226	PCI/G	NS			NS			NS			NS			2.3	0.643	J
Sr-90	PCI/G	NS			NS			NS			NS			0.411	NA	U

		902-RAH306			902-RBH301			902-RBH302			902-RBH303			902-RBH304		
		3198934 REG			3197424 REG			3197427 REG			3197425 REG			3197426 REG		
		4/14/94			4/13/94			4/13/94			4/13/94			4/13/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.509	NA	UJ	0.819	0.384	J	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.224	0.0437	J	0.248	0.0544	J
Pu-239/240	PCI/G	NS			NS			NS			0.00314	NA	UJ	0.00667	0.00673	J
Pu-242	PCI/G	NS			NS			NS			0.00314	NA	UJ	0.00451	NA	UJ
Th-228	PCI/G	NS			NS			NS			0.638	0.249	J	NS		
Th-230	PCI/G	NS			NS			NS			0.851	0.272	J	NS		
Th-232	PCI/G	NS			NS			NS			0.774	0.244	J	NS		
U-234	PCI/G	NS			NS			NS			0.642	0.128		NS		
U-235	PCI/G	NS			NS			NS			0.0465	0.0296		NS		
U-238	PCI/G	NS			NS			NS			0.514	0.111		NS		
Am-241	PCI/G	0.113	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0238	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0274	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0304	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0483	0.0192		NS			NS			NS			NS		
K-40	PCI/G	17.5	1.95		NS			NS			NS			NS		
Ra-226	PCI/G	2.97	0.683	J	NS			NS			NS			NS		
Sr-90	PCI/G	0.477	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		3224135 REG			3224136 REG			3224137 REG			3224138 REG			3224139 REG		
		6/9/94			6/9/94			6/9/94			6/9/94			6/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.098	NA	U	0.092	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.172	0.034	R	0.422	NA	UJ	NS		
Pu-239/240	PCI/G	NS			NS			0.0134	NA	U	0.196	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.0216	NA	U	0.16	NA	UJ	NS		
Th-228	PCI/G	NS			NS			1.07	0.166		NS			NS		
Th-230	PCI/G	NS			NS			1.02	0.159		NS			NS		
Th-232	PCI/G	NS			NS			1.02	0.158		NS			NS		
U-234	PCI/G	NS			NS			0.799	0.14		NS			NS		
U-235	PCI/G	NS			NS			0.06	0.0279		NS			NS		
U-238	PCI/G	NS			NS			0.931	0.156		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.135	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0256	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0285	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0349	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.24	0.0389	
K-40	PCI/G	NS			NS			NS			NS			25.9	2.8	
Ra-226	PCI/G	NS			NS			NS			NS			2.49	0.62	
Sr-90	PCI/G	NS			NS			NS			NS			0.443	NA	U

		RCH306			RHH301			RHH302			RHH303			RHH304		
		902-RCH306			902-RHH301			902-RHH302			902-RHH303			902-RHH304		
		3224140 REG			3202121 REG			3202122 REG			3202123 REG			3202124 REG		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.152	NA	U	0.114	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.202	0.0517		0.0222	NA	U
Pu-239/240	PCI/G	NS			NS			NS			0.0203	0.0138		0.00867	NA	U
Pu-242	PCI/G	NS			NS			NS			0.0166	NA	U	0.00319	NA	U
Th-228	PCI/G	NS			NS			NS			1.2	0.192	J	NS		
Th-230	PCI/G	NS			NS			NS			1.29	0.202		NS		
Th-232	PCI/G	NS			NS			NS			1.14	0.185		NS		
U-234	PCI/G	NS			NS			NS			0.701	0.125		NS		
U-235	PCI/G	NS			NS			NS			0.0557	0.0265		NS		
U-238	PCI/G	NS			NS			NS			0.903	0.151		NS		
Am-241	PCI/G	0.0964	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0251	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0284	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0333	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.112	0.0261		NS			NS			NS			NS		
K-40	PCI/G	26.2	2.73		NS			NS			NS			NS		
Ra-226	PCI/G	1.77	0.621		NS			NS			NS			NS		
Sr-90	PCI/G	0.548	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RJH301			RJH302			RJH303			RJH304			RJH312		
		902-RJH301			902-RJH302			902-RJH303			902-RJH304			902-RJH312		
		3222401 REG			3222402 REG			3222404 REG			3222405 REG			3222403 REG		
Radiological	**Units**															
Tritium	PCI/G	0.0843	NA	U	0.0743	NA	U	NS			NS			0.074	NA	U
Pu-238	PCI/G	NS			NS			0.2	0.0362		0.163	0.034		NS		
Pu-239/240	PCI/G	NS			NS			0.0187	0.00902		0.00819	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00373	0.00376		0.003	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKH301			RKH302			RKH303			RKH304			RKH314		
		902-RKH301			902-RKH302			902-RKH303			902-RKH304			902-RKH314		
		3204211 REG			3204212 REG			3204213 REG			3204214 REG			3204215 REG		
		4/25/94			4/25/94			4/25/94			4/25/94			04/25/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Tritium	PCI/G	0.097	NA	U	0.178	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0151	NA	U	0.00807	NA	U	0.0188	NA	UJ
Pu-239/240	PCI/G	NS			NS			0.012	0.00639		0.00695	0.00499		0.0122	NA	U
Pu-242	PCI/G	NS			NS			0.00217	NA	U	0.00235	NA	U	0.00305	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RMH301			RMH302			RMH303			RMH304			RNH301		
		902-RMH301			902-RMH302			902-RMH303			902-RMH304			902-RNH301		
		3204216 REG			3204217 REG			3204218 REG			3204219 REG			3226431 REG		
		4/25/94			4/25/94			4/25/94			4/25/94			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Pu-238	PCI/G							0.0114	0.00794		0.013	NA	U			
Pu-239/240	PCI/G							0.00928	0.00564		0.00654	0.0047				
Pu-242	PCI/G							0.00193	NA	U	0.00222	NA	U			
Th-228	PCI/G															
Th-230	PCI/G															
Th-232	PCI/G															
U-234	PCI/G															
U-235	PCI/G															
U-238	PCI/G															
Am-241	PCI/G															
Bi-207	PCI/G															
Bi-210m	PCI/G															
Co-60	PCI/G															
Cs-137	PCI/G															
K-40	PCI/G															
Ra-226	PCI/G															
Sr-90	PCI/G															

		RNH302			RNH303			RNH304			RNH314			RPH301		
		902-RNH302			902-RNH303			902-RNH304			902-RNH314			902-RPH301		
		3226432 REG			3226433 REG			3226434 REG			3226435 REG			3218508 REG		
		6/15/94			6/15/94			6/15/94			06/15/94DUPE			5/25/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0614	NA	U	NS			NS			NS			0.0782	NA	U
Pu-238	PCI/G	NS			0.353	0.0574		0.321	0.0547		0.287	0.0509		NS		
Pu-242	PCI/G	NS			0.00479	0.00482		0.00771	NA	U	0.00343	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RPH302			RPH303			RPH304			RRH301			RRH302		
		902-RPH302			902-RPH303			902-RPH304			902-RRH301			902-RRH302		
		3218509 REG			3218510 REG			3218511 REG			3229401 REG			3229402 REG		
		5/25/94			5/25/94			5/25/94			6/23/94			6/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0744	NA	U	NS			NS			0.054	NA	U	0.0931	NA	U
Pu-238	PCI/G	NS			0.054	0.0238		0.0551	0.0254		NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRH303			RRH304			RSH301			RSH302			RSH303		
		902-RRH303			902-RRH304			902-RSH301			902-RSH302			902-RSH303		
		3229403 REG			3229404 REG			3231202 REG			3231203 REG			3231204 REG		
		6/23/94			6/23/94			6/27/94			6/27/94			6/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.117	NA	U	0.116	NA	U	NS		
Pu-238	PCI/G	0.145	0.0352		0.112	0.0308		NS			NS			0.0497	0.0142	U
Pu-239/240	PCI/G	0.0112	0.00885		0.0102	NA	U	NS			NS			0.0125	0.00653	
Pu-242	PCI/G	0.00843	NA	U	0.009	NA	U	NS			NS			0.00219	0.00255	
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RSH304			RSH311			RSH313			RTH301			RTH302		
		902-RSH304			902-RSH311			902-RSH313			902-RTH301			902-RTH302		
		3231205 REG			3231206 REG			3231207 REG			3231208 REG			3231209 REG		
		6/27/94			06/27/94DUPE			06/27/94DUPE			6/27/94			6/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.117	NA	U	NS			0.117	NA	U	0.0943	NA	U
Pu-238	PCI/G	0.437	0.0137	U	NS			0.0662	0.0208	U	NS			NS		
Pu-239/240	PCI/G	0.0513	0.0141		NS			0.0125	NA	U	NS			NS		
Pu-242	PCI/G	0.00204	NA	U	NS			0.00962	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTH303			RTH304			RUH301			RUH302			RVH301		
		902-RTH303			902-RTH304			902-RUH301			902-RUH302			902-RVH301		
		3231210 REG			3231211 REG			3204232 REG			3204233 REG			3204221 REG		
		6/27/94			6/27/94			4/25/94			4/25/94			4/25/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0622	0.0177	U	0.0542	0.0153	U	0.0197	NA	UJ	0.0215	NA	UJ	0.00863	NA	U
Pu-239/240	PCI/G	0.00865	0.00555		0.00754	0.00529		0.0118	0.00801	J	0.00444	NA	UJ	0.00574	0.00459	
Pu-242	PCI/G	0.00637	NA	U	0.00555	NA	U	0.00355	NA	UJ	0.00491	0.00573	J	0.00528	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHEAST																
		RVH302			RVH312			RXH301			RXH302			RYH301		
		902-RVH302			902-RVH312			902-RXH301			902-RXH302			902-RYH301		
		3204222 REG			3204223 REG			3204207 REG			3204208 REG			3222436 REG		
		4/25/94			04/25/94DUPE			4/22/94			4/22/94			6/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0138	NA	U	0.0201	0.00839		0.0242	NA	UJ	0.0543	0.0227	J	0.255	0.0377	
Pu-239/240	PCI/G	0.00414	0.00374		0.00504	NA	U	0.00609	0.00615	J	0.0125	NA	UJ	0.018	0.00932	
Pu-242	PCI/G	0.0061	NA	U	0.00147	NA	U	0.00412	NA	UJ	0.0125	NA	UJ	0.0063	0.00479	
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RYH302			RYH312		
		902-RYH302			902-RYH312		
		3222437 REG			3222438 REG		
		6/3/94			06/03/94DUPE		
		Result	UNC	Val	Result	UNC	Val
Radiological	**Units**						
Tritium	PCI/G	NS			NS		
Pu-238	PCI/G	0.0915	0.0253	R	0.241	0.0377	
Pu-239/240	PCI/G	0.0124	NA	U	0.0169	0.00877	
Pu-242	PCI/G	0.0123	NA	U	0.00269	NA	U
Th-228	PCI/G	NS			NS		
Th-230	PCI/G	NS			NS		
Th-232	PCI/G	NS			NS		
U-234	PCI/G	NS			NS		
U-235	PCI/G	NS			NS		
U-238	PCI/G	NS			NS		
Am-241	PCI/G	NS			NS		
Bi-210m	PCI/G	NS			NS		
Co-60	PCI/G	NS			NS		
Cs-137	PCI/G	NS			NS		
K-40	PCI/G	NS			NS		
Ra-226	PCI/G	NS			NS		
Sr-90	PCI/G	NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH											
		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		J9927.D REG		J9928.D REG		H4266.D REG		H4268.D REG		H4267.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	13	U	12	U	12	U	11	U	12	U
Acetonitrile	UG/KG	128	U	125	U	123	U	114	U	116	U
Acrylonitrile	UG/KG	128	U	125	U	123	U	114	U	116	U
Benzene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Bromodichloromethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Bromoform	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Bromomethane	UG/KG	13	U	12	U	12	UJ	11	UJ	12	UJ
2-Butanone	UG/KG	13	U	12	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Chlorobenzene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Chloroethane	UG/KG	13	U	12	U	12	U	11	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Chloromethane	UG/KG	13	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,2-Diethylbenzene	UG/KG	26	U	25	U	25	U	23	U	23	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Hexane	UG/KG	13	U	12	U	12	U	11	U	12	U
2-Hexanone	UG/KG	13	U	12	U	12	U	11	U	12	U
Iodomethane	UG/KG	13	U	12	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	12	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	18	U	26		12	U	11	U	12	U
Styrene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Tetrachloroethene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Toluene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Trichloroethene	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Trichlorotrifluoroethane	UG/KG	13	U	12	U	12	U	11	U	12	U
Vinyl Acetate	UG/KG	13	U	12	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	13	U	12	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	12	U	11	U	12	U
Tentatively Identified Compounds						1		1			

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH											
		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		G1701759.D REG		G1801760.D REG		A0701796.D REG		A0901798.D REG		A0801797.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**										
Acenaphthene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Acenaphthylene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Anthracene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Benzo(a)anthracene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Benzo(a)pyrene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Benzo(b)fluoranthene	UG/KG	420	UJ	420	UJ	410	U	380	U	44	J
Benzo(g,h,i)perylene	UG/KG	420	UJ	420	UJ	47	J	380	U	390	U
Benzo(k)fluoranthene	UG/KG	420	UJ	420	UJ	410	UJ	380	UJ	390	U
Benzoic Acid	UG/KG	90	J	78	J	2000	UJ	1900	UJ	1900	UJ
Benzyl Alcohol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
bis(2-Chloroethyl)ether	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Bromophenyl-phenylether	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Butylbenzylphthalate	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Carbazole	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Chloro-3-methylphenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Chloroaniline	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Chloronaphthalene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Chlorophenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Chlorophenyl-phenylether	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Chrysene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Di-n-butylphthalate	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Di-n-octylphthalate	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Dibenzo(a,h)anthracene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Dibenzofuran	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
1,2-Dichlorobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
1,3-Dichlorobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
1,4-Dichlorobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
3,3'-Dichlorobenzidine	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2,4-Dichlorophenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Diethylphthalate	UG/KG	420	UJ	420	UJ	410	UJ	380	UJ	390	UJ
2,4-Dimethylphenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Dimethylphthalate	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
2,4-Dinitrotoluene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2,6-Dinitrotoluene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Fluoranthene	UG/KG	50	J	420	UJ	43	J	380	U	42	J
Fluorene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Hexachlorobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Hexachlorobutadiene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Hexachlorocyclopentadiene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Hexachloroethane	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH											
		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		G1701759.D REG		G1801760.D REG		A0701796.D REG		A0901798.D REG		A0801797.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**										
Indeno(1,2,3-c,d)pyrene											
Isophorone	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Methylnaphthalene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Methylphenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Methylphenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
N-Nitroso-di-n-propylamine	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
N-Nitrosodiphenylamine	UG/KG	420	UJ	420	UJ	410	UJ	380	UJ	390	UJ
Naphthalene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Nitroaniline	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
3-Nitroaniline	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
4-Nitroaniline	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
Nitrobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2-Nitrophenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
4-Nitrophenol	UG/KG	1100	UJ	1000	UJ	990	UJ	910	UJ	930	UJ
2,2'-oxybis(1-Chloropropane)	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Pentachlorophenol	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
Phenanthrene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Phenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Pyrene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
1,2,4-Trichlorobenzene	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
2,4,5-Trichlorophenol	UG/KG	1100	UJ	1000	UJ	990	U	910	U	930	U
2,4,6-Trichlorophenol	UG/KG	420	UJ	420	UJ	410	U	380	U	390	U
Tentatively Identified Compounds		25		24		28		20		27	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH											
		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		34797-13 REG		34797-14 REG		36132-01 REG		36132-03 REG		36132-02 REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
alpha-BHC	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
alpha-Chlordane	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
Aroclor 1232	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
Aroclor-1016	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
Aroclor-1221	UG/KG	15	UJ	11	UJ	16	U	15	U	16	U
Aroclor-1242	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
Aroclor-1248	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
Aroclor-1254	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
Aroclor-1260	UG/KG	7.4	UJ	5.4	UJ	8.1	U	7.5	U	7.7	U
beta-BHC	UG/KG	0.38	UJ	0.18	J	0.42	U	0.38	U	0.4	U
4,4'-DDD	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
4,4'-DDE	UG/KG	0.58	J	0.28	J	0.51	J	0.75	U	0.77	U
4,4'-DDT	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
delta-BHC	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
Dieldrin	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
Endosulfan I	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
Endosulfan II	UG/KG	0.74	UJ	0.54	UJ	0.81	UJ	0.75	UJ	0.77	UJ
Endosulfan Sulfate	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
Endrin	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
Endrin Aldehyde	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
Endrin Ketone	UG/KG	0.74	UJ	0.54	UJ	0.81	U	0.75	U	0.77	U
gamma-BHC (Lindane)	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
gamma-Chlordane	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
Heptachlor	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
Heptachlor Epoxide	UG/KG	0.38	UJ	0.28	UJ	0.42	U	0.38	U	0.4	U
p,p'-Methoxychlor	UG/KG	3.8	UJ	2.8	UJ	4.2	U	3.8	U	4	U
Toxaphene	UG/KG	38	UJ	28	UJ	42	U	38	U	40	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH											
		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		3479813 REG		3479814 REG		3613301 REG		3613303 REG		3613302 REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	14500		13800		15800		12400		14600	
Antimony	MG/KG	0.8	UJ	0.78	UJ	0.77	UJ	0.7	UJ	0.72	UJ
Arsenic	MG/KG	8.7		6.7		11		8.2		9.6	
Barium	MG/KG	87.8		74.8		119		67.3		107	
Beryllium	MG/KG	0.76		0.65		0.92		0.63		0.86	
Bismuth	MG/KG	6.6	U			40.2		70.4		35	
Cadmium	MG/KG	0.59	U	0.58	U	0.57	U	0.52	U	0.54	U
Calcium	MG/KG	8730		4070		5950		126000		7300	
Chromium	MG/KG	17.1		16		21.6		14.5		19.5	
Cobalt	MG/KG	10.4		10.5		12.6		7.9		11.4	
Copper	MG/KG	17.6		15.5		27	J	21.5	J	26.1	J
Cyanide	MG/KG	0.64	U	0.63	U	0.62	U	0.57	U	0.58	U
Iron	MG/KG	23100		22400		30200		21700		27800	
Lead	MG/KG	29.5		16.6		19		10		16.3	
Magnesium	MG/KG	5350		2730		5500		43700		6200	
Manganese	MG/KG	672		610		829		418		692	
Mercury	MG/KG	0.13	U	0.13	U	0.12	U	0.11	U	0.12	U
Nickel	MG/KG	19.4		17.1		26.2		23.2		26.2	
Potassium	MG/KG	1540		1190		2270		2020		1930	
Selenium	MG/KG	1.2	U	1.2	U	2.2	J	1.6	J	1.5	J
Silver	MG/KG	1.2	U	1.2	U	1.2	U	1.1	U	1.1	U
Sodium	MG/KG	485	U	619	J	468	U	430	U	441	U
Thallium	MG/KG	0.92	U	0.9	U	0.89	U	0.94		0.84	U
Vanadium	MG/KG	28.1		25.6		31.2	J	21.8	J	29.4	J
Zinc	MG/KG	220		84		86.7	J	60.8	J	80.9	J

		RAJ305		RAJ306		RCJ305		RCJ306		RCJ315	
		902-RAJ305		902-RAJ306		902-RCJ305		902-RCJ306		902-RCJ315	
		0347990015SA REG		0347990016SA REG		0361340001SA REG		0361340003SA REG		0361340002SA REG	
		4/14/94		4/14/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**										
Chloride	MG/KG	19.3	U	60.5		74.6	J	17	U	17.5	UJ
Fluoride	MG/KG	2.7		4.5		2.1		2		1.3	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	3.2		13.5		0.62	UJ	0.76		0.62	J
Sulfate	MG/KG	32.1	U	31.3	U	30.9	U	28.4	U	29.1	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RAJ301			RAJ302			RAJ303			RAJ304			RAJ305		
		902-RAJ301			902-RAJ302			902-RAJ303			902-RAJ304			902-RAJ305		
		3198923 REG			3198924 REG			3198925 REG			3198926 REG			3198927 REG		
		4/14/94			4/14/94			4/14/94			4/14/94			4/14/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	0.175	NA	U	0.232	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			2.9	0.484		1.06	0.274		NS		
Pu-239/240	PCI/G	NS			NS			0.0561	NA	U	0.0319	0.0371		NS		
Pu-242	PCI/G	NS			NS			0.0206	NA	U	0.0288	NA	U	NS		
Th-228	PCI/G	NS			NS			1.49	0.273		NS			NS		
Th-230	PCI/G	NS			NS			1.6	0.283	J	NS			NS		
Th-232	PCI/G	NS			NS			1.37	0.251		NS			NS		
U-234	PCI/G	NS			NS			0.864	0.172		NS			NS		
U-235	PCI/G	NS			NS			0.063	0.0358		NS			NS		
U-238	PCI/G	NS			NS			0.884	0.176		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0884	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0252	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0283	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0307	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.366	0.048	
K-40	PCI/G	NS			NS			NS			NS			16.4	1.85	
Ra-226	PCI/G	NS			NS			NS			NS			1.81	0.738	J
Sr-90	PCI/G	NS			NS			NS			NS			0.384	NA	U

		RAJ306			RBJ301			RBJ302			RBJ303			RBJ304		
		902-RAJ306			902-RBJ301			902-RBJ302			902-RBJ303			902-RBJ304		
		3198928 REG			3198905 REG			3198906 REG			3198907 REG			3198908 REG		
		4/14/94			4/14/94			4/14/94			4/14/94			4/14/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.431	NA	U	0.196	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.272	0.113		0.211	0.111	
Pu-239/240	PCI/G	NS			NS			NS			0.0832	0.0514		0.0528	0.0478	
Pu-242	PCI/G	NS			NS			NS			0.0205	NA	U	0.0286	NA	U
Th-228	PCI/G	NS			NS			NS			1.21	0.307		NS		
Th-230	PCI/G	NS			NS			NS			1.57	0.355	J	NS		
Th-232	PCI/G	NS			NS			NS			1.12	0.279	J	NS		
U-234	PCI/G	NS			NS			NS			0.826	0.155		NS		
U-235	PCI/G	NS			NS			NS			0.0634	0.0327		NS		
U-238	PCI/G	NS			NS			NS			0.83	0.156		NS		
Am-241	PCI/G	0.09	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0206	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0228	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0269	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.127	0.0267		NS			NS			NS			NS		
K-40	PCI/G	19.7	2.1		NS			NS			NS			NS		
Ra-226	PCI/G	2.57	0.605	J	NS			NS			NS			NS		
Sr-90	PCI/G	0.507	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RCJ301			RCJ302			RCJ303			RCJ304			RCJ305		
		902-RCJ301			902-RCJ302			902-RCJ303			902-RCJ304			902-RCJ305		
		3224107 REG			3224109 REG			3224110 REG			3224112 REG			3224114 REG		
		6/9/94			6/9/94			6/9/94			6/9/94			6/9/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	0.0827	NA	U	0.0732	0.0406	R	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.162	0.0304	R	0.16	0.0301	R	NS		
Pu-239/240	PCI/G	NS			NS			0.00708	0.00565		0.0108	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.014	NA	U	0.0066	NA	U	NS		
Th-228	PCI/G	NS			NS			1.02	0.162		NS			NS		
Th-230	PCI/G	NS			NS			1.64	0.236	R	NS			NS		
Th-232	PCI/G	NS			NS			0.958	0.153		NS			NS		
U-234	PCI/G	NS			NS			0.862	0.148		NS			NS		
U-235	PCI/G	NS			NS			0.0781	0.0327		NS			NS		
U-238	PCI/G	NS			NS			1.05	0.172		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0813	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0198	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0221	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.026	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.226	0.0347	
K-40	PCI/G	NS			NS			NS			NS			19.8	2.15	
Ra-226	PCI/G	NS			NS			NS			NS			2.8	0.589	
Sr-90	PCI/G	NS			NS			NS			NS			0.769	NA	U

		RCJ306			RCJ311			RCJ313			RCJ314			RCJ315		
		902-RCJ306			902-RCJ311			902-RCJ313			902-RCJ314			902-RCJ315		
		3224116 REG			3224108 REG			3224111 REG			3224113 REG			3224115 REG		
		6/9/94			06/09/94DUPE			06/09/94DUPE			06/09/94DUPE			06/09/94DUPE		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0883	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.151	0.0331	R	0.186	0.0425	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00682	0.00562		0.0151	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00836	NA	U	0.0257	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.978	0.155		NS			NS		
Th-230	PCI/G	NS			NS			1.47	0.215		NS			NS		
Th-232	PCI/G	NS			NS			1.01	0.159		NS			NS		
U-234	PCI/G	NS			NS			0.857	0.149		NS			NS		
U-235	PCI/G	NS			NS			0.0761	0.0325		NS			NS		
U-238	PCI/G	NS			NS			0.929	0.158		NS			NS		
Am-241	PCI/G	0.0872	NA	U	NS			NS			NS			0.0113	NA	U
Bi-207	PCI/G	0.0228	NA	U	NS			NS			NS			0.0224	NA	U
Bi-210m	PCI/G	0.026	NA	U	NS			NS			NS			0.0255	NA	U
Co-60	PCI/G	0.0289	NA	U	NS			NS			NS			0.0292	NA	U
Cs-137	PCI/G	0.0262	NA	U	NS			NS			NS			0.252	0.0345	
K-40	PCI/G	17.4	1.87		NS			NS			NS			19.5	2.14	
Ra-226	PCI/G	2.35	0.622		NS			NS			NS			0.611	NA	U
Sr-90	PCI/G	0.955	NA	U	NS			NS			NS			0.716	NA	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RGJ301			RGJ302			RGJ303			RGJ304			RHJ301		
		902-RGJ301			902-RGJ302			902-RGJ303			902-RGJ304			902-RHJ301		
		3198913 REG			3198914 REG			3198915 REG			3198916 REG			3198909 REG		
		4/14/94			4/14/94			4/14/94			4/14/94			4/14/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	Units															
Tritium	PCI/G	0.268	NA	U	0.504	NA	UJ	NS			NS			0.242	NA	U
Pu-238	PCI/G	NS			NS			0.468	0.184		0.265	0.124		NS		
Pu-239/240	PCI/G	NS			NS			0.0909	NA	U	0.0753	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.0334	NA	U	0.0102	0.0205		NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RHJ302			RHJ303			RHJ304			RJJ301			RJJ302		
		902-RHJ302			902-RHJ303			902-RHJ304			902-RJJ301			902-RJJ302		
		3198910 REG			3198911 REG			3198912 REG			3201315 REG			3201316 REG		
		4/14/94			4/14/94			4/14/94			4/20/94			4/20/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	Units															
Tritium	PCI/G	0.351	NA	U	NS			NS			1.43	0.182		0.11	NA	U
Pu-238	PCI/G	NS			0.2	0.0786		0.132	0.0693		NS			NS		
Pu-239/240	PCI/G	NS			0.0217	0.0219		0.0374	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.0399	NA	U	0.0138	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RJJ303			RJJ304			RJJ312			RKJ301			RKJ302		
		902-RJJ303			902-RJJ304			902-RJJ312			902-RKJ301			902-RKJ302		
		3201318 REG			3201319 REG			3201317 REG			3201320 REG			3201321 REG		
		4/20/94			4/20/94			04/20/94DUPE			4/20/94			4/20/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.143	NA	U	0.191	NA	U	0.123	NA	U
Pu-238	PCI/G	0.0978	0.0338	J	0.0353	0.023	J	NS			NS			NS		
Pu-239/240	PCI/G	0.0339	0.0166	J	0.00599	NA	J	NS			NS			NS		
Pu-242	PCI/G	0.0051	NA	UJ	0.0163	NA	UJ	NS			NS			NS		
Th-228	PCI/G	1.32	0.215	J	NS			NS			NS			NS		
Th-230	PCI/G	1.32	0.213		NS			NS			NS			NS		
Th-232	PCI/G	1.24	0.203		NS			NS			NS			NS		
U-234	PCI/G	0.935	0.157		NS			NS			NS			NS		
U-235	PCI/G	0.0481	0.0275		NS			NS			NS			NS		
U-238	PCI/G	1.03	0.17		NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKJ303			RKJ304			RMJ301			RMJ302			RMJ303		
		902-RKJ303			902-RKJ304			902-RMJ301			902-RMJ302			902-RMJ303		
		3201322 REG			3201323 REG			3201324 REG			3201325 REG			3201326 REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.163	NA	U	0.0951	NA	U	NS		
Pu-238	PCI/G	0.185	0.0642	R	0.0398	NA	UJ	NS			NS			0.0361	NA	UJ
Pu-239/240	PCI/G	0.0206	0.0187	R	0.0224	NA	UJ	NS			NS			0.00693	NA	UJ
Pu-242	PCI/G	0.0112	NA	R	0.00821	NA	UJ	NS			NS			0.00692	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RMJ304			RMJ314			RNJ301			RNJ302			RNJ303		
		902-RMJ304			902-RMJ314			902-RNJ301			902-RNJ302			902-RNJ303		
		3201327 REG			3201328 REG			3218142 REG			3218143 REG			3218144 REG		
		4/20/94			04/20/94DUPE			5/24/94			5/24/94			5/24/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0853	NA	U	0.114	NA	U	NS		
Pu-238	PCI/G	0.0319	NA	UJ	0.0466	NA	UJ	NS			NS			0.27	0.0871	J
Pu-239/240	PCI/G	0.0196	NA	UJ	0.00896	NA	UJ	NS			NS			0.0142	0.0166	
Pu-242	PCI/G	0.00719	NA	UJ	0.00895	NA	UJ	NS			NS			0.0128	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNJ304			RPJ301			RPJ302			RPJ303			RPJ304		
		902-RNJ304			902-RPJ301			902-RPJ302			902-RPJ303			902-RPJ304		
		3218145 REG			3218136 REG			3218138 REG			3218139 REG			3218140 REG		
		5/24/94			5/24/94			5/24/94			5/24/94			5/24/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0609	NA	U	0.0424	NA	U	NS			NS		
Pu-238	PCI/G	0.762	0.137	J	NS			NS			0.175	0.049	J	0.135	0.0544	J
Pu-239/240	PCI/G	0.00971	0.0098		NS			NS			0.00639	0.00743		0.0115	0.0134	J
Pu-242	PCI/G	0.00657	NA	U	NS			NS			0.0157	NA	U	0.0104	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RPJ311			RPJ314			RRJ301			RRJ302			RRJ303		
		902-RPJ311			902-RPJ314			902-RRJ301			902-RRJ302			902-RRJ303		
		3218137 REG			3218141 REG			3218146 REG			3218147 REG			3218148 REG		
		05/24/94DUPE			05/24/94DUPE			5/24/94			5/24/94			5/24/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	0.0645	NA	U	NS			0.0339	NA	U	0.033	NA	U	NS		
Pu-238	PCI/G	NS			0.079	0.0268	J	NS			NS			0.0472	0.0237	
Pu-239/240	PCI/G	NS			0.011	NA	U	NS			NS			0.021	0.0143	U
Pu-242	PCI/G	NS			0.00404	NA	U	NS			NS			0.0129	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRJ304			RSJ301			RSJ302			RSJ303			RSJ304		
		902-RRJ304			902-RSJ301			902-RSJ302			902-RSJ303			902-RSJ304		
		3218149 REG			3208451 REG			3208452 REG			3208453 REG			3208454 REG		
		5/24/94			5/4/94			5/4/94			5/4/94			5/4/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.145	NA	U	0.143	NA	U	NS			NS		
Pu-238	PCI/G	0.0252	NA	U	NS			NS			0.0453	NA	UJ	0.0517	NA	UJ
Pu-239/240	PCI/G	0.00795	0.00718	U	NS			NS			0.02	0.0154	J	0.0117	NA	UJ
Pu-242	PCI/G	0.0043	NA	U	NS			NS			0.00772	NA	UJ	0.0317	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RTJ301			RTJ302			RTJ303			RTJ304			RUJ301		
		902-RTJ301			902-RTJ302			902-RTJ303			902-RTJ304			902-RUJ301		
		3208455 REG			3208456 REG			3208457 REG			3208458 REG			3202129 REG		
		5/4/94			5/4/94			5/4/94			5/4/94			4/21/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	0.213	NA	U	0.185	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0673	NA	UJ	0.0322	0.0232		0.0157	NA	U
Pu-239/240	PCI/G	NS			NS			0.0283	0.0218	J	0.00805	0.00936		0.00875	0.00724	
Pu-242	PCI/G	NS			NS			0.0109	NA	UJ	0.00727	NA	U	0.00395	NA	U
Th-228	PCI/G	NS			NS			1.01	0.175	J	NS			NS		
Th-230	PCI/G	NS			NS			4.55	0.611	R	NS			NS		
Th-232	PCI/G	NS			NS			0.883	0.157	J	NS			NS		
U-234	PCI/G	NS			NS			0.888	0.15	J	NS			NS		
U-235	PCI/G	NS			NS			0.0781	0.0326	J	NS			NS		
U-238	PCI/G	NS			NS			0.86	0.146	J	NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RUJ302			RVJ301			RVJ302			RXJ301			RXJ302		
		902-RUJ302			902-RVJ301			902-RVJ302			902-RXJ301			902-RXJ302		
		3202130 REG			3204224 REG			3204225 REG			3204205 REG			3204206 REG		
		4/21/94			4/25/94			4/25/94			4/22/94			4/22/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.141	0.0374		0.021	NA	UJ	0.012	0.00677		0.0161	NA	U	0.014	NA	U
Pu-239/240	PCI/G	0.00493	0.00573		0.0123	NA	UJ	0.00722	0.0049		0.0231	0.011		0.00686	NA	U
Pu-242	PCI/G	0.00445	NA	U	0.00974	NA	UJ	0.00217	NA	U	0.00261	NA	U	0.00252	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH																
		RYJ301			RYJ302			RYJ303			RYJ304			RYJ314		
		902-RYJ301			902-RYJ302			902-RYJ303			902-RYJ304			902-RYJ314		
		3205327 REG			3205328 REG			3205329 REG			3205330 REG			3205331 REG		
		4/27/94			4/27/94			4/27/94			4/27/94			04/27/94DUPE		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Radiological	**Units**															
Tritium	PCI/G	0.128	NA	U	1.01	0.154		NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0195	NA	U	0.0401	NA		0.0104	NA	U
Pu-239/240	PCI/G	NS			NS			0.0102	NA	U	0.0177	NA		0.00261	NA	U
Pu-242	PCI/G	NS			NS			0.00374	NA	U	0.00652	NA		0.00261	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST									
		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		J9925.D REG		J9926.D REG		H4269.D REG		H4270.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	14	U	13	U	12	U	4	J
Acetonitrile	UG/KG	135	U	133	U	118	U	111	U
Acrylonitrile	UG/KG	135	U	133	U	118	U	111	U
Benzene	UG/KG	7	UJ	7	UJ	12	U	11	U
Bromodichloromethane	UG/KG	7	UJ	7	UJ	12	U	11	U
Bromoform	UG/KG	7	UJ	7	UJ	12	U	11	U
Bromomethane	UG/KG	14	U	13	U	12	UJ	11	UJ
2-Butanone	UG/KG	14	U	13	U	12	U	11	U
Carbon Disulfide	UG/KG	7	UJ	7	UJ	12	U	11	U
Carbon Tetrachloride	UG/KG	7	UJ	7	UJ	12	U	11	U
Chlorobenzene	UG/KG	7	UJ	7	UJ	12	U	11	U
Chlorodibromomethane	UG/KG	7	UJ	7	UJ	12	U	11	U
Chloroethane	UG/KG	14	U	13	U	12	U	11	U
Chloroform	UG/KG	7	UJ	7	UJ	12	U	11	U
Chloromethane	UG/KG	14	U	13	U	12	U	11	U
1,1-Dichloroethane	UG/KG	7	UJ	7	UJ	12	U	11	U
1,2-Dichloroethane	UG/KG	7	UJ	7	UJ	12	U	11	U
1,1-Dichloroethene	UG/KG	7	UJ	7	UJ	12	U	11	U
1,2-Dichloroethene	UG/KG	7	UJ	7	UJ	12	U	11	U
1,2-Dichloropropane	UG/KG	7	UJ	7	UJ	12	U	11	U
cis-1,3-Dichloropropene	UG/KG	7	UJ	7	UJ	12	U	11	U
trans-1,3-Dichloropropene	UG/KG	7	UJ	7	UJ	12	U	11	U
1,2-Diethylbenzene	UG/KG	27	U	27	U	24	U	22	U
Ethylbenzene	UG/KG	7	UJ	7	UJ	12	U	11	U
Hexane	UG/KG	14	U	13	U	12	U	11	U
2-Hexanone	UG/KG	14	U	13	U	12	U	11	U
Iodomethane	UG/KG	14	U	13	U	12	U	11	U
4-Methyl-2-pentanone	UG/KG	14	U	13	U	12	U	11	U
Methylene Chloride	UG/KG	43		68		12	U	11	U
Styrene	UG/KG	7	UJ	7	UJ	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	7	UJ	7	UJ	12	U	11	U
Tetrachloroethene	UG/KG	7	UJ	7	UJ	12	U	11	U
Toluene	UG/KG	7	UJ	7	UJ	12	U	11	U
1,1,1-Trichloroethane	UG/KG	7	UJ	7	UJ	12	U	11	U
1,1,2-Trichloroethane	UG/KG	7	UJ	7	UJ	12	U	11	U
Trichloroethene	UG/KG	7	UJ	7	UJ	12	U	11	U
Trichlorotrifluoroethane	UG/KG	14	U	13	U	12	U	11	U
Vinyl Acetate	UG/KG	14	U	13	U	12	U	11	U
Vinyl Chloride	UG/KG	14	U	13	U	12	U	11	U
Xylene, Total	UG/KG	7	UJ	7	UJ	12	U	11	U
Tentatively Identified Compounds						1		1	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST									
		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		G1501757.D REG		G1601758.D REG		A1001799.D REG		A1101800.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	450	UJ	440	UJ	390	U	370	U
Acenaphthylene	UG/KG	450	UJ	440	UJ	390	U	370	U
Anthracene	UG/KG	450	UJ	440	UJ	390	U	370	U
Benzo(a)anthracene	UG/KG	450	UJ	440	UJ	390	U	370	U
Benzo(a)pyrene	UG/KG	450	UJ	440	UJ	390	U	370	U
Benzo(b)fluoranthene	UG/KG	450	UJ	440	UJ	390	U	370	U
Benzo(g,h,i)perylene	UG/KG	450	UJ	440	UJ	390	U	370	U
Benzo(k)fluoranthene	UG/KG	450	UJ	440	UJ	390	UJ	370	UJ
Benzoic Acid	UG/KG	95	J	86	J	1900	UJ	1800	UJ
Benzyl Alcohol	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Benzyl-4-Chlorophenol	UG/KG	450	UJ	440	UJ	390	U	370	U
bis(2-Chloroethoxy)methane	UG/KG	450	UJ	440	UJ	390	U	370	U
bis(2-Chloroethyl)ether	UG/KG	450	UJ	440	UJ	390	U	370	U
bis(2-Ethylhexyl)phthalate	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Bromophenyl-phenylether	UG/KG	450	UJ	440	UJ	390	U	370	U
Butylbenzylphthalate	UG/KG	450	UJ	440	UJ	390	U	370	U
Carbazole	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Chloro-3-methylphenol	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Chloroaniline	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Chloronaphthalene	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Chlorophenol	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Chlorophenyl-phenylether	UG/KG	450	UJ	440	UJ	390	U	370	U
Chrysene	UG/KG	450	UJ	440	UJ	390	U	370	U
Di-n-butylphthalate	UG/KG	450	UJ	440	UJ	390	U	370	U
Di-n-octylphthalate	UG/KG	450	UJ	440	UJ	390	U	370	U
Dibenzo(a,h)anthracene	UG/KG	450	UJ	440	UJ	390	U	370	U
Dibenzofuran	UG/KG	450	UJ	440	UJ	390	U	370	U
1,2-Dichlorobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
1,3-Dichlorobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
1,4-Dichlorobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
3,3'-Dichlorobenzidine	UG/KG	450	UJ	440	UJ	390	U	370	U
2,4-Dichlorophenol	UG/KG	450	UJ	440	UJ	390	U	370	U
Diethylphthalate	UG/KG	450	UJ	440	UJ	390	UJ	370	UJ
2,4-Dimethylphenol	UG/KG	450	UJ	440	UJ	390	U	370	U
Dimethylphthalate	UG/KG	450	UJ	440	UJ	390	U	370	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	UJ	1100	UJ	940	U	890	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1100	UJ	940	U	890	U
2,4-Dinitrotoluene	UG/KG	450	UJ	440	UJ	390	U	370	U
2,6-Dinitrotoluene	UG/KG	450	UJ	440	UJ	390	U	370	U
Fluoranthene	UG/KG	450	UJ	440	UJ	390	U	370	U
Fluorene	UG/KG	450	UJ	440	UJ	390	U	370	U
Hexachlorobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
Hexachlorobutadiene	UG/KG	450	UJ	440	UJ	390	U	370	U
Hexachlorocyclopentadiene	UG/KG	450	UJ	440	UJ	390	U	370	U
Hexachloroethane	UG/KG	4[illegible]	[illegible]	440	UJ	390	U	370	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST									
		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		G1501757.D REG		G1601758.D REG		A1001799.D REG		A1101800.D REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	450	UJ	440	UJ	390	U	370	U
Isophorone	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Methylnaphthalene	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Methylphenol	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Methylphenol	UG/KG	450	UJ	440	UJ	390	U	370	U
N-Nitroso-di-n-propylamine	UG/KG	450	UJ	440	UJ	390	U	370	U
N-Nitrosodiphenylamine	UG/KG	450	UJ	440	UJ	390	UJ	370	UJ
Naphthalene	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Nitroaniline	UG/KG	1100	UJ	1100	UJ	940	U	890	U
3-Nitroaniline	UG/KG	1100	UJ	1100	UJ	940	U	890	U
4-Nitroaniline	UG/KG	1100	UJ	1100	UJ	940	U	890	U
Nitrobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
2-Nitrophenol	UG/KG	450	UJ	440	UJ	390	U	370	U
4-Nitrophenol	UG/KG	1100	UJ	1100	UJ	940	UJ	890	UJ
2,2'-oxybis(1-Chloropropane)	UG/KG	450	UJ	440	UJ	390	U	370	U
Pentachlorophenol	UG/KG	1100	UJ	1100	UJ	940	U	890	U
Phenanthrene	UG/KG	450	UJ	440	UJ	390	U	370	U
Phenol	UG/KG	450	UJ	440	UJ	390	U	370	U
Pyrene	UG/KG	450	UJ	440	UJ	390	U	370	U
1,2,4-Trichlorobenzene	UG/KG	450	UJ	440	UJ	390	U	370	U
2,4,5-Trichlorophenol	UG/KG	1100	UJ	1100	UJ	940	U	890	U
2,4,6-Trichlorophenol	UG/KG	450	UJ	440	UJ	390	U	370	U
Tentatively Identified Compounds		25		25		29		27	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST									
		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		34797-11 REG		34797-12 REG		36132-04 REG		36132-05 REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
alpha-BHC	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
alpha-Chlordane	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
Aroclor 1232	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
Aroclor-1016	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
Aroclor-1221	UG/KG	18	UJ	17	UJ	16	U	15	U
Aroclor-1242	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
Aroclor-1248	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
Aroclor-1254	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
Aroclor-1260	UG/KG	8.7	UJ	8.4	UJ	7.8	U	7.3	U
beta-BHC	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
4,4'-DDD	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
4,4'-DDE	UG/KG	0.51	J	0.84	UJ	0.51	J	0.73	U
4,4'-DDT	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
delta-BHC	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
Dieldrin	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
Endosulfan I	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
Endosulfan II	UG/KG	0.87	UJ	0.84	UJ	0.78	UJ	0.73	UJ
Endosulfan Sulfate	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
Endrin	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
Endrin Aldehyde	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
Endrin Ketone	UG/KG	0.87	UJ	0.84	UJ	0.78	U	0.73	U
gamma-BHC (Lindane)	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
gamma-Chlordane	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
Heptachlor	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
Heptachlor Epoxide	UG/KG	0.45	UJ	0.43	UJ	0.4	U	0.38	U
p,p'-Methoxychlor	UG/KG	4.5	UJ	4.3	UJ	4	U	3.8	U
Toxaphene	UG/KG	45	UJ	43	UJ	40	U	38	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST									
		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		3479811 REG		3479812 REG		3613304 REG		3613305 REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	18200		20000		13900		10600	
Antimony	MG/KG	0.83	UJ	0.83	UJ	0.73	UJ	0.69	UJ
Arsenic	MG/KG	7.6		4.5		10.9		7.6	
Barium	MG/KG	118		149		69.9		53.5	
Beryllium	MG/KG	0.93		1		0.75		0.55	
Bismuth	MG/KG	6.9	U	6.8	U	54.4		69.5	
Cadmium	MG/KG	0.62	U	0.61	U	0.54	U	0.51	U
Calcium	MG/KG	9980		7510		57200		112000	
Chromium	MG/KG	22.9		24.2		16.2		11.9	
Cobalt	MG/KG	12.7		14.2		9.9		9.5	
Copper	MG/KG	19.4		15.8		28.6	J	20.7	J
Cyanide	MG/KG	0.67	U	0.67	U	0.59	U	0.56	U
Iron	MG/KG	30900		34500		26300		20400	
Lead	MG/KG	21.3		13.2		17.7		9.9	
Magnesium	MG/KG	5030		6160		24300		44100	
Manganese	MG/KG	800		1080		467		378	
Mercury	MG/KG	0.13	U	0.13	U	0.12	U	0.11	U
Nickel	MG/KG	26.5		29.9		27.2		23.6	
Potassium	MG/KG	2680		2970		1740		1980	
Selenium	MG/KG	1.2	U	1.2	U	1.3	J	2	J
Silver	MG/KG	1.3	U	1.3	U	1.1	U	1.1	U
Sodium	MG/KG	903	J	1770	J	446	U	421	U
Thallium	MG/KG	0.97	U	0.96	U	0.85	U	0.8	U
Vanadium	MG/KG	25.8		27.2		28.5	J	19.7	J
Zinc	MG/KG	282		73		76.2	J	60.8	J

		RAK305		RAK306		RCK305		RCK306	
		902-RAK305		902-RAK306		902-RCK305		902-RCK306	
		0347990013SA REG		0347990014SA REG		0361340004SA REG		0361340005SA REG	
		4/14/94		4/14/94		6/9/94		6/9/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	50.9		1180		17.7	U	16.7	U
Fluoride	MG/KG	5.8		2.4		1.5		1.6	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.9		0.67	U	0.63		0.91	
Sulfate	MG/KG	33.6	U	53.3		29.5	U	27.9	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST					
		RAK305		RAK306	
		902-RAK305		902-RAK306	
		0347990013SA REG		0347990014SA REG	
		4/14/94		4/14/94	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.34	UJ	0.33	UJ
1,3-Dinitrobenzene	UG/G	0.34	UJ	0.33	UJ
2,4-Dinitrotoluene	UG/G	0.34	UJ	0.33	UJ
2,6-Dinitrotoluene	UG/G	0.35	UJ	0.35	UJ
HMX	UG/G	3	UJ	2.9	UJ
Nitrobenzene	UG/G	0.35	UJ	0.35	UJ
PETN	UG/G	1.3	UJ	1.3	UJ
RDX	UG/G	1.3	UJ	1.3	UJ
TETRYL	UG/G	0.87	UJ	0.87	UJ
1,3,5-Trinitrobenzene	UG/G	0.34	UJ	0.33	UJ
2,4,6-Trinitrotoluene	UG/G	0.34	UJ	0.33	UJ

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RAK301			RAK302			RAK303			RAK304			RAK305		
		902-RAK301			902-RAK302			902-RAK303			902-RAK304			902-RAK305		
		3198919 REG			3198920 REG			3198921 REG			3198922 REG			3198917 REG		
		4/14/94			4/14/94			4/14/94			4/14/94			4/14/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	1.35	0.534	J	0.272	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.627	0.191		0.726	0.202		NS		
Pu-239/240	PCI/G	NS			NS			0.0734	NA	U	0.0466	0.0422		NS		
Pu-242	PCI/G	NS			NS			0.027	NA	U	0.0252	NA	U	NS		
Th-228	PCI/G	NS			NS			1.27	0.259	J	NS			NS		
Th-230	PCI/G	NS			NS			1.52	0.292	J	NS			NS		
Th-232	PCI/G	NS			NS			1.22	0.25	J	NS			NS		
U-234	PCI/G	NS			NS			0.71	0.14		NS			NS		
U-235	PCI/G	NS			NS			0.0526	0.0377		NS			NS		
U-238	PCI/G	NS			NS			0.928	0.169		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0958	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0242	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0281	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0311	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.174	0.0341	
K-40	PCI/G	NS			NS			NS			NS			26.8	2.78	
Ra-226	PCI/G	NS			NS			NS			NS			0.63	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.38	NA	U

		RAK306			RBK301			RBK302			RBK303			RBK304		
		902-RAK306			902-RBK301			902-RBK302			902-RBK303			902-RBK304		
		3198918 REG			3214201 REG			3214202 REG			3214203 REG			3214204 REG		
		4/14/94			5/17/94			5/17/94			5/17/94			5/17/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.149	0.0724	R	0.151	0.0664	R	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.278	0.0703	J	0.103	0.0667	J
Pu-239/240	PCI/G	NS			NS			NS			0.0139	0.0126	J	0.0327	0.0272	J
Pu-242	PCI/G	NS			NS			NS			0.00753	NA	UJ	0.0148	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.11	0.195		NS		
Th-230	PCI/G	NS			NS			NS			1.19	0.203		NS		
Th-232	PCI/G	NS			NS			NS			1.12	0.194		NS		
U-234	PCI/G	NS			NS			NS			0.89	0.162		NS		
U-235	PCI/G	NS			NS			NS			0.028	NA	U	NS		
U-238	PCI/G	NS			NS			NS			0.768	0.148		NS		
Am-241	PCI/G	0.0826	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0229	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0233	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0295	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0254	NA	U	NS			NS			NS			NS		
K-40	PCI/G	28.2	2.99		NS			NS			NS			NS		
Ra-226	PCI/G	2.93	0.634	J	NS			NS			NS			NS		
Sr-90	PCI/G	0.372	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RCK301			RCK302			RCK303			RCK304			RCK305		
		902-RCK301			902-RCK302			902-RCK303			902-RCK304			902-RCK305		
		3224117 REG			3224118 REG			3224119 REG			3224120 REG			3224121 REG		
		6/9/94			6/9/94			6/9/94			6/9/94			6/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0754	NA	U	0.0432	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.52	0.0889	J	0.284	0.0506		NS		
Pu-239/240	PCI/G	NS			NS			0.0161	0.012	J	0.0111	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00484	NA	UJ	0.00702	NA	U	NS		
Th-228	PCI/G	NS			NS			0.844	0.141		NS			NS		
Th-230	PCI/G	NS			NS			1.51	0.223		NS			NS		
Th-232	PCI/G	NS			NS			0.947	0.153		NS			NS		
U-234	PCI/G	NS			NS			0.872	0.149		NS			NS		
U-235	PCI/G	NS			NS			0.0493	0.0282		NS			NS		
U-238	PCI/G	NS			NS			0.927	0.156		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.11	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0279	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0326	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0369	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.279	0.0496	
K-40	PCI/G	NS			NS			NS			NS			19.3	2.13	
Ra-226	PCI/G	NS			NS			NS			NS			2.76	0.759	
Sr-90	PCI/G	NS			NS			NS			NS			0.378	NA	U

		RCK306			REK301			REK302			REK303			REK304		
		902-RCK306			902-REK301			902-REK302			902-REK303			902-REK304		
		3224122 REG			3214205 REG			3214206 REG			3214207 REG			3214208 REG		
		6/9/94			5/17/94			5/17/94			5/17/94			5/17/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0906	NA	UJ	0.114	NA	UJ	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0825	0.0378	J	0.0874	0.0288	
Pu-239/240	PCI/G	NS			NS			NS			0.0191	0.0158	J	0.00516	NA	U
Pu-242	PCI/G	NS			NS			NS			0.0234	NA	UJ	0.00515	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0773	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0231	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0258	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0298	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0261	NA	U	NS			NS			NS			NS		
K-40	PCI/G	16.6	1.85		NS			NS			NS			NS		
Ra-226	PCI/G	2.83	0.655		NS			NS			NS			NS		
Sr-90	PCI/G	0.993	0.255	R	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RHK301			RHK302			RHK303			RHK304			RHK312		
		902-RHK301			902-RHK302			902-RHK303			902-RHK304			902-RHK312		
		3214209 REG			3214211 REG			3214212 REG			3214213 REG			3214210 REG		
		5/17/94			5/17/94			5/17/94			5/17/94			05/17/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.103	NA	UJ	0.0972	NA	UJ	NS			NS			0.106	NA	UJ
Pu-238	PCI/G	NS			NS			0.0772	0.0426	J	0.135	0.0426		NS		
Pu-239/240	PCI/G	NS			NS			0.0386	0.0221	J	0.0192	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00804	NA	UJ	0.0191	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJK301			RJK302			RJK303			RJK304			RJK314		
		902-RJK301			902-RJK302			902-RJK303			902-RJK304			902-RJK314		
		3212816 REG			3212817 REG			3212818 REG			3212819 REG			3212820 REG		
		5/12/94			5/12/94			5/12/94			5/12/94			05/12/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0863	0.0409		0.0847	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			5.6	0.873	R	0.0951	0.0254		0.367	0.0863	J
Pu-239/240	PCI/G	NS			NS			0.585	0.138	J	0.009	NA	U	0.0289	NA	UJ
Pu-242	PCI/G	NS			NS			0.0462	0.0318	J	0.00331	NA	U	0.0229	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RKK301			RKK302			RKK303			RKK304			RMK301		
		902-RKK301			902-RKK302			902-RKK303			902-RKK304			902-RMK301		
		3212830 REG			3212831 REG			3212832 REG			3212833 REG			3212834 REG		
		5/12/94			5/12/94			5/12/94			5/12/94			5/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.122	0.0725		0.0841	NA	U	NS			NS			0.0816	NA	U
Pu-238	PCI/G	NS			NS			0.0252	0.0705	UJ	5.22	0.889	R	NS		
Pu-239/240	PCI/G	NS			NS			0.00962	NA	UJ	0.214	0.0859	J	NS		
Pu-242	PCI/G	NS			NS			0.0262	NA	UJ	0.02	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RMK302			RMK303			RMK304			RMK312			RNK301		
		902-RMK302			902-RMK303			902-RMK304			902-RMK312			902-RNK301		
		3212836 REG			3212837 REG			3212838 REG			3212835 REG			3218116 REG		
		5/12/94			5/12/94			5/12/94			05/12/94DUPE			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0744	NA	U	NS			NS			0.0916	NA	U	0.107	0.0635	
Pu-238	PCI/G	NS			0.21	0.0895	J	0.284	0.106	J	NS			NS		
Pu-239/240	PCI/G	NS			0.0171	0.0199	J	0.0214	NA	UJ	NS			NS		
Pu-242	PCI/G	NS			0.0419	NA	UJ	0.0214	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RNK302			RNK303			RNK304			RPK301			RPK302		
		902-RNK302			902-RNK303			902-RNK304			902-RPK301			902-RPK302		
		3218117 REG			3218118 REG			3218119 REG			3218120 REG			3218121 REG		
		5/23/94			5/23/94			5/23/94			5/23/94			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0519	NA	U	NS			NS			0.0523	NA	U	0.0503	NA	U
Pu-238	PCI/G	NS			0.153	0.0431	J	0.191	0.0774	J	NS			NS		
Pu-239/240	PCI/G	NS			0.00631	0.00734		0.014	NA	UJ	NS			NS		
Pu-242	PCI/G	NS			0.0057	NA	U	0.014	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPK303			RPK304			RRK301			RRK302			RRK303		
		902-RPK303			902-RPK304			902-RRK301			902-RRK302			902-RRK303		
		3218122 REG			3218123 REG			3218130 REG			3218131 REG			3218132 REG		
		5/23/94			5/23/94			5/23/94			5/23/94			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.156	NA	U	0.168	NA	U	NS		
Pu-238	PCI/G	0.616	0.126	J	0.428	0.0923	J	NS			NS			0.102	0.0529	J
Pu-239/240	PCI/G	0.0231	NA	UJ	0.00798	0.00928		NS			NS			0.0113	0.0132	UJ
Pu-242	PCI/G	0.00848	NA	UJ	0.0072	NA	U	NS			NS			0.0102	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RRK304			RSK301			RSK302			RSK303			RSK304		
		902-RRK304			902-RSK301			902-RSK302			902-RSK303			902-RSK304		
		3218133 REG			3218124 REG			3218125 REG			3218126 REG			3218127 REG		
		5/23/94			5/23/94			5/23/94			5/23/94			5/23/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.078	NA	U	0.0899	NA	U	NS			NS		
Pu-238	PCI/G	0.358	0.0728	J	NS			NS			0.581	0.124	J	0.25	0.0486	J
Pu-239/240	PCI/G	0.0116	0.00961		NS			NS			0.0315	NA	UJ	0.00946	NA	U
Pu-242	PCI/G	0.00524	NA	U	NS			NS			0.00916	NA	UJ	0.00348	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RSK311			RSK314			RTK301			RTK302			RTK303		
		902-RSK311			902-RSK314			902-RTK301			902-RTK302			902-RTK303		
		3218128 REG			3218129 REG			3208459 REG			3208460 REG			3208461 REG		
		05/23/94DUPE			05/23/94DUPE			5/4/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.078	NA	U	NS			0.0838	NA	U	0.0816	NA	U	NS		
Pu-238	PCI/G	NS			0.0509	0.0235	J	NS			NS			0.0337	NA	U
Pu-239/240	PCI/G	NS			0.00476	NA	U	NS			NS			0.00982	NA	U
Pu-242	PCI/G	NS			0.00476	NA	U	NS			NS			0.0267	NA	U
Th-228	PCI/G	NS			NS			NS			NS			0.794	0.136	J
Th-230	PCI/G	NS			NS			NS			NS			2.84	0.387	R
Th-232	PCI/G	NS			NS			NS			NS			0.671	0.12	J
U-234	PCI/G	NS			NS			NS			NS			0.802	0.141	
U-235	PCI/G	NS			NS			NS			NS			0.0624	0.0339	
U-238	PCI/G	NS			NS			NS			NS			0.694	0.127	
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RTK304			RTK311			RUK301			RUK302			RVK301		
		902-RTK304			902-RTK311			902-RUK301			902-RUK302			902-RVK301		
		3208462 REG			3208463 REG			3204226 REG			3204227 REG			3204201 REG		
		5/4/94			05/04/94DUPE			4/25/94			4/25/94			4/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0928	NA	U	NS			NS			NS		
Pu-238	PCI/G	0.316	NA	U	NS			0.0131	NA	U	0.0269	0.0193	J	0.00782	NA	U
Pu-239/240	PCI/G	0.0194	NA	U	NS			0.00941	0.00598		0.00672	0.00678	J	0.00783	NA	U
Pu-242	PCI/G	0.00712	NA	U	NS			0.00212	NA	U	0.0124	NA	UJ	0.0114	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RVK302			RXK301			RXK302			RXK312			RYK301		
		902-RVK302			902-RXK301			902-RXK302			902-RXK312			902-RYK301		
		3204202 REG			3202131 REG			3202132 REG			3202133 REG			3205332 REG		
		4/22/94			4/21/94			4/21/94			04/21/94DUPE			4/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0454	0.0246	J	0.13	0.0341		0.00845	NA	U	0.0193	NA	U	0.022	NA	U
Pu-239/240	PCI/G	0.00493	NA	UJ	0.0136	0.0102		0.011	0.00679		0.00804	0.00727		0.0125	0.00897	
Pu-242	PCI/G	0.0134	NA	UJ	0.0041	NA	U	0.00212	NA	U	0.0149	NA	U	0.00422	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTH/SOUTHWEST																
		RYK302														
		902-RYK302														
		3205333 REG														
		4/27/94														
		Result	UNC	Val												
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.186	0.0511	U	NS			NS			NS			NS		
Pu-239/240	PCI/G	0.0193	NA	U	NS			NS			NS			NS		
Pu-242	PCI/G	0.0282	NA	U	NS			NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST											
		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		J0052.D REG		J0053.D REG		J1099.D REG		J1100.D REG		J1101.D REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	12	U	12	U	2	J	12	U
Acetonitrile	UG/KG	116	UJ	119	UJ	118	UJ	114	UJ	119	UJ
Acrylonitrile	UG/KG	116	U	119	U	118	U	114	U	119	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
2-Butanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	2	J	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	23	U	24	U	24	U	23	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	12	U	12	U	12	U	1	J	12	U
2-Hexanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Iodomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	157		42		6	UJ	6	UJ	6	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	11		6	UJ	6	UJ	2	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds								1			

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST											
		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		G0101798.D REG		G0201799.D REG		G0701411.D REG		G0801412.D REG		G0901413.D REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	390	U	400	U	390	U	380	U	400	U
Acenaphthylene	UG/KG	390	U	400	U	390	U	380	U	400	U
Anthracene	UG/KG	390	U	400	U	390	U	380	U	400	U
Benzo(a)anthracene	UG/KG	53	J	400	U	160	J	380	U	110	J
Benzo(a)pyrene	UG/KG	64	J	400	U	200	J	380	U	160	J
Benzo(b)fluoranthene	UG/KG	72	J	400	U	190	J	380	U	140	J
Benzo(g,h,i)perylene	UG/KG	48	J	400	U	130	J	380	U	96	J
Benzo(k)fluoranthene	UG/KG	74	J	400	U	190	J	380	U	180	J
Benzoic Acid	UG/KG	100	J	63	J	82	J	43	J	84	J
Benzyl Alcohol	UG/KG	390	U	400	U	2000	U	1900	U	2000	U
2-Benzyl-4-Chlorophenol	UG/KG	390	U	400	U	390	U	380	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	390	U	400	U	390	U	380	U	400	U
bis(2-Chloroethyl)ether	UG/KG	390	U	400	U	390	U	380	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Bromophenyl-phenylether	UG/KG	390	U	400	U	390	U	380	U	400	U
Butylbenzylphthalate	UG/KG	390	U	400	U	390	U	380	U	400	U
Carbazole	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Chloro-3-methylphenol	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Chloroaniline	UG/KG	390	U	400	U	390	U	380	U	400	U
2-Chloronaphthalene	UG/KG	390	U	400	U	390	U	380	U	400	U
2-Chlorophenol	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Chlorophenyl-phenylether	UG/KG	390	U	400	U	390	U	380	U	400	U
Chrysene	UG/KG	100	R	400	U	280	J	380	U	210	J
Di-n-butylphthalate	UG/KG	390	U	400	U	390	U	53	J	400	U
Di-n-octylphthalate	UG/KG	390	U	400	U	390	U	380	U	400	U
Dibenzo(a,h)anthracene	UG/KG	390	U	400	U	390	U	380	U	400	U
Dibenzofuran	UG/KG	390	U	400	U	390	U	380	U	400	U
1,2-Dichlorobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
1,3-Dichlorobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
1,4-Dichlorobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
3,3'-Dichlorobenzidine	UG/KG	390	U	400	U	390	U	380	U	400	U
2,4-Dichlorophenol	UG/KG	390	U	400	U	390	U	380	U	400	U
Diethylphthalate	UG/KG	390	U	400	U	390	U	380	U	400	U
2,4-Dimethylphenol	UG/KG	390	U	400	U	390	U	380	U	400	U
Dimethylphthalate	UG/KG	390	U	400	U	390	U	380	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	970	U	990	U	980	U	950	U	990	U
2,4-Dinitrophenol	UG/KG	970	U	990	U	980	U	950	U	990	U
2,4-Dinitrotoluene	UG/KG	390	U	400	U	390	U	380	U	400	U
2,6-Dinitrotoluene	UG/KG	390	U	400	U	390	U	380	U	400	U
Fluoranthene	UG/KG	140	J	400	U	350	J	380	U	240	J
Fluorene	UG/KG	390	U	400	U	390	U	380	U	400	U
Hexachlorobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
Hexachlorobutadiene	UG/KG	390	U	400	U	390	U	380	U	400	U
Hexachlorocyclopentadiene	UG/KG	390	U	400	U	390	U	380	U	400	U
Hexachloroethane	UG/KG	390	U	400	U	390	U	380	U	400	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST											
		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		G0101798.D REG		G0201799.D REG		G0701411.D REG		G0801412.D REG		G0901413.D REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Indeno(1,2,3-c,d)pyrene	UG/KG	46	J	400	U	130	J	380	U	100	J
Isophorone	UG/KG	390	U	400	U	390	U	380	U	400	U
2-Methylnaphthalene	UG/KG	390	U	400	U	390	U	380	U	400	U
2-Methylphenol	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Methylphenol	UG/KG	390	U	400	U	390	U	380	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	390	U	400	U	390	U	380	U	400	U
N-Nitrosodiphenylamine	UG/KG	390	U	400	U	390	U	380	U	400	U
Naphthalene	UG/KG	390	U	400	U	41	J	380	U	400	U
2-Nitroaniline	UG/KG	970	U	990	U	980	U	950	U	990	U
3-Nitroaniline	UG/KG	970	U	990	U	980	U	950	U	990	U
4-Nitroaniline	UG/KG	970	U	990	U	980	U	950	U	990	U
Nitrobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
2-Nitrophenol	UG/KG	390	U	400	U	390	U	380	U	400	U
4-Nitrophenol	UG/KG	970	U	990	U	980	U	950	U	990	U
2,2'-oxybis(1-Chloropropane)	UG/KG	390	U	400	U	390	U	380	U	400	U
Pentachlorophenol	UG/KG	970	U	990	U	980	U	950	U	990	U
Phenanthrene	UG/KG	64	J	400	U	170	J	380	U	92	J
Phenol	UG/KG	390	U	400	U	390	U	380	U	400	U
Pyrene	UG/KG	120	J	400	U	290	J	380	U	220	J
1,2,4-Trichlorobenzene	UG/KG	390	U	400	U	390	U	380	U	400	U
2,4,5-Trichlorophenol	UG/KG	970	U	990	U	980	U	950	U	990	U
2,4,6-Trichlorophenol	UG/KG	390	U	400	U	390	U	380	U	400	U
Tentatively Identified Compounds		25		25		25		20		25	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST											
		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		34973-01 REG		34973-02 REG		36022-01 REG		36022-02 REG		36022-03 REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	7.9	U	0.4	UJ	2.6	J	0.38	U	3	J
alpha-BHC	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
alpha-Chlordane	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
Aroclor 1232	UG/KG	150	U	7.8	UJ	16	U	7.5	U	16	U
Aroclor-1016	UG/KG	150	U	7.8	UJ	16	U	7.5	U	16	U
Aroclor-1221	UG/KG	310	U	16	UJ	32	U	15	U	32	U
Aroclor-1242	UG/KG	150	U	7.8	UJ	16	U	7.5	U	16	U
Aroclor-1248	UG/KG	400		7.8	UJ	16	U	7.5	U	16	U
Aroclor-1254	UG/KG	150	U	7.8	UJ	16	U	7.5	U	16	U
Aroclor-1260	UG/KG	150	U	7.8	UJ	22	J	7.5	U	21	J
beta-BHC	UG/KG	7.9	U	0.4	UJ	0.96		0.38	U	1	
4,4'-DDD	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	1.6	U
4,4'-DDE	UG/KG	15	U	0.78	UJ	8.8		0.6	J	8	
4,4'-DDT	UG/KG	15	U	0.78	UJ	11	J	0.75	UJ	1.6	UJ
delta-BHC	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
Dieldrin	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	1.6	U
Endosulfan I	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
Endosulfan II	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	4.2	J
Endosulfan Sulfate	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	1.6	U
Endrin	UG/KG	15	U	0.78	UJ	1.6	UJ	0.75	UJ	1.6	UJ
Endrin Aldehyde	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	1.6	U
Endrin Ketone	UG/KG	15	U	0.78	UJ	1.6	U	0.75	U	1.6	U
gamma-BHC (Lindane)	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
gamma-Chlordane	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
Heptachlor	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
Heptachlor Epoxide	UG/KG	7.9	U	0.4	UJ	0.8	U	0.38	U	0.81	U
p,p'-Methoxychlor	UG/KG	79	U	4	UJ	8	UJ	3.8	UJ	8.1	UJ
Toxaphene	UG/KG	790	U	40	UJ	80	U	38	U	81	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST											
		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		3497501 REG		3497502 REG		3602101 REG		3602102 REG		3602103 REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	14800		13500		8440		12100		8400	
Antimony	MG/KG	0.73	UJ	0.74	UJ	0.73	U	0.7	U	0.73	U
Arsenic	MG/KG	12.2		6.7		9.3		7.9		9.1	
Barium	MG/KG	78.6		67.7		433	J	124		107	J
Beryllium	MG/KG	0.79		0.73		0.54		0.62		0.58	
Bismuth	MG/KG	6	U	6.1	U	31.5		28.6		32	
Cadmium	MG/KG	0.54	U	0.55	U	0.8		0.52	U	1.1	
Calcium	MG/KG	23300		2640		86200	J	5750		44400	J
Chromium	MG/KG	19.8		19.2		55.6	J	15.3		13.6	J
Cobalt	MG/KG	10.3		8.6		28		8.6		6	
Copper	MG/KG	21.9		11.3		79		17.5		19.9	
Cyanide	MG/KG	0.58	U	0.59	U	0.59	U	0.57	U	0.59	U
Iron	MG/KG	27400		20300		62600		21900		15300	
Lead	MG/KG	33.8		11.7		50.6		12.9		53.1	
Magnesium	MG/KG	9520		4060		38100		3050		22500	
Manganese	MG/KG	712		722		2440	J	765		551	J
Mercury	MG/KG	0.12	J	0.12	U	0.12	U	0.11	U	0.12	U
Nickel	MG/KG	23.9		20.9		56	J	16.7		13.7	J
Potassium	MG/KG	1620		802		3770		1260		1250	
Selenium	MG/KG	1.1	U	1.1	U	1.1	U	1	U	1.1	U
Silver	MG/KG	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Sodium	MG/KG	442	U	448	U	447	U	429	U	448	U
Thallium	MG/KG	0.84	U	0.85	U	0.85	U	0.82	U	0.85	U
Vanadium	MG/KG	25.2	J	27.1	J	18.3		23.8		17.9	
Zinc	MG/KG	530		58.9		440	J	69.4		125	J

		RAM305		RAM306		RCM305		RCM306		RCM315	
		902-RAM305		902-RAM306		902-RCM305		902-RCM306		902-RCM315	
		0349740002SA REG		0349740003SA REG		0360230001SA REG		0360230002SA REG		0360230003SA REG	
		4/19/94		4/19/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**										
Chloride	MG/KG	17.5	U	17.8	U	17.7	U	17	U	17.8	U
Fluoride	MG/KG	2.2		1		0.59	U	0.57	U	0.59	U
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.87		0.59		1.8		1		2.4	
Sulfate	MG/KG	29.2	U	29.7	U	29.6	U	28.4	U	29.6	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RAM301			RAM302			RAM303			RAM304			RAM305		
		902-RAM301			902-RAM302			902-RAM303			902-RAM304			902-RAM305		
		3200205 REG			3200206 REG			3200207 REG			3200208 REG			3200209 REG		
		4/19/94			4/19/94			4/19/94			4/19/94			4/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.662	0.115	J	0.166	0.0804	J	NS			NS			NS		
Pu-238	PCI/G	NS			NS			7.26	0.903		4.79	0.641	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0398	0.0119		0.0645	0.0204	J	NS		
Pu-242	PCI/G	NS			NS			0.00294	0.00298		0.00403	0.0047	J	NS		
Th-228	PCI/G	NS			NS			1.08	0.261	J	NS			NS		
Th-230	PCI/G	NS			NS			1.53	0.317	J	NS			NS		
Th-232	PCI/G	NS			NS			1.15	0.265	J	NS			NS		
U-234	PCI/G	NS			NS			0.898	0.171		NS			NS		
U-235	PCI/G	NS			NS			0.0672	0.0379		NS			NS		
U-238	PCI/G	NS			NS			1.22	0.216		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0835	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0194	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.022	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.025	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.371	0.0496	
K-40	PCI/G	NS			NS			NS			NS			19.8	2.15	
Ra-226	PCI/G	NS			NS			NS			NS			2.71	0.56	
Sr-90	PCI/G	NS			NS			NS			NS			0.481	NA	U

		RAM306			RBM301			RBM302			RBM303			RBM304		
		902-RAM306			902-RBM301			902-RBM302			902-RBM303			902-RBM304		
		REG			3202109 REG			3202110 REG			3202111 REG			3202112 REG		
		4/19/94			4/21/94			4/21/94			4/21/94			4/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.266	0.108		0.181	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			5.68	0.806		2.01	0.286	
Pu-239/240	PCI/G	NS			NS			NS			0.0394	0.0188		0.0218	0.0141	
Pu-242	PCI/G	NS			NS			NS			0.0138	NA	U	0.0059	NA	U
Th-228	PCI/G	NS			NS			NS			0.955	0.306	R	NS		
Th-230	PCI/G	NS			NS			NS			1.47	0.383	R	NS		
Th-232	PCI/G	NS			NS			NS			0.871	0.275	R	NS		
U-234	PCI/G	NS			NS			NS			0.848	0.142		NS		
U-235	PCI/G	NS			NS			NS			0.0673	0.0301		NS		
U-238	PCI/G	NS			NS			NS			0.862	0.144		NS		
Am-241	PCI/G	0.126	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0292	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0334	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0362	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0333	NA	U	NS			NS			NS			NS		
K-40	PCI/G	14	1.65		NS			NS			NS			NS		
Ra-226	PCI/G	2.39	0.642		NS			NS			NS			NS		
Sr-90	PCI/G	0.402	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RCM301			RCM302			RCM303			RCM304			RCM305		
		902-RCM301			902-RCM302			902-RCM303			902-RCM304			902-RCM305		
		3222801 REG			3222802 REG			3222803 REG			3222804 REG			3222805 REG		
		6/7/94			6/7/94			6/7/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.079	NA	U	0.0592	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.278	0.0353		0.239	0.0325		NS		
Pu-239/240	PCI/G	NS			NS			0.0142	0.00667		0.00986	0.00569		NS		
Pu-242	PCI/G	NS			NS			0.00322	0.00289		0.00352	0.00316		NS		
Th-228	PCI/G	NS			NS			0.654	0.144		NS			NS		
Th-230	PCI/G	NS			NS			1.26	0.219		NS			NS		
Th-232	PCI/G	NS			NS			0.723	0.147		NS			NS		
U-234	PCI/G	NS			NS			0.68	0.126		NS			NS		
U-235	PCI/G	NS			NS			0.0254	0.0182	U	NS			NS		
U-238	PCI/G	NS			NS			0.816	0.143	U	NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0642	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0173	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0181	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0216	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.354	0.0455	
K-40	PCI/G	NS			NS			NS			NS			14.8	1.61	
Ra-226	PCI/G	NS			NS			NS			NS			0.5	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			1.52	0.351	

		RCM306			RCM315			RHM301			RHM302			RHM303		
		902-RCM306			902-RCM315			902-RHM301			902-RHM302			902-RHM303		
		REG			REG			3202113 REG			3202134 REG			3202135 REG		
		6/7/94			06/07/94DUPE			4/21/94			4/21/94			4/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.122	NA	U	0.232	0.0832		NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.0269	NA	U
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0132	NA	U
Pu-242	PCI/G	NS			NS			NS			NS			0.00484	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0692	NA	U	0.0755	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0155	NA	U	0.0185	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0171	NA	U	0.0212	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0215	NA	U	0.0247	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.0172	NA	U	0.385	0.0556		NS			NS			NS		
K-40	PCI/G	15.2	1.61		14.8	1.65		NS			NS			NS		
Ra-226	PCI/G	2.53	0.524		1.84	0.548		NS			NS			NS		
Sr-90	PCI/G	0.533	NA	U	0.62	NA	U	NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RHM304			RJM301			RJM302			RJM303			RJM304		
		902-RHM304			902-RJM301			902-RJM302			902-RJM303			902-RJM304		
		3202136 REG			3202104 REG			3202105 REG			3202107 REG			3202108 REG		
		4/21/94			4/21/94			4/21/94			4/21/94			4/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.067	NA	U	0.0988	NA	U	NS			NS		
Pu-238	PCI/G	0.101	0.037		NS			NS			0.0868	0.0331		0.103	0.0366	
Pu-239/240	PCI/G	0.0169	NA	U	NS			NS			0.016	NA	U	0.0184	NA	U
Pu-242	PCI/G	0.0062	NA	U	NS			NS			0.00588	NA	U	0.00678	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJM312			RMM301			RMM302			RMM303			RMM304		
		902-RJM312			902-RMM301			902-RMM302			902-RMM303			902-RMM304		
		3202106 REG			3205323 REG			3205324 REG			3205325 REG			3205326 REG		
		04/21/94DUPE			4/27/94			4/27/94			4/27/94			4/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0842	NA	U	0.18	0.0889		0.118	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.193	0.0447	U	0.0401	NA	U
Pu-239/240	PCI/G	NS			NS			NS			0.0241	0.0147		0.0209	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00502	NA	U	0.00769	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RNM301			RNM302			RNM303			RNM304			RPM301		
		902-RNM301			902-RNM302			902-RNM303			902-RNM304			902-RPM301		
		3231216 REG			3231217 REG			3231218 REG			3231219 REG			3211232 REG		
		6/27/94			6/27/94			6/27/94			6/27/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.195	NA	U	0.0806	NA	U	NS			NS			0.12	NA	U
Pu-238	PCI/G	NS			NS			0.026	0.0105	U	0.0818	0.023	U	NS		
Pu-239/240	PCI/G	NS			NS			0.00925	NA	U	0.013	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00654	NA	U	0.013	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPM302			RPM303			RPM304			RRM301			RRM302		
		902-RPM302			902-RPM303			902-RPM304			902-RRM301			902-RRM302		
		3211233 REG			3211234 REG			3211235 REG			3211222 REG			3211223 REG		
		5/10/94			5/10/94			5/10/94			5/10/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.109	NA	U	NS			NS			0.133	NA	U	0.138	NA	U
Pu-238	PCI/G	NS			0.0581	NA	U	0.234	0.0547	J	NS			NS		
Pu-239/240	PCI/G	NS			0.00903	NA	U	0.00547	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.0245	NA	U	0.00546	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RRM303			RRM304			RRM312			RRM314			RSM301		
		902-RRM303			902-RRM304			902-RRM312			902-RRM314			902-RSM301		
		3211224 REG			3211225 REG			3211226 REG			3211227 REG			3228612 REG		
		5/10/94			5/10/94			05/10/94DUPE			05/10/94DUPE			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.138	NA	U	NS			0.0889	NA	U
Pu-238	PCI/G	0.221	0.064	J	0.332	0.0974	J	NS			0.188	0.0977	J	NS		
Pu-239/240	PCI/G	0.0099	0.0115	J	0.0115	NA	UJ	NS			0.0243	NA	UJ	NS		
Pu-242	PCI/G	0.0243	NA	UJ	0.0115	NA	UJ	NS			0.0243	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RSM302			RSM303			RSM304			RSM313			RTM301		
		902-RSM302			902-RSM303			902-RSM304			902-RSM313			902-RTM301		
		3228613 REG			3228614 REG			3228615 REG			3228616 REG			3211241 REG		
		6/21/94			6/21/94			6/21/94			06/21/94DUPE			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0914	NA	U	NS			NS			NS			0.109	NA	U
Pu-238	PCI/G	NS			0.0716	0.027	UJ	0.0742	0.0214	U	0.0553	0.0172	U	NS		
Pu-239/240	PCI/G	NS			0.0123	NA	UJ	0.00837	0.00668		0.00729	NA	U	NS		
Pu-242	PCI/G	NS			0.0123	NA	UJ	0.00972	NA	U	0.00916	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RTM302			RTM303			RTM304			RUM301			RUM302		
		902-RTM302			902-RTM303			902-RTM304			902-RUM301			902-RUM302		
		3211242 REG			3211243 REG			3211244 REG			3204228 REG			3204229 REG		
		5/10/94			5/10/94			5/10/94			4/25/94			4/25/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0655	NA	U	NS			NS			NS			NS		
Pu-238	PCI/G	NS			0.0457	NA	UJ	0.069	0.0299		0.0229	0.0109	J	0.0244	NA	UJ
Pu-239/240	PCI/G	NS			0.00945	NA	UJ	0.00624	NA	U	0.00549	0.00453	J	0.0308	NA	UJ
Pu-242	PCI/G	NS			0.00944	NA	UJ	0.017	NA	U	0.00248	NA	U	0.0244	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RUM303			RUM304			RVM301			RVM302			RVM303		
		902-RUM303			902-RUM304			902-RVM301			902-RVM302			902-RVM303		
		3204230 REG			3204231 REG			3212423 REG			3212424 REG			3212425 REG		
		4/25/94			4/25/94			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.15	NA	U	0.0703	NA	U	NS			NS			0.0958	NA	U
Pu-238	PCI/G	NS			NS			0.202	0.0485	U	0.117	0.0481	UJ	NS		
Pu-239/240	PCI/G	NS			NS			0.0143	NA	U	0.0233	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.0143	NA	U	0.00856	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - SOUTHWEST																
		RVM304			RXM301			RXM302			RYM301			RYM302		
		902-RVM304			902-RXM301			902-RXM302			902-RYM301			902-RYM302		
		3212426 REG			3205334 REG			3205335 REG			3204203 REG			3204204 REG		
		5/11/94			4/27/94			4/25/94			4/22/94			4/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0824	NA	U	NS			NS			NS			NS		
Pu-238	PCI/G	NS			0.139	0.0358	U	0.0168	NA	U	0.0287	NA	UJ	0.0116	NA	UJ
Pu-239/240	PCI/G	NS			0.0119	0.00911		0.00357	0.00415		0.00413	NA	UJ	0.00501	0.00505	J
Pu-242	PCI/G	NS			0.0046	NA	U	0.00323	NA	U	0.00412	NA	UJ	0.00339	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		J0056.D REG		J0057.D REG		J0060.D REG		J0074.D REG		J1102.D REG		J1103.D REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**												
Acetone	UG/KG	12	U	12	U	3	J	15	U	11	U	12	U
Acetonitrile	UG/KG	119	UJ	116	UJ	119	UJ	119	UJ	109	UJ	119	UJ
Acrylonitrile	UG/KG	119	U	116	U	119	U	119	U	109	U	119	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Bromomethane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
2-Butanone	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Chloroethane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Chloromethane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	23	U	24	U	24	U	22	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Hexane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
2-Hexanone	UG/KG	12	UJ	12	U	12	U	12	U	11	U	12	U
Iodomethane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	12	UJ	12	U	12	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	118		82		133		86		5	UJ	6	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Toluene	UG/KG	6	J	2	J	5	J	6	UJ	5	UJ	4	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	5	UJ	6	UJ
Tentatively Identified Compounds						1							

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		G0301800.D REG		G0401801.D REG		G0701804.D REG		G0801805.D REG		G1001414.D REG		G1101415.D REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**												
Acenaphthene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Acenaphthylene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Anthracene	UG/KG	400	U	390	U	400	U	400	U	360	U	90	J
Benzo(a)anthracene	UG/KG	82	J	390	U	90	J	46	J	62	J	430	
Benzo(a)pyrene	UG/KG	94	J	390	U	120	J	49	J	89	J	490	
Benzo(b)fluoranthene	UG/KG	92	J	390	U	140	J	87	J	71	J	790	
Benzo(g,h,i)perylene	UG/KG	70	J	390	U	82	J	400	U	55	J	300	J
Benzo(k)fluoranthene	UG/KG	130	J	390	U	140	J	400	U	100	J	400	U
Benzoic Acid	UG/KG	54	J	1900	U	48	J	40	J	48	J	84	J
Benzyl Alcohol	UG/KG	400	U	390	U	400	U	400	U	1800	U	2000	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
bis(2-Chloroethyl)ether	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4-Bromophenyl-phenylether	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Butylbenzylphthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Carbazole	UG/KG	400	U	390	U	400	U	400	U	360	U	66	J
4-Chloro-3-methylphenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4-Chloroaniline	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Chloronaphthalene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Chlorophenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4-Chlorophenyl-phenylether	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Chrysene	UG/KG	190	J	42	R	240	J	100	R	100	J	680	
Di-n-butylphthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Di-n-octylphthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Dibenzo(a,h)anthracene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Dibenzofuran	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
1,2-Dichlorobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
1,3-Dichlorobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
1,4-Dichlorobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
3,3'-Dichlorobenzidine	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2,4-Dichlorophenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Diethylphthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2,4-Dimethylphenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Dimethylphthalate	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
2,4-Dinitrophenol	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
2,4-Dinitrotoluene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2,6-Dinitrotoluene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Fluoranthene	UG/KG	210	J	44	J	270	J	120	J	130	J	850	
Fluorene	UG/KG	400	U	390	U	400	U	400	U	360	U	44	J
Hexachlorobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Hexachlorobutadiene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Hexachlorocyclopentadiene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Hexachloroethane	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		G0301800.D REG		G0401801.D REG		G0701804.D REG		G0801805.D REG		G1001414.D REG		G1101415.D REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**												
Indeno(1,2,3-c,d)pyrene	UG/KG	63	J	390	U	79	J	400	U	56	J	320	J
Isophorone	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Methylnaphthalene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Methylphenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4-Methylphenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
N-Nitrosodiphenylamine	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Naphthalene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Nitroaniline	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
3-Nitroaniline	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
4-Nitroaniline	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
Nitrobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2-Nitrophenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
4-Nitrophenol	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Pentachlorophenol	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
Phenanthrene	UG/KG	58	J	390	U	69	J	400	U	47	J	530	
Phenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Pyrene	UG/KG	240	J	53	J	290	J	130	J	110	J	730	
1,2,4-Trichlorobenzene	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
2,4,5-Trichlorophenol	UG/KG	990	U	970	U	990	U	990	U	900	U	990	U
2,4,6-Trichlorophenol	UG/KG	400	U	390	U	400	U	400	U	360	U	400	U
Tentatively Identified Compounds		25		16		25		22		24		25	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		34973-03 REG		34973-04 REG		34973-07 REG		34973-08 REG		36022-04 REG		36022-05 REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**												
Aldrin	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	1.3	J	4	U
alpha-BHC	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
alpha-Chlordane	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
Aroclor 1232	UG/KG	7.8	U	7.7	U	16	U	7.8	U	7.2	U	78	U
Aroclor-1016	UG/KG	7.8	U	7.7	U	16	U	7.8	U	7.2	U	78	U
Aroclor-1221	UG/KG	16	U	16	U	32	U	16	U	14	U	160	U
Aroclor-1242	UG/KG	7.8	U	7.7	U	16	U	7.8	U	7.2	U	78	U
Aroclor-1248	UG/KG	7.8	U	7.7	U	16	U	7.8	U	7.2	U	1300	
Aroclor-1254	UG/KG	7.8	U	7.7	U	16	U	7.8	U	7.2	U	78	U
Aroclor-1260	UG/KG	7.8	U	7.7	U	16	U	7.8	U	23		78	U
beta-BHC	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	1.1	J	4	U
4,4'-DDD	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	6.4	J
4,4'-DDE	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	7.8	U
4,4'-DDT	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	UJ	8.6	J
delta-BHC	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
Dieldrin	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.94	J	7.8	U
Endosulfan I	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
Endosulfan II	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	7.8	U
Endosulfan Sulfate	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	7.8	U
Endrin	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	UJ	7.8	UJ
Endrin Aldehyde	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	7.8	U
Endrin Ketone	UG/KG	0.78	U	0.77	U	1.6	U	0.78	U	0.72	U	7.8	U
gamma-BHC (Lindane)	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
gamma-Chlordane	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
Heptachlor	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	0.37	U	4	U
Heptachlor Epoxide	UG/KG	0.4	U	0.39	U	0.81	U	0.4	U	1.6	J	4	U
p,p'-Methoxychlor	UG/KG	4	U	3.9	U	8.1	U	4	U	3.7	UJ	40	UJ
Toxaphene	UG/KG	40	U	39	U	81	U	40	U	37	U	400	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		3497503 REG		3497504 REG		3497507 REG		3497508 REG		3602104 REG		3602105 REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units												
Aluminum	MG/KG	11600		14700		12000		14900		4030		6830	
Antimony	MG/KG	0.73	UJ	0.72	UJ	0.74	UJ	0.73	UJ	0.67	U	0.74	U
Arsenic	MG/KG	3.2		1.5		2.8		1.4		3.1		5.4	
Barium	MG/KG	27		28.3		26.5		21.2		77.7		128	
Beryllium	MG/KG	0.57		0.66		0.63		0.67		0.25		0.43	
Bismuth	MG/KG	6.1	U	6	U	6.1	U	6.4		46.5		49.4	
Cadmium	MG/KG	0.55	U	0.53	U	0.55	U	0.54	U	0.5	U	0.95	
Calcium	MG/KG	92600		29500		66800		43400		133000		98300	
Chromium	MG/KG	13.9		22		15.8		20.2		5.6		24.3	
Cobalt	MG/KG	11		14.4		11.4		14.6		2.5		6.1	
Copper	MG/KG	13.9		10.1		11.1		22.9		10.4		34.9	
Cyanide	MG/KG	0.59	U	0.58	U	0.61		0.59	U	0.54	U	0.59	U
Iron	MG/KG	24500		30200		26300		32100		7030		13900	
Lead	MG/KG	6.7		5		10.5		8.1		10.3		39.1	
Magnesium	MG/KG	14400		19200		23500		21200		28400		28000	
Manganese	MG/KG	488		473		490		793		309		448	
Mercury	MG/KG	0.12	U	0.12	U	0.12	U	0.12	U	0.11	U	0.18	
Nickel	MG/KG	25		33.5		24.7		32.5		7.4		17.9	
Potassium	MG/KG	2650		3440		2700		3330		585	U	1030	
Selenium	MG/KG	1.1	U	1.1	U	1.1	U	1.1	U	1.5		1.1	U
Silver	MG/KG	1.1	U	1.1	U	1.1	U	1.1	U	1	U	1.1	U
Sodium	MG/KG	448	U	440	U	450	U	447	U	410	U	448	U
Thallium	MG/KG	0.85	U	0.84	U	0.86	U	0.85	U	0.78	U	0.85	U
Vanadium	MG/KG	14.6	J	16.9	J	15.1	J	15.6	J	9.4		14.1	
Zinc	MG/KG	70.3		74.3		97.8		68.1		41		114	

DIRECTION FROM MOUND -													
		RAN305		RAN306		RAN315		RAN316		RCN305		RCN306	
		902-RAN305		902-RAN306		902-RAN315		902-RAN316		902-RCN305		902-RCN306	
		0349740005SA REG		0349740006SA REG		0349740009SA REG		0349740010SA REG		0360230004SA REG		0360230005SA REG	
		4/20/94		4/20/94		04/20/94DUPE		04/20/94DUPE		6/7/94		6/7/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units												
Chloride	MG/KG	33.4		17.4	UJ	32.6		24	J	16.3	U	17.8	U
Fluoride	MG/KG	1.1		1.5		1		1.8		0.76		1.7	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.59	U	0.58	U	0.6	U	0.59	U	2.1		3.8	
Sulfate	MG/KG	29.6	U	29.1	U	29.8	U	31.4	J	27.1	U	29.7	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RAN301			RAN302			RAN303			RAN304			RAN305		
		902-RAN301			902-RAN302			902-RAN303			902-RAN304			902-RAN305		
		3201302 REG			3201304 REG			3201306 REG			3201308 REG			REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.192	0.0713		0.0967	0.0564		NS			NS			NS		
Pu-238	PCI/G	NS			NS			1.07	0.176	J	0.152	0.0488	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0413	0.0193	J	0.00808	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00559	NA	UJ	0.00807	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.988	0.198	J	NS			NS		
Th-230	PCI/G	NS			NS			1.05	0.203		NS			NS		
Th-232	PCI/G	NS			NS			0.781	0.165		NS			NS		
U-234	PCI/G	NS			NS			0.766	0.142		NS			NS		
U-235	PCI/G	NS			NS			0.0619	0.031		NS			NS		
U-238	PCI/G	NS			NS			0.719	0.136		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0686	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0179	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0206	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.024	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.777	0.0891	J
K-40	PCI/G	NS			NS			NS			NS			18.6	2	
Ra-226	PCI/G	NS			NS			NS			NS			0.501	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			4.57	0.419	J

		RAN306			RAN311			RAN312			RAN313			RAN314		
		902-RAN306			902-RAN311			902-RAN312			902-RAN313			902-RAN314		
		3201312 REG			3201303 REG			3201305 REG			3201307 REG			3201309 REG		
		4/20/94			04/20/94DUPE			04/20/94DUPE			04/20/94DUPE			04/20/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.164	0.0643		0.0887	0.0436		NS			NS		
Pu-238	PCI/G	NS			NS			NS			1.34	0.205	R	0.187	0.0488	J
Pu-239/240	PCI/G	NS			NS			NS			0.0484	0.0204	R	0.0221	0.0137	J
Pu-242	PCI/G	NS			NS			NS			0.0143	NA	R	0.00545	NA	UJ
Th-228	PCI/G	NS			NS			NS			1.12	0.207	J	NS		
Th-230	PCI/G	NS			NS			NS			1.2	0.217		NS		
Th-232	PCI/G	NS			NS			NS			0.909	0.178		NS		
U-234	PCI/G	NS			NS			NS			0.849	0.152		NS		
U-235	PCI/G	NS			NS			NS			0.0759	0.0364		NS		
U-238	PCI/G	NS			NS			NS			0.77	0.142		NS		
Am-241	PCI/G	0.0949	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0231	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0254	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0334	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.137	0.0283		NS			NS			NS			NS		
K-40	PCI/G	29.2	3.15		NS			NS			NS			NS		
Ra-226	PCI/G	1.49	0.52		NS			NS			NS			NS		
Sr-90	PCI/G	0.614	0.223	R	NS			NS			NS			NS		

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DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RAN315			RAN316			RBN301			RBN302			RBN303		
		902-RAN315			902-RAN316			902-RBN301			902-RBN302			902-RBN303		
		3201311 REG			3201313 REG			3216901 REG			3216902 REG			3216903 REG		
		04/20/94DUPE			04/20/94DUPE			5/18/94			5/18/94			5/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.294	0.0598		0.0667	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.483	0.0842	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0114	NA	U
Pu-242	PCI/G	NS			NS			NS			NS			0.00417	NA	U
Th-228	PCI/G	NS			NS			NS			NS			1	0.215	J
Th-230	PCI/G	NS			NS			NS			NS			1.43	0.266	J
Th-232	PCI/G	NS			NS			NS			NS			1.02	0.207	J
U-234	PCI/G	NS			NS			NS			NS			1	0.172	
U-235	PCI/G	NS			NS			NS			NS			0.0562	0.029	J
U-238	PCI/G	NS			NS			NS			NS			1.07	0.181	
Am-241	PCI/G	0.0764	NA	U	0.122	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0189	NA	U	0.0275	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0203	NA	U	0.0313	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0233	NA	U	0.0362	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.398	0.0503	J	0.106	0.0339		NS			NS			NS		
K-40	PCI/G	23.1	2.41		29.5	3.19		NS			NS			NS		
Ra-226	PCI/G	0.521	NA	U	1.6	0.734		NS			NS			NS		
Sr-90	PCI/G	0.729	NA	J	8.29	0.546	J	NS			NS			NS		

		RBN304			RCN301			RCN302			RCN303			RCN304		
		902-RBN304			902-RCN301			902-RCN302			902-RCN303			902-RCN304		
		3216904 REG			3222808 REG			3222809 REG			3222810 REG			3222811 REG		
		5/18/94			6/7/94			6/7/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0429	NA	U	0.0872	NA	U	NS			NS		
Pu-238	PCI/G	0.71	0.114		NS			NS			0.214	0.0323		0.129	0.0239	
Pu-239/240	PCI/G	0.0146	NA	U	NS			NS			0.00718	0.00533		0.00418	0.00376	
Pu-242	PCI/G	0.00426	NA	U	NS			NS			0.00216	NA	U	0.00615	NA	U
Th-228	PCI/G	NS			NS			NS			0.529	0.114		NS		
Th-230	PCI/G	NS			NS			NS			0.91	0.159		NS		
Th-232	PCI/G	NS			NS			NS			0.447	0.0969		NS		
U-234	PCI/G	NS			NS			NS			0.518	0.103		NS		
U-235	PCI/G	NS			NS			NS			0.0412	0.0234		NS		
U-238	PCI/G	NS			NS			NS			0.607	0.115		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RCN305			RCN306			RCN311			RCN312			RCN313		
		902-RCN305			902-RCN306			902-RCN311			902-RCN312			902-RCN313		
		REG			3222813 REG			3222814 REG			3222815 REG			3222816 REG		
		6/7/94			6/7/94			06/07/94DUPE			06/07/94DUPE			06/07/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0438	NA	U	0.0791	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.191	0.029	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0063	0.00448	
Pu-242	PCI/G	NS			NS			NS			NS			0.00213	NA	U
Th-228	PCI/G	NS			NS			NS			NS			0.468	0.146	J
Th-230	PCI/G	NS			NS			NS			NS			0.943	0.214	J
Th-232	PCI/G	NS			NS			NS			NS			0.46	0.134	J
U-234	PCI/G	NS			NS			NS			NS			0.56	0.108	
U-235	PCI/G	NS			NS			NS			NS			0.0228	NA	U
U-238	PCI/G	NS			NS			NS			NS			0.597	0.113	
Am-241	PCI/G	0.107	NA	U	0.0898	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.017	NA	U	0.0232	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0204	NA	U	0.0265	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0237	NA	U	0.0294	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.0846	0.0197		0.374	0.052		NS			NS			NS		
K-40	PCI/G	10.1	1.17		12.8	1.44		NS			NS			NS		
Ra-226	PCI/G	1.2	0.467		1.87	0.586		NS			NS			NS		
Sr-90	PCI/G	0.76	NA	U	0.721	NA	U	NS			NS			NS		

		RCN314			RGN301			RGN302			RGN303			RGN304		
		902-RCN314			902-RGN301			902-RGN302			902-RGN303			902-RGN304		
		3222817 REG			3207752 REG			3207753 REG			3207754 REG			3207755 REG		
		06/07/94DUPE			5/3/94			5/3/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.145	NA	U	0.123	NA	U	NS			NS		
Pu-238	PCI/G	0.14	0.0223		NS			NS			0.0575	0.0406	J	0.0813	NA	UJ
Pu-239/240	PCI/G	0.00571	0.00383		NS			NS			0.0104	NA	UJ	0.0147	NA	UJ
Pu-242	PCI/G	0.00443	0.00337		NS			NS			0.0104	NA	UJ	0.0398	NA	UJ
Th-228	PCI/G	NS			NS			NS			0.61	0.11	J	NS		
Th-230	PCI/G	NS			NS			NS			1.18	0.18	J	NS		
Th-232	PCI/G	NS			NS			NS			0.511	0.0973	J	NS		
U-234	PCI/G	NS			NS			NS			0.562	0.105		NS		
U-235	PCI/G	NS			NS			NS			0.0453	0.0247		NS		
U-238	PCI/G	NS			NS			NS			0.607	0.112		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RGN314			RJN301			RJN302			RJN303			RJN304		
		902-RGN314			902-RJN301			902-RJN302			902-RJN303			902-RJN304		
		3207756 REG			3210729 REG			3210730 REG			3210731 REG			3210732 REG		
		05/03/94DUPE			5/9/94			5/9/94			5/9/94			5/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.117	NA	U	0.0388	NA	U	NS			NS		
Pu-238	PCI/G	0.0811	NA	UJ	NS			NS			0.113	0.0395	U	0.0665	0.0369	U
Pu-239/240	PCI/G	0.0438	0.0328	J	NS			NS			0.0128	0.0116		0.0258	NA	U
Pu-242	PCI/G	0.0132	NA	UJ	NS			NS			0.00693	NA	U	0.00751	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJN314			RKN301			RKN302			RKN303			RKN304		
		902-RJN314			902-RKN301			902-RKN302			902-RKN303			902-RKN304		
		3210733 REG			3207747 REG			3207748 REG			3207750 REG			3207751 REG		
		05/09/94DUPE			5/3/94			5/3/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.227	NA	U	0.252	NA	U	NS			NS		
Pu-238	PCI/G	0.151	0.0416		NS			NS			0.0454	0.031	J	0.0752	0.0533	J
Pu-239/240	PCI/G	0.00572	0.00665		NS			NS			0.0227	0.0174	J	0.0376	0.0341	J
Pu-242	PCI/G	0.014	NA	U	NS			NS			0.00878	NA	UJ	0.0204	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RKN312			RMN301			RMN302			RMN303			RMN304		
		902-RKN312			902-RMN301			902-RMN302			902-RMN303			902-RMN304		
		3207749 REG			3205319 REG			3205320 REG			3205321 REG			3205322 REG		
		05/03/94DUPE			4/27/94			4/27/94			4/27/94			4/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.238	NA	U	0.219	NA	U	0.141	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.00799	NA	U	0.032	NA	U
Pu-239/240	PCI/G	NS			NS			NS			0.0101	NA	U	0.018	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00799	NA	U	0.0066	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNN301			RNN302			RNN303			RNN304			RNN313		
		902-RNN301			902-RNN302			902-RNN303			902-RNN304			902-RNN313		
		3211236 REG			3211237 REG			3211238 REG			3211239 REG			3211240 REG		
		5/10/94			5/10/94			5/10/94			5/10/94			05/10/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.115	NA	U	0.133	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.39	0.0872	J	0.0942	0.0359		0.0749	0.034	J
Pu-239/240	PCI/G	NS			NS			0.0226	NA	U	0.00608	NA	U	0.00635	NA	U
Pu-242	PCI/G	NS			NS			0.00832	NA	U	0.00608	NA	U	0.00635	NA	U
Th-228	PCI/G	NS			NS			0.991	0.218	J	NS			1.03	0.175	
Th-230	PCI/G	NS			NS			1.14	0.236	J	NS			1.27	0.204	
Th-232	PCI/G	NS			NS			0.982	0.212	J	NS			1.04	0.174	
U-234	PCI/G	NS			NS			0.899	0.166		NS			0.924	0.168	
U-235	PCI/G	NS			NS			0.0479	0.0283		NS			0.0432	0.0309	
U-238	PCI/G	NS			NS			0.983	0.178		NS			0.983	0.175	
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RPN301			RPN302			RPN303			RPN304			RRN301		
		902-RPN301			902-RPN302			902-RPN303			902-RPN304			902-RRN301		
		3220926 REG			3220927 REG			3220928 REG			3220929 REG			3220922 REG		
		6/2/94			6/2/94			6/2/94			6/2/94			6/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0759	NA	U	0.101	NA	U	NS			NS			0.0531	NA	U
Pu-238	PCI/G	NS			NS			0.0731	0.0282		0.0682	0.0271		NS		
Pu-239/240	PCI/G	NS			NS			0.0139	0.01		0.0133	0.0107		NS		
Pu-242	PCI/G	NS			NS			0.00472	NA	U	0.0155	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRN302			RRN303			RRN304			RSN301			RSN302		
		902-RRN302			902-RRN303			902-RRN304			902-RSN301			902-RSN302		
		3220923 REG			3220924 REG			3220925 REG			3228617 REG			3228618 REG		
		6/2/94			6/2/94			6/2/94			6/21/94			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0886	NA	U	NS			NS			0.0857	NA	U	0.126	NA	U
Pu-238	PCI/G	NS			0.084	0.0417		0.0739	0.0289		NS			NS		
Pu-239/240	PCI/G	NS			0.0315	0.0202		0.00489	NA		NS			NS		
Pu-242	PCI/G	NS			0.00711	NA	U	0.00489	NA	U	NS			NS		
Th-228	PCI/G	NS			0.985	0.162		NS			NS			NS		
Th-230	PCI/G	NS			1.33	0.204		NS			NS			NS		
Th-232	PCI/G	NS			0.725	0.129		NS			NS			NS		
U-234	PCI/G	NS			0.836	0.142		NS			NS			NS		
U-235	PCI/G	NS			0.0641	0.0284		NS			NS			NS		
U-238	PCI/G	NS			0.987	0.162		NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RSN303			RSN304			RTN301			RTN302			RTN303		
		902-RSN303			902-RSN304			902-RTN301			902-RTN302			902-RTN303		
		3228619 REG			3228620 REG			3228621 REG			3228622 REG			3228623 REG		
		6/21/94			6/21/94			6/21/94			6/21/94			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0641	NA	U	0.068	NA	U	NS		
Pu-238	PCI/G	0.0374	0.0142	U	0.0555	0.0162	U	NS			NS			0.0494	0.0152	U
Pu-239/240	PCI/G	0.012	NA	U	0.00965	NA	U	NS			NS			0.00648	0.00518	
Pu-242	PCI/G	0.00848	NA	U	0.00965	NA	U	NS			NS			0.00595	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTN304			RTN311			RUN301			RUN302			RVN301		
		902-RTN304			902-RTN311			902-RUN301			902-RUN302			902-RVN301		
		3228624 REG			3228621 REG			3207146 REG			3207147 REG			3212417 REG		
		6/21/94			06/21/94DUPE			5/2/94			5/2/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0595	NA	U	NS			NS			NS		
Pu-238	PCI/G	0.0922	0.0294	UJ	NS			0.234	0.0649	J	0.0278	NA	UJ	0.197	0.0495	U
Pu-239/240	PCI/G	0.0135	0.0103	J	NS			0.027	0.0206	J	0.0163	NA	UJ	0.0153	0.011	
Pu-242	PCI/G	0.0052	NA	UJ	NS			0.0073	NA	UJ	0.0129	NA	UJ	0.00519	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RVN302			RVN303			RVN304			RVN312			RVN314		
		902-RVN302			902-RVN303			902-RVN304			902-RVN312			902-RVN314		
		3212418 REG			3212420 REG			3212421 REG			3212419 REG			3212422 REG		
		5/11/94			5/11/94			5/11/94			05/11/94DUPE			05/11/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.106	NA	U	0.104	NA	U	NS			0.102	NA	U
Pu-238	PCI/G	0.264	0.0661	U	NS			NS			0.201	0.054	U	NS		
Pu-239/240	PCI/G	0.00663	NA	U	NS			NS			0.00782	0.0091		NS		
Pu-242	PCI/G	0.018	NA	U	NS			NS			0.00706	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RXN301			RXN302			RXN303			RXN304			RYN301		
		902-RXN301			902-RXN302			902-RXN303			902-RXN304			902-RYN301		
		3205336 REG			3205337 REG			3205338 REG			3205339 REG			3205717 REG		
		4/27/94			4/27/94			4/27/94			4/27/94			4/28/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.222	NA	U	0.157	NA	U	0.0775	NA	U
Pu-238	PCI/G	0.0834	NA	U	0.224	0.049		NS			NS			NS		
Pu-239/240	PCI/G	0.0318	0.029		0.00659	0.00664		NS			NS			NS		
Pu-242	PCI/G	0.0172	NA	U	0.00446	NA	U	NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/SOUTHWEST																
		RYN302			RYN303			RYN304								
		902-RYN302			902-RYN303			902-RYN304								
		3205718 REG			3205719 REG			3205720 REG								
		4/28/94			4/28/94			4/28/94								
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val						
Radiological	**Units**															
Tritium	PCI/G	0.103	NA	U	NS			NS			NS			NS		
Pu-238	PCI/G	NS			0.019	NA	UJ	0.0338	0.0156	J	NS			NS		
Pu-239/240	PCI/G	NS			0.0114	0.00853	J	0.00831	NA	UJ	NS			NS		
Pu-242	PCI/G	NS			0.00343	NA	UJ	0.00305	NA	UJ	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST													
		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		J0058.D REG			J0059.D REG			J1104.D REG			J1105.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Volatile Organics	Units												
Acetone	UG/KG	12	U	U	13	U	U	1	J	J	11	U	U
Acetonitrile	UG/KG	120	U	UJ	128	U	UJ	115	U	UJ	109	U	UJ
Acrylonitrile	UG/KG	120	U	U	128	U	U	115	U	U	109	U	U
Benzene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Bromodichloromethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Bromoform	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Bromomethane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
2-Butanone	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Carbon Disulfide	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Carbon Tetrachloride	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Chlorobenzene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Chlorodibromomethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Chloroethane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Chloroform	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Chloromethane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
1,1-Dichloroethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloroethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,1-Dichloroethene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloroethene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloropropane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
cis-1,3-Dichloropropene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
trans-1,3-Dichloropropene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Diethylbenzene	UG/KG	24	U	U	26	U	U	23	U	U	22	U	U
Ethylbenzene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Hexane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
2-Hexanone	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Iodomethane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
4-Methyl-2-pentanone	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Methylene Chloride	UG/KG	140	B		163	B		6	JB	UJ	5	JB	UJ
Styrene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Tetrachloroethene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Toluene	UG/KG	6	U	UJ	1	J	J	6	U	UJ	5	U	UJ
1,1,1-Trichloroethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
1,1,2-Trichloroethane	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Trichloroethene	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ
Trichlorotrifluoroethane	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Vinyl Acetate	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Vinyl Chloride	UG/KG	12	U	U	13	U	U	12	U	U	11	U	U
Xylene, Total	UG/KG	6	U	UJ	6	U	UJ	6	U	UJ	5	U	UJ

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST													
		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		G0501802.D REG			G0601803.D REG			G1401418.D REG			G1501419.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Semi-volatile Organics	**Units**												
Acenaphthene	UG/KG	400	U	U	430	U	U	380	U	U	130	J	J
Acenaphthylene	UG/KG	400	U	U	430	U	U	380	U	U	100	J	J
Anthracene	UG/KG	400	U	U	430	U	U	380	U	U	390		
Benzo(a)anthracene	UG/KG	110	J	J	430	U	U	270	J	J	1700		
Benzo(a)pyrene	UG/KG	140	J	J	430	U	U	340	J	J	1700		
Benzo(b)fluoranthene	UG/KG	140	J	J	430	U	U	340	J	J	2000		
Benzo(g,h,i)perylene	UG/KG	79	J	J	430	U	U	200	J	J	960		
Benzo(k)fluoranthene	UG/KG	140	J	J	430	U	U	300	J	J	1100		
Benzoic Acid	UG/KG	100	J	J	46	J	J	57	J	J	37	J	J
Benzyl Alcohol	UG/KG	400	U	U	430	U	U	1900	U	U	1800	U	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
bis(2-Chloroethyl)ether	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	U	430	U	U	190	J	J	370	U	U
4-Bromophenyl-phenylether	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Butylbenzylphthalate	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Carbazole	UG/KG	400	U	U	430	U	U	380	U	U	240	J	J
4-Chloro-3-methylphenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
4-Chloroaniline	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2-Chloronaphthalene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2-Chlorophenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
4-Chlorophenyl-phenylether	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Chrysene	UG/KG	180	J	R	430	U	U	440			2200		
Di-n-butylphthalate	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Di-n-octylphthalate	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Dibenzo(a,h)anthracene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Dibenzofuran	UG/KG	400	U	U	430	U	U	380	U	U	110	J	J
1,2-Dichlorobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
1,3-Dichlorobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
1,4-Dichlorobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
3,3'-Dichlorobenzidine	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2,4-Dichlorophenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Diethylphthalate	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2,4-Dimethylphenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Dimethylphthalate	UG/KG	400	U	U	430	U	U	380	U	U	250	J	J
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
2,4-Dinitrophenol	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
2,4-Dinitrotoluene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2,6-Dinitrotoluene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Fluoranthene	UG/KG	280	J	J	43	J	J	530			2800		
Fluorene	UG/KG	400	U	U	430	U	U	380	U	U	280	J	J
Hexachlorobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Hexachlorobutadiene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Hexachlorocyclopentadiene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Hexachloroethane	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST													
		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		G0501802.D REG			G0601803.D REG			G1401418.D REG			G1501419.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Semi-volatile Organics	Units												
Indeno(1,2,3-c,d)pyrene	UG/KG	80	J	J	430	U	U	200	J	J	1000		
Isophorone	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2-Methylnaphthalene	UG/KG	400	U	U	430	U	U	380	U	U	38	J	J
2-Methylphenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
4-Methylphenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
N-Nitrosodiphenylamine	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Naphthalene	UG/KG	400	U	U	430	U	U	380	U	U	39	J	J
2-Nitroaniline	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
3-Nitroaniline	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
4-Nitroaniline	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
Nitrobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2-Nitrophenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
4-Nitrophenol	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Pentachlorophenol	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
Phenanthrene	UG/KG	150	J	J	430	U	U	200	J	J	2200		
Phenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Pyrene	UG/KG	280	J	J	430	U	U	460			2400		
1,2,4-Trichlorobenzene	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
2,4,5-Trichlorophenol	UG/KG	1000	U	U	1100	U	U	960	U	U	920	U	U
2,4,6-Trichlorophenol	UG/KG	400	U	U	430	U	U	380	U	U	370	U	U
Tentatively Identified Compounds		25			23			23			24		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST													
		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		34973-05 REG			34973-06 REG			36022-06 REG			36022-07 REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Pesticides and PCBs	**Units**												
Aldrin	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
alpha-BHC	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
alpha-Chlordane	UG/KG	0.41	U	U	0.44	U	UJ	53			6.3	P	J
Aroclor 1232	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
Aroclor-1016	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
Aroclor-1221	UG/KG	16	U	U	17	U	UJ	150	U	U	58	U	U
Aroclor-1242	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
Aroclor-1248	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
Aroclor-1254	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
Aroclor-1260	UG/KG	7.9	U	U	8.4	U	UJ	76	U	U	29	U	U
beta-BHC	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
4,4'-DDD	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
4,4'-DDE	UG/KG	1.2			0.84	U	UJ	7.6	U	U	2.9	U	U
4,4'-DDT	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	UJ	2.9	U	UJ
delta-BHC	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
Dieldrin	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
Endosulfan I	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
Endosulfan II	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
Endosulfan Sulfate	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
Endrin	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	UJ
Endrin Aldehyde	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
Endrin Ketone	UG/KG	0.79	U	U	0.84	U	UJ	7.6	U	U	2.9	U	U
gamma-BHC (Lindane)	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.5	U	U
gamma-Chlordane	UG/KG	0.41	U	U	0.44	U	UJ	24			4.3		
Heptachlor	UG/KG	0.41	U	U	0.44	U	UJ	3.9	U	U	1.9		J
Heptachlor Epoxide	UG/KG	0.41	U	U	0.44	U	UJ	26	P	J	1.5	U	U
p,p'-Methoxychlor	UG/KG	4.1	U	U	4.4	U	UJ	39	U	UJ	15	U	UJ
Toxaphene	UG/KG	41	U	U	44	U	UJ	390	U	U	150	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST													
		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		3497505 REG			3497506 REG			3602106 REG			3602107 REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Inorganics	Units												
Aluminum	MG/KG	12300			19900			7450			6740		
Antimony	MG/KG	0.74	U N	UJ	0.79	U N	UJ	0.71	U	U	0.68	U	U
Arsenic	MG/KG	20.9			6			7			6.4		
Barium	MG/KG	74.9			88.6			90.2			64.6		
Beryllium	MG/KG	0.74			1			0.47			0.36		
Bismuth	MG/KG	6.1	U	U	6.5	U	U	33			47.6		
Cadmium	MG/KG	0.55	U	U	0.59	U	U	0.53	U	U	0.5	U	U
Calcium	MG/KG	75400	*		7180	*		27100			74700		
Chromium	MG/KG	16.5			24.4			13.9			10		
Cobalt	MG/KG	12.2			17.7			7.3	B		6.3	B	
Copper	MG/KG	21			21			17.7			16.2		
Cyanide	MG/KG	0.6	U	U	0.64	U	U	0.57	U	U	0.55	U	U
Iron	MG/KG	25400			40900			16400			14500		
Lead	MG/KG	84.5			13.9			25.8			15.9		
Magnesium	MG/KG	11300			6630			12100			30000		
Manganese	MG/KG	941			1680			653			440		
Mercury	MG/KG	0.12	U N	U	0.13	U N	U	0.12			0.11	U	U
Nickel	MG/KG	22.7			32.8			13			13.6		
Potassium	MG/KG	1880			2560			1380			1340		
Selenium	MG/KG	1.1	U	U	1.2	U	U	1.1	U	U	1	U	U
Silver	MG/KG	1.2	U	U	1.2	U	U	1.1	U	U	1	U	U
Sodium	MG/KG	453	U	U	482	U	U	433	U	U	413	U	U
Thallium	MG/KG	0.86	U	U	0.92	U	U	0.82	U	U	0.79	U	U
Vanadium	MG/KG	20.2	E	J	25.1	E	J	17.1			14.6		
Zinc	MG/KG	1220			74			70			55.2		

		RAP305			RAP306			RCP305			RCP306		
		902-RAP305			902-RAP306			902-RCP305			902-RCP306		
		03497400007SA REG			03497400008SA REG			03602300006SA REG			03602300007SA REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Anions	Units												
Chloride	MG/KG	18	U	U	31.6			17.2	U	U	16.4	U	U
Fluoride	MG/KG	1.4			1.7			0.57	U	U	1.7		
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.88			1.8			3.1			0.94		
Sulfate	MG/KG	30	U	U	42			28.6	U	U	27.3	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RAP301			RAP302			RAP303			RAP304			RAP305		
		902-RAP301			902-RAP302			902-RAP303			902-RAP304			902-RAP305		
		3201331 REG			3201332 REG			3201333 REG			3201334 REG			3201335 REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.351	0.096		0.188	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.665	0.135	J	0.309	0.0704	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0379	0.0226	J	0.0163	0.0125	J	NS		
Pu-242	PCI/G	NS			NS			0.00854	NA	UJ	0.00629	NA	UJ	NS		
Th-228	PCI/G	NS			NS			0.992	0.173	J	NS			NS		
Th-230	PCI/G	NS			NS			0.875	0.157		NS			NS		
Th-232	PCI/G	NS			NS			0.953	0.167		NS			NS		
U-234	PCI/G	NS			NS			0.643	0.117		NS			NS		
U-235	PCI/G	NS			NS			0.0372	0.0227		NS			NS		
U-238	PCI/G	NS			NS			0.66	0.12		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.164	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0405	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0485	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0464	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			1.14	0.142	
K-40	PCI/G	NS			NS			NS			NS			30.3	3.12	
Ra-226	PCI/G	NS			NS			NS			NS			1.11	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.394	NA	U

		RAP306			RBP301			RBP302			RBP303			RBP304		
		902-RAP306			902-RBP301			902-RBP302			902-RBP303			902-RBP304		
		3201336 REG			3216905 REG			3216906 REG			3216907 REG			3216908 REG		
		4/20/94			5/18/94			5/18/94			5/18/94			5/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0815	NA	U	0.0553	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.468	0.0951		0.24	0.0735	
Pu-239/240	PCI/G	NS			NS			NS			0.00672	NA	U	0.0268	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00671	NA	U	0.0338	NA	U
Th-228	PCI/G	NS			NS			NS			0.796	0.252	J	NS		
Th-230	PCI/G	NS			NS			NS			1.57	0.35	J	NS		
Th-232	PCI/G	NS			NS			NS			0.819	0.234	J	NS		
U-234	PCI/G	NS			NS			NS			0.73	0.137		NS		
U-235	PCI/G	NS			NS			NS			0.026	NA	UJ	NS		
U-238	PCI/G	NS			NS			NS			0.805	0.147		NS		
Am-241	PCI/G	0.141	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0356	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0415	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0482	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0406	NA	U	NS			NS			NS			NS		
K-40	PCI/G	34.3	3.67		NS			NS			NS			NS		
Ra-226	PCI/G	2.07	0.979		NS			NS			NS			NS		
Sr-90	PCI/G	0.625	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RCP301			RCP302			RCP303			RCP304			RCP305		
		902-RCP301			902-RCP302			902-RCP303			902-RCP304			902-RCP305		
		3222818 REG			3222819 REG			3222820 REG			3222821 REG			REG		
		6/7/94			6/7/94			6/7/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0613	NA	U	0.0454	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.167	0.0458		0.136	0.0405		NS		
Pu-239/240	PCI/G	NS			NS			0.00862	0.00983		0.00726	0.00844		NS		
Pu-242	PCI/G	NS			NS			0.00647	NA	U	0.00655	NA	U	NS		
Th-228	PCI/G	NS			NS			0.777	0.159		NS			NS		
Th-230	PCI/G	NS			NS			0.992	0.187		NS			NS		
Th-232	PCI/G	NS			NS			0.727	0.15		NS			NS		
U-234	PCI/G	NS			NS			0.787	0.143		NS			NS		
U-235	PCI/G	NS			NS			0.0438	0.0267		NS			NS		
U-238	PCI/G	NS			NS			0.837	0.149		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0889	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0222	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0264	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0274	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.4	0.0531	
K-40	PCI/G	NS			NS			NS			NS			15.3	1.7	
Ra-226	PCI/G	NS			NS			NS			NS			0.602	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.693	NA	U

		RCP306			RDP301			RDP302			RDP303			RDP304		
		902-RCP306			902-RDP301			902-RDP302			902-RDP303			902-RDP304		
		REG			3222425 REG			3222426 REG			3222428 REG			3222429 REG		
		6/7/94			6/3/94			6/3/94			6/3/94			6/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0819	0.0339		0.0673	0.0308		NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.422	0.0601		0.121	0.0254	
Pu-239/240	PCI/G	NS			NS			NS			0.0342	0.0116		0.00461	0.00416	
Pu-242	PCI/G	NS			NS			NS			0.00612	NA	U	0.00679	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0684	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0196	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0226	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.025	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.125	0.0246		NS			NS			NS			NS		
K-40	PCI/G	14.4	1.6		NS			NS			NS			NS		
Ra-226	PCI/G	1.91	0.566		NS			NS			NS			NS		
Sr-90	PCI/G	0.821	0.358		NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RDP312			RGP301			RGP302			RGP303			RGP304		
		902-RDP312			902-RGP301			902-RGP302			902-RGP303			902-RGP304		
		3222427 REG			3212821 REG			3212822 REG			3212823 REG			3212824 REG		
		06/03/94DUPE			5/12/94			5/12/94			5/12/94			5/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0476	NA	U	0.0525	NA	U	0.06	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.111	0.0384		0.159	0.0721	J
Pu-239/240	PCI/G	NS			NS			NS			0.0186	NA	U	0.0493	NA	UJ
Pu-242	PCI/G	NS			NS			NS			0.00684	NA	U	0.0144	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RHP301			RHP302			RHP303			RHP304			RHP312		
		902-RHP301			902-RHP302			902-RHP303			902-RHP304			902-RHP312		
		3212436 REG			3212437 REG			3212439 REG			3212440 REG			3212438 REG		
		5/11/94			5/11/94			5/11/94			5/11/94			05/11/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0854	NA	U	0.0457	NA	U	NS			NS			0.0453	NA	U
Pu-238	PCI/G	NS			NS			0.245	0.0582	U	0.192	0.0565	U	NS		
Pu-239/240	PCI/G	NS			NS			0.0212	0.0161		0.00756	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00573	NA	U	0.0205	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RJP301			RJP302			RJP303			RJP304			RKP301		
		902-RJP301			902-RJP302			902-RJP303			902-RJP304			902-RKP301		
		3211209 REG			3211210 REG			3211207 REG			3211208 REG			3216953 REG		
		5/10/94			5/10/94			5/10/94			5/10/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0907	NA	U	0.0807	NA	U	NS			NS			0.0899	NA	U
Pu-238	PCI/G	NS			NS			0.199	0.0485	J	0.142	0.0556	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0145	NA	U	0.0316	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00534	NA	U	0.0399	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKP302			RKP303			RKP304			RMP301			RMP302		
		902-RKP302			902-RKP303			902-RKP304			902-RMP301			902-RMP302		
		3216954 REG			3216955 REG			3216956 REG			3210725 REG			3210726 REG		
		5/19/94			5/19/94			5/19/94			5/9/94			5/9/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.104	NA	U	NS			NS			0.11	NA	U	0.114	NA	U
Pu-238	PCI/G	NS			0.0273	NA	UJ	0.0477	0.0229		NS			NS		
Pu-239/240	PCI/G	NS			0.0101	NA	UJ	0.0135	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.0101	NA	UJ	0.00497	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RMP303			RMP304			RPP301			RPP302			RPP303		
		902-RMP303			902-RMP304			902-RPP301			902-RPP302			902-RPP303		
		3210727 REG			3210728 REG			3212446 REG			3212447 REG			3212448 REG		
		5/9/94			5/9/94			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.106	NA	U	0.118	NA	U	NS		
Pu-238	PCI/G	0.297	0.075	J	0.174	0.0475	U	NS			NS			0.103	0.0394	UJ
Pu-239/240	PCI/G	0.0169	0.153	J	0.0169	NA	U	NS			NS			0.00825	NA	UJ
Pu-242	PCI/G	0.00915	NA	UJ	0.00619	NA	U	NS			NS			0.00824	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			1.03	0.199	
Th-230	PCI/G	NS			NS			NS			NS			1.53	0.262	
Th-232	PCI/G	NS			NS			NS			NS			1.01	0.192	
U-234	PCI/G	NS			NS			NS			NS			0.917	0.163	
U-235	PCI/G	NS			NS			NS			NS			0.0405	0.0249	
U-238	PCI/G	NS			NS			NS			NS			1.01	0.175	
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPP304			RRP301			RRP302			RRP303			RRP304		
		902-RPP304			902-RRP301			902-RRP302			902-RRP303			902-RRP304		
		3212449 REG			3212403 REG			3212404 REG			3212405 REG			3212406 REG		
		5/11/94			5/11/94			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.111	NA	U	0.107	NA	U	NS			NS		
Pu-238	PCI/G	0.0635	NA	UJ	NS			NS			0.272	0.0789	UJ	0.131	0.0529	UJ
Pu-239/240	PCI/G	0.0389	NA	UJ	NS			NS			0.0338	NA	UJ	0.0109	0.0127	J
Pu-242	PCI/G	0.0143	NA	UJ	NS			NS			0.00983	NA	UJ	0.00984	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RRP313			RSP301			RSP302			RSP303			RSP304		
		902-RRP313			902-RSP301			902-RSP302			902-RSP303			902-RSP304		
		3212407 REG			3212408 REG			3212409 REG			3212410 REG			3212411 REG		
		05/11/94DUPE			5/11/94			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.114	NA	U	0.123	NA	U	NS			NS		
Pu-238	PCI/G	0.15	0.0559	UJ	NS			NS			0.183	0.0507	U	0.188	0.0504	U
Pu-239/240	PCI/G	0.00867	NA	UJ	NS			NS			0.00979	0.00989		0.00636	NA	U
Pu-242	PCI/G	0.00886	NA	UJ	NS			NS			0.018	NA	U	0.0173	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RSP311			RTP301			RTP302			RTP303			RTP304		
		902-RSP311			902-RTP301			902-RTP302			902-RTP303			902-RTP304		
		3212412 REG			3218150 REG			3218151 REG			3218152 REG			3218153 REG		
		05/11/94DUPE			5/24/94			5/24/94			5/24/94			5/24/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.113	NA	U	0.0922	NA	U	0.107	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0635	0.0248		0.0653	0.0348	J
Pu-239/240	PCI/G	NS			NS			NS			0.00953	0.00788	U	0.00844	NA	UJ
Pu-242	PCI/G	NS			NS			NS			0.0043	NA	U	0.00843	NA	UJ
Th-228	PCI/G	NS			NS			NS			0.939	0.149		NS		
Th-230	PCI/G	NS			NS			NS			1.39	0.204		NS		
Th-232	PCI/G	NS			NS			NS			0.953	0.15		NS		
U-234	PCI/G	NS			NS			NS			0.866	0.158		NS		
U-235	PCI/G	NS			NS			NS			0.0835	0.0371	J	NS		
U-238	PCI/G	NS			NS			NS			1.11	0.191		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST																
		RTP313			RUP301			RUP302			RVP301			RVP302		
		902-RTP313			902-RUP301			902-RUP302			902-RVP301			902-RVP302		
		3218154 REG			3205345 REG			3205346 REG			3205342 REG			3205343 REG		
		05/24/94DUPE			4/27/94			4/27/94			4/27/94			4/27/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0483	0.0246		0.0415	NA	U	0.0603	NA	UJ	0.0551	0.0246		0.0384	0.0231	
Pu-239/240	PCI/G	0.0145	0.012	U	0.0105	0.0105	U	0.0098	NA	UJ	0.0335	0.0177	U	0.00613	NA	U
Pu-242	PCI/G	0.0178	NA	U	0.00708	NA	U	0.00979	NA	UJ	0.00533	NA	U	0.00613	NA	U
Th-228	PCI/G	0.874	0.143		NS			NS			NS			NS		
Th-230	PCI/G	1.32	0.196		NS			NS			NS			NS		
Th-232	PCI/G	0.963	0.153		NS			NS			NS			NS		
U-234	PCI/G	1.11	0.191		NS			NS			NS			NS		
U-235	PCI/G	0.05	0.0323	J	NS			NS			NS			NS		
U-238	PCI/G	1.21	0.205		NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RVP312			RXP301			RXP302			RYP301			RYP302		
		902-RVP312			902-RXP301			902-RXP302			902-RYP301			902-RYP302		
		3205344 REG			3205340 REG			3205341 REG			3208432 REG			3208433 REG		
		04/27/94DUPE			4/27/94			4/27/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0597	NA	UJ	0.0379	NA	U	0.029	NA	U	0.323	0.0984	J	0.047	NA	UJ
Pu-239/240	PCI/G	0.0301	0.0216	UJ	0.00716	0.00831	U	0.00731	NA	U	0.0131	NA	UJ	0.00889	0.0103	J
Pu-242	PCI/G	0.0277	NA	UJ	0.0176	NA	U	0.0073	NA	U	0.0193	0.0196	J	0.00802	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST													
		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		J0080.D REG			J0067.D REG			J1110.D REG			J1107.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	Lab	Val	Result	Lab	Val	Result	Lab	Val	Result	Lab	Val
Volatile Organics	Units												
Acetone	UG/KG	24	U	U	12	U	U	11	U	U	5	J	J
Acetonitrile	UG/KG	238	U	UJ	125	U	UJ	111	U	UJ	110	U	UJ
Acrylonitrile	UG/KG	238	U	U	125	U	U	111	U	U	110	U	U
Benzene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Bromodichloromethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Bromoform	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Bromomethane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
2-Butanone	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Carbon Disulfide	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Carbon Tetrachloride	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Chlorobenzene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Chlorodibromomethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Chloroethane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Chloroform	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Chloromethane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
1,1-Dichloroethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloroethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,1-Dichloroethene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloroethene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Dichloropropane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
cis-1,3-Dichloropropene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
trans-1,3-Dichloropropene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,2-Diethylbenzene	UG/KG	48	U	U	25	U	U	22	U	U	22	U	U
Ethylbenzene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Hexane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
2-Hexanone	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Iodomethane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
4-Methyl-2-pentanone	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Methylene Chloride	UG/KG	176	B		121	B		6	JB	UJ	5	JB	UJ
Styrene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,1,2,2-Tetrachloroethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Tetrachloroethene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Toluene	UG/KG	12	U	U	6	U	UJ	1	J	J	5	U	UJ
1,1,1-Trichloroethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
1,1,2-Trichloroethane	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Trichloroethene	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Trichlorotrifluoroethane	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Vinyl Acetate	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Vinyl Chloride	UG/KG	24	U	U	12	U	U	11	U	U	11	U	U
Xylene, Total	UG/KG	12	U	U	6	U	UJ	6	U	UJ	5	U	UJ
Tentatively Identified Compounds		1									1		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST													
		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		G1301810.D REG			G1401811.D REG			G1601420.D REG			G1701421.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Semi-volatile Organics	Units												
Acenaphthene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Acenaphthylene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Anthracene	UG/KG	400	U	U	420	U	U	73	J	J	360	U	U
Benzo(a)anthracene	UG/KG	130	J	J	420	U	U	360	J	J	360	U	U
Benzo(a)pyrene	UG/KG	150	J	J	420	U	U	480			48	J	J
Benzo(b)fluoranthene	UG/KG	160	J	J	420	U	U	520			40	J	J
Benzo(g,h,i)perylene	UG/KG	96	J	J	420	U	U	320	J	J	360	U	U
Benzo(k)fluoranthene	UG/KG	180	J	J	420	U	U	400			44	J	J
Benzoic Acid	UG/KG	95	J	J	42	J	J	45	J	J	39	J	J
Benzyl Alcohol	UG/KG	400	U	U	420	U	U	1800	U	U	1800	U	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
bis(2-Chloroethyl)ether	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4-Bromophenyl-phenylether	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Butylbenzylphthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Carbazole	UG/KG	400	U	U	420	U	U	48	J	J	360	U	U
4-Chloro-3-methylphenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4-Chloroaniline	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Chloronaphthalene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Chlorophenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4-Chlorophenyl-phenylether	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Chrysene	UG/KG	220	J	J	420	U	U	610			62	J	J
Di-n-butylphthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Di-n-octylphthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Dibenzo(a,h)anthracene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Dibenzofuran	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
1,2-Dichlorobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
1,3-Dichlorobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
1,4-Dichlorobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
3,3'-Dichlorobenzidine	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2,4-Dichlorophenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Diethylphthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2,4-Dimethylphenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Dimethylphthalate	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4,6-Dinitro-2-methylphenol	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
2,4-Dinitrophenol	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
2,4-Dinitrotoluene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2,6-Dinitrotoluene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Fluoranthene	UG/KG	360	J	J	420	U	U	890			93	J	J
Fluorene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Hexachlorobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Hexachlorobutadiene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Hexachlorocyclopentadiene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Hexachloroethane	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST													
		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		G1301810.D REG			G1401811.D REG			G1601420.D REG			G1701421.D REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Semi-volatile Organics	Units												
Indeno(1,2,3-c,d)pyrene	UG/KG	97	J	J	420	U	U	300	J	J	360	U	U
Isophorone	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Methylnaphthalene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Methylphenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4-Methylphenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
N-Nitrosodiphenylamine	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Naphthalene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Nitroaniline	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
3-Nitroaniline	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
4-Nitroaniline	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
Nitrobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2-Nitrophenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
4-Nitrophenol	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Pentachlorophenol	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
Phenanthrene	UG/KG	190	J	J	420	U	U	430			42	J	J
Phenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Pyrene	UG/KG	340	J	J	420	U	U	800			87	J	J
1,2,4-Trichlorobenzene	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
2,4,5-Trichlorophenol	UG/KG	990	U	U	1000	U	U	930	U	U	910	U	U
2,4,6-Trichlorophenol	UG/KG	400	U	U	420	U	U	370	U	U	360	U	U
Tentatively Identified Compounds		25			25			21			15		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST													
		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		34973-13 REG			34973-14 REG			36022-08 REG			36022-09 REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Pesticides and PCBs	**Units**												
Aldrin	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
alpha-BHC	UG/KG	0.4	U	U	0.42	U	UJ	0.02	JP	U	0.37	U	U
alpha-Chlordane	UG/KG	0.4	U	U	0.42	U	UJ	1.9	P	J	0.37	U	U
Aroclor 1232	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
Aroclor-1016	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
Aroclor-1221	UG/KG	16	U	U	17	U	UJ	15	U	U	15	U	U
Aroclor-1242	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
Aroclor-1248	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
Aroclor-1254	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
Aroclor-1260	UG/KG	7.8	U	U	8.2	U	UJ	7.3	U	U	7.3	U	U
beta-BHC	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
4,4'-DDD	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
4,4'-DDE	UG/KG	0.88	P	J	0.82	U	UJ	0.73	U	U	0.73	U	U
4,4'-DDT	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	UJ	0.73	U	UJ
delta-BHC	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
Dieldrin	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
Endosulfan I	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
Endosulfan II	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
Endosulfan Sulfate	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
Endrin	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
Endrin Aldehyde	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
Endrin Ketone	UG/KG	0.78	U	U	0.82	U	UJ	0.73	U	U	0.73	U	U
gamma-BHC (Lindane)	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
gamma-Chlordane	UG/KG	0.4	U	U	0.42	U	UJ	1.1			0.37	U	U
Heptachlor	UG/KG	0.4	U	U	0.42	U	UJ	0.2	JP	J	0.37	U	U
Heptachlor Epoxide	UG/KG	0.4	U	U	0.42	U	UJ	0.38	U	U	0.37	U	U
p,p'-Methoxychlor	UG/KG	4	U	U	4.2	U	UJ	3.8	U	UJ	3.7	U	UJ
Toxaphene	UG/KG	40	U	U	42	U	UJ	38	U	U	37	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST													
		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		3497513 REG			3497514 REG			3602108 REG			3602109 REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Inorganics	**Units**												
Aluminum	MG/KG	14300			17800			7520			9850		
Antimony	MG/KG	0.74	U N	UJ	0.78	U N	UJ	0.69	U	U	0.68	U	U
Arsenic	MG/KG	8.1			7			6.3			6.9		
Barium	MG/KG	78.1			100			82.9			80.1		
Beryllium	MG/KG	0.86			0.99			0.45			0.5		
Bismuth	MG/KG	6.1	U	U	6.4	U	U	26.3			22.7		
Cadmium	MG/KG	0.55	U	U	0.58	U	U	0.51	U	U	0.5	U	U
Calcium	MG/KG	58000	*		7710	*		16000			3200		
Chromium	MG/KG	17.4			20			13.1			13.8		
Cobalt	MG/KG	11.4	B		14			5.8	B		7.2	B	
Copper	MG/KG	17.4			16.7			15.2			11.8		
Cyanide	MG/KG	0.6	U	U	0.63	U	U	0.56	U	U	0.55	U	U
Iron	MG/KG	24700			31000			15800			17500		
Lead	MG/KG	95			21.5			22.7			10		
Magnesium	MG/KG	7640			4330			7740			2250		
Manganese	MG/KG	667			1050			614			629		
Mercury	MG/KG	0.12	U N	U	0.13	U N	U	0.11	U	U	0.11	U	U
Nickel	MG/KG	21.7			24.9			13.4			11.2		
Potassium	MG/KG	2020			2540			1010	B		876	B	
Selenium	MG/KG	1.1	U	U	1.2	U	U	1	U	U	1	U	U
Silver	MG/KG	1.1	U	U	1.2	U	U	1.1	U	U	1.1	U	U
Sodium	MG/KG	451	U	U	475	U	U	422	U	U	414	U	U
Thallium	MG/KG	0.86	U	U	0.9	U	U	0.8	U	U	0.79	U	U
Vanadium	MG/KG	20.7	E	J	23.2	E	J	16.1			21.7		
Zinc	MG/KG	753			182			52.1			42.8		

		RAR305			RAR306			RCR305			RCR306		
		902-RAR305			902-RAR306			902-RCR305			902-RCR306		
		0349740015SA REG			0349740016SA REG			0360230008SA REG			0360230009SA REG		
		4/20/94			4/20/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Anions	**Units**												
Chloride	MG/KG	17.9	U		18.8	U		16.7	U	U	16.5	U	U
Fluoride	MG/KG	1.4			2.3			0.95			1.1		
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.7			1.5			3.9			2.3		
Sulfate	MG/KG	29.8	U		31.4	U		27.9	U	U	27.4	U	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RAR301			RAR302			RAR303			RAR304			RAR305		
		902-RAR301			902-RAR302			902-RAR303			902-RAR304			902-RAR305		
		3201337 REG			3201338 REG			3201339 REG			3201340 REG			3201341 REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	5.95	0.384	J	0.302	0.125		NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.501	0.0979	J	0.286	0.0778	J	NS		
Pu-239/240	PCI/G	NS			NS			0.0302	0.0167	J	0.0207	0.0172	J	NS		
Pu-242	PCI/G	NS			NS			0.00583	NA	UJ	0.00935	NA	UJ	NS		
Th-228	PCI/G	NS			NS			1.03	0.191	R	NS			NS		
Th-230	PCI/G	NS			NS			1.07	0.197		NS			NS		
Th-232	PCI/G	NS			NS			1.13	0.205		NS			NS		
U-234	PCI/G	NS			NS			0.823	0.139		NS			NS		
U-235	PCI/G	NS			NS			0.0259	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.932	0.154		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0853	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0248	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.281	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0329	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.729	0.0807	
K-40	PCI/G	NS			NS			NS			NS			23.3	2.51	
Ra-226	PCI/G	NS			NS			NS			NS			0.643	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.483	NA	U

		RAR306			RBR301			RBR302			RBR303			RBR304		
		902-RAR306			902-RBR301			902-RBR302			902-RBR303			902-RBR304		
		REG			3216914 REG			3216915 REG			3216916 REG			3216917 REG		
		4/20/94			5/18/94			5/18/94			5/18/94			5/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0868	NA	U	0.111	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.454	0.0974		0.289	0.0726	
Pu-239/240	PCI/G	NS			NS			NS			0.0202	NA	U	0.0108	0.0109	
Pu-242	PCI/G	NS			NS			NS			0.00741	NA	U	0.00732	NA	U
Th-228	PCI/G	NS			NS			NS			0.884	0.147		NS		
Th-230	PCI/G	NS			NS			NS			1.37	0.206		NS		
Th-232	PCI/G	NS			NS			NS			0.811	0.137		NS		
U-234	PCI/G	NS			NS			NS			0.808	0.145		NS		
U-235	PCI/G	NS			NS			NS			0.0545	0.0281	J	NS		
U-238	PCI/G	NS			NS			NS			0.761	0.139		NS		
Am-241	PCI/G	0.111	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0274	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0314	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0353	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0301	NA	U	NS			NS			NS			NS		
K-40	PCI/G	29.1	3.02		NS			NS			NS			NS		
Ra-226	PCI/G	2.3	0.747		NS			NS			NS			NS		
Sr-90	PCI/G	0.37	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RCR301			RCR302			RCR303			RCR304			RCR305		
		902-RCR301			902-RCR302			902-RCR303			902-RCR304			902-RCR305		
		3222824 REG			3222825 REG			3222826 REG			3222827 REG			3222828 REG		
		6/7/94			6/7/94			6/7/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0775	NA	U	0.0476	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.14	0.0348		0.197	0.0545		NS		
Pu-239/240	PCI/G	NS			NS			0.00898	NA	U	0.188	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00438	NA	U	0.0074	NA	U	NS		
Th-228	PCI/G	NS			NS			0.563	0.122		NS			NS		
Th-230	PCI/G	NS			NS			1.25	0.206		NS			NS		
Th-232	PCI/G	NS			NS			0.578	0.118		NS			NS		
U-234	PCI/G	NS			NS			0.723	0.132		NS			NS		
U-235	PCI/G	NS			NS			0.0394	0.0232		NS			NS		
U-238	PCI/G	NS			NS			0.824	0.146		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0759	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0168	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0203	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0213	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.356	0.0421	U
K-40	PCI/G	NS			NS			NS			NS			14	1.49	
Ra-226	PCI/G	NS			NS			NS			NS			0.488	NA	U
Sr-90	PCI/G	NS			NS			NS			NS			0.79	0.235	

		RCR306			RDR301			RDR302			RDR303			RDR304		
		902-RCR306			902-RDR301			902-RDR302			902-RDR303			902-RDR304		
		3222829 REG			3222420 REG			3222421 REG			3222422 REG			3222424 REG		
		6/7/94			6/3/94			6/3/94			6/3/94			6/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0324	0.0153		0.0581	0.0293		NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0872	0.0219		0.0905	0.0221	
Pu-239/240	PCI/G	NS			NS			NS			0.00978	NA	U	0.00915	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00977	NA	U	0.00725	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.06	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0148	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0159	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0213	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0166	NA	U	NS			NS			NS			NS		
K-40	PCI/G	14.2	1.53		NS			NS			NS			NS		
Ra-226	PCI/G	0.45	NA	U	NS			NS			NS			NS		
Sr-90	PCI/G	0.625	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RDR313			RGR301			RGR302			RGR303			RGR304		
		902-RDR313			902-RGR301			902-RGR302			902-RGR303			902-RGR304		
		3222423 REG			3211260 REG			3211261 REG			3211262 REG			3211263 REG		
		06/03/94DUPE			5/10/94			5/10/94			5/10/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0891	NA	U	0.0717	NA	U	NS			NS		
Pu-238	PCI/G	0.14	0.0289		NS			NS			0.072	0.0294		0.127	0.038	
Pu-239/240	PCI/G	0.00309	0.00358		NS			NS			0.0158	0.0121		0.00575	NA	U
Pu-242	PCI/G	0.00956	NA	U	NS			NS			0.0061	NA	U	0.0156	NA	U
Th-228	PCI/G	NS			NS			NS			0.744	0.133		NS		
Th-230	PCI/G	NS			NS			NS			1.36	0.208		NS		
Th-232	PCI/G	NS			NS			NS			0.687	0.125		NS		
U-234	PCI/G	NS			NS			NS			0.773	0.151		NS		
U-235	PCI/G	NS			NS			NS			0.0581	NA	U	NS		
U-238	PCI/G	NS			NS			NS			0.814	0.157		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RHR301			RHR302			RHR303			RHR304			RJR301		
		902-RHR301			902-RHR302			902-RHR303			902-RHR304			902-RJR301		
		3211251 REG			3211252 REG			3211253 REG			3211254 REG			3207160 REG		
		5/10/94			5/10/94			5/10/94			5/10/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0555	NA	U	0.0878	NA	U	NS			NS			0.1	NA	U
Pu-238	PCI/G	NS			NS			0.0366	NA	U	0.163	0.0724	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00975	0.00984		0.013	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.0066	NA	U	0.013	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RJR302			RJR303			RJR304			RJR312			RJR314		
		902-RJR302			902-RJR303			902-RJR304			902-RJR312			902-RJR314		
		3207161 REG			3207163 REG			3207164 REG			3207162 REG			3207165 REG		
		5/2/94			5/2/94			5/2/94			05/02/94DUPE			05/02/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0881	NA	U	NS			NS			0.076	NA	U	NS		
Pu-238	PCI/G	NS			0.0537	0.0247	J	0.0425	0.0225	J	NS			0.0184	NA	U
Pu-239/240	PCI/G	NS			0.0259	0.0158	J	0.00809	0.00817	J	NS			0.00348	0.00404	
Pu-242	PCI/G	NS			0.00539	NA	UJ	0.00548	NA	UJ	NS			0.00314	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RKR301			RKR302			RKR303			RKR304			RMR301		
		902-RKR301			902-RKR302			902-RKR303			902-RKR304			902-RMR301		
		3208421 REG			3208422 REG			3208423 REG			3208424 REG			3214216 REG		
		5/4/94			5/4/94			5/4/94			5/4/94			5/17/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.224	NA	U	0.204	NA	U	NS			NS			0.065	NA	UJ
Pu-238	PCI/G	NS			NS			0.211	0.0536		0.0874	0.0444	J	NS		
Pu-239/240	PCI/G	NS			NS			0.00879	0.00886		0.00912	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.00595	NA	UJ	0.00911	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RMR302			RMR303			RMR304			RMR314			RNR301		
		902-RMR302			902-RMR303			902-RMR304			902-RMR314			902-RNR301		
		3214217 REG			3214218 REG			3214219 REG			3214220 REG			3226401 REG		
		5/17/94			5/17/94			5/17/94			05/17/94DUPE			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0639	NA	UJ	NS			NS			NS			0.0535	NA	U
Pu-238	PCI/G	NS			0.0567	0.0294		0.104	0.053	J	0.521	0.111	J	NS		
Pu-239/240	PCI/G	NS			0.0167	NA	U	0.0118	NA	UJ	0.0096	0.0112	J	NS		
Pu-242	PCI/G	NS			0.00615	NA	U	0.0118	NA	UJ	0.00866	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RNR302			RNR303			RNR304			RNR313			RPR301		
		902-RNR302			902-RNR303			902-RNR304			902-RNR313			902-RPR301		
		3226402 REG			3226403 REG			3226404 REG			3226405 REG			3226406 REG		
		6/15/94			6/15/94			6/15/94			06/15/94DUPE			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0794	NA	U	NS			NS			NS			0.0674	NA	U
Pu-238	PCI/G	NS			0.0897	0.0308	J	0.393	0.0716		0.864	0.128	J	NS		
Pu-239/240	PCI/G	NS			0.0102	0.00921		0.0102	NA	U	0.0144	NA	U	NS		
Pu-242	PCI/G	NS			0.0115	NA	U	0.00487	NA	U	0.00868	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RPR302			RPR303			RPR304			RRR301			RRR302		
		902-RPR302			902-RPR303			902-RPR304			902-RRR301			902-RRR302		
		3226407 REG			3226408 REG			3226409 REG			3226410 REG			3226412 REG		
		6/15/94			6/15/94			6/15/94			6/15/94			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.074	NA	U	NS			NS			0.0685	NA	U	0.0756	NA	U
Pu-238	PCI/G	NS			0.367	0.0694		0.312	0.0551		NS			NS		
Pu-239/240	PCI/G	NS			0.0249	0.0146		0.00503	0.00583		NS			NS		
Pu-242	PCI/G	NS			0.0051	NA	U	0.00454	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RRR303			RRR304			RRR311			RSR301			RSR302		
		902-RRR303			902-RRR304			902-RRR311			902-RSR301			902-RSR302		
		3226413 REG			3226414 REG			3226411 REG			3226415 REG			3226416 REG		
		6/15/94			6/15/94			06/15/94DUPE			6/15/94			6/15/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0874	NA	U	0.0875	NA	U	0.0871	NA	U
Pu-238	PCI/G	0.34	0.0559		0.287	0.056		NS			NS			NS		
Pu-239/240	PCI/G	0.0118	NA	U	0.0136	NA	U	NS			NS			NS		
Pu-242	PCI/G	0.00822	NA	U	0.0112	NA	U	NS			NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RSR303			RSR304			RTR301			RTR302			RTR303		
		902-RSR303			902-RSR304			902-RTR301			902-RTR302			902-RTR303		
		3226417 REG			3226418 REG			3228626 REG			3228627 REG			3228628 REG		
		6/15/94			6/15/94			6/21/94			6/21/94			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0705	NA	U	0.0694	NA	U	NS		
Pu-238	PCI/G	0.336	0.0574		0.283	0.0605		NS			NS			0.0423	0.0161	U
Pu-239/240	PCI/G	0.093	NA	U	0.0182	NA	U	NS			NS			0.00821	NA	U
Pu-242	PCI/G	0.00445	NA	U	0.0132	NA	U	NS			NS			0.0082	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTR304			RUR301			RUR302			RVR301			RVR302		
		902-RTR304			902-RUR301			902-RUR302			902-RVR301			902-RVR302		
		3228629 REG			3207144 REG			3207145 REG			3208440 REG			3208441 REG		
		6/21/94			5/2/94			5/2/94			5/3/94			5/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.078	0.0209	U	0.00993	NA	U	0.0233	NA	UJ	0.0353	NA	UJ	0.407	0.155	J
Pu-239/240	PCI/G	0.0112	0.00656		0.00609	NA	U	0.00398	NA	UJ	0.152	0.0154	J	0.0683	NA	UJ
Pu-242	PCI/G	0.00683	NA	U	0.00608	NA	U	0.00397	NA	UJ	0.028	NA	UJ	0.0251	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - WEST/NORTHWEST																
		RXR301			RXR302			RYR301			RYR302					
		902-RXR301			902-RXR302			902-RYR301			902-RYR302					
		3208434 REG			3208435 REG			3208430 REG			3208431 REG					
		5/3/94			5/3/94			5/3/94			5/3/94					
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val			
Radiological	Units															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0556	NA	U	0.096	0.0373	J	0.216	0.053		0.319	0.0719		NS		
Pu-239/240	PCI/G	0.0169	0.0171		0.00704	NA	UJ	0.00611	NA	U	0.0128	0.0115		NS		
Pu-242	PCI/G	0.0115	NA	U	0.0191	NA	UJ	0.0166	NA	U	0.00692	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST									
		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		J0077.D REG		J0078.D REG		H4233.D REG		H4244.D REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units								
Acetone	UG/KG	18	U	15	U	11	U	11	U
Acetonitrile	UG/KG	137	UJ	130	UJ	112	U	108	U
Acrylonitrile	UG/KG	137	U	130	U	112	U	108	U
Benzene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Bromodichloromethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Bromoform	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Bromomethane	UG/KG	14	U	13	U	11	U	11	U
2-Butanone	UG/KG	14	U	13	U	11	U	11	U
Carbon Disulfide	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Carbon Tetrachloride	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Chlorobenzene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Chlorodibromomethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Chloroethane	UG/KG	14	U	13	U	11	U	11	U
Chloroform	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Chloromethane	UG/KG	14	U	13	U	11	U	11	U
1,1-Dichloroethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloroethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,1-Dichloroethene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloroethene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloropropane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
cis-1,3-Dichloropropene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
trans-1,3-Dichloropropene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,2-Diethylbenzene	UG/KG	27	U	26	U	22	U	22	U
Ethylbenzene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Hexane	UG/KG	14	U	13	U	11	U	11	U
2-Hexanone	UG/KG	14	U	13	U	11	U	11	U
Iodomethane	UG/KG	14	U	13	U	11	U	11	U
4-Methyl-2-pentanone	UG/KG	14	U	13	U	11	U	11	U
Methylene Chloride	UG/KG	155		134		1	J	5	UJ
Styrene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,1,2,2-Tetrachloroethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Tetrachloroethene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Toluene	UG/KG	7	UJ	6	UJ	6	UJ	2	J
1,1,1-Trichloroethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
1,1,2-Trichloroethane	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Trichloroethene	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Trichlorotrifluoroethane	UG/KG	14	U	13	U	11	U	11	U
Vinyl Acetate	UG/KG	14	U	13	U	11	U	11	U
Vinyl Chloride	UG/KG	14	U	13	U	11	U	11	U
Xylene, Total	UG/KG	7	UJ	6	UJ	6	UJ	5	UJ
Tentatively Identified Compounds								2	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST									
		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		G0901806.D REG		G1001807.D REG		A0801775.D REG		A1101778.D REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Acenaphthene	UG/KG	460	U	430	U	370	U	360	U
Acenaphthylene	UG/KG	460	U	430	U	370	U	360	U
Anthracene	UG/KG	460	U	430	U	38	J	360	U
Benzo(a)anthracene	UG/KG	460	U	430	U	280	J	39	J
Benzo(a)pyrene	UG/KG	460	U	430	U	310	J	41	J
Benzo(b)fluoranthene	UG/KG	460	U	430	U	340	J	70	J
Benzo(g,h,i)perylene	UG/KG	460	U	430	U	190	J	360	U
Benzo(k)fluoranthene	UG/KG	460	U	430	U	240	J	360	U
Benzoic Acid	UG/KG	79	J	73	J	1800	U	1800	U
Benzyl Alcohol	UG/KG	460	U	430	U	370	U	360	U
2-Benzyl-4-Chlorophenol	UG/KG	460	U	430	U	370	U	360	U
bis(2-Chloroethoxy)methane	UG/KG	460	U	430	U	370	U	360	U
bis(2-Chloroethyl)ether	UG/KG	460	U	430	U	370	U	360	U
bis(2-Ethylhexyl)phthalate	UG/KG	460	U	430	U	54	J	360	U
4-Bromophenyl-phenylether	UG/KG	460	U	430	U	370	U	360	U
Butylbenzylphthalate	UG/KG	460	U	430	U	370	U	360	U
Carbazole	UG/KG	460	U	430	U	370	U	360	U
4-Chloro-3-methylphenol	UG/KG	460	U	430	U	370	U	360	U
4-Chloroaniline	UG/KG	460	U	430	U	370	U	360	U
2-Chloronaphthalene	UG/KG	460	U	430	U	370	U	360	U
2-Chlorophenol	UG/KG	460	U	430	U	370	U	360	U
4-Chlorophenyl-phenylether	UG/KG	460	U	430	U	370	U	360	U
Chrysene	UG/KG	460	U	430	U	380		57	J
Di-n-butylphthalate	UG/KG	460	U	430	U	370	U	360	U
Di-n-octylphthalate	UG/KG	460	U	430	U	370	U	360	U
Dibenzo(a,h)anthracene	UG/KG	460	U	430	U	370	U	360	U
Dibenzofuran	UG/KG	460	U	430	U	370	U	360	U
1,2-Dichlorobenzene	UG/KG	460	U	430	U	370	U	360	U
1,3-Dichlorobenzene	UG/KG	460	U	430	U	370	U	360	U
1,4-Dichlorobenzene	UG/KG	460	U	430	U	370	U	360	U
3,3'-Dichlorobenzidine	UG/KG	460	U	430	U	370	U	360	U
2,4-Dichlorophenol	UG/KG	460	U	430	U	370	U	360	U
Diethylphthalate	UG/KG	460	U	430	U	370	U	360	U
2,4-Dimethylphenol	UG/KG	460	U	430	U	370	U	360	U
Dimethylphthalate	UG/KG	460	U	430	U	370	U	360	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	U	1100	U	900	U	860	U
2,4-Dinitrophenol	UG/KG	1100	U	1100	U	900	U	860	U
2,4-Dinitrotoluene	UG/KG	460	U	430	U	370	U	360	U
2,6-Dinitrotoluene	UG/KG	460	U	430	U	370	U	360	U
Fluoranthene	UG/KG	460	U	430	U	510		63	J
Fluorene	UG/KG	460	U	430	U	370	U	360	U
Hexachlorobenzene	UG/KG	460	U	430	U	370	U	360	U
Hexachlorobutadiene	UG/KG	460	U	430	U	370	U	360	U
Hexachlorocyclopentadiene	UG/KG	460	U	430	U	370	U	360	U
Hexachloroethane	UG/KG	460	U	430	U	370	U	360	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST									
		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		G0901806.D REG		G1001807.D REG		A0801775.D REG		A1101778.D REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	460	U	430	U	200	J	360	U
Isophorone	UG/KG	460	U	430	U	370	U	360	U
2-Methylnaphthalene	UG/KG	460	U	430	U	370	U	360	U
2-Methylphenol	UG/KG	460	U	430	U	370	U	360	U
4-Methylphenol	UG/KG	460	U	430	U	370	U	360	U
N-Nitroso-di-n-propylamine	UG/KG	460	U	430	U	370	U	360	U
N-Nitrosodiphenylamine	UG/KG	460	U	430	U	370	U	360	U
Naphthalene	UG/KG	460	U	430	U	370	U	360	U
2-Nitroaniline	UG/KG	1100	U	1100	U	900	U	860	U
3-Nitroaniline	UG/KG	1100	U	1100	U	900	U	860	U
4-Nitroaniline	UG/KG	1100	U	1100	U	900	U	860	U
Nitrobenzene	UG/KG	460	U	430	U	370	U	360	U
2-Nitrophenol	UG/KG	460	U	430	U	370	U	360	U
4-Nitrophenol	UG/KG	1100	U	1100	U	900	U	860	U
2,2'-oxybis(1-Chloropropane)	UG/KG	460	U	430	U	370	U	360	U
Pentachlorophenol	UG/KG	1100	U	1100	U	900	U	860	U
Phenanthrene	UG/KG	460	U	430	U	200	J	360	U
Phenol	UG/KG	460	U	430	U	370	U	360	U
Pyrene	UG/KG	460	U	430	U	570		79	J
1,2,4-Trichlorobenzene	UG/KG	460	U	430	U	370	U	360	U
2,4,5-Trichlorophenol	UG/KG	1100	U	1100	U	900	U	860	U
2,4,6-Trichlorophenol	UG/KG	460	U	430	U	370	U	360	U
Tentatively Identified Compounds		25		25		29		24	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST									
		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		34973-09 REG		34973-10 REG		36046-03 REG		36046-04 REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
alpha-BHC	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
alpha-Chlordane	UG/KG	0.46	UJ	0.44	UJ	1.5	J	0.36	U
Aroclor 1232	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
Aroclor-1016	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
Aroclor-1221	UG/KG	18	UJ	17	UJ	30	U	14	U
Aroclor-1242	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
Aroclor-1248	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
Aroclor-1254	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
Aroclor-1260	UG/KG	9	UJ	8.6	UJ	15	U	7.1	U
beta-BHC	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
4,4'-DDD	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
4,4'-DDE	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
4,4'-DDT	UG/KG	0.9	UJ	0.86	UJ	1.5	UJ	0.71	UJ
delta-BHC	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
Dieldrin	UG/KG	0.9	UJ	0.86	UJ	1.1	J	0.71	U
Endosulfan I	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
Endosulfan II	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
Endosulfan Sulfate	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
Endrin	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
Endrin Aldehyde	UG/KG	0.9	UJ	0.86	UJ	1.5	U	0.71	U
Endrin Ketone	UG/KG	0.9	UJ	0.86	UJ	1.9	NJ	0.71	U
gamma-BHC (Lindane)	UG/KG	0.46	UJ	0.44	UJ	0.76	U	0.36	U
gamma-Chlordane	UG/KG	0.46	UJ	0.44	UJ	4.2		0.36	U
Heptachlor	UG/KG	0.46	UJ	0.44	UJ	0.94	J	0.36	U
Heptachlor Epoxide	UG/KG	0.46	UJ	0.44	UJ	11		0.36	U
p,p'-Methoxychlor	UG/KG	4.6	UJ	4.4	UJ	7.6	U	3.6	U
Toxaphene	UG/KG	46	UJ	44	UJ	76	U	36	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST									
		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		3497509 REG		3497510 REG		3604803 REG		3604804 REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	17300		16700		7180		6480	
Antimony	MG/KG	0.85	UJ	0.81	UJ	0.69	R	0.67	R
Arsenic	MG/KG	3		4.6		11.8		10.5	
Barium	MG/KG	122		123		106		80.2	
Beryllium	MG/KG	0.95		0.88		0.53		0.54	
Bismuth	MG/KG	7.1	U	6.7	U	34.4		25.3	
Cadmium	MG/KG	0.63	U	0.6	U	0.52	U	0.5	U
Calcium	MG/KG	9310		7730		34700		22700	
Chromium	MG/KG	20.5		17.5		9.8		8.9	
Cobalt	MG/KG	13.5		12		5.9		5.9	
Copper	MG/KG	18.3		13.8		18.7		15.7	
Cyanide	MG/KG	0.69	U	0.65	U	0.56	U	0.54	U
Iron	MG/KG	34000		32400		13500		13600	
Lead	MG/KG	15		13.1		50.3		34.1	
Magnesium	MG/KG	4820		4850		15200		9800	
Manganese	MG/KG	1420		1290		579		565	
Mercury	MG/KG	0.14	U	0.13	U	0.11	U	0.11	U
Nickel	MG/KG	27.6		26.3		14		10.9	
Potassium	MG/KG	2810		2480		863	U	857	U
Selenium	MG/KG	1.3	U	1.2	U	1	U	0.99	U
Silver	MG/KG	1.3	U	1.2	U	1.1	U	1	U
Sodium	MG/KG	521	U	492	U	423	U	408	U
Thallium	MG/KG	0.99	U	0.94	U	0.81	U	0.78	U
Vanadium	MG/KG	21.3	J	19.3	J	14.9		13.7	
Zinc	MG/KG	81.7		72.1		61.7		50.8	

		RAS305		RAS306		RCS305		RCS306	
		902-RAS305		902-RAS306		902-RCS305		902-RCS306	
		0349740011SA REG		0349740012SA REG		0360490003SA REG		0360490004SA REG	
		4/20/94		4/20/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	44.2		58.1		16.8	U	16.2	U
Fluoride	MG/KG	2.9		3.6		1.8	J	1.9	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.69	U	0.65	U	3	J	1.6	J
Sulfate	MG/KG	34.4	U	32.6	U	28	UJ	27.5	J

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST					
		RCS305		RCS306	
		902-RCS305		902-RCS306	
		0360490003SA REG		0360490004SA REG	
		6/8/94		6/8/94	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.28	U	0.27	U
1,3-Dinitrobenzene	UG/G	0.28	U	0.27	U
2,4-Dinitrotoluene	UG/G	0.28	U	0.27	U
2,6-Dinitrotoluene	UG/G	0.29	U	0.28	U
HMX	UG/G	2.5	U	2.4	U
Nitrobenzene	UG/G	0.29	U	0.28	U
PETN	UG/G	1.1	U	1.1	U
RDX	UG/G	1.1	U	1.1	U
TETRYL	UG/G	0.73	U	0.7	U
1,3,5-Trinitrobenzene	UG/G	0.28	U	0.27	U
2,4,6-Trinitrotoluene	UG/G	0.28	U	0.27	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RAS301			RAS302			RAS303			RAS304			RAS305		
		902-RAS301			902-RAS302			902-RAS303			902-RAS304			902-RAS305		
		3201343 REG			3201344 REG			3201345 REG			3201346 REG			REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	5.21	0.373		0.156	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.104	0.0368	R	0.0984	0.0376	R	NS		
Pu-239/240	PCI/G	NS			NS			0.00616	NA	R	0.00636	NA	R	NS		
Pu-242	PCI/G	NS			NS			0.00615	NA	R	0.00635	NA	R	NS		
Th-228	PCI/G	NS			NS			1.23	0.205	J	NS			NS		
Th-230	PCI/G	NS			NS			1.26	0.207		NS			NS		
Th-232	PCI/G	NS			NS			1.31	0.213		NS			NS		
U-234	PCI/G	NS			NS			0.841	0.144		NS			NS		
U-235	PCI/G	NS			NS			0.0216	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.821	0.141		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0848	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0197	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0221	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0268	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.0232	NA	U
K-40	PCI/G	NS			NS			NS			NS			31.5	3.26	
Ra-226	PCI/G	NS			NS			NS			NS			2.06	0.496	
Sr-90	PCI/G	NS			NS			NS			NS			0.426	NA	U

		RAS306			RBS301			RBS302			RBS303			RBS304		
		902-RAS306			902-RBS301			902-RBS302			902-RBS303			902-RBS304		
		REG			3216909 REG			3216910 REG			3216911 REG			3216912 REG		
		4/20/94			5/18/94			5/18/94			5/18/94			5/18/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0736	NA	U	0.109	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.247	0.0609		0.169	0.0421	
Pu-239/240	PCI/G	NS			NS			NS			0.018	0.0144		0.00483	NA	U
Pu-242	PCI/G	NS			NS			NS			0.00608	NA	U	0.00482	NA	U
Th-228	PCI/G	NS			NS			NS			0.722	0.125		NS		
Th-230	PCI/G	NS			NS			NS			1.13	0.175		NS		
Th-232	PCI/G	NS			NS			NS			0.646	0.114		NS		
U-234	PCI/G	NS			NS			NS			0.92	0.165		NS		
U-235	PCI/G	NS			NS			NS			0.00987	NA	UJ	NS		
U-238	PCI/G	NS			NS			NS			1.05	0.182		NS		
Am-241	PCI/G	0.0933	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0216	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0244	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0313	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.0271	NA	U	NS			NS			NS			NS		
K-40	PCI/G	33.3	3.55		NS			NS			NS			NS		
Ra-226	PCI/G	0.606	NA	U	NS			NS			NS			NS		
Sr-90	PCI/G	0.39	NA	U	NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RBS312			RCS301			RCS302			RCS303			RCS304		
		902-RBS312			902-RCS301			902-RCS302			902-RCS303			902-RCS304		
		3216913 REG			3223007 REG			3223008 REG			3223009 REG			3223010 REG		
		05/18/94DUPE			6/8/94			6/8/94			6/8/94			6/8/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.105	NA	U	0.0618	NA	U	0.037	NA	U	NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.0704	0.0159	U	0.0616	0.0145	U
Pu-239/240	PCI/G	NS			NS			NS			0.0169	0.00773	U	0.00603	0.00447	U
Pu-242	PCI/G	NS			NS			NS			0.00199	NA	U	0.0067	0.00426	
Th-228	PCI/G	NS			NS			NS			0.654	0.14		NS		
Th-230	PCI/G	NS			NS			NS			1.33	0.225		NS		
Th-232	PCI/G	NS			NS			NS			0.72	0.144		NS		
U-234	PCI/G	NS			NS			NS			0.738	0.132		NS		
U-235	PCI/G	NS			NS			NS			0.0457	0.0243		NS		
U-238	PCI/G	NS			NS			NS			0.835	0.144		NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RCS305			RCS306			RGS301			RGS302			RGS303		
		902-RCS305			902-RCS306			902-RGS301			902-RGS302			902-RGS303		
		3223011 REG			3223012 REG			3207156 REG			3207157 REG			3207158 REG		
		6/8/94			6/8/94			5/2/94			5/2/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0716	NA	U	0.0863	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.0335	0.0128	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0159	0.0074	
Pu-242	PCI/G	NS			NS			NS			NS			0.00587	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.112	NA	U	0.0839	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0192	NA	U	0.0215	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0221	NA	U	0.0245	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0254	NA	U	0.0269	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.334	0.0463		0.0246	NA	U	NS			NS			NS		
K-40	PCI/G	13.1	1.47		14.5	1.6		NS			NS			NS		
Ra-226	PCI/G	0.537	NA	U	2.1	0.569		NS			NS			NS		
Sr-90	PCI/G	0.425	NA	U	0.444	NA	U	NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RGS304			RHS301			RHS302			RHS303			RHS304		
		902-RGS304			902-RHS301			902-RHS302			902-RHS303			902-RHS304		
		3207159 REG			3212427 REG			3212428 REG			3212429 REG			3212430 REG		
		5/2/94			5/11/94			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.0838	NA	U	0.0875	NA	U	NS			NS		
Pu-238	PCI/G	0.00962	NA	U	NS			NS			0.412	0.122	UJ	0.335	0.105	UJ
Pu-239/240	PCI/G	0.00357	0.0036		NS			NS			0.039	NA	UJ	0.0142	NA	UJ
Pu-242	PCI/G	0.00268	0.00312		NS			NS			0.039	NA	UJ	0.0142	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJS301			RJS302			RJS303			RJS304			RJS312		
		902-RJS301			902-RJS302			902-RJS303			902-RJS304			902-RJS312		
		3207119 REG			3207120 REG			3207122 REG			3207123 REG			3207121 REG		
		4/29/94			4/29/94			4/29/94			4/29/94			04/29/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0736	NA	U	0.172	NA	U	NS			NS			0.997	0.137	
Pu-238	PCI/G	NS			NS			0.0237	0.0129	J	0.0211	0.0108		NS		
Pu-239/240	PCI/G	NS			NS			0.0118	0.00834	J	0.00288	0.00335		NS		
Pu-242	PCI/G	NS			NS			0.0032	NA	UJ	0.0026	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RJS314			RKS301			RKS302			RKS303			RKS304		
		902-RJS314			902-RKS301			902-RKS302			902-RKS303			902-RKS304		
		3207124 REG			3207152 REG			3207153 REG			3207154 REG			3207155 REG		
		04/29/94DUPE			5/2/94			5/2/94			5/2/94			5/2/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			1.87	0.148		0.206	NA	U	NS			NS		
Pu-238	PCI/G	0.0226	NA	UJ	NS			NS			0.0204	0.0102		0.0309	NA	UJ
Pu-239/240	PCI/G	0.0114	0.00817	J	NS			NS			0.00537	0.00486		0.0137	NA	UJ
Pu-242	PCI/G	0.0105	NA	UJ	NS			NS			0.00291	NA	U	0.00502	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RMS301			RMS302			RMS303			RMS304			RNS301		
		902-RMS301			902-RMS302			902-RMS303			902-RMS304			902-RNS301		
		3211205 REG			3211206 REG			3211203 REG			3211204 REG			3216963 REG		
		5/10/94			5/10/94			5/10/94			5/10/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.126	NA	U	0.106	NA	U	NS			NS			0.102	NA	U
Pu-238	PCI/G	NS			NS			0.122	0.0483		0.154	0.0574		NS		
Pu-239/240	PCI/G	NS			NS			0.047	0.025		0.0343	NA	U	NS		
Pu-242	PCI/G	NS			NS			0.00847	NA	U	0.0126	NA	U	NS		
Th-228	PCI/G	NS			NS			0.768	0.173	J	NS			NS		
Th-230	PCI/G	NS			NS			1.29	0.239	J	NS			NS		
Th-232	PCI/G	NS			NS			0.79	0.169	J	NS			NS		
U-234	PCI/G	NS			NS			0.883	0.161		NS			NS		
U-235	PCI/G	NS			NS			0.0417	0.0278		NS			NS		
U-238	PCI/G	NS			NS			0.0842	0.157		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RNS302			RNS303			RNS304			RPS301			RPS302		
		902-RNS302			902-RNS303			902-RNS304			902-RPS301			902-RPS302		
		3216964 REG			3216965 REG			3216966 REG			3228640 REG			3228641 REG		
		5/19/94			5/19/94			5/19/94			6/21/94			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.102	NA	U	NS			NS			0.0592	NA	U	0.063	NA	U
Pu-238	PCI/G	NS			0.065	0.026		0.0573	0.0254		NS			NS		
Pu-239/240	PCI/G	NS			0.0253	0.0139		0.0163	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.0049	NA	U	0.00597	NA	U	NS			NS		
Th-228	PCI/G	NS			0.841	0.141		NS			NS			NS		
Th-230	PCI/G	NS			1.41	0.21		NS			NS			NS		
Th-232	PCI/G	NS			0.846	0.14		NS			NS			NS		
U-234	PCI/G	NS			0.924	0.179		NS			NS			NS		
U-235	PCI/G	NS			0.0551	0.0326	J	NS			NS			NS		
U-238	PCI/G	NS			0.965	0.182		NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPS303			RPS304			RRS301			RRS302			RRS303		
		902-RPS303			902-RPS304			902-RRS301			902-RRS302			902-RRS303		
		3228642 REG			3228643 REG			3212802 REG			3212803 REG			3212804 REG		
		6/21/94			6/21/94			5/12/94			5/12/94			5/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.092	0.0554		0.095	NA	U	NS		
Pu-238	PCI/G	0.0624	0.0198	U	0.0456	0.014	U	NS			NS			0.0409	0.0264	J
Pu-239/240	PCI/G	0.0114	NA	U	0.0059	NA	U	NS			NS			0.0276	NA	UJ
Pu-242	PCI/G	0.00317	0.00368		0.004	0.00359		NS			NS			0.0102	0.0103	J
Th-228	PCI/G	NS			NS			NS			NS			1.06	0.175	
Th-230	PCI/G	NS			NS			NS			NS			1.49	0.228	
Th-232	PCI/G	NS			NS			NS			NS			0.922	0.157	
U-234	PCI/G	NS			NS			NS			NS			0.916	0.165	
U-235	PCI/G	NS			NS			NS			NS			0.0579	0.0308	
U-238	PCI/G	NS			NS			NS			NS			1.1	0.189	
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RRS304			RSS301			RSS302			RSS303			RSS304		
		902-RRS304			902-RSS301			902-RSS302			902-RSS303			902-RSS304		
		3212805 REG			3228631 REG			3228632 REG			3228633 REG			3228634 REG		
		5/12/94			6/21/94			6/21/94			6/21/94			6/21/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.0461	NA	U	0.0568	NA	U	NS			NS		
Pu-238	PCI/G	0.105	0.0598	J	NS			NS			0.107	0.0408	UJ	0.0872	0.0199	U
Pu-239/240	PCI/G	0.019	NA	UJ	NS			NS			0.02	0.016	J	0.0118	0.00798	
Pu-242	PCI/G	0.019	NA	UJ	NS			NS			0.00677	NA	UJ	0.00618	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTS301			RTS302			RTS303			RTS304			RUS301		
		902-RTS301			902-RTS302			902-RTS303			902-RTS304			902-RUS301		
		3229405 REG			3229406 REG			3229407 REG			3229408 REG			3216957 REG		
		6/23/94			6/23/94			6/23/94			6/23/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	0.0663	NA	U	0.0803	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.0794	0.0253		0.16	0.0376		0.0664	0.0253	
Pu-239/240	PCI/G	NS			NS			0.0166	NA	U	0.0144	NA	U	0.028	0.0145	
Pu-242	PCI/G	NS			NS			0.012	NA	U	0.0144	NA	U	0.00474	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTHWEST																
		RUS302			RVS301			RVS302			RYS301			RYS302		
		902-RUS302			902-RVS301			902-RVS302			902-RYS301			902-RYS302		
		3216958 REG			3208438 REG			3208439 REG			3208425 REG			3208426 REG		
		5/19/94			5/4/94			5/4/94			5/4/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			NS		
Pu-238	PCI/G	0.0488	NA	UJ	0.0354	NA	UJ	0.0228	NA	U	0.19	0.053		0.26	0.111	J
Pu-239/240	PCI/G	0.0272	NA	UJ	0.0164	0.0148	J	0.00573	NA	U	0.0192	NA	UJ	0.0564	NA	UJ
Pu-242	PCI/G	0.00793	NA	UJ	0.00889	NA	UJ	0.00572	NA	U	0.00704	NA	UJ	0.0207	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST											
		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		J0079.D REG		J0065.D REG		J1108.D REG		J1109.D REG		H4236.D REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**										
Acetone	UG/KG	11	U	13	U	11	U	10	U	10	U
Acetonitrile	UG/KG	114	UJ	126	UJ	112	UJ	104	UJ	103	U
Acrylonitrile	UG/KG	114	U	126	U	112	U	104	U	103	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Bromomethane	UG/KG	11	U	13	U	11	U	10	U	10	U
2-Butanone	UG/KG	11	U	13	U	11	U	10	U	10	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Chloroethane	UG/KG	11	U	13	U	11	U	10	U	10	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Chloromethane	UG/KG	11	U	13	U	11	U	10	U	10	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	1	J	5	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,2-Diethylbenzene	UG/KG	23	U	25	U	22	U	21	U	21	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Hexane	UG/KG	11	U	13	U	11	U	10	U	10	U
2-Hexanone	UG/KG	11	U	13	U	11	U	10	U	10	U
Iodomethane	UG/KG	11	U	13	U	11	U	10	U	10	U
4-Methyl-2-pentanone	UG/KG	11	U	13	U	11	U	10	U	10	U
Methylene Chloride	UG/KG	49		133		6	UJ	5	UJ	2	J
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Toluene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	1	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Trichlorotrifluoroethane	UG/KG	11	U	13	U	11	U	10	U	10	U
Vinyl Acetate	UG/KG	11	U	13	U	11	U	10	U	10	U
Vinyl Chloride	UG/KG	11	U	13	U	11	U	10	U	10	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ	5	UJ
Tentatively Identified Compounds				1						2	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST											
		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		G1101808.D REG		G1201809.D REG		G0201434.D REG		G0301435.D REG		G0401436.D REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	380	U	420	U	370	U	350	U	340	U
Acenaphthylene	UG/KG	380	U	420	U	370	U	350	U	38	J
Anthracene	UG/KG	380	U	420	U	370	U	350	U	340	U
Benzo(a)anthracene	UG/KG	110	J	420	U	140	J	70	J	280	J
Benzo(a)pyrene	UG/KG	120	J	420	U	180	J	110	J	360	J
Benzo(b)fluoranthene	UG/KG	120	J	420	U	320	J	130	J	610	J
Benzo(g,h,i)perylene	UG/KG	86	J	420	U	100	J	71	J	140	J
Benzo(k)fluoranthene	UG/KG	140	J	47	J	370	U	92	J	340	UJ
Benzoic Acid	UG/KG	60	J	59	J	61	J	38	J	45	J
Benzyl Alcohol	UG/KG	380	U	420	U	1900	U	1700	U	1700	U
2-Benzyl-4-Chlorophenol	UG/KG	380	U	420	U	370	U	350	U	340	U
bis(2-Chloroethoxy)methane	UG/KG	380	U	420	U	370	U	350	U	340	U
bis(2-Chloroethyl)ether	UG/KG	380	U	420	U	370	U	350	U	340	U
bis(2-Ethylhexyl)phthalate	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Bromophenyl-phenylether	UG/KG	380	U	420	U	370	U	350	U	340	U
Butylbenzylphthalate	UG/KG	380	U	420	U	370	U	350	U	140	J
Carbazole	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Chloro-3-methylphenol	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Chloroaniline	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Chloronaphthalene	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Chlorophenol	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Chlorophenyl-phenylether	UG/KG	380	U	420	U	370	U	350	U	340	U
Chrysene	UG/KG	180	J	51	R	250	J	110	J	400	J
Di-n-butylphthalate	UG/KG	380	U	420	U	370	U	350	U	120	J
Di-n-octylphthalate	UG/KG	380	U	420	U	370	U	350	U	340	U
Dibenzo(a,h)anthracene	UG/KG	380	U	420	U	370	U	350	U	340	U
Dibenzofuran	UG/KG	380	U	420	U	370	U	350	U	340	U
1,2-Dichlorobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
1,3-Dichlorobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
1,4-Dichlorobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
3,3'-Dichlorobenzidine	UG/KG	380	U	420	U	370	U	350	U	340	U
2,4-Dichlorophenol	UG/KG	380	U	420	U	370	U	350	U	340	U
Diethylphthalate	UG/KG	380	U	420	U	370	U	350	U	340	U
2,4-Dimethylphenol	UG/KG	380	U	420	U	370	U	350	U	340	U
Dimethylphthalate	UG/KG	380	U	420	U	370	U	350	U	340	U
4,6-Dinitro-2-methylphenol	UG/KG	950	U	1000	U	940	U	870	U	860	U
2,4-Dinitrophenol	UG/KG	950	U	1000	U	940	U	870	U	860	U
2,4-Dinitrotoluene	UG/KG	380	U	420	U	370	U	350	U	340	U
2,6-Dinitrotoluene	UG/KG	380	U	420	U	370	U	350	U	340	U
Fluoranthene	UG/KG	250	J	82	J	290	J	120	J	380	U
Fluorene	UG/KG	380	U	420	U	370	U	350	U	340	U
Hexachlorobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
Hexachlorobutadiene	UG/KG	380	U	420	U	370	U	350	U	340	U
Hexachlorocyclopentadiene	UG/KG	380	U	420	U	370	U	350	U	340	U
Hexachloroethane	UG/KG	380	U	420	U	370	U	350	U	340	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST											
		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		G1101808.D REG		G1201809.D REG		G0201434.D REG		G0301435.D REG		G0401436.D REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Indeno(1,2,3-c,d)pyrene	UG/KG	81	J	420	U	110	J	68	J	160	J
Isophorone	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Methylnaphthalene	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Methylphenol	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Methylphenol	UG/KG	380	U	420	U	370	U	350	U	340	U
N-Nitroso-di-n-propylamine	UG/KG	380	U	420	U	370	U	350	U	340	U
N-Nitrosodiphenylamine	UG/KG	380	U	420	U	370	U	350	U	340	U
Naphthalene	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Nitroaniline	UG/KG	950	U	1000	U	940	U	870	U	860	U
3-Nitroaniline	UG/KG	950	U	1000	U	940	U	870	U	860	U
4-Nitroaniline	UG/KG	950	U	1000	U	940	U	870	U	860	U
Nitrobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
2-Nitrophenol	UG/KG	380	U	420	U	370	U	350	U	340	U
4-Nitrophenol	UG/KG	950	U	1000	U	940	U	870	U	860	U
2,2'-oxybis(1-Chloropropane)	UG/KG	380	U	420	U	370	U	350	U	340	U
Pentachlorophenol	UG/KG	230	J	1000	U	940	U	870	U	860	U
Phenanthrene	UG/KG	130	J	47	J	150	J	73	U	87	J
Phenol	UG/KG	380	U	420	U	370	U	350	U	340	U
Pyrene	UG/KG	240	J	74	J	250	J	96	J	320	U
1,2,4-Trichlorobenzene	UG/KG	380	U	420	U	370	U	350	U	340	U
2,4,5-Trichlorophenol	UG/KG	950	U	1000	U	940	U	870	U	860	U
2,4,6-Trichlorophenol	UG/KG	380	U	420	U	370	U	350	U	340	U
Tentatively Identified Compounds		22		21		20		25		25	

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST											
		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		34973-11 REG		34973-12 REG		36022-10 REG		36022-11 REG		36022-12 REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
alpha-BHC	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
alpha-Chlordane	UG/KG	1.6	J	0.41	J	0.38	U	0.35	U	0.35	U
Aroclor 1232	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
Aroclor-1016	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
Aroclor-1221	UG/KG	30	U	17	U	15	U	14	U	14	U
Aroclor-1242	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
Aroclor-1248	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
Aroclor-1254	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
Aroclor-1260	UG/KG	15	U	8.3	U	7.4	U	6.9	U	6.8	U
beta-BHC	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
4,4'-DDD	UG/KG	1.5	U	0.83	U	0.74	U	0.69	U	0.68	U
4,4'-DDE	UG/KG	0.8	J	0.83	U	0.74	U	0.69	U	0.68	U
4,4'-DDT	UG/KG	1.5	U	0.83	U	0.74	UJ	0.69	UJ	0.68	UJ
delta-BHC	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
Dieldrin	UG/KG	1.5	U	0.83	U	1.1		0.69	U	0.68	U
Endosulfan I	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
Endosulfan II	UG/KG	1.5	U	0.83	U	0.74	U	0.69	U	0.68	U
Endosulfan Sulfate	UG/KG	1.5	U	0.83	U	0.74	U	0.69	U	0.68	U
Endrin	UG/KG	1.5	U	0.83	U	0.74	U	0.69	U	0.68	U
Endrin Aldehyde	UG/KG	1.5	U	0.83	U	0.74	U	0.69	U	0.68	U
Endrin Ketone	UG/KG	1.5	U	0.83	U	0.91		0.43	J	2	
gamma-BHC (Lindane)	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
gamma-Chlordane	UG/KG	1.3	J	0.28	J	0.38	U	0.35	U	0.3	J
Heptachlor	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
Heptachlor Epoxide	UG/KG	0.77	U	0.43	U	0.38	U	0.35	U	0.35	U
p,p'-Methoxychlor	UG/KG	7.7	U	4.3	U	3.8	UJ	3.5	UJ	3.5	UJ
Toxaphene	UG/KG	77	U	43	U	38	U	35	U	35	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST											
		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		3497511 REG		3497512 REG		3602110 REG		3602111 REG		3602112 REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	6570		13800		7390		3370		3080	
Antimony	MG/KG	0.7	UJ	0.78	UJ	0.7	U	0.64	U	0.64	U
Arsenic	MG/KG	14.6		6.4		8		6.1		7.3	
Barium	MG/KG	54.3		122		84.6		24		32.4	
Beryllium	MG/KG	0.42		0.84		0.55		0.21		0.2	
Bismuth	MG/KG	5.8	U	6.4	U	21.5		63.9		62.6	
Cadmium	MG/KG	0.52	U	0.58	U	0.52	U	0.48	U	0.48	U
Calcium	MG/KG	101000		29900		4080		140000		129000	
Chromium	MG/KG	12		18.6		15.1		4.5		5.5	
Cobalt	MG/KG	6.3		10.6		10.1		3.4		4.2	
Copper	MG/KG	13.8		18.5		17.3		9.9		11.3	
Cyanide	MG/KG	0.57	U	0.63	U	0.56	U	0.52	U	0.52	U
Iron	MG/KG	15000		27900		18000		8510		10200	
Lead	MG/KG	64.2		25.8		23.8		8.5		8.7	
Magnesium	MG/KG	28900		7510		2080		56400		51300	
Manganese	MG/KG	709		1270		984		334		401	
Mercury	MG/KG	0.11	U	0.13	U	0.11	U	0.1	U	0.1	U
Nickel	MG/KG	12.6		23.4		13		7.5		10.3	
Potassium	MG/KG	1310		2010		1100		665		719	
Selenium	MG/KG	1	U	1.2	U	1.8		0.95	U	1.4	
Silver	MG/KG	1.1	U	1.2	U	1.1	U	1	U	0.99	U
Sodium	MG/KG	429	U	476	U	425	U	392	U	390	U
Thallium	MG/KG	0.82	U	0.91	U	0.81	U	0.75	U	0.74	U
Vanadium	MG/KG	13.6	J	19.1	J	21.3		8.4		8.6	
Zinc	MG/KG	76.9		86.4		58.5		28.3		34.7	

		RAT305		RAT306		RCT305		RCT306		RCT316	
		902-RAT305		902-RAT306		902-RCT305		902-RCT306		902-RCT316	
		0349740013SA REG		0349740014SA REG		0360230010SA REG		0360230011SA REG		0360230012SA REG	
		4/20/94		4/20/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**										
Chloride	MG/KG	17	U	119		16.9	U	15.6	U	15.5	U
Fluoride	MG/KG	0.86		2.1		0.72		1		0.83	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.7		2.4		0.57		0.52	U	0.52	U
Sulfate	MG/KG	28.3	U	31.5	U	28.1		25.9	U	25.8	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST							
		RCT305		RCT306		RCT316	
		902-RCT305		902-RCT306		902-RCT316	
		0360230010SA REG		0360230011SA REG		0360230012SA REG	
		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val
EXPLOSIVES	Units						
2-Amino-4,6-dinitrotoluene	UG/G	0.28	U	0.26	U	0.26	U
1,3-Dinitrobenzene	UG/G	0.28	U	0.26	U	0.26	U
2,4-Dinitrotoluene	UG/G	0.28	U	0.26	U	0.26	U
2,6-Dinitrotoluene	UG/G	0.29	U	0.27	U	0.27	U
HMX	UG/G	2.5	U	2.3	U	2.3	U
Nitrobenzene	UG/G	0.29	U	0.27	U	0.27	U
PETN	UG/G	1.1	U	1	U	1	U
RDX	UG/G	1.1	U	1	U	1	U
TETRYL	UG/G	0.73	U	0.67	U	0.67	U
1,3,5-Trinitrobenzene	UG/G	0.28	U	0.26	U	0.26	U
2,4,6-Trinitrotoluene	UG/G	0.28	U	0.26	U	0.26	U

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RAT301			RAT302			RAT303			RAT304			RAT305		
		902-RAT301			902-RAT302			902-RAT303			902-RAT304			902-RAT305		
		3201349 REG			3201350 REG			3201351 REG			3201352 REG			3201353 REG		
		4/20/94			4/20/94			4/20/94			4/20/94			4/20/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.987	0.0892		0.433	0.119		NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.147	0.0505	R	0.203	0.0558	R	NS		
Pu-239/240	PCI/G	NS			NS			0.0235	NA	R	0.00655	NA	R	NS		
Pu-242	PCI/G	NS			NS			0.00863	NA	R	0.00655	NA	R	NS		
Th-228	PCI/G	NS			NS			0.702	0.151	J	NS			NS		
Th-230	PCI/G	NS			NS			1.03	0.195		NS			NS		
Th-232	PCI/G	NS			NS			0.808	0.163		NS			NS		
U-234	PCI/G	NS			NS			0.587	0.113		NS			NS		
U-235	PCI/G	NS			NS			0.0232	NA	U	NS			NS		
U-238	PCI/G	NS			NS			0.562	0.11		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0898	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0182	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.0215	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0235	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.105	0.0221	
K-40	PCI/G	NS			NS			NS			NS			14.7	1.64	
Ra-226	PCI/G	NS			NS			NS			NS			1.36	0.503	
Sr-90	PCI/G	NS			NS			NS			NS			0.483	NA	U

		RAT306			RBT301			RBT302			RBT303			RBT304		
		902-RAT306			902-RBT301			902-RBT302			902-RBT303			902-RBT304		
		3201354 REG			3222415 REG			3222416 REG			3222417 REG			3222418 REG		
		4/20/94			6/3/94			6/3/94			6/3/94			6/3/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.102	0.0567		0.0978	0.0599		NS			NS		
Pu-238	PCI/G	NS			NS			NS			0.223	0.0372		0.245	0.0389	U
Pu-239/240	PCI/G	NS			NS			NS			0.0262	0.0106		0.0151	0.00759	U
Pu-242	PCI/G	NS			NS			NS			0.00738	NA	U	0.0026	0.00263	R
Th-228	PCI/G	NS			NS			NS			1.19	0.191		NS		
Th-230	PCI/G	NS			NS			NS			1.25	0.197		NS		
Th-232	PCI/G	NS			NS			NS			1.19	0.19		NS		
U-234	PCI/G	NS			NS			NS			0.987	0.155		NS		
U-235	PCI/G	NS			NS			NS			0.065	0.0271		NS		
U-238	PCI/G	NS			NS			NS			0.97	0.153		NS		
Am-241	PCI/G	0.0949	NA	U	NS			NS			NS			NS		
Bi-207	PCI/G	0.0235	NA	U	NS			NS			NS			NS		
Bi-210m	PCI/G	0.0276	NA	U	NS			NS			NS			NS		
Co-60	PCI/G	0.0324	NA	U	NS			NS			NS			NS		
Cs-137	PCI/G	0.028	NA	U	NS			NS			NS			NS		
K-40	PCI/G	23.5	2.48		NS			NS			NS			NS		
Ra-226	PCI/G	1.93	0.503		NS			NS			NS			NS		
Sr-90	PCI/G	0.638	0.21		NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RCT301			RCT302			RCT303			RCT304			RCT305		
		902-RCT301			902-RCT302			902-RCT303			902-RCT304			902-RCT305		
		3222832 REG			3222833 REG			3222834 REG			3222835 REG			3222836 REG		
		6/7/94			6/7/94			6/7/94			6/7/94			6/7/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0703	NA	U	0.017	NA	U	NS			NS			NS		
Pu-238	PCI/G	NS			NS			0.158	0.0441		0.219	0.0563		NS		
Pu-239/240	PCI/G	NS			NS			0.0195	NA	U	0.00779	0.00905		NS		
Pu-242	PCI/G	NS			NS			0.0141	NA	U	0.0134	NA	U	NS		
Th-228	PCI/G	NS			NS			0.866	0.151		NS			NS		
Th-230	PCI/G	NS			NS			1.63	0.245		NS			NS		
Th-232	PCI/G	NS			NS			0.917	0.156		NS			NS		
U-234	PCI/G	NS			NS			0.874	0.151		NS			NS		
U-235	PCI/G	NS			NS			0.075	0.0339		NS			NS		
U-238	PCI/G	NS			NS			1.01	0.169		NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			0.0728	NA	U
Bi-207	PCI/G	NS			NS			NS			NS			0.0162	NA	U
Bi-210m	PCI/G	NS			NS			NS			NS			0.019	NA	U
Co-60	PCI/G	NS			NS			NS			NS			0.0217	NA	U
Cs-137	PCI/G	NS			NS			NS			NS			0.193	0.0286	
K-40	PCI/G	NS			NS			NS			NS			14.9	1.59	
Ra-226	PCI/G	NS			NS			NS			NS			3.04	0.585	
Sr-90	PCI/G	NS			NS			NS			NS			0.524	0.235	

		RCT306			RCT316			RGT301			RGT302			RGT303		
		902-RCT306			902-RCT316			902-RGT301			902-RGT302			902-RGT303		
		3222837 REG			3222838 REG			3216921 REG			3216922 REG			3216923 REG		
		6/7/94			06/07/94DUPE			5/19/94			5/19/94			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0956	NA	U	0.0902	NA	U	NS		
Pu-238	PCI/G	NS			NS			NS			NS			0.23	0.0557	
Pu-239/240	PCI/G	NS			NS			NS			NS			0.0233	0.0144	
Pu-242	PCI/G	NS			NS			NS			NS			0.00573	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	0.0601	NA	U	0.0872	NA	U	NS			NS			NS		
Bi-207	PCI/G	0.0143	NA	U	0.0157	NA	U	NS			NS			NS		
Bi-210m	PCI/G	0.0165	NA	U	0.0178	NA	U	NS			NS			NS		
Co-60	PCI/G	0.0196	NA	U	0.0196	NA	U	NS			NS			NS		
Cs-137	PCI/G	0.0158	NA	U	0.0181	NA	U	NS			NS			NS		
K-40	PCI/G	11.9	1.31		11.1	1.23		NS			NS			NS		
Ra-226	PCI/G	1.84	0.462		0.422	NA	U	NS			NS			NS		
Sr-90	PCI/G	0.723	0.246		7.2			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RGT304			RHT301			RHT302			RHT303			RHT304		
		902-RGT304			902-RHT301			902-RHT302			902-RHT303			902-RHT304		
		3216924 REG			3212825 REG			3212826 REG			3212827 REG			3212828 REG		
		5/19/94			5/12/94			5/12/94			5/12/94			5/12/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.471	NA	U	0.0397	NA	U	NS			NS		
Pu-238	PCI/G	0.148	0.0433		NS			NS			0.114	0.0748	J	0.171	0.06	J
Pu-239/240	PCI/G	0.0176	NA	U	NS			NS			0.0286	0.0289	J	0.00929	NA	UJ
Pu-242	PCI/G	0.014	NA	U	NS			NS			0.0194	NA	UJ	0.00928	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RJT301			RJT302			RJT303			RJT304			RKT301		
		902-RJT301			902-RJT302			902-RJT303			902-RJT304			902-RKT301		
		3207721 REG			3207722 REG			3207723 REG			3207724 REG			3211255 REG		
		5/3/94			5/3/94			5/3/94			5/3/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0921	NA	U	0.0822	NA	U	NS			NS			0.0843	NA	U
Pu-238	PCI/G	NS			NS			0.114	0.0756	J	0.0627	0.0479	J	NS		
Pu-239/240	PCI/G	NS			NS			0.038	0.0315	J	0.0155	NA	UJ	NS		
Pu-242	PCI/G	NS			NS			0.0466	NA	UJ	0.0155	NA	UJ	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RKT302			RKT303			RKT304			RKT312			RMT301		
		902-RKT302			902-RKT303			902-RKT304			902-RKT312			902-RMT301		
		3211256 REG			3211258 REG			3211259 REG			3211257 REG			3216925 REG		
		5/10/94			5/10/94			5/10/94			05/10/94DUPE			5/19/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0633	NA	U	NS			NS			0.0717	NA	U	0.107	NA	U
Pu-238	PCI/G	NS			0.095	0.0371		0.0468	0.0229		NS			NS		
Pu-239/240	PCI/G	NS			0.00678	NA	U	0.00529	NA	U	NS			NS		
Pu-242	PCI/G	NS			0.00678	NA	U	0.0144	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RMT302			RMT303			RMT304			RNT301			RNT302		
		902-RMT302			902-RMT303			902-RMT304			902-RNT301			902-RNT302		
		3216926 REG			3216927 REG			3216928 REG			3228647 REG			3228648 REG		
		5/19/94			5/19/94			5/19/94			6/22/94			6/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.143	NA	U	NS			NS			0.119	NA	U	0.108	NA	U
Pu-238	PCI/G	NS			0.194	0.0603		0.342	0.0737		NS			NS		
Pu-239/240	PCI/G	NS			0.0102	0.0119		0.00646	0.00752		NS			NS		
Pu-242	PCI/G	NS			0.025	NA	U	0.00583	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RNT303			RNT304			RPT301			RPT302			RPT303		
		902-RNT303			902-RNT304			902-RPT301			902-RPT302			902-RPT303		
		3228649 REG			3228650 REG			3228651 REG			3228652 REG			3228653 REG		
		6/22/94			6/22/94			6/22/94			6/22/94			6/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			NS			0.0475	NA	U	0.0553	NA	U	NS		
Pu-238	PCI/G	0.14	0.0358		0.134	0.0341	J	NS			NS			0.0185	NA	U
Pu-239/240	PCI/G	0.0169	0.0109		0.012	0.00962	J	NS			NS			0.0115	NA	U
Pu-242	PCI/G	0.00458	NA	U	0.0111	NA	UJ	NS			NS			0.00333	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RPT304			RRT301			RRT302			RRT303			RRT304		
		902-RPT304			902-RRT301			902-RRT302			902-RRT303			902-RRT304		
		3228654 REG			3228655 REG			3228656 REG			3228657 REG			3228658 REG		
		6/22/94			6/22/94			6/22/94			6/22/94			6/22/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Tritium	PCI/G	NS			0.123	NA	U	0.0661	NA	U	NS			NS		
Pu-238	PCI/G	0.0586	NA	UJ	NS			NS			0.0574	0.0184		0.0338	0.02	J
Pu-239/240	PCI/G	0.0369	NA	UJ	NS			NS			0.0178	0.00864		0.0119	NA	UJ
Pu-242	PCI/G	0.0281	NA	UJ	NS			NS			0.0073	NA	U	0.0119	NA	UJ
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RRT314			RST301			RST302			RST303			RST304		
		902-RRT314			902-RST301			902-RST302			902-RST303			902-RST304		
		3228659 REG			3211228 REG			3211229 REG			3211230 REG			3211231 REG		
		06/22/94DUPE			5/10/94			5/10/94			5/10/94			5/10/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			0.135	NA	U	0.104	NA	U	NS			NS		
Pu-238	PCI/G	0.0879	0.0358	J	NS			NS			0.327	0.0893	J	0.42	0.0743	J
Pu-239/240	PCI/G	0.0166	NA	UJ	NS			NS			0.0294	0.0236	J	0.00811	0.0732	
Pu-242	PCI/G	0.0209	NA	UJ	NS			NS			0.00996	NA	UJ	0.00439	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RTT301			RTT302			RTT303			RTT304			RTT311		
		902-RTT301			902-RTT302			902-RTT303			902-RTT304			902-RTT311		
		3228635 REG			3228636 REG			3228637 REG			3228638 REG			3228635 REG		
		6/21/94			6/21/94			6/21/94			6/21/94			06/21/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	0.0707	NA	U	0.0665	NA	U	NS			NS			0.077	NA	U
Pu-238	PCI/G	NS			NS			0.0428	0.0139	U	0.0785	0.017	U	NS		
Pu-239/240	PCI/G	NS			NS			0.0101	0.00681		0.00738	0.00449		NS		
Pu-242	PCI/G	NS			NS			0.00227	NA	U	0.00494	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RUT301			RUT302			RUT303			RUT304			RVT301		
		902-RUT301			902-RUT302			902-RUT303			902-RUT304			902-RVT301		
		3210703 REG			3210704 REG			3210705 REG			3210706 REG			3208436 REG		
		5/6/94			5/6/94			5/6/94			5/6/94			5/4/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			0.0936	NA	U	0.0944	NA	U	NS		
Pu-238	PCI/G	0.125	0.0402	U	0.108	0.042	U	NS			NS			0.0328	NA	U
Pu-239/240	PCI/G	0.0166	0.0127		0.0239	NA	U	NS			NS			0.0354	0.0172	
Pu-242	PCI/G	0.00641	NA	U	0.00695	NA	U	NS			NS			0.00532	NA	U
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

		RVT302			RVT312			RXT301			RXT302			RXT303		
		902-RVT302			902-RVT312			902-RXT301			902-RXT302			902-RXT303		
		3208437 REG			3208428 REG			3212450 REG			3212451 REG			3212452 REG		
		5/4/94			05/04/94DUPE			5/11/94			5/11/94			5/11/94		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Tritium	PCI/G	NS			NS			NS			NS			0.113	NA	U
Pu-238	PCI/G	0.689	0.164		0.502	0.123	J	0.103	0.0321	U	0.037	0.0223	U	NS		
Pu-239/240	PCI/G	0.042	NA	U	0.0363	NA	UJ	0.0141	NA	U	0.0161	NA	U	NS		
Pu-242	PCI/G	0.0154	NA	U	0.0133	NA	UJ	0.0177	NA	U	0.0059	NA	U	NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.1 AIRBORNE DEPOSITIONAL INVESTIGATION

DIRECTION FROM MOUND - NORTH/NORTHWEST																
		RXT304			RYT301			RYT302								
		902-RXT304			902-RYT301			902-RYT302								
		3212453 REG			3222434 REG			3222435 REG								
		5/11/94			6/3/94			6/3/94								
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val						
Radiological	**Units**															
Tritium	PCI/G	0.122	NA	U	NS			NS			NS			NS		
Pu-238	PCI/G	NS			0.191	0.0339		0.159	0.0348		NS			NS		
Pu-239/240	PCI/G	NS			0.0143	NA	U	0.0121	0.00903		NS			NS		
Pu-242	PCI/G	NS			0.0092	NA	U	0.0099	NA	U	NS			NS		
Th-228	PCI/G	NS			NS			NS			NS			NS		
Th-230	PCI/G	NS			NS			NS			NS			NS		
Th-232	PCI/G	NS			NS			NS			NS			NS		
U-234	PCI/G	NS			NS			NS			NS			NS		
U-235	PCI/G	NS			NS			NS			NS			NS		
U-238	PCI/G	NS			NS			NS			NS			NS		
Am-241	PCI/G	NS			NS			NS			NS			NS		
Bi-207	PCI/G	NS			NS			NS			NS			NS		
Bi-210m	PCI/G	NS			NS			NS			NS			NS		
Co-60	PCI/G	NS			NS			NS			NS			NS		
Cs-137	PCI/G	NS			NS			NS			NS			NS		
K-40	PCI/G	NS			NS			NS			NS			NS		
Ra-226	PCI/G	NS			NS			NS			NS			NS		
Sr-90	PCI/G	NS			NS			NS			NS			NS		

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		H4471.D REG		H4474.D REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Volatile Organics	**Units**				
Acetone	UG/KG	12	U	12	U
Acetonitrile	UG/KG	125	U	123	U
Acrylonitrile	UG/KG	125	U	123	U
Benzene	UG/KG	12	U	12	U
Bromodichloromethane	UG/KG	12	U	12	U
Bromoform	UG/KG	12	U	12	U
Bromomethane	UG/KG	12	UJ	12	UJ
2-Butanone	UG/KG	12	U	12	U
Carbon Disulfide	UG/KG	12	U	12	U
Carbon Tetrachloride	UG/KG	12	U	12	U
Chlorobenzene	UG/KG	12	U	12	U
Chlorodibromomethane	UG/KG	12	U	12	U
Chloroethane	UG/KG	12	U	12	U
Chloroform	UG/KG	12	U	12	U
Chloromethane	UG/KG	12	U	12	U
1,1-Dichloroethane	UG/KG	12	U	12	U
1,2-Dichloroethane	UG/KG	12	U	12	U
1,1-Dichloroethene	UG/KG	12	U	12	U
1,2-Dichloroethene	UG/KG	25	U	25	U
1,2-Dichloropropane	UG/KG	12	U	12	U
cis-1,3-Dichloropropene	UG/KG	12	U	12	U
trans-1,3-Dichloropropene	UG/KG	12	U	12	U
1,2-Diethylbenzene	UG/KG	25	U	25	U
Ethylbenzene	UG/KG	12	U	12	U
Hexane	UG/KG	12	U	12	U
2-Hexanone	UG/KG	12	U	12	U
Iodomethane	UG/KG	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U
Methylene Chloride	UG/KG	12	U	12	U
Styrene	UG/KG	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	12	U	12	U
Tetrachloroethene	UG/KG	12	U	12	U
Toluene	UG/KG	12	U	2	J
1,1,1-Trichloroethane	UG/KG	12	U	12	U
1,1,2-Trichloroethane	UG/KG	12	U	12	U
Trichloroethene	UG/KG	12	U	12	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U
Xylene, Total	UG/KG	25	U	25	U
Tentatively Identified Compounds				1	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		A1201020.D REG		A1501023.D REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
Acenaphthene	UG/KG	420	U	410	U
Acenaphthylene	UG/KG	420	U	410	U
Anthracene	UG/KG	420	U	410	U
Benzo(a)anthracene	UG/KG	420	U	50	J
Benzo(a)pyrene	UG/KG	420	U	42	J
Benzo(b)fluoranthene	UG/KG	420	U	47	J
Benzo(g,h,i)perylene	UG/KG	420	U	410	U
Benzo(k)fluoranthene	UG/KG	420	U	50	J
Benzoic Acid	UG/KG	2000	U	2000	U
Benzyl Alcohol	UG/KG	420	U	410	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U	410	U
bis(2-Chloroethoxy)methane	UG/KG	420	U	410	U
bis(2-Chloroethyl)ether	UG/KG	420	U	410	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	U	410	U
4-Bromophenyl-phenylether	UG/KG	420	U	410	U
Butylbenzylphthalate	UG/KG	420	U	410	U
Carbazole	UG/KG	420	U	410	U
4-Chloro-3-methylphenol	UG/KG	420	U	410	U
4-Chloroaniline	UG/KG	420	U	410	U
2-Chloronaphthalene	UG/KG	420	U	410	U
2-Chlorophenol	UG/KG	420	U	410	U
4-Chlorophenyl-phenylether	UG/KG	420	U	410	U
Chrysene	UG/KG	420	U	89	J
Di-n-butylphthalate	UG/KG	420	U	410	U
Di-n-octylphthalate	UG/KG	420	U	410	U
Dibenzo(a,h)anthracene	UG/KG	420	U	410	U
Dibenzofuran	UG/KG	420	U	410	U
1,2-Dichlorobenzene	UG/KG	420	U	410	U
1,3-Dichlorobenzene	UG/KG	420	U	410	U
1,4-Dichlorobenzene	UG/KG	420	U	410	U
3,3'-Dichlorobenzidine	UG/KG	420	U	410	U
2,4-Dichlorophenol	UG/KG	420	U	410	U
Diethylphthalate	UG/KG	420	U	410	U
2,4-Dimethylphenol	UG/KG	420	U	410	U
Dimethylphthalate	UG/KG	420	U	410	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	980	U
2,4-Dinitrophenol	UG/KG	1000	UJ	980	UJ
2,4-Dinitrotoluene	UG/KG	420	U	410	U
2,6-Dinitrotoluene	UG/KG	420	U	410	U
Fluoranthene	UG/KG	420	U	99	J
Fluorene	UG/KG	420	U	410	U
Hexachlorobenzene	UG/KG	420	U	410	U
Hexachlorobutadiene	UG/KG	420	U	410	U
Hexachlorocyclopentadiene	UG/KG	420	U	410	U
Hexachloroethane	UG/KG	420	U	410	U

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		A1201020.D REG		A1501023.D REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	410	U
Isophorone	UG/KG	420	U	410	U
2-Methylnaphthalene	UG/KG	420	U	410	U
2-Methylphenol	UG/KG	420	U	410	U
4-Methylphenol	UG/KG	420	UJ	410	UJ
N-Nitroso-di-n-propylamine	UG/KG	420	UJ	410	UJ
N-Nitrosodiphenylamine	UG/KG	420	U	410	U
Naphthalene	UG/KG	420	U	410	U
2-Nitroaniline	UG/KG	1000	UJ	980	UJ
3-Nitroaniline	UG/KG	1000	U	980	U
4-Nitroaniline	UG/KG	1000	U	980	U
Nitrobenzene	UG/KG	420	U	410	U
2-Nitrophenol	UG/KG	420	U	410	U
4-Nitrophenol	UG/KG	1000	U	980	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	410	U
Pentachlorophenol	UG/KG	1000	U	980	U
Phenanthrene	UG/KG	420	U	410	U
Phenol	UG/KG	420	U	410	U
Pyrene	UG/KG	420	U	80	J
1,2,4-Trichlorobenzene	UG/KG	420	U	410	U
2,4,5-Trichlorophenol	UG/KG	1000	U	980	U
2,4,6-Trichlorophenol	UG/KG	420	U	410	U
Tentatively Identified Compounds		12		17	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		36191-06 REG		36191-07 REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Pesticides and PCBs	**Units**				
Aldrin	UG/KG	0.42	U	0.42	U
alpha-BHC	UG/KG	0.42	U	0.42	U
alpha-Chlordane	UG/KG	0.42	U	0.42	U
Aroclor 1232	UG/KG	8.2	U	8.1	U
Aroclor-1016	UG/KG	8.2	U	8.1	U
Aroclor-1221	UG/KG	17	U	16	U
Aroclor-1242	UG/KG	8.2	U	8.1	U
Aroclor-1248	UG/KG	8.2	U	8.1	U
Aroclor-1254	UG/KG	8.2	U	8.1	U
Aroclor-1260	UG/KG	8.2	U	8.1	U
beta-BHC	UG/KG	0.42	U	0.42	U
4,4'-DDD	UG/KG	0.82	U	0.81	U
4,4'-DDE	UG/KG	0.82	U	0.81	U
4,4'-DDT	UG/KG	0.82	U	0.81	U
delta-BHC	UG/KG	0.42	U	0.42	U
Dieldrin	UG/KG	0.82	U	0.81	U
Endosulfan I	UG/KG	0.42	U	0.42	U
Endosulfan II	UG/KG	0.82	UJ	0.81	UJ
Endosulfan Sulfate	UG/KG	0.82	U	0.81	U
Endrin	UG/KG	0.82	U	0.81	U
Endrin Aldehyde	UG/KG	0.82	U	0.81	U
Endrin Ketone	UG/KG	0.82	U	0.81	U
gamma-BHC (Lindane)	UG/KG	0.42	U	0.42	U
gamma-Chlordane	UG/KG	0.42	U	0.42	U
Heptachlor	UG/KG	0.42	U	0.42	U
Heptachlor Epoxide	UG/KG	0.42	U	0.42	U
p,p'-Methoxychlor	UG/KG	4.2	U	4.2	U
Toxaphene	UG/KG	42	U	42	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		3618906 REG		3618907 REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Inorganics	**Units**				
Aluminum	MG/KG	17900		16200	
Antimony	MG/KG	0.77	R	0.77	R
Arsenic	MG/KG	3	J	5.3	J
Barium	MG/KG	28.2		44.5	
Beryllium	MG/KG	0.93		0.85	
Bismuth	MG/KG	57.5		54.4	
Cadmium	MG/KG	0.57	U	0.57	U
Calcium	MG/KG	50600	J	77500	J
Chromium	MG/KG	27.7		24.5	
Cobalt	MG/KG	16.5		18.2	
Copper	MG/KG	25.1		26.4	
Cyanide	MG/KG	0.01	U	0.01	U
Iron	MG/KG	35700		33100	
Lead	MG/KG	6.5		6.8	
Magnesium	MG/KG	13400		13200	
Manganese	MG/KG	533		796	
Mercury	MG/KG	0.12	U	0.12	U
Nickel	MG/KG	38		34.9	
Potassium	MG/KG	5960		5170	
Selenium	MG/KG	0.5	UJ	0.5	UJ
Silver	MG/KG	1.2	U	1.2	U
Sodium	MG/KG	471	U	468	U
Thallium	MG/KG	0.9	U	0.89	U
Vanadium	MG/KG	19.9	J	18.8	J
Zinc	MG/KG	79.4	J	69.8	J

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		0362150009SA REG		0362150010SA REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Anions	**Units**				
Chloride	MG/KG	119	J	50.4	J
Fluoride	MG/KG	3.7	J	5.6	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	3.5	J	2.5	J
Sulfate	MG/KG	69.8	J	240	J

		N01301		N01311	
		902-N01301		902-N01311	
		0362150009SA REG		0362150010SA REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
Miscellaneous	**Units**				
PH	UNITS	8.2	J	8.1	J
Total Organic Carbon	%	0.2	U	0.2	UJ

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01					
		N01301		N01311	
		902-N01301		902-N01311	
		0362150009SA REG		0362150010SA REG	
		6/15/94		06/16/94DUPE	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.31	UJ	0.31	UJ
1,3-Dinitrobenzene	UG/G	0.31	UJ	0.31	UJ
2,4-Dinitrotoluene	UG/G	0.31	UJ	0.31	UJ
2,6-Dinitrotoluene	UG/G	0.32	UJ	0.32	UJ
HMX	UG/G	2.7	UJ	2.7	UJ
Nitrobenzene	UG/G	0.32	UJ	0.32	UJ
PETN	UG/G	1.2	UJ	1.2	UJ
RDX	UG/G	1.2	UJ	1.2	UJ
TETRYL	UG/G	0.81	UJ	0.81	UJ
1,3,5-Trinitrobenzene	UG/G	0.31	UJ	0.31	UJ
2,4,6-Trinitrotoluene	UG/G	0.31	UJ	0.31	UJ

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N01							
		N01301			N01311		
		902-N01301			902-N01311		
		3226436 REG			3226437 REG		
		34500			06/16/94DUPE		
		Result	UNC	Val	Result	UNC	Val
Radiological	**Units**						
Am-241	PCI/G	0.106	NA	U	0.0829	NA	U
Bi-207	PCI/G	0.0265	NA	U	0.0231	NA	U
Bi-210m	PCI/G	0.0287	NA	U	0.0242	NA	U
Co-60	PCI/G	0.0348	NA	U	0.0323	NA	U
Cs-137	PCI/G	0.292	NA	U	0.026	NA	U
K-40	PCI/G	30.9	3.17		31.4	3.33	
Pu-238	PCI/G	0.0463	0.0182	J	0.352	0.0613	J
Pu-239/240	PCI/G	0.01	NA	UJ	0.00996	0.00762	
Pu-242	PCI/G	0.00681	0.00612	J	0.00386	NA	U
Ra-226	PCI/G	0.651	NA	U	2.81	0.498	
Sr-90	PCI/G	0.39	NA	U	0.49	NA	U
Th-228	PCI/G	1.14	0.19		1.1	0.176	
Th-230	PCI/G	0.985	0.168		0.853	0.143	
Th-232	PCI/G	1.08	0.179		1.22	0.189	
Tritium	PCI/G	1.4	0.0871		1.22	0.0875	
U-234	PCI/G	0.817	0.144		0.936	0.163	U
U-235	PCI/G	0.0548	0.0303		0.0386	0.0257	U
U-238	PCI/G	0.785	0.141		0.936	0.163	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02											
		N02301		N02302		N02303		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02303		902-N02304	
		H4262.D REG		H4299.D REG		H4300.D REA		H4264.D REG		H4265.D REG	
		6/13/94		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	18	J	18		18		12	U
Acetonitrile	UG/KG	116	U	116	U	115	U	115	U	118	U
Acrylonitrile	UG/KG	116	U	116	U	115	U	115	U	118	U
Benzene	UG/KG	12	U	12	U	12	U	12	U	12	U
Bromodichloromethane	UG/KG	12	U	12	U	12	U	12	U	12	U
Bromoform	UG/KG	12	U	12	U	12	U	12	U	12	U
Bromomethane	UG/KG	12	UJ	12	UJ	12	UJ	12	UJ	12	UJ
2-Butanone	UG/KG	12	U	12	U	12	U	12	U	12	U
Carbon Disulfide	UG/KG	12	U	2	J	3	J	1	J	12	U
Carbon Tetrachloride	UG/KG	12	U	12	U	12	U	12	U	12	U
Chlorobenzene	UG/KG	12	U	12	U	12	UJ	12	UJ	12	UJ
Chlorodibromomethane	UG/KG	12	U	12	U	12	U	12	U	12	U
Chloroethane	UG/KG	12	U	12	UJ	12	UJ	12	U	12	U
Chloroform	UG/KG	12	U	12	U	12	U	12	U	12	U
Chloromethane	UG/KG	12	U	12	U	12	U	12	U	12	U
1,1-Dichloroethane	UG/KG	12	U	12	U	12	U	12	U	12	U
1,2-Dichloroethane	UG/KG	12	U	12	U	12	U	12	U	12	U
1,1-Dichloroethene	UG/KG	12	U	12	U	12	U	12	U	12	U
1,2-Dichloroethene	UG/KG	23	U	23	U	23	U	23	U	24	U
1,2-Dichloropropane	UG/KG	12	U	12	U	12	U	12	U	12	U
cis-1,3-Dichloropropene	UG/KG	12	U	12	U	12	U	12	U	12	U
trans-1,3-Dichloropropene	UG/KG	12	U	12	U	12	U	12	U	12	U
1,2-Diethylbenzene	UG/KG	23	U	23	U	23	UJ	23	UJ	24	UJ
Ethylbenzene	UG/KG	12	U	12	U	12	UJ	12	UJ	12	UJ
Hexane	UG/KG	12	U	12	U	12	U	12	U	12	U
2-Hexanone	UG/KG	12	U	12	U	12	U	12	U	12	U
Iodomethane	UG/KG	12	U	12	U	12	U	12	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	UJ	12	UJ	12	UJ
Methylene Chloride	UG/KG	10	U	12	U	2	J	10	U	10	U
Styrene	UG/KG	12	U	12	U	12	UJ	12	UJ	12	UJ
1,1,2,2-Tetrachloroethane	UG/KG	12	U	12	U	12	UJ	12	U	12	UJ
Tetrachloroethene	UG/KG	12	U	12	U	12	UJ	12	U	12	UJ
Toluene	UG/KG	5	J	12	U	12	UJ	5	J	1	J
1,1,1-Trichloroethane	UG/KG	12	U	12	U	12	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	12	U	12	U	12	U	12	U	12	U
Trichloroethene	UG/KG	12	U	12	U	12	U	12	U	12	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	12	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	12	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	12	U	12	U
Xylene, Total	UG/KG	23	U	23	U	23	UJ	23	UJ	24	UJ
Tentatively Identified Compounds		1		1		1		2		3	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02									
		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		A0801016.D REG		A0901017.D REG		A0801116.D REG		A1101019.D REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	380	U	380	U	380	U	390	U
Acenaphthylene	UG/KG	380	U	380	U	380	U	390	U
Anthracene	UG/KG	380	U	380	U	380	U	390	U
Benzo(a)anthracene	UG/KG	380	U	380	U	380	U	390	U
Benzo(a)pyrene	UG/KG	380	U	380	U	380	U	390	U
Benzo(b)fluoranthene	UG/KG	380	U	380	U	380	U	390	U
Benzo(g,h,i)perylene	UG/KG	380	U	380	U	380	U	390	U
Benzo(k)fluoranthene	UG/KG	380	U	380	U	380	U	390	U
Benzoic Acid	UG/KG	1900	U	46	J	42	UJ	1900	U
Benzyl Alcohol	UG/KG	380	U	380	U	380	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	380	U	380	U	380	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	380	U	380	U	380	U	390	U
bis(2-Chloroethyl)ether	UG/KG	380	U	380	U	380	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	380	U	380	U	380	UJ	390	U
4-Bromophenyl-phenylether	UG/KG	380	U	380	U	380	U	390	U
Butylbenzylphthalate	UG/KG	380	U	380	U	380	U	390	U
Carbazole	UG/KG	380	U	380	U	380	U	390	U
4-Chloro-3-methylphenol	UG/KG	380	U	380	U	380	U	390	U
4-Chloroaniline	UG/KG	380	U	380	U	380	U	390	U
2-Chloronaphthalene	UG/KG	380	U	380	U	380	U	390	U
2-Chlorophenol	UG/KG	380	U	380	U	380	U	390	U
4-Chlorophenyl-phenylether	UG/KG	380	U	380	U	380	U	390	U
Chrysene	UG/KG	380	U	380	U	380	U	390	U
Di-n-butylphthalate	UG/KG	380	U	380	U	380	U	390	U
Di-n-octylphthalate	UG/KG	380	U	380	U	380	U	390	U
Dibenzo(a,h)anthracene	UG/KG	380	U	380	U	380	U	390	U
Dibenzofuran	UG/KG	380	U	380	U	380	U	390	U
1,2-Dichlorobenzene	UG/KG	380	U	380	U	380	U	390	U
1,3-Dichlorobenzene	UG/KG	380	U	380	U	380	U	390	U
1,4-Dichlorobenzene	UG/KG	380	U	380	U	380	U	390	U
3,3'-Dichlorobenzidine	UG/KG	380	U	380	U	380	U	390	U
2,4-Dichlorophenol	UG/KG	380	U	380	U	380	U	390	U
Diethylphthalate	UG/KG	380	U	380	U	380	U	390	U
2,4-Dimethylphenol	UG/KG	380	U	380	U	380	U	390	U
Dimethylphthalate	UG/KG	380	U	380	U	380	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	910	U	930	U	920	U	940	U
2,4-Dinitrophenol	UG/KG	910	UJ	930	UJ	920	UJ	940	UJ
2,4-Dinitrotoluene	UG/KG	380	U	380	U	380	U	390	U
2,6-Dinitrotoluene	UG/KG	380	U	380	U	380	U	390	U
Fluoranthene	UG/KG	380	U	380	U	380	U	390	U
Fluorene	UG/KG	380	U	380	U	380	U	390	U
Hexachlorobenzene	UG/KG	380	U	380	U	380	U	390	U
[illegible]achlorobutadiene	UG/KG	380	U	380	U	3[illegible]	[illegible]	390	U
[illegible]achlorocyclopentadiene	UG/KG	380	U	380	U	3[illegible]	[illegible]	390	U
Hexachloroethane	UG/KG	380	U	380	U	380	U	390	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02									
		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		A0801016.D REG		A0901017.D REG		A0801116.D REG		A1101019.D REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	380	U	380	U	380	U	390	U
Isophorone	UG/KG	380	U	380	U	380	U	390	U
2-Methylnaphthalene	UG/KG	380	U	380	U	380	U	390	U
2-Methylphenol	UG/KG	380	U	380	U	380	U	390	U
4-Methylphenol	UG/KG	380	UJ	380	UJ	380	U	390	UJ
N-Nitroso-di-n-propylamine	UG/KG	380	UJ	380	UJ	380	U	390	UJ
N-Nitrosodiphenylamine	UG/KG	380	U	380	U	380	U	390	U
Naphthalene	UG/KG	380	U	380	U	380	U	390	U
2-Nitroaniline	UG/KG	910	UJ	930	UJ	920	U	940	UJ
3-Nitroaniline	UG/KG	910	U	930	U	920	U	940	U
4-Nitroaniline	UG/KG	910	U	930	U	920	U	940	U
Nitrobenzene	UG/KG	380	U	380	U	380	U	390	U
2-Nitrophenol	UG/KG	380	U	380	U	380	U	390	U
4-Nitrophenol	UG/KG	910	U	930	U	920	U	940	U
2,2'-oxybis(1-Chloropropane)	UG/KG	380	U	380	U	380	U	390	U
Pentachlorophenol	UG/KG	910	U	930	U	920	U	940	U
Phenanthrene	UG/KG	380	U	380	U	380	U	57	J
Phenol	UG/KG	380	U	380	U	380	U	390	U
Pyrene	UG/KG	380	U	380	U	380	U	390	U
1,2,4-Trichlorobenzene	UG/KG	380	U	380	U	380	U	390	U
2,4,5-Trichlorophenol	UG/KG	910	U	930	U	920	U	940	U
2,4,6-Trichlorophenol	UG/KG	380	U	380	U	380	U	390	U
Tentatively Identified Compounds		21		30		30		30	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02									
		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		36191-02 REG		36191-03 REG		36191-04 REG		36191-05 REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units								
Aldrin	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
alpha-BHC	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
alpha-Chlordane	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
Aroclor 1232	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
Aroclor-1016	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
Aroclor-1221	UG/KG	16	U	16	U	15	U	16	U
Aroclor-1242	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
Aroclor-1248	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
Aroclor-1254	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
Aroclor-1260	UG/KG	7.7	U	7.6	U	7.6	U	7.8	U
beta-BHC	UG/KG	0.4	U	1.3	J	0.42	J	0.4	U
4,4'-DDD	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
4,4'-DDE	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
4,4'-DDT	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
delta-BHC	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
Dieldrin	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
Endosulfan I	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
Endosulfan II	UG/KG	0.77	UJ	0.76	UJ	0.76	UJ	0.78	UJ
Endosulfan Sulfate	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
Endrin	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
Endrin Aldehyde	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
Endrin Ketone	UG/KG	0.77	U	0.76	U	0.76	U	0.78	U
gamma-BHC (Lindane)	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
gamma-Chlordane	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
Heptachlor	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
Heptachlor Epoxide	UG/KG	0.4	U	0.39	U	0.39	U	0.4	U
p,p'-Methoxychlor	UG/KG	4	U	3.9	U	3.9	U	4	U
Toxaphene	UG/KG	40	U	39	U	39	U	40	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02									
		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		3618902 REG		3618903 REG		3618904 REG		3618905 REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	6670		5090		6420		8580	
Antimony	MG/KG	0.72	R	0.72	R	0.71	R	0.73	R
Arsenic	MG/KG	5.6		3.8		5.7		4	
Barium	MG/KG	37.6		46.8		50.5		28.7	
Beryllium	MG/KG	0.38		0.3		0.37		0.46	
Bismuth	MG/KG	74.3		74.1		71.6		71.3	
Cadmium	MG/KG	0.54	U	0.53	U	0.53	U	0.54	U
Calcium	MG/KG	136000	J	144000	J	135000	J	135000	J
Chromium	MG/KG	8.6		8		7.3		10	
Cobalt	MG/KG	6.3		6.3		7.2		7.9	
Copper	MG/KG	14		13.1		14.5		15.5	
Cyanide	MG/KG	0.01	U	0.01	U	0.01	U	0.01	U
Iron	MG/KG	14300		12600		14500		16800	
Lead	MG/KG	7.2		7.5		8		8.8	
Magnesium	MG/KG	47600		53100		48100		41000	
Manganese	MG/KG	285		331		338		418	
Mercury	MG/KG	0.12	U	0.12	U	0.12	U	0.12	U
Nickel	MG/KG	17.2		14.4		18.5		20	
Potassium	MG/KG	1910		1830		2120		2480	
Selenium	MG/KG	4.7	UJ	0.46	UJ	0.46	UJ	0.47	UJ
Silver	MG/KG	1.1	U	1.1		1.1	U	1.1	U
Sodium	MG/KG	441	U	439		435	U	445	U
Thallium	MG/KG	0.84	U	0.84		0.83	U	0.85	U
Vanadium	MG/KG	13.6	J	10.4	J	12.8	J	14.5	J
Zinc	MG/KG	43.3	J	39.9	J	38.4	J	45.3	J

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02									
		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		0362150005SA REG		0362150006SA REG		0362150007SA REG		0362150008SA REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	20.8	J	58.3	J	30.4	J	17.6	UJ
Fluoride	MG/KG	1.9	J	1	J	3.2	J	3.4	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.3	J	0.58	UJ	0.58	UJ	0.59	UJ
Sulfate	MG/KG	87.5	J	250	J	183	J	202	J

		N02301		N02302		N02303		N02304	
		902-N02301		902-N02302		902-N02303		902-N02304	
		0362150005SA REG		0362150006SA REG		0362150007SA REG		0362150008SA REG	
		6/13/94		6/13/94		6/13/94		6/13/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	**Units**								
PH	UNITS	8.4	J	8.1	J	8.2	J	7.4	J
Total Organic Carbon	%	0.2	U	0.2525		0.335		0.3875	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02			
		N02301	
		902-N02301	
		0362150005SA REG	
		6/13/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	UG/G	0.29	UJ
1,3-Dinitrobenzene	UG/G	0.29	UJ
2,4-Dinitrotoluene	UG/G	0.29	UJ
2,6-Dinitrotoluene	UG/G	0.3	UJ
HMX	UG/G	2.6	UJ
Nitrobenzene	UG/G	0.3	UJ
PETN	UG/G	1.2	UJ
RDX	UG/G	1.2	UJ
TETRYL	UG/G	0.76	UJ
1,3,5-Trinitrobenzene	UG/G	0.29	UJ
2,4,6-Trinitrotoluene	UG/G	0.29	UJ

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N02													
		N02301			N02302			N02303			N02304		
		902-N02301			902-N02302			902-N02303			902-N02304		
		3226423 REG			3226424 REG			3226425 REG			3226426 REG		
		34498			34498			34498			34498		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**												
Am-241	PCI/G	0.134	NA	U	0.0817	NA	U	0.0902	NA	U	0.0833	NA	U
Bi-207	PCI/G	0.0229	NA	U	0.0222	NA	U	0.0242	NA	U	0.0246	NA	U
Bi-210m	PCI/G	0.0256	NA	U	0.026	NA	U	0.0274	NA	U	0.0277	NA	U
Co-60	PCI/G	0.0277	NA	U	0.0278	NA	U	0.0291	NA	U	0.0321	NA	U
Cs-137	PCI/G	0.0264	NA	U	0.0237	NA	U	0.0267	NA	U	0.0284	NA	U
K-40	PCI/G	13.8	1.58		13.1	1.46		14.9	1.68		17	1.91	
Pu-238	PCI/G	0.154	0.0479		0.149	0.038		0.0877	0.0267		0.173	0.0383	
Pu-239/240	PCI/G	0.0214	NA	U	0.0112	NA	U	0.00997	NA	U	0.00455	NA	U
Pu-242	PCI/G	0.00842	NA	U	0.00593	0.00688		0.00477	NA	U	0.00869	NA	U
Ra-226	PCI/G	1.88	0.598		2	0.518		2.18	0.63		0.633	NA	U
Sr-90	PCI/G	0.482	NA	U	0.395	NA	U	0.525	0.2		0.475	0.187	
Th-228	PCI/G	0.664	0.122		0.438	0.918		0.564	0.113		0.585	0.111	
Th-230	PCI/G	1.06	0.171		0.947	0.154		1.05	0.171		0.63	0.12	
Th-232	PCI/G	0.598	0.113		0.49	0.0955		0.585	0.111		0.998	0.163	
Tritium	PCI/G	0.203	0.0408	R	1.06	0.0547	R	1.01	0.0569	R	0.831	0.0567	R
U-234	PCI/G	0.673	0.123	J	0.865	0.148		0.798	0.141		0.854	0.147	
U-235	PCI/G	0.0333	0.0253	J	0.0337	0.0208		0.048	NA	U	0.0488	0.0266	
U-238	PCI/G	0.835	0.144	J	0.862	0.148		0.897	0.154		0.891	0.152	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		H4255.D REG		H4271.D REG		H4294.D REG		H4295.D REG		H4296.D REG		H4297.D REG		H4316.D REG		H4261.D REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94	DUPE
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**																
Acetone	UG/KG	4	J	11	U	11	U	11	J	8	J	11	U	11	J	12	U
Acetonitrile	UG/KG	114	U	114	U	112	U	111	U	111	U	112	U	108	U	119	U
Acrylonitrile	UG/KG	114	U	114	U	112	U	111	U	111	U	112	U	108	U	119	U
Benzene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Bromodichloromethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Bromoform	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Bromomethane	UG/KG	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	U	12	UJ
2-Butanone	UG/KG	11	U	11	U	11	U	1	J	11	U	11	U	11	U	12	U
Carbon Disulfide	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Carbon Tetrachloride	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Chlorobenzene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Chlorodibromomethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Chloroethane	UG/KG	11	U	11	U	11	UJ	11	UJ	11	UJ	11	UJ	11	U	12	U
Chloroform	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Chloromethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloroethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloroethene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	24	U
1,2-Dichloropropane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
cis-1,3-Dichloropropene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
trans-1,3-Dichloropropene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,2-Diethylbenzene	UG/KG	23	U	23	U	22	U	22	U	22	U	22	U	22	U	24	U
Ethylbenzene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Hexane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
2-Hexanone	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Iodomethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Methylene Chloride	UG/KG	11	U	11	U	2	J	11	U	1	J	11	U	6	J	10	U
Styrene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Tetrachloroethene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Toluene	UG/KG	11	U	11	U	11	U	11	U	3	J	3	J	2	J	12	U
1,1,1-Trichloroethane	UG/KG	11	U	5	J	11	U	11	U	11	U	11	U	11	U	3	J
1,1,2-Trichloroethane	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Trichloroethene	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	2	J	1	UJ
Trichlorotrifluoroethane	UG/KG	11	U	40		8	J	11	U	3	J	11	U	11	U	172	J
Vinyl Acetate	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	12	U
Vinyl Chloride	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	UJ	12	U
Xylene, Total	UG/KG	11	U	11	U	11	U	11	U	11	U	11	U	11	U	24	U
Tentatively Identified Compounds		1		2		1		1				1				2	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		A1201801.D REG		A1501804.D REG		A1601805.D REG		A0101811.D REG		A0201812.D REG		A0301813.D REG		A0401814.D REG		A0701115.D REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**																
Acenaphthene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Acenaphthylene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Anthracene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Benzo(a)anthracene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Benzo(a)pyrene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Benzo(b)fluoranthene	UG/KG	380	U	380	U	41	J	370	U	370	U	38	J	360	U	40	J
Benzo(g,h,i)perylene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Benzo(k)fluoranthene	UG/KG	380	UJ	380	UJ	370	UJ	370	UJ	370	UJ	370	UJ	360	UJ	400	U
Benzoic Acid	UG/KG	1900	UJ	1900	UJ	1800	UJ	1800	UJ	1800	UJ	1800	UJ	1800	UJ	2000	UJ
Benzyl Alcohol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
bis(2-Chloroethyl)ether	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	UJ
4-Bromophenyl-phenylether	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Butylbenzylphthalate	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	42	J	400	U
Carbazole	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4-Chloro-3-methylphenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4-Chloroaniline	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Chloronaphthalene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Chlorophenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4-Chlorophenyl-phenylether	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Chrysene	UG/KG	380	U	380	U	370	U	370	U	370	U	43	J	360	U	400	U
Di-n-butylphthalate	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Di-n-octylphthalate	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Dibenzo(a,h)anthracene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Dibenzofuran	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
1,2-Dichlorobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
1,3-Dichlorobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
1,4-Dichlorobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
3,3'-Dichlorobenzidine	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2,4-Dichlorophenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Diethylphthalate	UG/KG	380	UJ	380	UJ	370	UJ	370	U	370	U	370	U	360	U	400	U
2,4-Dimethylphenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Dimethylphthalate	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
2,4-Dinitrophenol	UG/KG	900	U	910	U	900	U	890	UJ	890	UJ	900	UJ	860	UJ	950	UJ
2,4-Dinitrotoluene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2,6-Dinitrotoluene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Fluoranthene	UG/KG	70	J	380	U	41	J	370	U	370	U	54	J	360	U	55	J
Fluorene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Hexachlorobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Hexachlorobutadiene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
[illegible]achlorocyclopentadiene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
[illegible]achloroethane	UG/KG	380	U	380	U	[illegible]		370	U	370	U	370	U	360	U	400	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		A1201801.D REG		A1501804.D REG		A1601805.D REG		A0101811.D REG		A0201812.D REG		A0301813.D REG		A0401814.D REG		A0701115.D REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**																
Indeno(1,2,3-c,d)pyrene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Isophorone	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Methylnaphthalene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Methylphenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4-Methylphenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
N-Nitrosodiphenylamine	UG/KG	380	UJ	380	UJ	370	UJ	370	U	370	U	370	U	360	U	400	U
Naphthalene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Nitroaniline	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
3-Nitroaniline	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
4-Nitroaniline	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
Nitrobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2-Nitrophenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
4-Nitrophenol	UG/KG	900	UJ	910	UJ	900	UJ	890	U	890	U	900	U	860	U	950	U
2,2'-oxybis(1-Chloropropane)	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Pentachlorophenol	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
Phenanthrene	UG/KG	380	U	380	U	370	U	370	U	370	U	49	J	360	U	400	U
Phenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Pyrene	UG/KG	46	J	380	U	370	U	370	UJ	370	UJ	46	J	360	UJ	48	J
1,2,4-Trichlorobenzene	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
2,4,5-Trichlorophenol	UG/KG	900	U	910	U	900	U	890	U	890	U	900	U	860	U	950	U
2,4,6-Trichlorophenol	UG/KG	380	U	380	U	370	U	370	U	370	U	370	U	360	U	400	U
Tentatively Identified Compounds		16		30		30		30		30		30		30		24	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		36132-06 REG		36132-07 REG		36132-08 REG		36132-09 REG		36132-10 REG		36132-11 REG		36132-12 REG		36191-01 REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**																
Aldrin	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
alpha-BHC	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
alpha-Chlordane	UG/KG	0.41		0.39	U	0.2	J	0.38	U	0.38	U	7.6	UJ	1.8	U	0.38	J
Aroclor 1232	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
Aroclor-1016	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
Aroclor-1221	UG/KG	15	U	15	U	15	U	15	U	15	U	300	UJ	72	U	16	U
Aroclor-1242	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
Aroclor-1248	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
Aroclor-1254	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
Aroclor-1260	UG/KG	7.5	U	7.5	U	7.4	U	7.3	U	7.3	U	150	UJ	35	U	7.8	U
beta-BHC	UG/KG	0.66		0.39	U	1.1	J	0.38	U	0.38	U	7.6	UJ	1.8	U	0.57	J
4,4'-DDD	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	U
4,4'-DDE	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	U
4,4'-DDT	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.52	J
delta-BHC	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
Dieldrin	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	U
Endosulfan I	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
Endosulfan II	UG/KG	0.75	UJ	0.75	UJ	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	UJ
Endosulfan Sulfate	UG/KG	0.75	U	0.75	U	0.74	UJ	0.73	UJ	0.73	UJ	15	UJ	3.5	UJ	0.78	U
Endrin	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	U
Endrin Aldehyde	UG/KG	0.75	U	0.75	U	0.74	U	0.73	U	0.73	U	15	UJ	3.5	U	0.78	U
Endrin Ketone	UG/KG	0.75	U	0.75	U	0.74	U	0.73	J	0.73	U	15	UJ	3.5	U	0.78	U
gamma-BHC (Lindane)	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
gamma-Chlordane	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.38	U	7.6	UJ	1.8	U	0.4	U
Heptachlor	UG/KG	0.38	U	0.39	U	0.38	U	0.22	J	0.38	U	7.6	UJ	1.8	U	0.4	U
Heptachlor Epoxide	UG/KG	0.38	U	0.39	U	0.38	U	0.38	U	0.22	J	7.6	UJ	1.8	U	0.4	U
p,p'-Methoxychlor	UG/KG	3.8	U	3.9	U	3.8	U	3.8	U	3.8	U	57	J	18	U	4	U
Toxaphene	UG/KG	38	U	39	U	38	U	38	U	38	U	760	UJ	180	U	40	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		3613306 REG		3613307 REG		3613308 REG		3613309 REG		3613310 REG		3613311 REG		3613312 REG		3618901 REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94	DUPE
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**																
Aluminum	MG/KG	8140		5610		3700		3990		4750		3430		4470		7950	
Antimony	MG/KG	0.7	UJ	0.7	U	0.7	UJ	0.69	UJ	0.69	UJ	0.7	UJ	0.67	UJ	0.74	R
Arsenic	MG/KG	11.9		5.9		3.9		3.5		5		6.2		124		6.3	
Barium	MG/KG	52.6		54.6		46.7		39.5		51.5		41.9		73.9		71.5	
Beryllium	MG/KG	0.47		0.32		0.24		0.27		0.29		0.24		0.28		0.45	
Bismuth	MG/KG	70.1		69.6		68.8		66.1		66.5		63.1		71.5		76.1	
Cadmium	MG/KG	0.52	U	0.52	U	0.52	U	0.51	U	0.51	U	0.52	U	0.5	U	0.55	U
Calcium	MG/KG	105000		137000		130000		131000		128000		128000		195000		129000	J
Chromium	MG/KG	10.2		7.1		5.6		6.3		6.4		6.5		6.3		10	
Cobalt	MG/KG	7.2		5.4		5.5		6		4.8		5		7.3		8.5	
Copper	MG/KG	24.7	J	14.3	J	14	J	15.5	J	15.1	J	13.6	J	16.2	J	15.1	
Cyanide	MG/KG	0.56	U	0.57	U	0.56	U	0.56	U	0.56	U	0.56	U	0.54	U	0.6	U
Iron	MG/KG	32400		13400		12000		13900		13300		11500		18700		16000	
Lead	MG/KG	11.4		6.7		6.5		5.4		6.4		6.5		9.8		9.7	
Magnesium	MG/KG	39500		59900		52700		50100		53700		53600		57000		52800	
Manganese	MG/KG	387		217		278		294		280		250		502		416	
Mercury	MG/KG	0.11	U	0.11	U	0.11	U	0.11	U	0.11		0.11	U	0.11	U	0.12	U
Nickel	MG/KG	28.1		13.3		14.8		16.1		16.3		13.1		16.6		21.5	
Potassium	MG/KG	1890		1770		1140		1810		1550		992		1570		1780	
Selenium	MG/KG	2.3	J	1.4	J	1.5	J	1.4	J	2.7	J	2.7	J	2.9	J	0.48	UJ
Silver	MG/KG	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1	U	1.1	U
Sodium	MG/KG	427	U	428	U	426	U	420	U	420	U	427	U	407	U	451	U
Thallium	MG/KG	0.93	U	0.82	U	0.81	U	1.9	U	0.8	U	0.88	U	0.78	U	0.86	U
Vanadium	MG/KG	15.9	J	12.3	J	8.4	J	8.7	J	10.5	J	8	J	9.3	J	15.1	J
Zinc	MG/KG	80.6	J	42.5	J	50.5	J	61.1	J	43.6	J	36.1		179		44.7	J

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																	
		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		0361340006SA REG		0361340007SA REG		0361340008SA REG		0361340009SA REG		0361340010SA REG		0361340011SA REG		0361340012SA REG		0362150003SA REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**																
Chloride	MG/KG	23.7		48.6		75.2		53.7		48.7		55.7		18.2		78	J
Fluoride	MG/KG	1.5		1.4		0.92		0.8		0.93		0.96		1.7		1.2	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.6		0.78		0.56	U	0.56	U	0.56	U	0.59		0.54	U	0.74	J
Sulfate	MG/KG	28.3	U	28.3	U	124		139		113		142		26.9	U	40.6	J

		N03301		N03302		N03303		N03304		N03305		N03306		N03307		N03312	
		902-N03301		902-N03302		902-N03303		902-N03304		902-N03305		902-N03306		902-N03307		902-N03312	
		REG		REG		REG		REG		0361340010SA REG		REG		REG		REG	
		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		6/9/94		06/09/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	**Units**																
Cation Exchange Capacity as Na	MEQ/100	667															
PH	UNITS	7.9	J	8.4	J	8.2	J	8	J	8.1	J	8.2	J	8.4	J	8.6	J
Total Organic Carbon	%	0.2	U	0.2475		0.36		0.4325		0.4033		0.3767		0.2	U	0.2	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03			
		N03301	
		902-N03301	
		0361340006SA REG	
		6/9/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	UG/G	0.25	U
1,3-Dinitrobenzene	UG/G	0.25	U
2,4-Dinitrotoluene	UG/G	0.25	U
2,6-Dinitrotoluene	UG/G	0.26	U
HMX	UG/G	2.2	U
Nitrobenzene	UG/G	0.26	U
PETN	UG/G	1	U
RDX	UG/G	1	U
TETRYL	UG/G	0.65	U
1,3,5-Trinitrobenzene	UG/G	0.25	U
2,4,6-Trinitrotoluene	UG/G	0.25	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03																
		N03301			N03302			N03303			N03304			N03305		
		902-N03301			902-N03302			902-N03303			902-N03304			902-N03305		
		3225401 REG			3225402 REG			3225404 REG			3224142 REG			3225405 REG		
		34494			34494			34494			34494			34494		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Am-241	PCI/G	0.0619	NA	U	0.0734	NA	U	0.0611	NA	U	0.102	NA	U	0.067	NA	U
Bi-207	PCI/G	0.0159	NA	U	0.025	NA	U	0.0144	NA	U	0.027	NA	U	0.0162	NA	U
Bi-210m	PCI/G	0.0173	NA	U	0.0191	NA	U	0.0157	NA	U	0.0311	NA	U	0.0187	NA	U
Co-60	PCI/G	0.02	NA	U	0.3	NA	U	0.0199	NA	U	0.0304	NA	U	0.0231	NA	U
Cs-137	PCI/G	0.0172	NA	U	0.0313	NA	U	0.0163	NA	U	0.0318	NA	U	0.0183	NA	U
K-40	PCI/G	9.15	1.03		13.7	1.48		12.7	1.36		16	1.8		13.2	1.47	
Pu-238	PCI/G	0.769	0.034	J	0.111	0.0405	J	0.13	0.0445	J	0.191	0.0377		0.184	0.054	J
Pu-239/240	PCI/G	0.022	0.0176	J	0.0108	0.0109	J	0.0204	0.0146	J	0.0112	NA	U	0.00831	NA	UJ
Pu-242	PCI/G	0.0256	NA	UJ	0.00733	NA	UJ	0.00689	NA	UJ	0.0234	NA	U	0.0226	NA	UJ
Ra-226	PCI/G	0.424	NA	U	0.508	NA	U	1.51	0.378		1.78	0.65		0.48	NA	U
Sr-90	PCI/G	1.05	0.293		0.67	0.239		0.448	NA	U	0.502	NA	U	1	0.284	
Th-228	PCI/G	0.442	0.0937		0.71	0.128		0.551	0.108		0.47	0.0924		0.62	0.118	
Th-230	PCI/G	1.11	0.174		0.999	0.163		0.959	0.158		0.98	0.156		1.14	0.179	
Th-232	PCI/G	0.482	0.0947		0.676	0.122		0.597	0.112		0.448	0.0894		0.559	0.105	
Tritium	PCI/G	0.101	0.0392	R	0.32	0.048	R	0.381	0.0418	R	1.49	0.0644	R	1.49	0.0766	R
U-234	PCI/G	0.861	0.158		0.789	0.141		0.984	0.16		0.825	0.146		0.968	0.176	
U-235	PCI/G	0.103	0.0431		0.0482	0.0272		0.0635	0.0281		0.0465	0.0255		0.037	0.0251	
U-238	PCI/G	0.872	0.159		0.879	0.152		1.55	0.231		1.05	0.176		1.03	0.184	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N03										
		N03306			N03307			N03312		
		902-N03306			902-N03307			902-N03312		
		3224144 REG			3224143 REG			3225403 REG		
		34494			34494			06/09/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**									
Am-241	PCI/G	0.0809	NA	U	0.0802	NA	U	0.0782	NA	U
Bi-207	PCI/G	0.0201	NA	U	0.0247	NA	U	0.0188	NA	U
Bi-210m	PCI/G	0.0226	NA	U	0.0273	NA	U	0.0219	NA	U
Co-60	PCI/G	0.0256	NA	U	0.0297	NA	U	0.0268	NA	U
Cs-137	PCI/G	0.0229	NA	U	0.0275	NA	U	0.0222	NA	U
K-40	PCI/G	12.7	1.4		17.3	1.93		13.7	1.54	
Pu-238	PCI/G	0.189	0.0376		0.193	0.0378		0.059	0.0308	J
Pu-239/240	PCI/G	0.00336	NA	U	0.00832	NA	U	0.0255	NA	UJ
Pu-242	PCI/G	0.00372	0.00432		0.00306	NA	U	0.0174	NA	UJ
Ra-226	PCI/G	0.536	NA	U	0.61	NA	U	0.535	NA	U
Sr-90	PCI/G	0.366	NA	U	0.353	NA	U	0.34	0.192	R
Th-228	PCI/G	0.395	0.0841		0.469	0.0848		0.623	0.118	
Th-230	PCI/G	0.868	0.145		0.8	0.126		1.1	0.177	
Th-232	PCI/G	0.377	0.0812		0.43	0.0791		0.792	0.138	
Tritium	PCI/G	0.869	0.0624	R	0.377	0.038	R	0.228	0.0449	R
U-234	PCI/G	0.734	0.131		0.684	0.122		0.617	0.119	
U-235	PCI/G	0.0581	0.0276		0.0457	0.0235		0.0298	NA	U
U-238	PCI/G	0.695	0.126		0.712	0.126		0.767	0.139	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04									
		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		H4245.D REG		H4246.D REG		H4247.D REG		H4248.D REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units								
Acetone	UG/KG	12	U	12	U	15	U	11	U
Acetonitrile	UG/KG	125	U	118	U	115	U	110	U
Acrylonitrile	UG/KG	125	U	118	U	115	U	110	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Bromomethane	UG/KG	12	U	12	U	12	U	11	U
2-Butanone	UG/KG	12	U	12	U	12	U	11	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Chloroethane	UG/KG	12	U	12	U	12	U	11	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Chloromethane	UG/KG	12	U	12	U	12	U	11	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	1	J	5	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,2-Diethylbenzene	UG/KG	25	U	24	U	23	U	22	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Hexane	UG/KG	12	U	12	U	12	U	11	U
2-Hexanone	UG/KG	12	U	12	U	12	U	11	U
Iodomethane	UG/KG	12	U	12	U	12	U	11	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	U	11	U
Methylene Chloride	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Toluene	UG/KG	5	J	4	J	5	J	2	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	5	UJ
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	11	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	11	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	11	U
Xylene, Total	UG/KG	5	J	6	UJ	6	UJ	5	UJ
Tentatively Identified Compounds		1		2		2		2	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04									
		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		A1201779.D REG		A1301780.D REG		A1401781.D REG		A1501782.D REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Acenaphthene	UG/KG	420	U	390	U	380	U	370	U
Acenaphthylene	UG/KG	420	U	390	U	380	U	370	U
Anthracene	UG/KG	420	U	390	U	380	U	370	U
Benzo(a)anthracene	UG/KG	420	U	390	U	380	U	370	U
Benzo(a)pyrene	UG/KG	420	U	390	U	380	U	370	U
Benzo(b)fluoranthene	UG/KG	420	U	390	U	380	U	370	U
Benzo(g,h,i)perylene	UG/KG	420	U	390	U	380	U	370	U
Benzo(k)fluoranthene	UG/KG	420	U	390	U	380	U	370	U
Benzoic Acid	UG/KG	2000	U	1900	U	1900	U	1800	U
Benzyl Alcohol	UG/KG	420	U	390	U	380	U	370	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U	390	U	380	U	370	U
bis(2-Chloroethoxy)methane	UG/KG	420	U	390	U	380	U	370	U
bis(2-Chloroethyl)ether	UG/KG	420	U	390	U	380	U	370	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	U	390	U	380	U	71	J
4-Bromophenyl-phenylether	UG/KG	420	U	390	U	380	U	370	U
Butylbenzylphthalate	UG/KG	420	U	390	U	380	U	370	U
Carbazole	UG/KG	420	U	390	U	380	U	370	U
4-Chloro-3-methylphenol	UG/KG	420	U	390	U	380	U	370	U
4-Chloroaniline	UG/KG	420	U	390	U	380	U	370	U
2-Chloronaphthalene	UG/KG	420	U	390	U	380	U	370	U
2-Chlorophenol	UG/KG	420	U	390	U	380	U	370	U
4-Chlorophenyl-phenylether	UG/KG	420	U	390	U	380	U	370	U
Chrysene	UG/KG	420	U	390	U	380	U	370	U
Di-n-butylphthalate	UG/KG	420	U	390	U	46	J	370	U
Di-n-octylphthalate	UG/KG	420	U	390	U	380	U	370	U
Dibenzo(a,h)anthracene	UG/KG	420	U	390	U	380	U	370	U
Dibenzofuran	UG/KG	420	U	390	U	380	U	370	U
1,2-Dichlorobenzene	UG/KG	420	U	390	U	380	U	370	U
1,3-Dichlorobenzene	UG/KG	420	U	390	U	380	U	370	U
1,4-Dichlorobenzene	UG/KG	420	U	390	U	380	U	370	U
3,3'-Dichlorobenzidine	UG/KG	420	U	390	U	380	U	370	U
2,4-Dichlorophenol	UG/KG	420	U	390	U	380	U	370	U
Diethylphthalate	UG/KG	420	U	390	U	380	U	370	U
2,4-Dimethylphenol	UG/KG	420	U	390	U	380	U	370	U
Dimethylphthalate	UG/KG	420	U	390	U	380	U	370	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	940	U	920	U	880	U
2,4-Dinitrophenol	UG/KG	1000	U	940	U	920	U	880	U
2,4-Dinitrotoluene	UG/KG	420	U	390	U	380	U	370	U
2,6-Dinitrotoluene	UG/KG	420	U	390	U	380	U	370	U
Fluoranthene	UG/KG	420	U	390	U	380	U	370	U
Fluorene	UG/KG	420	U	390	U	380	U	370	U
Hexachlorobenzene	UG/KG	420	U	390	U	380	U	370	U
Hexachlorobutadiene	UG/KG	420	U	390	U	380	U	370	U
Hexachlorocyclopentadiene	UG/KG	420	U	390	U	380	U	370	U
Hexachloroethane	UG/KG	420	U	390	U	380	U	370	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04									
		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		A1201779.D REG		A1301780.D REG		A1401781.D REG		A1501782.D REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	390	U	380	U	370	U
Isophorone	UG/KG	420	U	390	U	380	U	370	U
2-Methylnaphthalene	UG/KG	420	U	390	U	380	U	370	U
2-Methylphenol	UG/KG	420	U	390	U	380	U	370	U
4-Methylphenol	UG/KG	420	U	390	U	380	U	370	U
N-Nitroso-di-n-propylamine	UG/KG	420	U	390	U	380	U	370	U
N-Nitrosodiphenylamine	UG/KG	420	U	390	U	380	U	370	U
Naphthalene	UG/KG	420	U	390	U	380	U	370	U
2-Nitroaniline	UG/KG	1000	U	940	U	920	U	880	U
3-Nitroaniline	UG/KG	1000	U	940	U	920	U	880	U
4-Nitroaniline	UG/KG	1000	U	940	U	920	U	880	U
Nitrobenzene	UG/KG	420	U	390	U	380	U	370	U
2-Nitrophenol	UG/KG	420	U	390	U	380	U	370	U
4-Nitrophenol	UG/KG	1000	U	940	U	920	U	880	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	390	U	380	U	370	U
Pentachlorophenol	UG/KG	1000	U	940	U	920	U	880	U
Phenanthrene	UG/KG	420	U	390	U	380	U	370	U
Phenol	UG/KG	420	U	390	U	380	U	370	U
Pyrene	UG/KG	420	U	390	U	380	U	370	U
1,2,4-Trichlorobenzene	UG/KG	420	U	390	U	380	U	370	U
2,4,5-Trichlorophenol	UG/KG	1000	U	940	U	920	U	880	U
2,4,6-Trichlorophenol	UG/KG	420	U	390	U	380	U	370	U
Tentatively Identified Compounds		17		29		30		29	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04									
		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		36046-05 REG		36046-06 REG		36046-07 REG		36046-08 REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
alpha-BHC	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
alpha-Chlordane	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
Aroclor 1232	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
Aroclor-1016	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
Aroclor-1221	UG/KG	17	U	16	UJ	15	U	15	U
Aroclor-1242	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
Aroclor-1248	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
Aroclor-1254	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
Aroclor-1260	UG/KG	8.2	U	7.7	UJ	7.6	U	7.2	U
beta-BHC	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
4,4'-DDD	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
4,4'-DDE	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
4,4'-DDT	UG/KG	0.82	UJ	0.77	UJ	0.76	UJ	0.72	UJ
delta-BHC	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
Dieldrin	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
Endosulfan I	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
Endosulfan II	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
Endosulfan Sulfate	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
Endrin	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
Endrin Aldehyde	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
Endrin Ketone	UG/KG	0.82	U	0.77	UJ	0.76	U	0.72	U
gamma-BHC (Lindane)	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
gamma-Chlordane	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
Heptachlor	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
Heptachlor Epoxide	UG/KG	0.42	U	0.4	UJ	0.39	U	0.37	U
p,p'-Methoxychlor	UG/KG	4.2	U	4	UJ	3.9	U	3.7	U
Toxaphene	UG/KG	42	U	40	UJ	39	U	37	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04									
		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		3604805 REG		3604806 REG		3604807 REG		3604808 REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	11300		6410		3660		2570	
Antimony	MG/KG	0.77	R	0.73	R	0.71	R	0.68	R
Arsenic	MG/KG	10.4		7		11		4.3	
Barium	MG/KG	113		96.5		44.2		51.3	
Beryllium	MG/KG	0.69		0.37		0.24		0.16	
Bismuth	MG/KG	31		62.6		76.5		64.4	
Cadmium	MG/KG	0.57	U	0.54	U	0.53	U	0.51	U
Calcium	MG/KG	3870		144000		133000		234000	
Chromium	MG/KG	14.3		10.1		8.8		7.5	
Cobalt	MG/KG	11.8		8.7		5.5		3.7	
Copper	MG/KG	19.9		20.3		16.1		10.3	
Cyanide	MG/KG	0.62	U	0.59	U	0.58	U	0.55	U
Iron	MG/KG	24900		21200		15000		9480	
Lead	MG/KG	15.2		11.8		9.5		6	
Magnesium	MG/KG	3490		47800		51200		56400	
Manganese	MG/KG	991		885		530		707	
Mercury	MG/KG	0.12	U	0.12	U	0.12	U	0.11	U
Nickel	MG/KG	25.3		23.9		14.2		10.1	
Potassium	MG/KG	1060		1130		1020		830	U
Selenium	MG/KG	2.2		1.3		2.2		3.9	
Silver	MG/KG	1.2	U	1.1	U	1.1	U	1.1	U
Sodium	MG/KG	471	U	444	U	435	U	416	U
Thallium	MG/KG	0.9	U	0.85	U	0.83	U	0.79	U
Vanadium	MG/KG	25.3		13.9		8.6		6.7	
Zinc	MG/KG	73.3		58.2		50		28.9	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001
PIPELINE - STATION N04

		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		0360490005SA REG		0360490006SA REG		0360490007SA REG		0360490008SA REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**								
Chloride	MG/KG	18.7	U	17.6	U	17.3	U	16.5	U
Fluoride	MG/KG	1.2	J	2.1	J	0.98	J	1.2	J
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.62	U	0.59	U	0.59	J	0.55	U
Sulfate	MG/KG	34.5	J	29.3	UJ	28.8	UJ	27.5	UJ

		N04301		N04302		N04303		N04304	
		902-N04301		902-N04302		902-N04303		902-N04304	
		REG		0360490006SA REG		0360490007SA REG		0360490008SA REG	
		6/8/94		6/8/94		6/8/94		6/8/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	**Units**								
Cation Exchange Capacity as Na	MEQ/100	13.6							
PH	UNITS	7.9		8.4		8.6		8.6	
Total Organic Carbon	%	0.2	U	0.29		0.8075		0.2	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04			
		N04301	
		902-N04301	
		0360490005SA REG	
		6/8/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	UG/G	0.31	U
1,3-Dinitrobenzene	UG/G	0.31	U
2,4-Dinitrotoluene	UG/G	0.31	U
2,6-Dinitrotoluene	UG/G	0.32	U
HMX	UG/G	2.7	U
Nitrobenzene	UG/G	0.32	U
PETN	UG/G	1.2	U
RDX	UG/G	1.2	U
TETRYL	UG/G	0.81	U
1,3,5-Trinitrobenzene	UG/G	0.31	U
2,4,6-Trinitrotoluene	UG/G	0.31	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N04													
		N04301			N04302			N04303			N04304		
		902-N04301			902-N04302			902-N04303			902-N04304		
		3223019 REG			3223020 REG			3223021 REG			3223022 REG		
		34493			34493			34493			34493		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**												
Am-241	PCI/G	0.159	NA	U	0.0801	NA	U	0.0884	NA	U	0.0687	NA	U
Bi-207	PCI/G	0.026	NA	U	0.0225	NA	U	0.023	NA	U	0.0218	NA	U
Bi-210m	PCI/G	0.0294	NA	U	0.0253	NA	U	0.0273	NA	U	0.0251	NA	U
Co-60	PCI/G	0.0364	NA	U	0.0292	NA	U	0.0286	NA	U	0.0293	NA	U
Cs-137	PCI/G	0.0293	NA	U	0.0256	NA	U	0.0274	NA	U	0.0253	NA	U
K-40	PCI/G	17.6	1.99		12	1.36		11.2	1.34		8.81	1.13	
Pu-238	PCI/G	0.3	0.0568	UJ	0.591	0.0603	UJ	0.174	0.0277	U	0.143	0.053	U
Pu-239/240	PCI/G	0.0153	NA	UJ	0.0241	NA	UJ	0.00572	0.00435	U	0.0252	NA	U
Pu-242	PCI/G	0.00561	NA	UJ	0.00217	NA	UJ	0.00816	0.0052		0.00925	NA	U
Ra-226	PCI/G	3.3	0.772		1.45	0.609		1.82	0.637		0.547	NA	U
Sr-90	PCI/G	0.728	NA	U	1.05	0.464		0.644	NA	U	1.3	0.427	
Th-228	PCI/G	0.902	0.157		0.421	0.0925		0.342	0.91		0.251	0.0657	
Th-230	PCI/G	1.52	0.231		0.786	0.137		0.74	0.142		0.642	0.117	
Th-232	PCI/G	0.924	0.157		0.0408	0.0876		0.318	0.0815		0.307	0.0717	
Tritium	PCI/G	0.703	0.0814	R	0.124	0.0283	R	0.133	0.0365	R	0.0982	0.0293	R
U-234	PCI/G	1.03	0.17		0.617	0.117		0.667	0.134		0.496	0.103	
U-235	PCI/G	0.0556	0.0271		0.0236	NA	U	0.0612	0.0133		0.00914	NA	U
U-238	PCI/G	1.11	0.18		0.636	0.119		0.637	0.127		0.584	0.115	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		H4237.D REG		H4239.D REG		H4240.D REG		H4241.D REG		H4238.D REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	4	UJ	12	U	11	U	4	UJ
Acetonitrile	UG/KG	120	U	122	U	122	U	112	U	122	U
Acrylonitrile	UG/KG	120	U	122	U	122	U	112	U	122	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
2-Butanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	24	U	24	U	22	U	24	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	12	U	12	U	12	U	11	U	12	U
2-Hexanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Iodomethane	UG/KG	12	U	12	U	12	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	12	U	11	U	12	U
Methylene Chloride	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	4	UJ
Styrene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	5	J	5	J	7	J	4	J	2	J
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Acetate	UG/KG	12	U	12	U	12	U	11	U	12	U
Vinyl Chloride	UG/KG	12	U	12	U	12	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds		2		2		2		2		2	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		G0501437.D REG		G0701439.D REG		G0801440.D REG		G0901441.D REG		G0601438.D REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	400	U	410	U	400	U	370	U	410	U
Acenaphthylene	UG/KG	400	U	410	U	400	U	370	U	410	U
Anthracene	UG/KG	400	U	410	U	400	U	370	U	410	U
Benzo(a)anthracene	UG/KG	66	J	410	U	400	U	370	U	410	U
Benzo(a)pyrene	UG/KG	64	J	410	U	400	U	370	U	410	U
Benzo(b)fluoranthene	UG/KG	69	J	50	J	400	U	370	U	410	U
Benzo(g,h,i)perylene	UG/KG	400	U	410	U	400	U	370	U	410	U
Benzo(k)fluoranthene	UG/KG	67	J	410	U	400	U	370	U	410	U
Benzoic Acid	UG/KG	74	J	2000	U	56	J	64	J	74	J
Benzyl Alcohol	UG/KG	2000	U	2000	U	2000	U	1900	U	2000	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	410	U	400	U	370	U	410	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	410	U	400	U	370	U	410	U
bis(2-Chloroethyl)ether	UG/KG	400	U	410	U	400	U	370	U	410	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Bromophenyl-phenylether	UG/KG	400	U	410	U	400	U	370	U	410	U
Butylbenzylphthalate	UG/KG	400	U	59	J	400	U	370	U	43	J
Carbazole	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Chloro-3-methylphenol	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Chloroaniline	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Chloronaphthalene	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Chlorophenol	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Chlorophenyl-phenylether	UG/KG	400	U	410	U	400	U	370	U	410	U
Chrysene	UG/KG	91	J	410	U	400	U	370	U	410	U
Di-n-butylphthalate	UG/KG	400	U	410	U	400	U	57	J	410	U
Di-n-octylphthalate	UG/KG	400	U	410	U	400	U	370	U	410	U
Dibenzo(a,h)anthracene	UG/KG	400	U	410	U	400	U	370	U	410	U
Dibenzofuran	UG/KG	400	U	410	U	400	U	370	U	410	U
1,2-Dichlorobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
1,3-Dichlorobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
1,4-Dichlorobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
3,3'-Dichlorobenzidine	UG/KG	400	U	410	U	400	U	370	U	410	U
2,4-Dichlorophenol	UG/KG	400	U	410	U	400	U	370	U	410	U
Diethylphthalate	UG/KG	400	U	410	U	400	U	370	U	410	U
2,4-Dimethylphenol	UG/KG	400	U	410	U	400	U	370	U	410	U
Dimethylphthalate	UG/KG	400	U	410	U	400	U	370	U	410	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
2,4-Dinitrophenol	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
2,4-Dinitrotoluene	UG/KG	400	U	410	U	400	U	370	U	410	U
2,6-Dinitrotoluene	UG/KG	400	U	410	U	400	U	370	U	410	U
Fluoranthene	UG/KG	120	J	51	J	400	U	370	U	410	U
Fluorene	UG/KG	400	U	410	U	400	U	370	U	410	U
Hexachlorobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
Hexachlorobutadiene	UG/KG	400	U	410	U	400	U	370	U	410	U
Hexachlorocyclopentadiene	UG/KG	400	U	410	U	400	U	370	U	410	U
Hexachloroethane	UG/KG	400	U	410	U	400	U	370	U	410	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		G0501437.D REG		G0701439.D REG		G0801440.D REG		G0901441.D REG		G0601438.D REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Indeno(1,2,3-c,d)pyrene	UG/KG	41	J	410	U	400	U	370	U	410	U
Isophorone	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Methylnaphthalene	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Methylphenol	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Methylphenol	UG/KG	400	U	410	U	400	U	370	U	410	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	410	U	400	U	370	U	410	U
N-Nitrosodiphenylamine	UG/KG	400	U	410	U	400	U	370	U	410	U
Naphthalene	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Nitroaniline	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
3-Nitroaniline	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
4-Nitroaniline	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
Nitrobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
2-Nitrophenol	UG/KG	400	U	410	U	400	U	370	U	410	U
4-Nitrophenol	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	410	U	400	U	370	U	410	U
Pentachlorophenol	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
Phenanthrene	UG/KG	54	J	410	U	400	U	370	U	410	U
Phenol	UG/KG	400	U	410	U	400	U	370	U	410	U
Pyrene	UG/KG	83	J	42	J	400	U	370	U	410	U
1,2,4-Trichlorobenzene	UG/KG	400	U	410	U	400	U	370	U	410	U
2,4,5-Trichlorophenol	UG/KG	1000	U	1000	U	1000	U	940	U	1000	U
2,4,6-Trichlorophenol	UG/KG	400	U	410	U	400	U	370	U	410	U
Tentatively Identified Compounds		22		21		16		23		23	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		36022-13 REG		36022-15 REG		36022-16 REG		36022-17 REG		36022-14 REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**										
Aldrin	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
alpha-BHC	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
alpha-Chlordane	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
Aroclor 1232	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
Aroclor-1016	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
Aroclor-1221	UG/KG	16	U	16	U	16	U	15	U	16	U
Aroclor-1242	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
Aroclor-1248	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
Aroclor-1254	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
Aroclor-1260	UG/KG	7.8	U	8	U	8	U	7.4	U	8	U
beta-BHC	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
4,4'-DDD	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
4,4'-DDE	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
4,4'-DDT	UG/KG	0.78	UJ	0.8	UJ	0.8	UJ	0.74	UJ	0.8	UJ
delta-BHC	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
Dieldrin	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
Endosulfan I	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
Endosulfan II	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
Endosulfan Sulfate	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
Endrin	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
Endrin Aldehyde	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
Endrin Ketone	UG/KG	0.78	U	0.8	U	0.8	U	0.74	U	0.8	U
gamma-BHC (Lindane)	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
gamma-Chlordane	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
Heptachlor	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
Heptachlor Epoxide	UG/KG	0.4	U	0.41	U	0.41	U	0.38	U	0.41	U
p,p'-Methoxychlor	UG/KG	4	UJ	4.1	UJ	4.1	UJ	3.8	UJ	4.1	UJ
Toxaphene	UG/KG	40	U	41	U	41	U	38	U	41	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		3602113 REG		3602115 REG		3602116 REG		3602117 REG		3602114 REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**										
Aluminum	MG/KG	9770		4950		7680		3820		11300	
Antimony	MG/KG	0.74	U	0.76	U	0.75	U	0.7	U	0.76	U
Arsenic	MG/KG	7.7		7.7		7		6.5		9.7	
Barium	MG/KG	73.9		58.7		59.5		39.5		89.1	
Beryllium	MG/KG	0.67		0.29		0.42		0.21		0.68	
Bismuth	MG/KG	29.7		72.1		69.1		72.2		31.3	
Cadmium	MG/KG	0.55	U	0.56	U	0.56	U	0.52	U	0.56	U
Calcium	MG/KG	18900	J	175000		126000		170000		3190	J
Chromium	MG/KG	13.1		8.1		13.1		6.5		14.7	
Cobalt	MG/KG	8.9		8		12.1		6.2		14	
Copper	MG/KG	19.2		21.1		24.6		23.5		23.3	
Cyanide	MG/KG	0.6	U	0.61	U	0.61	U			0.61	U
Iron	MG/KG	18500		19100		25300		15700		24700	
Lead	MG/KG	17.3		12		7		7.7		15.6	
Magnesium	MG/KG	9810	J	47900		34100		44900		3770	J
Manganese	MG/KG	583		849		805		544		875	
Mercury	MG/KG	0.12	U	0.12	U	0.12	U	0.11	U	0.12	U
Nickel	MG/KG	20.5		19.2		27.6		16.1		21.4	
Potassium	MG/KG	970		1280		1930		1320		919	
Selenium	MG/KG	1.1	U	2.4		1.1	U	2.4		1.1	U
Silver	MG/KG	1.2	U	1.2	U	1.2	U	1.1	U	1.2	U
Sodium	MG/KG	453	U	463	U	459	U	426	U	461	U
Thallium	MG/KG	0.86	U	0.88	U	0.87	U	0.81	U	0.88	U
Vanadium	MG/KG	21.1		10.4		14.3		10.9		22.4	
Zinc	MG/KG	57.5		70.5		65.1		48.5		75.9	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05											
		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		0360230013SA REG		0360230015SA REG		0360230016SA REG		0360230017SA REG		0360230014SA REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	**Units**										
Chloride	MG/KG	18	U	18.4	U	18.2	U	16.9	U	18.3	U
Fluoride	MG/KG	1.4	J	2		2.4		0.91		0.61	UJ
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.6	U	0.61	U	0.61	U	0.56	U	0.61	U
Sulfate	MG/KG	30	U	25		30.4	U	28.2	U	561	R

		N05301		N05302		N05303		N05304		N05311	
		902-N05301		902-N05302		902-N05303		902-N05304		902-N05311	
		0360230013SA REG		REG		REG		REG		0360230014SA REG	
		6/7/94		6/7/94		6/7/94		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	**Units**										
PH	UNITS	7.8		8.7		8.5		8.7		7.3	
Total Organic Carbon	%	0.3075		0.2	U	0.2	U	0.2	U	0.29	
Cation Exchange Capacity as Na	MEQ/100			16.3							

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05					
		N05301		N05311	
		902-N05301		902-N05311	
		0360230013SA REG		0360230014SA REG	
		6/7/94		06/07/94DUPE	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.3	U	0.3	U
1,3-Dinitrobenzene	UG/G	0.3	U	0.3	U
2,4-Dinitrotoluene	UG/G	0.3	U	0.3	U
2,6-Dinitrotoluene	UG/G	0.31	U	0.32	U
HMX	UG/G	2.6	U	2.7	U
Nitrobenzene	UG/G	0.31	U	0.32	U
PETN	UG/G	1.2	U	1.2	U
RDX	UG/G	1.2	U	1.2	U
TETRYL	UG/G	0.78	U	0.79	U
1,3,5-Trinitrobenzene	UG/G	0.3	U	0.3	U
2,4,6-Trinitrotoluene	UG/G	0.3	U	0.3	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N05																
		N05301			N05302			N05303			N05304			N05311		
		902-N05301			902-N05302			902-N05303			902-N05304			902-N05311		
		3222839 REG			3222840 REG			3222841 REG			3222842 REG			3222843 REG		
		34492			34492			34492			34492			06/07/94DUPE		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Am-241	PCI/G	0.0707	NA	U	0.154	0.0584	U	0.0872	NA	U	0.145	NA	U	0.0933	NA	U
Bi-207	PCI/G	0.0174	NA	U	0.0147	NA	U	0.0211	NA	U	0.0246	NA	U	0.0213	NA	U
Bi-210m	PCI/G	0.0184	NA	U	0.0167	NA	U	0.0236	NA	U	0.0283	NA	U	0.026	NA	U
Co-60	PCI/G	0.0235	NA	U	0.0204	NA	U	0.0292	NA	U	0.0314	NA	U	0.0315	NA	U
Cs-137	PCI/G	0.0192	NA	U	0.0169	NA	U	0.0251	NA	U	0.0277	NA	U	0.0251	NA	U
K-40	PCI/G	17.5	1.88		1.11	1.21		18.9	2.09		11.7	1.42		19.4	2.14	
Pu-238	PCI/G	0.304	0.0675		0.897	0.158		0.31	0.0605		0.16	0.0397		1.65	0.24	
Pu-239/240	PCI/G	0.0137	NA	U	0.0169	NA	U	0.0101	NA	U	0.0167	NA	U	0.0176	NA	U
Pu-242	PCI/G	0.0137	NA	U	0.0205	NA	U	0.011	NA	U	0.0123	NA	U	0.0176	NA	U
Ra-226	PCI/G	3.45	0.533		0.455	NA	U	1.77	0.597		0.501	NA	U	3.14	0.747	
Sr-90	PCI/G	0.978	0.32		2.39	0.374		3.27	0.473		0.401	NA	U	0.374	NA	U
Th-228	PCI/G	0.917	0.15		0.557	0.123		0.73	0.146		0.433	0.22	J	1.01	0.249	J
Th-230	PCI/G	1.74	0.249		1.02	0.18		0.922	0.173		1.7	0.424	J	1.7	0.34	J
Th-232	PCI/G	0.814	0.138		0.458	0.104		0.676	0.141	J	0.501	0.2	J	1.15	0.256	J
Tritium	PCI/G	0.73	0.079		0.259	0.0329		0.152	0.0336		0.181	0.0321		0.436	0.0695	
U-234	PCI/G	0.815	0.143		0.692	0.13		0.704	0.13		0.551	0.11		0.794	0.138	
U-235	PCI/G	0.0507	0.0261		0.041	0.0242		0.036	0.0222		0.0408	NA	U	0.0389	0.0237	
U-238	PCI/G	0.849	0.147		0.882	0.157		0.721	0.132		0.709	0.133		0.91	0.154	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		J1079.D REG		J1080.D REG		J1081.D REG		J1082.D REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	12	U	13	U	11	U	13	U
Acetonitrile	UG/KG	122	U	126	U	110	U	130	U
Acrylonitrile	UG/KG	122	U	126	U	110	U	130	U
Benzene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Bromomethane	UG/KG	12	U	13	U	11	U	13	U
2-Butanone	UG/KG	12	U	13	U	11	U	13	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Chloroethane	UG/KG	12	U	13	U	11	U	13	U
Chloroform	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Chloromethane	UG/KG	12	U	13	U	11	U	13	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	25	U	22	U	26	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Hexane	UG/KG	2	J	3	J	2	J	3	J
2-Hexanone	UG/KG	12	U	13	U	11	U	13	U
Iodomethane	UG/KG	12	U	13	U	11	U	13	U
4-Methyl-2-pentanone	UG/KG	12	U	13	U	11	U	13	U
Methylene Chloride	UG/KG	13	U	17	U	12	U	16	U
Styrene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	13	U	11	U	13	U
Vinyl Acetate	UG/KG	12	U	13	U	11	U	13	U
Vinyl Chloride	UG/KG	12	U	13	U	11	U	13	U
Xylene, Total	UG/KG	6	UJ	6	UJ	5	UJ	6	UJ
Tentatively Identified Compounds		1		2					

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		G1801398.D REG		G0101405.D REG		G0201406.D REG		G0301407.D REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Acenaphthene	UG/KG	400	U	420	U	360	U	430	U
Acenaphthylene	UG/KG	400	U	420	U	360	U	430	U
Anthracene	UG/KG	400	U	420	U	360	U	430	U
Benzo(a)anthracene	UG/KG	400	U	420	U	360	U	430	U
Benzo(a)pyrene	UG/KG	400	U	420	U	360	U	430	U
Benzo(b)fluoranthene	UG/KG	400	U	420	U	360	U	430	U
Benzo(g,h,i)perylene	UG/KG	400	U	420	U	360	U	430	U
Benzo(k)fluoranthene	UG/KG	400	U	420	U	360	U	430	U
Benzoic Acid	UG/KG	50	J	50	J	37	J	2200	U
Benzyl Alcohol	UG/KG	400	U	420	U	360	U	430	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	420	U	360	U	430	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	420	U	360	U	430	U
bis(2-Chloroethyl)ether	UG/KG	400	U	420	U	360	U	430	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	420	U	360	U	430	U
4-Bromophenyl-phenylether	UG/KG	400	U	420	U	360	U	430	U
Butylbenzylphthalate	UG/KG	400	U	420	U	360	U	430	U
Carbazole	UG/KG	400	U	420	U	360	U	430	U
4-Chloro-3-methylphenol	UG/KG	400	U	420	U	360	U	430	U
4-Chloroaniline	UG/KG	400	U	420	U	360	U	430	U
2-Chloronaphthalene	UG/KG	400	U	420	U	360	U	430	U
2-Chlorophenol	UG/KG	400	U	420	U	360	U	430	U
4-Chlorophenyl-phenylether	UG/KG	400	U	420	U	360	U	430	U
Chrysene	UG/KG	400	U	420	U	360	U	56	J
Di-n-butylphthalate	UG/KG	400	U	420	U	360	U	430	U
Di-n-octylphthalate	UG/KG	400	U	420	U	360	U	430	U
Dibenzo(a,h)anthracene	UG/KG	400	U	420	U	360	U	430	U
Dibenzofuran	UG/KG	400	U	420	U	360	U	430	U
1,2-Dichlorobenzene	UG/KG	400	U	420	U	360	U	430	U
1,3-Dichlorobenzene	UG/KG	400	U	420	U	360	U	430	U
1,4-Dichlorobenzene	UG/KG	400	U	420	U	360	U	430	U
3,3'-Dichlorobenzidine	UG/KG	400	U	420	U	360	U	430	U
2,4-Dichlorophenol	UG/KG	400	U	420	U	360	U	430	U
Diethylphthalate	UG/KG	400	U	420	U	360	U	430	U
2,4-Dimethylphenol	UG/KG	400	U	420	U	360	U	430	U
Dimethylphthalate	UG/KG	400	U	420	U	360	U	430	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	1000	U	910	U	1100	U
2,4-Dinitrophenol	UG/KG	1000	U	1000	U	910	U	1100	U
2,4-Dinitrotoluene	UG/KG	400	U	420	U	360	U	430	U
2,6-Dinitrotoluene	UG/KG	400	U	420	U	360	U	430	U
Fluoranthene	UG/KG	49	J	420	U	360	U	73	J
Fluorene	UG/KG	400	U	420	U	360	U	430	U
Hexachlorobenzene	UG/KG	400	U	420	U	360	U	430	U
Hexachlorobutadiene	UG/KG	400	U	420	U	360	U	430	U
Hexachlorocyclopentadiene	UG/KG	400	U	420	U	360	U	430	U
Hexachloroethane	UG/KG	400	U	420	U	360	U	430	U

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		G1801398.D REG		G0101405.D REG		G0201406.D REG		G0301407.D REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Indeno(1,2,3-c,d)pyrene	UG/KG	400	U	420	U	360	U	430	U
Isophorone	UG/KG	400	U	420	U	360	U	430	U
2-Methylnaphthalene	UG/KG	400	U	420	U	360	U	430	U
2-Methylphenol	UG/KG	400	U	420	U	360	U	430	U
4-Methylphenol	UG/KG	400	U	420	U	360	U	430	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	420	U	360	U	430	U
N-Nitrosodiphenylamine	UG/KG	400	U	420	U	360	U	430	U
Naphthalene	UG/KG	400	U	420	U	360	U	430	U
2-Nitroaniline	UG/KG	1000	U	1000	U	910	U	1100	U
3-Nitroaniline	UG/KG	1000	U	1000	U	910	U	1100	U
4-Nitroaniline	UG/KG	1000	U	1000	U	910	U	1100	U
Nitrobenzene	UG/KG	400	U	420	U	360	U	430	U
2-Nitrophenol	UG/KG	400	U	420	U	360	U	430	U
4-Nitrophenol	UG/KG	1000	U	1000	U	910	U	1100	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	420	U	360	U	430	U
Pentachlorophenol	UG/KG	1000	U	1000	U	910	U	1100	U
Phenanthrene	UG/KG	400	U	420	U	360	U	430	U
Phenol	UG/KG	400	U	420	U	360	U	430	U
Pyrene	UG/KG	45	J	420	U	360	U	65	J
1,2,4-Trichlorobenzene	UG/KG	400	U	420	U	360	U	430	U
2,4,5-Trichlorophenol	UG/KG	1000	U	1000	U	910	U	1100	U
2,4,6-Trichlorophenol	UG/KG	400	U	420	U	360	U	430	U
Tentatively Identified Compounds		21		25		14		25	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		35929-13 REG		35929-14 REG		35929-15 REG		35929-16 REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
alpha-BHC	UG/KG	0.41	UJ	0.43	UJ	0.37	U	0.44	UJ
alpha-Chlordane	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
Aroclor 1232	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
Aroclor-1016	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
Aroclor-1221	UG/KG	16	U	17	U	15	U	17	UJ
Aroclor-1242	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
Aroclor-1248	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
Aroclor-1254	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
Aroclor-1260	UG/KG	8	U	8.4	U	7.3	U	8.6	UJ
beta-BHC	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
4,4'-DDD	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
4,4'-DDE	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
4,4'-DDT	UG/KG	0.8	UJ	0.84	UJ	0.73	UJ	0.86	UJ
delta-BHC	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
Dieldrin	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
Endosulfan I	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
Endosulfan II	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
Endosulfan Sulfate	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
Endrin	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
Endrin Aldehyde	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
Endrin Ketone	UG/KG	0.8	U	0.84	U	0.73	U	0.86	UJ
gamma-BHC (Lindane)	UG/KG	0.41	UJ	0.43	UJ	0.37	U	0.44	UJ
gamma-Chlordane	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
Heptachlor	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
Heptachlor Epoxide	UG/KG	0.41	U	0.43	U	0.37	U	0.44	UJ
p,p'-Methoxychlor	UG/KG	4.1	UJ	4.3	UJ	3.7	U	4.4	UJ
Toxaphene	UG/KG	41	U	43	U	37	U	44	UJ

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		3593013 REG		3593014 REG		3593015 REG		3593016 REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	12600		10900		3180		5870	
Antimony	MG/KG	0.76	U	0.79	U	0.68	U	0.81	U
Arsenic	MG/KG	9.7	J	10.6	J	4.5	J	6.1	J
Barium	MG/KG	127		77.8		25.9		41.3	
Beryllium	MG/KG	0.7		0.64		0.18		0.28	
Bismuth	MG/KG	34.5		32.4		71.6		61.2	
Cadmium	MG/KG	0.56	U	0.58	U	0.5	U	0.6	U
Calcium	MG/KG	20400		4220		117000		141000	
Chromium	MG/KG	18.7		17		5.6		7	
Cobalt	MG/KG	14		9.4		3.3		6.2	
Copper	MG/KG	22.9		22.5		10		16.2	
Cyanide	MG/KG	0.61	U	0.63	U	0.55	U	0.65	U
Iron	MG/KG	27500	J	25900	J	8890	J	14700	
Lead	MG/KG	15.5		12		5		12.8	
Magnesium	MG/KG	4450		3510		64900		58600	
Manganese	MG/KG	849	J	641	J	400	J	564	J
Mercury	MG/KG	0.12	U	0.13	U	0.11	U	0.13	U
Nickel	MG/KG	24.2		24.5		9.6		14.3	
Potassium	MG/KG	1850		1570		747		1090	
Selenium	MG/KG	1.1	U	1.4		1	U	1.8	
Silver	MG/KG	1.2	U	1.2	U	1.1	U	1.2	U
Sodium	MG/KG	462	U	480	U	414	U	492	U
Thallium	MG/KG	0.88	U	0.91	U	0.79	U	0.94	U
Vanadium	MG/KG	25.8		26.5		9.7		14	
Zinc	MG/KG	85.9		74.3		23.3		43.4	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06									
		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		0357290020SA REG		0357290021SA REG		0357290022SA REG		0357290023SA REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	18.3	U	38.3		26.1		69.4	
Fluoride	MG/KG	0.76		0.77		0.98		0.78	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	2.4		0.63	U	0.55	U	0.98	
Sulfate	MG/KG	50		51		27.4	U	32.6	U

		N06301		N06302		N06303		N06304	
		902-N06301		902-N06302		902-N06303		902-N06304	
		0357290020SA REG		0357290021SA REG		0357290022SA REG		REG	
		6/2/94		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	Units								
Cation Exchange Capacity as Na	MEQ/100	19.5		14					
PH	UNITS	8.4		8.1		8.9	J	8.2	J
Total Organic Carbon	%	0.41		0.3225		3.1		4.9	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06			
		N06301	
		902-N06301	
		0357290020SA REG	
		6/2/94	
		Result	Val
EXPLOSIVES	**Units**		
2-Amino-4,6-dinitrotoluene	UG/G	0.25	U
1,3-Dinitrobenzene	UG/G	0.25	U
2,4-Dinitrotoluene	UG/G	0.25	U
2,6-Dinitrotoluene	UG/G	0.26	U
HMX	UG/G	2.2	U
Nitrobenzene	UG/G	0.26	U
PETN	UG/G	1	U
RDX	UG/G	1	U
TETRYL	UG/G	0.65	U
1,3,5-Trinitrobenzene	UG/G	0.25	U
2,4,6-Trinitrotoluene	UG/G	0.25	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N06													
		N06301			N06302			N06303			N06304		
		902-N06301			902-N06302			902-N06303			902-N06304		
		3222440 REG			3222441 REG			3222442 REG			3222443 REG		
		34487			34487			34487			34487		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units												
Am-241	PCI/G	0.13	NA	U	0.0842	NA	U	0.0804	NA	U	0.0675	NA	U
Bi-207	PCI/G	0.021	NA	U	0.0211	NA	U	0.0217	NA	U	0.0201	NA	U
Bi-210m	PCI/G	0.0248	NA	U	0.0238	NA	U	0.0251	NA	U	0.0236	NA	U
Co-60	PCI/G	0.0624	0.0178		0.027	NA	U	0.0266	NA	U	0.0251	NA	U
Cs-137	PCI/G	0.0516	0.0624		0.0237	NA	U	0.0241	NA	U	0.023	NA	U
K-40	PCI/G	13.5	1.54		19.1	2.01		8.52	1.07		8.78	1.1	
Pu-238	PCI/G	3.48	0.305		0.31	0.04		0.0762	0.0332	R	0.0578	0.0191	R
Pu-239/240	PCI/G	0.0488	0.0124		0.00521	0.00396		0.00712	NA	UJ	0.00365	NA	U
Pu-242	PCI/G	0.00638	NA	U	0.00298	0.00299		0.0712	NA	UJ	0.00364	NA	U
Ra-226	PCI/G	0.562	NA	U	2.39	0.535		1.24	0.553		0.514	NA	U
Sr-90	PCI/G	0.47	NA	U	0.103	NA	UJ	0.813	0.183		0.258	NA	UJ
Th-228	PCI/G	0.647	0.121		0.808	0.141		0.564	0.114		0.305	0.0728	
Th-230	PCI/G	1.28	0.198		1.53	0.229		1.52	0.235		0.885	0.147	
Th-232	PCI/G	0.593	0.111		0.876	0.148		0.473	0.0993		0.246	0.0611	
Tritium	PCI/G	0.565	0.0581		0.116	NA	U	0.164	0.0336		0.703	0.119	U
U-234	PCI/G	0.744	0.133		0.825	0.144		1.13	0.183		0.581	0.114	
U-235	PCI/G	0.0743	0.0322		0.0382	0.0226		0.0757	0.0323		0.04	0.0236	
U-238	PCI/G	0.708	0.127		0.813	0.142		1.08	0.176		0.674	0.126	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		J1070.D REG		J1096.D REG		J1072.D REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**						
Acetone	UG/KG	12	U	12	U	11	U
Acetonitrile	UG/KG	119	U	35	J	114	U
Acrylonitrile	UG/KG	119	U	123	U	114	U
Benzene	UG/KG	6	UJ	6	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	6	UJ	6	UJ
Bromoform	UG/KG	6	UJ	6	UJ	6	UJ
Bromomethane	UG/KG	12	U	12	U	11	U
2-Butanone	UG/KG	12	U	12	U	11	U
Carbon Disulfide	UG/KG	6	UJ	6	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	6	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	6	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	6	UJ	6	UJ
Chloroethane	UG/KG	12	U	12	U	11	U
Chloroform	UG/KG	6	UJ	6	UJ	6	UJ
Chloromethane	UG/KG	12	U	12	U	11	U
1,1-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	6	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	6	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	6	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	6	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	24	U	25	U	23	U
Ethylbenzene	UG/KG	6	UJ	6	UJ	6	UJ
Hexane	UG/KG	12	U	12	U	1	J
2-Hexanone	UG/KG	12	U	12	U	11	U
Iodomethane	UG/KG	12	U	12	U	11	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	11	U
Methylene Chloride	UG/KG	12	U	12	U	11	U
Styrene	UG/KG	6	UJ	6	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	6	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	6	UJ	6	UJ
Toluene	UG/KG	6	UJ	6	UJ	6	UJ
1,1,1-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	6	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	6	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	12	U	12	U	11	U
Vinyl Acetate	UG/KG	12	U	12	U	11	U
Vinyl Chloride	UG/KG	12	U	12	U	11	U
Xylene, Total	UG/KG	6	UJ	6	UJ	6	UJ
Tentatively Identified Compounds		1		1		1	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		G0901389.D REG		G1001390.D REG		G1101391.D REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**						
Acenaphthene	UG/KG	400	U	410	U	380	U
Acenaphthylene	UG/KG	400	U	410	U	380	U
Anthracene	UG/KG	400	U	410	U	380	U
Benzo(a)anthracene	UG/KG	400	U	410	U	380	U
Benzo(a)pyrene	UG/KG	400	U	410	U	380	U
Benzo(b)fluoranthene	UG/KG	400	U	410	U	380	U
Benzo(g,h,i)perylene	UG/KG	400	U	410	U	380	U
Benzo(k)fluoranthene	UG/KG	400	U	410	U	380	U
Benzoic Acid	UG/KG	2000	U	2100	U	1900	U
Benzyl Alcohol	UG/KG	400	U	410	U	380	U
2-Benzyl-4-Chlorophenol	UG/KG	400	U	410	U	380	U
bis(2-Chloroethoxy)methane	UG/KG	400	U	410	U	380	U
bis(2-Chloroethyl)ether	UG/KG	400	U	410	U	380	U
bis(2-Ethylhexyl)phthalate	UG/KG	400	U	410	U	380	U
4-Bromophenyl-phenylether	UG/KG	400	U	410	U	380	U
Butylbenzylphthalate	UG/KG	400	U	410	U	380	U
Carbazole	UG/KG	400	U	410	U	380	U
4-Chloro-3-methylphenol	UG/KG	400	U	410	U	380	U
4-Chloroaniline	UG/KG	400	U	410	U	380	U
2-Chloronaphthalene	UG/KG	400	U	410	U	380	U
2-Chlorophenol	UG/KG	400	U	410	U	380	U
4-Chlorophenyl-phenylether	UG/KG	400	U	410	U	380	U
Chrysene	UG/KG	400	U	410	U	380	U
Di-n-butylphthalate	UG/KG	400	U	72	J	380	U
Di-n-octylphthalate	UG/KG	400	U	410	U	380	U
Dibenzo(a,h)anthracene	UG/KG	400	U	410	U	380	U
Dibenzofuran	UG/KG	400	U	410	U	380	U
1,2-Dichlorobenzene	UG/KG	400	U	410	U	380	U
1,3-Dichlorobenzene	UG/KG	400	U	410	U	380	U
1,4-Dichlorobenzene	UG/KG	400	U	410	U	380	U
3,3'-Dichlorobenzidine	UG/KG	400	U	410	U	380	U
2,4-Dichlorophenol	UG/KG	400	U	410	U	380	U
Diethylphthalate	UG/KG	400	U	410	U	380	U
2,4-Dimethylphenol	UG/KG	400	U	410	U	380	U
Dimethylphthalate	UG/KG	400	U	410	U	380	U
4,6-Dinitro-2-methylphenol	UG/KG	990	U	1000	U	950	U
2,4-Dinitrophenol	UG/KG	990	U	1000	U	950	U
2,4-Dinitrotoluene	UG/KG	400	U	410	U	380	U
2,6-Dinitrotoluene	UG/KG	400	U	410	U	380	U
Fluoranthene	UG/KG	400	U	410	U	380	U
Fluorene	UG/KG	400	U	410	U	380	U
Hexachlorobenzene	UG/KG	400	U	410	U	380	U
Hexachlorobutadiene	UG/KG	400	U	410	U	380	U
Hexachlorocyclopentadiene	UG/KG	400	U	410	U	380	U
Hexachloroethane	UG/KG	400	U	410	U	380	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		G0901389.D REG		G1001390.D REG		G1101391.D REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**						
Indeno(1,2,3-c,d)pyrene	UG/KG	400	U	410	U	380	U
Isophorone	UG/KG	400	U	410	U	380	U
2-Methylnaphthalene	UG/KG	400	U	410	U	380	U
2-Methylphenol	UG/KG	400	U	410	U	380	U
4-Methylphenol	UG/KG	400	U	410	U	380	U
N-Nitroso-di-n-propylamine	UG/KG	400	U	410	U	380	U
N-Nitrosodiphenylamine	UG/KG	400	U	410	U	380	U
Naphthalene	UG/KG	400	U	410	U	380	U
2-Nitroaniline	UG/KG	990	U	1000	U	950	U
3-Nitroaniline	UG/KG	990	U	1000	U	950	U
4-Nitroaniline	UG/KG	990	U	1000	U	950	U
Nitrobenzene	UG/KG	400	U	410	U	380	U
2-Nitrophenol	UG/KG	400	U	410	U	380	U
4-Nitrophenol	UG/KG	990	U	1000	U	950	U
2,2'-oxybis(1-Chloropropane)	UG/KG	400	U	410	U	380	U
Pentachlorophenol	UG/KG	990	U	1000	U	950	U
Phenanthrene	UG/KG	400	U	410	U	380	U
Phenol	UG/KG	400	U	410	U	380	U
Pyrene	UG/KG	400	U	410	U	380	U
1,2,4-Trichlorobenzene	UG/KG	400	U	410	U	380	U
2,4,5-Trichlorophenol	UG/KG	990	U	1000	U	950	U
2,4,6-Trichlorophenol	UG/KG	400	U	410	U	380	U
Tentatively Identified Compounds		7		15		11	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		35929-04 REG		35929-05 REG		35929-06 REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**						
Aldrin	UG/KG	0.4	U	0.42	U	0.39	U
alpha-BHC	UG/KG	0.4	UJ	0.42	UJ	0.39	UJ
alpha-Chlordane	UG/KG	0.4	U	0.42	U	0.39	U
Aroclor 1232	UG/KG	7.8	U	8	U	7.5	U
Aroclor-1016	UG/KG	7.8	U	8	U	7.5	U
Aroclor-1221	UG/KG	16	U	16	U	15	U
Aroclor-1242	UG/KG	7.8	U	8	U	7.5	U
Aroclor-1248	UG/KG	7.8	U	8	U	7.5	U
Aroclor-1254	UG/KG	7.8	U	8	U	7.5	U
Aroclor-1260	UG/KG	7.8	U	8	U	7.5	U
beta-BHC	UG/KG	0.4	U	0.42	U	0.39	U
4,4'-DDD	UG/KG	0.78	U	0.8	U	0.75	U
4,4'-DDE	UG/KG	0.78	U	0.8	U	0.75	U
4,4'-DDT	UG/KG	0.78	UJ	0.8	UJ	0.75	UJ
delta-BHC	UG/KG	0.4	U	0.42	U	0.39	U
Dieldrin	UG/KG	0.78	U	0.8	U	0.75	U
Endosulfan I	UG/KG	0.4	U	0.42	U	0.39	U
Endosulfan II	UG/KG	0.78	U	0.8	U	0.75	U
Endosulfan Sulfate	UG/KG	0.78	U	0.8	U	0.75	U
Endrin	UG/KG	0.78	U	0.8	U	0.75	U
Endrin Aldehyde	UG/KG	0.78	U	0.8	U	0.75	U
Endrin Ketone	UG/KG	0.78	U	0.8	U	0.75	U
gamma-BHC (Lindane)	UG/KG	0.4	UJ	0.42	UJ	0.39	UJ
gamma-Chlordane	UG/KG	0.4	U	0.42	U	0.39	U
Heptachlor	UG/KG	0.4	U	0.42	U	0.39	U
Heptachlor Epoxide	UG/KG	0.4	U	0.42	U	0.39	U
p,p'-Methoxychlor	UG/KG	4	UJ	4.2	UJ	3.9	UJ
Toxaphene	UG/KG	40	U	42	U	39	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		3593004 REG		3593005 REG		3593006 REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Inorganics	**Units**						
Aluminum	MG/KG	12000		10100		2710	
Antimony	MG/KG	0.74	U	0.76	U	0.71	U
Arsenic	MG/KG	7.7	J	8.4	J	5.6	J
Barium	MG/KG	114		92.4		27.5	
Beryllium	MG/KG	0.75		0.71		0.18	
Bismuth	MG/KG	33.2		55.1		83.4	
Cadmium	MG/KG	0.55	U	0.57	U	0.52	U
Calcium	MG/KG	5900		32400		131000	
Chromium	MG/KG	17.1		11.5		5	
Cobalt	MG/KG	13.2		8.5		5.5	
Copper	MG/KG	20.5		19.4		18.4	
Cyanide	MG/KG	0.6	U	0.61	U	0.57	U
Iron	MG/KG	27000	J	21400	J	11000	J
Lead	MG/KG	14.4		10.6		6.5	
Magnesium	MG/KG	4200		19300		74700	
Manganese	MG/KG	822	J	851	J	360	J
Mercury	MG/KG	0.12	U	0.12	U	0.11	U
Nickel	MG/KG	24.7		21.3		13.8	
Potassium	MG/KG	1580		1210		943	
Selenium	MG/KG	1.1	U	1.1	U	1	U
Silver	MG/KG	1.1	U	1.2	U	1.1	U
Sodium	MG/KG	450	U	464	U	430	U
Thallium	MG/KG	0.86	U	0.88	U	0.82	U
Vanadium	MG/KG	22.6		22.2		8.2	
Zinc	MG/KG	75.9		63.7		46.9	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07							
		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		0357290008SA REG		0357290009SA REG		0357290010SA REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Anions	Units						
Chloride	MG/KG	17.9	U	18.4	U	17.1	U
Fluoride	MG/KG	2		1.8		1.3	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.92		0.61	U	0.91	
Sulfate	MG/KG	25	U	25	U	25	U

		N07301		N07302		N07303	
		902-N07301		902-N07302		902-N07303	
		REG		REG		REG	
		6/2/94		6/2/94		6/2/94	
		Result	Val	Result	Val	Result	Val
Miscellaneous	Units						
Cation Exchange Capacity as Na	MEQ/100	22.2					
PH	UNITS	8	J	8.2	J	8.7	J
Total Organic Carbon	%	0.755		0.555		8.5	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N07										
		N07301			N07302			N07303		
		902-N07301			902-N07302			902-N07303		
		3220905 REG			3220906 REG			3220907 REG		
		34487			34487			34487		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units									
Am-241	PCI/G	0.0981	NA	U	0.066	NA	U	0.05	NA	U
Bi-207	PCI/G	0.029	NA	U	0.017	NA	U	0.013	NA	U
Bi-210m	PCI/G	0.0323	NA	U	0.0187	NA	U	0.0151	NA	U
Co-60	PCI/G	0.0366	NA	U	0.0211	NA	U	0.0174	NA	U
Cs-137	PCI/G	0.039	NA	U	0.0184	NA	U	0.0149	NA	U
K-40	PCI/G	22	2.42		5.92	0.752		5.76	0.68	
Pu-238	PCI/G	0.131	0.0459		0.0537	NA	UJ	0.0301	NA	U
Pu-239/240	PCI/G	0.0334	NA	U	0.0333	NA	UJ	0.0133	NA	U
Pu-242	PCI/G	0.00752	NA	U	0.00968	NA	UJ	0.0168	NA	U
Ra-226	PCI/G	2.79	0.752		1.5	0.41		0.393	NA	U
Sr-90	PCI/G	0.582	NA	U	0.507	NA	U	0.549	NA	U
Th-228	PCI/G	0.0573	NA	U	0.889	0.161		0.0703	NA	U
Th-230	PCI/G	0.0289	0.0207		1.85	0.281		0.0349	0.0267	
Th-232	PCI/G	0.0335	NA	U	0.748	0.141		0.0335	NA	U
Tritium	PCI/G	0.1	NA	U	0.168	0.0637		0.117	0.0497	
U-234	PCI/G	0.747	0.139		1.14	0.206		0.515	0.104	
U-235	PCI/G	0.0455	0.0277		0.27	0.0798		0.0298	NA	U
U-238	PCI/G	0.796	0.146		1.17	0.209		0.515	0.104	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		J1065.D REG		J1068.D REG		J1069.D REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**						
Acetone	UG/KG	11	U	11	U	2	J
Acetonitrile	UG/KG	111	U	106	U	118	U
Acrylonitrile	UG/KG	111	U	106	U	118	U
Benzene	UG/KG	6	UJ	5	UJ	6	UJ
Bromodichloromethane	UG/KG	6	UJ	5	UJ	6	UJ
Bromoform	UG/KG	6	UJ	5	UJ	6	UJ
Bromomethane	UG/KG	11	U	11	U	12	U
2-Butanone	UG/KG	11	U	11	U	12	U
Carbon Disulfide	UG/KG	6	UJ	5	UJ	6	UJ
Carbon Tetrachloride	UG/KG	6	UJ	5	UJ	6	UJ
Chlorobenzene	UG/KG	6	UJ	5	UJ	6	UJ
Chlorodibromomethane	UG/KG	6	UJ	5	UJ	6	UJ
Chloroethane	UG/KG	11	U	11	U	12	U
Chloroform	UG/KG	6	UJ	5	UJ	6	UJ
Chloromethane	UG/KG	11	U	11	U	12	U
1,1-Dichloroethane	UG/KG	6	UJ	5	UJ	6	UJ
1,2-Dichloroethane	UG/KG	6	UJ	5	UJ	6	UJ
1,1-Dichloroethene	UG/KG	6	UJ	5	UJ	6	UJ
1,2-Dichloroethene	UG/KG	6	UJ	5	UJ	6	UJ
1,2-Dichloropropane	UG/KG	6	UJ	5	UJ	6	UJ
cis-1,3-Dichloropropene	UG/KG	6	UJ	5	UJ	6	UJ
trans-1,3-Dichloropropene	UG/KG	6	UJ	5	UJ	6	UJ
1,2-Diethylbenzene	UG/KG	22	U	21	U	24	U
Ethylbenzene	UG/KG	6	UJ	5	UJ	6	UJ
Hexane	UG/KG	11	U	11	U	1	J
2-Hexanone	UG/KG	11	U	11	U	12	U
Iodomethane	UG/KG	11	U	11	U	12	U
4-Methyl-2-pentanone	UG/KG	11	U	11	U	12	U
Methylene Chloride	UG/KG	11	U	11	U	12	U
Styrene	UG/KG	6	UJ	5	UJ	6	UJ
1,1,2,2-Tetrachloroethane	UG/KG	6	UJ	5	UJ	6	UJ
Tetrachloroethene	UG/KG	6	UJ	5	UJ	6	UJ
Toluene	UG/KG	6	UJ	3	J	3	J
1,1,1-Trichloroethane	UG/KG	6	UJ	5	UJ	6	UJ
1,1,2-Trichloroethane	UG/KG	6	UJ	5	UJ	6	UJ
Trichloroethene	UG/KG	6	UJ	5	UJ	6	UJ
Trichlorotrifluoroethane	UG/KG	11	U	11	U	12	U
Vinyl Acetate	UG/KG	11	U	11	U	12	U
Vinyl Chloride	UG/KG	11	U	11	U	12	U
Xylene, Total	UG/KG	6	UJ	5	UJ	6	UJ
Tentatively Identified Compounds		2		1		1	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		G0401384.D REG		G0701387.D REG		G0801388.D REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**						
Acenaphthene	UG/KG	370	U	360	U	390	U
Acenaphthylene	UG/KG	370	U	360	U	390	U
Anthracene	UG/KG	370	U	360	U	390	U
Benzo(a)anthracene	UG/KG	370	U	360	U	390	U
Benzo(a)pyrene	UG/KG	370	U	360	U	390	U
Benzo(b)fluoranthene	UG/KG	370	U	360	U	390	U
Benzo(g,h,i)perylene	UG/KG	370	U	360	U	390	U
Benzo(k)fluoranthene	UG/KG	370	U	360	U	390	U
Benzoic Acid	UG/KG	1800	U	1800	U	2000	U
Benzyl Alcohol	UG/KG	370	U	360	U	390	U
2-Benzyl-4-Chlorophenol	UG/KG	370	U	360	U	390	U
bis(2-Chloroethoxy)methane	UG/KG	370	U	360	U	390	U
bis(2-Chloroethyl)ether	UG/KG	370	U	360	U	390	U
bis(2-Ethylhexyl)phthalate	UG/KG	370	U	360	U	62	J
4-Bromophenyl-phenylether	UG/KG	370	U	360	U	390	U
Butylbenzylphthalate	UG/KG	370	U	360	U	390	U
Carbazole	UG/KG	370	U	360	U	390	U
4-Chloro-3-methylphenol	UG/KG	370	U	360	U	390	U
4-Chloroaniline	UG/KG	370	U	360	U	390	U
2-Chloronaphthalene	UG/KG	370	U	360	U	390	U
2-Chlorophenol	UG/KG	370	U	360	U	390	U
4-Chlorophenyl-phenylether	UG/KG	370	U	360	U	390	U
Chrysene	UG/KG	370	U	360	U	390	U
Di-n-butylphthalate	UG/KG	370	U	360	U	390	U
Di-n-octylphthalate	UG/KG	370	U	360	U	390	U
Dibenzo(a,h)anthracene	UG/KG	370	U	360	U	390	U
Dibenzofuran	UG/KG	370	U	360	U	390	U
1,2-Dichlorobenzene	UG/KG	370	U	360	U	390	U
1,3-Dichlorobenzene	UG/KG	370	U	360	U	390	U
1,4-Dichlorobenzene	UG/KG	370	U	360	U	390	U
3,3'-Dichlorobenzidine	UG/KG	370	U	360	U	390	U
2,4-Dichlorophenol	UG/KG	370	U	360	U	390	U
Diethylphthalate	UG/KG	370	U	360	U	390	U
2,4-Dimethylphenol	UG/KG	370	U	360	U	390	U
Dimethylphthalate	UG/KG	370	U	360	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	930	U	890	U	980	U
2,4-Dinitrophenol	UG/KG	930	U	890	U	980	U
2,4-Dinitrotoluene	UG/KG	370	U	360	U	390	U
2,6-Dinitrotoluene	UG/KG	370	U	360	U	390	U
Fluoranthene	UG/KG	370	U	360	U	390	U
Fluorene	UG/KG	370	U	360	U	390	U
Hexachlorobenzene	UG/KG	370	U	360	U	390	U
[illegible]achlorobutadiene	UG/KG	370	U	360	U	39[illegible]	[illegible]
[illegible]chlorocyclopentadiene	UG/KG	370	U	360	U	[illegible]	[illegible]
[illegible]xachloroethane	UG/KG	370	U	360	U	39[illegible]	[illegible]

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		G0401384.D REG		G0701387.D REG		G0801388.D REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Indeno(1,2,3-c,d)pyrene	UG/KG	370	U	360	U	390	U
Isophorone	UG/KG	370	U	360	U	390	U
2-Methylnaphthalene	UG/KG	370	U	360	U	390	U
2-Methylphenol	UG/KG	370	U	360	U	390	U
4-Methylphenol	UG/KG	370	U	360	U	390	U
N-Nitroso-di-n-propylamine	UG/KG	370	U	360	U	390	U
N-Nitrosodiphenylamine	UG/KG	370	U	360	U	390	U
Naphthalene	UG/KG	370	U	360	U	390	U
2-Nitroaniline	UG/KG	930	U	890	U	980	U
3-Nitroaniline	UG/KG	930	U	890	U	980	U
4-Nitroaniline	UG/KG	930	U	890	U	980	U
Nitrobenzene	UG/KG	370	U	360	U	390	U
2-Nitrophenol	UG/KG	370	U	360	U	390	U
4-Nitrophenol	UG/KG	930	U	890	U	980	U
2,2'-oxybis(1-Chloropropane)	UG/KG	370	U	360	U	390	U
Pentachlorophenol	UG/KG	930	U	890	U	980	U
Phenanthrene	UG/KG	370	U	360	U	390	U
Phenol	UG/KG	370	U	360	U	390	U
Pyrene	UG/KG	370	U	360	U	390	U
1,2,4-Trichlorobenzene	UG/KG	370	U	360	U	390	U
2,4,5-Trichlorophenol	UG/KG	930	U	890	U	980	U
2,4,6-Trichlorophenol	UG/KG	370	U	360	U	390	U
Tentatively Identified Compounds		14		12		11	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		35929-01 REG		35929-02 REG		35929-03 REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**						
Aldrin	UG/KG	0.38	U	0.36	U	0.4	U
alpha-BHC	UG/KG	0.38	UJ	0.36	UJ	0.4	UJ
alpha-Chlordane	UG/KG	0.38	U	0.36	U	0.4	U
Aroclor 1232	UG/KG	7.3	U	7	U	7.8	U
Aroclor-1016	UG/KG	7.3	U	7	U	7.8	U
Aroclor-1221	UG/KG	15	U	14	U	16	U
Aroclor-1242	UG/KG	7.3	U	7	U	7.8	U
Aroclor-1248	UG/KG	7.3	U	7	U	7.8	U
Aroclor-1254	UG/KG	7.3	U	7	U	7.8	U
Aroclor-1260	UG/KG	7.3	U	7	U	7.8	U
beta-BHC	UG/KG	0.38	U	0.36	U	0.4	U
4,4'-DDD	UG/KG	0.73	U	0.7	U	0.78	U
4,4'-DDE	UG/KG	0.73	U	0.7	U	0.78	U
4,4'-DDT	UG/KG	0.73	UJ	0.7	UJ	0.78	UJ
delta-BHC	UG/KG	0.38	U	0.36	U	0.4	U
Dieldrin	UG/KG	0.73	U	0.7	U	0.78	U
Endosulfan I	UG/KG	0.38	U	0.36	U	0.4	U
Endosulfan II	UG/KG	0.73	U	0.7	U	0.78	U
Endosulfan Sulfate	UG/KG	0.73	U	0.7	U	0.78	U
Endrin	UG/KG	0.73	U	0.7	U	0.78	U
Endrin Aldehyde	UG/KG	0.73	U	0.7	U	0.78	U
Endrin Ketone	UG/KG	0.73	U	0.7	U	0.78	U
gamma-BHC (Lindane)	UG/KG	0.38	UJ	0.36	UJ	0.4	UJ
gamma-Chlordane	UG/KG	0.38	U	0.36	U	0.4	U
Heptachlor	UG/KG	0.38	U	0.36	U	0.4	U
Heptachlor Epoxide	UG/KG	0.38	U	0.36	U	0.4	U
p,p'-Methoxychlor	UG/KG	3.8	UJ	3.6	UJ	4	UJ
Toxaphene	UG/KG	38	U	36	U	40	U

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		3593001 REG		3593002 REG		3593003 REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Inorganics	**Units**						
Aluminum	MG/KG	3460		2120		2090	
Antimony	MG/KG	0.69	U	0.66	U	0.73	U
Arsenic	MG/KG	4.4	J	4.4	J	2.8	J
Barium	MG/KG	48.2		25		26.8	
Beryllium	MG/KG	0.22		0.13		0.13	
Bismuth	MG/KG	58.3		60		72	
Cadmium	MG/KG	0.51	U	0.49	U	0.54	U
Calcium	MG/KG	127000		114000		149000	
Chromium	MG/KG	4.2		5.2		3.9	
Cobalt	MG/KG	3.4		3.3		3.3	
Copper	MG/KG	7.8		7.8		9.1	
Cyanide	MG/KG	0.55	U	0.53	U	0.59	U
Iron	MG/KG	9100	J	6820	J	6470	J
Lead	MG/KG	5		4.3		4.7	
Magnesium	MG/KG	41500		35800		62000	
Manganese	MG/KG	479	J	294	J	304	J
Mercury	MG/KG	0.11	U	0.11	U	0.12	U
Nickel	MG/KG	8.7		7.6		7.3	
Potassium	MG/KG	568	U	398	U	387	U
Selenium	MG/KG	1	U	0.98	U	1.1	U
Silver	MG/KG	1.1	U	1	U	1.1	U
Sodium	MG/KG	418	U	402	U	445	U
Thallium	MG/KG	0.8	U	0.77	U	0.85	U
Vanadium	MG/KG	8.2		6.1		6.4	
Zinc	MG/KG	27.8		22.6		21.2	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08							
		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		0357290005SA REG		0357290006SA REG		0357290007SA REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Anions	Units						
Chloride	MG/KG	16.6	U	16	U	17.6	U
Fluoride	MG/KG	1.3		0.82		0.66	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	2.3		0.97		0.71	
Sulfate	MG/KG	25	U	25	U	25	U

		N08301		N08302		N08303	
		902-N08301		902-N08302		902-N08303	
		REG		0357290006SA REG		0357290007SA REG	
		6/1/94		6/1/94		6/1/94	
		Result	Val	Result	Val	Result	Val
Miscellaneous	Units						
Cation Exchange Capacity as Na	MEQ/100	26.7					
PH	UNITS	8.3	J	8.4	J	8.7	J
Total Organic Carbon	%	4		3.5		6.275	

APPENDIX E.2 NPDES OUTFALL 001 SOIL INVESTIGATION

NPDES OUTFALL 001 PIPELINE - STATION N08										
		N08301			N08302			N08303		
		902-N08301			902-N08302			902-N08303		
		3220901 REG			3220902 REG			3220903 REG		
		34486			34486			34486		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**									
Am-241	PCI/G	0.106	NA	U	0.0559	NA	U	0.0659	NA	U
Bi-207	PCI/G	0.0189	NA	U	0.0148	NA	U	0.0174	NA	U
Bi-210m	PCI/G	0.0222	NA	U	0.0178	NA	U	0.0202	NA	U
Co-60	PCI/G	0.0261	NA	U	0.0187	NA	U	0.0219	NA	U
Cs-137	PCI/G	0.0217	NA	U	0.0167	NA	U	0.0191	NA	U
K-40	PCI/G	10.9	1.27		8.14	0.929		6.51	0.827	
Pu-238	PCI/G	0.0403	NA	U	0.0515	NA	U	0.05	NA	U
Pu-239/240	PCI/G	0.0187	NA	U	0.0238	NA	U	0.0203	NA	U
Pu-242	PCI/G	0.00687	NA	U	0.00692	NA	U	0.0203	NA	U
Ra-226	PCI/G	1.78	0.527		0.939	0.342		1.06	0.466	
Sr-90	PCI/G	0.783	0.379	J	0.687	NA	U	0.492	NA	U
Th-228	PCI/G	0.0823	NA	U	0.0597	NA	U	0.0636	NA	U
Th-230	PCI/G	0.0516	0.033		0.0762	0.0408	R	0.0649	0.0342	
Th-232	PCI/G	0.0559	NA	U	0.0115	NA	U	0.0281	NA	U
Tritium	PCI/G	0.0795	NA	U	0.0265	NA	U	0.0434	NA	U
U-234	PCI/G	0.584	0.113		0.355	0.0803		0.426	0.0912	
U-235	PCI/G	0.0345	NA	U	0.0232	NA	U	0.0421	0.0239	
U-238	PCI/G	0.497	0.105		0.333	0.0766		0.433	0.0926	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		H4475.D REG		H4476.D REG		H4477.D REG		H4478.D REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units								
Acetone	UG/KG	13	U	10	U	10	U	10	U
Acetonitrile	UG/KG	130	U	31	J	135	U	156	U
Acrylonitrile	UG/KG	130	U	122	U	135	U	156	U
Benzene	UG/KG	13	U	12	U	14	U	16	U
Bromodichloromethane	UG/KG	13	U	12	U	14	U	16	U
Bromoform	UG/KG	13	U	12	U	14	U	16	U
Bromomethane	UG/KG	13	UJ	12	UJ	14	UJ	16	UJ
2-Butanone	UG/KG	13	U	12	U	14	U	16	U
Carbon Disulfide	UG/KG	13	U	12	U	14	U	16	U
Carbon Tetrachloride	UG/KG	13	U	12	U	14	U	16	U
Chlorobenzene	UG/KG	13	U	12	U	14	U	16	U
Chlorodibromomethane	UG/KG	13	U	12	U	14	U	16	U
Chloroethane	UG/KG	13	U	12	U	14	U	16	U
Chloroform	UG/KG	13	U	12	U	14	U	16	U
Chloromethane	UG/KG	13	U	12	U	14	U	16	U
1,1-Dichloroethane	UG/KG	13	U	12	U	14	U	16	U
1,2-Dichloroethane	UG/KG	13	U	12	U	14	U	16	U
1,1-Dichloroethene	UG/KG	13	U	12	U	14	U	16	U
1,2-Dichloroethene	UG/KG	26	U	24	U	27	U	31	U
1,2-Dichloropropane	UG/KG	13	U	12	U	14	U	16	U
cis-1,3-Dichloropropene	UG/KG	13	U	12	U	14	U	16	U
trans-1,3-Dichloropropene	UG/KG	13	U	12	U	14	U	16	U
1,2-Diethylbenzene	UG/KG	26	U	24	U	27	U	31	U
Ethylbenzene	UG/KG	13	U	12	U	14	U	16	U
Hexane	UG/KG	13	U	12	U	14	U	16	U
2-Hexanone	UG/KG	13	U	12	U	14	U	16	U
Iodomethane	UG/KG	13	U	12	U	14	U	16	U
4-Methyl-2-pentanone	UG/KG	13	U	12	U	14	U	16	U
Methylene Chloride	UG/KG	13	U	12	U	14	U	16	U
Styrene	UG/KG	13	U	12	U	14	U	16	U
1,1,2,2-Tetrachloroethane	UG/KG	13	U	12	U	14	U	16	U
Tetrachloroethene	UG/KG	13	U	12	U	14	U	2	J
Toluene	UG/KG	13	U	12	U	2	J	16	U
1,1,1-Trichloroethane	UG/KG	13	U	12	U	14	U	16	U
1,1,2-Trichloroethane	UG/KG	13	U	12	U	14	U	16	U
Trichloroethene	UG/KG	13	U	12	U	14	U	16	U
Trichlorotrifluoroethane	UG/KG	13	U	12	U	14	U	16	U
Vinyl Acetate	UG/KG	13	U	12	U	14	U	16	U
Vinyl Chloride	UG/KG	13	U	12	U	14	U	16	U
Xylene, Total	UG/KG	26	U	24	U	27	U	31	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		A1601024.D REG		A1701025.D REG		A1801026.D REG		A0101031.D REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Acenaphthene	UG/KG	430	U	410	U	450	U	55	J
Acenaphthylene	UG/KG	430	U	410	U	450	U	520	U
Anthracene	UG/KG	430	U	410	U	450	U	98	J
Benzo(a)anthracene	UG/KG	83	J	410	U	450	U	440	J
Benzo(a)pyrene	UG/KG	97	J	410	U	450	U	480	J
Benzo(b)fluoranthene	UG/KG	88	J	410	U	450	U	350	J
Benzo(g,h,i)perylene	UG/KG	61	J	410	U	450	U	270	J
Benzo(k)fluoranthene	UG/KG	90	J	410	U	450	U	580	
Benzoic Acid	UG/KG	61	J	2000	U	58	J	220	J
Benzyl Alcohol	UG/KG	430	U	410	U	450	U	520	U
2-Benzyl-4-Chlorophenol	UG/KG	430	U	410	U	450	U	520	U
bis(2-Chloroethoxy)methane	UG/KG	430	U	410	U	450	U	520	U
bis(2-Chloroethyl)ether	UG/KG	430	U	410	U	450	U	520	U
bis(2-Ethylhexyl)phthalate	UG/KG	62	J	410	U	150	J	520	U
4-Bromophenyl-phenylether	UG/KG	430	U	410	U	450	U	520	U
Butylbenzylphthalate	UG/KG	430	U	410	U	450	U	520	U
Carbazole	UG/KG	430	U	410	U	450	U	93	J
4-Chloro-3-methylphenol	UG/KG	430	U	410	U	450	U	520	U
4-Chloroaniline	UG/KG	430	U	410	U	450	U	520	U
2-Chloronaphthalene	UG/KG	430	U	410	U	450	U	520	U
2-Chlorophenol	UG/KG	430	U	410	U	450	U	520	U
4-Chlorophenyl-phenylether	UG/KG	430	U	410	U	450	U	520	U
Chrysene	UG/KG	160	J	410	U	69	J	770	
Di-n-butylphthalate	UG/KG	430	U	410	U	450	U	520	U
Di-n-octylphthalate	UG/KG	430	U	410	U	450	U	520	U
Dibenzo(a,h)anthracene	UG/KG	430	U	410	U	450	U	520	U
Dibenzofuran	UG/KG	430	U	410	U	450	U	520	U
1,2-Dichlorobenzene	UG/KG	430	U	410	U	450	U	520	U
1,3-Dichlorobenzene	UG/KG	430	U	410	U	450	U	520	U
1,4-Dichlorobenzene	UG/KG	430	U	410	U	450	U	520	U
3,3'-Dichlorobenzidine	UG/KG	430	U	410	U	450	U	520	U
2,4-Dichlorophenol	UG/KG	430	U	410	U	450	U	520	U
Diethylphthalate	UG/KG	430	U	410	U	450	U	520	U
2,4-Dimethylphenol	UG/KG	430	U	410	U	450	U	520	U
Dimethylphthalate	UG/KG	430	U	410	U	450	U	520	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	980	U	1100	U	1200	U
2,4-Dinitrophenol	UG/KG	1000	UJ	980	UJ	1100	UJ	1200	UJ
2,4-Dinitrotoluene	UG/KG	430	U	410	U	450	U	520	UJ
2,6-Dinitrotoluene	UG/KG	430	U	410	U	450	U	520	U
Fluoranthene	UG/KG	220	J	410	U	100	J	1100	
Fluorene	UG/KG	430	U	410	U	450	U	520	U
Hexachlorobenzene	UG/KG	430	U	410	U	450	U	520	U
Hexachlorobutadiene	UG/KG	430	U	410	U	450	U	520	U
Hexachlorocyclopentadiene	UG/KG	430	U	410	U	450	U	520	U
Hexachloroethane	UG/KG	430	U	410	U	450	U	520	U
Indeno(1,2,3-c,d)pyrene	UG/KG	61	J	410	U	450	U	290	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		A1601024.D REG		A1701025.D REG		A1801026.D REG		A0101031.D REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Isophorone	UG/KG	430	U	410	U	450	U	520	U
2-Methylnaphthalene	UG/KG	430	U	410	U	450	U	520	U
2-Methylphenol	UG/KG	430	U	410	U	450	U	520	U
4-Methylphenol	UG/KG	430	UJ	410	UJ	450	UJ	520	U
N-Nitroso-di-n-propylamine	UG/KG	430	UJ	410	UJ	450	UJ	520	U
N-Nitrosodiphenylamine	UG/KG	430	U	410	U	450	U	520	U
Naphthalene	UG/KG	430	U	410	U	450	U	520	U
2-Nitroaniline	UG/KG	1000	UJ	980	UJ	1100	UJ	1200	U
3-Nitroaniline	UG/KG	1000	U	980	U	1100	U	1200	U
4-Nitroaniline	UG/KG	1000	U	980	U	1100	U	1200	U
Nitrobenzene	UG/KG	430	U	410	U	450	U	520	U
2-Nitrophenol	UG/KG	430	U	410	U	450	U	520	U
4-Nitrophenol	UG/KG	1000	U	980	U	1100	U	1200	U
2,2'-oxybis(1-Chloropropane)	UG/KG	430	U	410	U	450	U	520	U
Pentachlorophenol	UG/KG	1000	U	980	U	1100	U	1200	U
Phenanthrene	UG/KG	110	J	410	U	61	J	540	
Phenol	UG/KG	430	U	410	U	450	U	520	U
Pyrene	UG/KG	170	J	410	U	78	J	820	
1,2,4-Trichlorobenzene	UG/KG	430	U	410	U	450	U	520	U
2,4,5-Trichlorophenol	UG/KG	1000	U	980	U	1100	U	1200	U
2,4,6-Trichlorophenol	UG/KG	430	U	410	U	450	U	520	U
Tentatively Identified Compounds		29		16		30		30	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		36191-08 REG		36191-09 REG		36191-10 REG		36191-11 REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
alpha-BHC	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
alpha-Chlordane	UG/KG	0.44	U	0.41	U	0.46	U	0.86	J
Aroclor 1232	UG/KG	8.6	U	8	U	8.9	U	20	U
Aroclor-1016	UG/KG	8.6	U	8	U	8.9	U	20	U
Aroclor-1221	UG/KG	17	U	16	U	18	U	42	U
Aroclor-1242	UG/KG	8.6	U	8	U	8.9	U	20	U
Aroclor-1248	UG/KG	8.6	U	8	U	8.9	U	20	U
Aroclor-1254	UG/KG	8.6	U	8	U	8.9	U	20	U
Aroclor-1260	UG/KG	8.6	U	8	U	8.9	U	20	U
beta-BHC	UG/KG	0.44	U	0.41	U	0.78	J	1.1	U
4,4'-DDD	UG/KG	0.86	U	0.8	U	0.89	U	2	U
4,4'-DDE	UG/KG	0.86	U	0.8	U	0.89	U	2	U
4,4'-DDT	UG/KG	0.86	U	0.8	U	0.89	U	2	U
delta-BHC	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
Dieldrin	UG/KG	0.86	U	0.8	U	0.89	U	2	U
Endosulfan I	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
Endosulfan II	UG/KG	0.86	UJ	0.8	UJ	0.89	UJ	2	UJ
Endosulfan Sulfate	UG/KG	0.86	U	0.8	U	0.89	U	2	U
Endrin	UG/KG	0.86	U	0.8	U	0.89	U	2	U
Endrin Aldehyde	UG/KG	0.86	U	0.8	U	0.89	U	2	U
Endrin Ketone	UG/KG	0.86	U	0.8	U	0.89	U	2	U
gamma-BHC (Lindane)	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
gamma-Chlordane	UG/KG	0.44	U	0.41	U	0.46	U	1.1	J
Heptachlor	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
Heptachlor Epoxide	UG/KG	0.44	U	0.41	U	0.46	U	1.1	U
p,p'-Methoxychlor	UG/KG	4.4	U	4.1	U	4.6	U	11	U
Toxaphene	UG/KG	44	U	41	U	46	U	110	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		3618908 REG		3618909 REG		3618910 REG		3618911 REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	**Units**								
Aluminum	MG/KG	5650		13300		3800		12000	
Antimony	MG/KG	0.81	R	0.76	R	0.84	R	0.97	R
Arsenic	MG/KG	4.6		1.2		4		4.9	
Barium	MG/KG	46.2		40.5		36.9		77.3	
Beryllium	MG/KG	0.34		0.68		0.24		0.67	
Bismuth	MG/KG	51.7		50.3		49.2		44.3	
Cadmium	MG/KG	0.6	U	0.56	U	0.62	U	0.72	U
Calcium	MG/KG	96200		85200	J	146000	J	82000	J
Chromium	MG/KG	9.9		19.6		11.8		19.9	
Cobalt	MG/KG	7.2		14.2		5.6		13.6	
Copper	MG/KG	15		22.6		13.4		33.9	
Cyanide	MG/KG	0.01	U	0.01	U	0.01	U	0.02	U
Iron	MG/KG	12600		26900		12200		26900	
Lead	MG/KG	10.1		4.5		15.7		16.6	
Magnesium	MG/KG	26500		10600		53500		12100	
Manganese	MG/KG	394		554		408		537	
Mercury	MG/KG	0.13	U	0.12	U	0.28		0.16	U
Nickel	MG/KG	12.9		29.8		17		25.3	
Potassium	MG/KG	1620		3760		1120		2850	
Selenium	MG/KG	0.52	UJ	4.9	J	0.54	UJ	0.62	UJ
Silver	MG/KG	1.3	U	1.2	U	1.3	U	1.5	U
Sodium	MG/KG	494	U	461	U	512	U	591	U
Thallium	MG/KG	0.94	U	0.88	U	0.98	U	1.1	U
Vanadium	MG/KG	11.1	J	15	J	7.8	J	17.4	J
Zinc	MG/KG	55.1	J	66.7	J	49.1	J	99.8	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601									
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		0362150011SA REG		0362150012SA REG		0362150013SA REG		0362150014SA REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	59.7		62.2		225		264	
Fluoride	MG/KG	0.75		3.7		1.2		2.6	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1	J	0.59	UJ	0.64	UJ	1	J
Sulfate	MG/KG	61		45.7		356		284	
		S11301		S11302		S12301		S13301	
		902-S11301		902-S11302		902-S12301		902-S13301	
		REG		0362150012SA REG		0362150013SA REG		0362150014SA REG	
		6/20/94		6/20/94		6/20/94		6/20/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	Units								
Cation Exchange Capacity as Na	MEQ/100	7.8							
PH	UNITS	7.8	J	8.2	J	7.4	J	7.3	J
Total Organic Carbon	%	0.7975		0.2		0.6		2	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601			
		S11301	
		902-S11301	
		0362150011SA REG	
		6/20/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.33	UJ
1,3-Dinitrobenzene	UG/G	0.33	UJ
2,4-Dinitrotoluene	UG/G	0.33	UJ
2,6-Dinitrotoluene	UG/G	0.34	UJ
HMX	UG/G	2.9	UJ
Nitrobenzene	UG/G	0.34	UJ
PETN	UG/G	1.3	UJ
RDX	UG/G	1.3	UJ
TETRYL	UG/G	0.85	UJ
1,3,5-Trinitrobenzene	UG/G	0.33	UJ
2,4,6-Trinitrotoluene	UG/G	0.33	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 601													
		S11301			S11302			S12301			S13301		
		902-S11301			902-S11302			902-S12301			902-S13301		
		3228675 REG			3228676 REG			3228671 REG			3228670 REG		
		34505			34505			34505			34505		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units												
Am-241	PCI/G	0.0575	NA	U	0.114	NA	U	0.0851	NA	U	0.111	NA	U
Bi-207	PCI/G	0.0158	NA	U	0.0222	NA	U	0.0223	NA	U	0.0283	NA	U
Bi-210m	PCI/G	0.0161	NA	U	0.0247	NA	U	0.0257	NA	U	0.0331	NA	U
Co-60	PCI/G	0.0214	NA	U	0.0298	NA	U	0.0289	NA	U	0.0364	NA	U
Cs-137	PCI/G	0.0509	0.0158		0.0264	NA	U	0.0716	0.022		0.209	0.0381	
K-40	PCI/G	13.1	1.44		23.1	2.5		12.8	1.47		26.6	2.83	
Pu-238	PCI/G	0.941	0.12		0.565	0.0968	J	1.34	0.163		0.267	0.0498	
Pu-239/240	PCI/G	0.0077	0.00574		0.00532	NA	UJ	0.00638	NA	U	0.00643	0.0058	
Pu-242	PCI/G	0.00256	0.00297		0.00532	NA	UJ	0.00432	0.0039		0.00944	NA	U
Ra-226	PCI/G	1.43	0.401		1.44	0.619		1.31	0.583		2.91	0.821	
Sr-90	PCI/G	0.415	NA	U	0.549	NA	U	0.435	0.24	J	0.583	0.286	
Th-228	PCI/G	0.41	0.0836		0.649	0.117		0.45	0.0927		0.998	0.156	
Th-230	PCI/G	0.696	0.119		0.608	0.111		0.725	0.126		0.823	0.134	
Th-232	PCI/G	0.497	0.0932		0.688	0.122		0.457	0.0912		0.892	0.143	
Tritium	PCI/G	0.324	0.0699	R	0.43	0.0758	R	67.4	0.621		132	1.06	
U-234	PCI/G	0.61	0.126		0.837	0.15		0.828	0.151		1.47	0.244	
U-235	PCI/G	0.0243	0.0201		0.0482	ND	U	0.0222	0.0183		0.0896	0.0424	
U-238	PCI/G	0.565	0.119		0.8	0.145		0.652	0.128		0.906	0.17	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		H4479.D REG		H4480.D REG		H4481.D REG		H4482.D REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	**Units**								
Acetone	UG/KG	46	U	56	=	34	U	14	U
Acetonitrile	UG/KG	135	U	126	U	133	U	145	U
Acrylonitrile	UG/KG	135	U	126	U	133	U	4	J
Benzene	UG/KG	14	U	13	U	13	U	14	U
Bromodichloromethane	UG/KG	14	U	13	U	13	U	14	U
Bromoform	UG/KG	14	U	13	U	13	U	14	U
Bromomethane	UG/KG	14	UJ	13	UJ	13	UJ	14	UJ
2-Butanone	UG/KG	12	J	9	J	7	J	14	U
Carbon Disulfide	UG/KG	14	U	13	U	13	U	14	U
Carbon Tetrachloride	UG/KG	14	U	13	U	13	U	14	U
Chlorobenzene	UG/KG	14	U	13	U	13	U	14	U
Chlorodibromomethane	UG/KG	14	U	13	U	13	U	14	U
Chloroethane	UG/KG	14	U	13	U	13	U	14	U
Chloroform	UG/KG	14	U	13	U	13	U	14	U
Chloromethane	UG/KG	14	U	13	U	13	U	14	U
1,1-Dichloroethane	UG/KG	14	U	13	U	13	U	14	U
1,2-Dichloroethane	UG/KG	14	U	13	U	13	U	14	U
1,1-Dichloroethene	UG/KG	14	U	13	U	13	U	14	U
1,2-Dichloroethene	UG/KG	27	U	25	U	27	U	29	U
1,2-Dichloropropane	UG/KG	14	U	13	U	13	U	14	U
cis-1,3-Dichloropropene	UG/KG	14	U	13	U	13	U	14	U
trans-1,3-Dichloropropene	UG/KG	14	U	13	U	13	U	14	U
1,2-Diethylbenzene	UG/KG	27	U	25	U	27	U	29	U
Ethylbenzene	UG/KG	14	U	13	U	13	U	14	U
Hexane	UG/KG	14	U	13	U	13	U	14	U
2-Hexanone	UG/KG	14	U	13	U	13	U	14	U
Iodomethane	UG/KG	14	U	13	U	13	U	14	U
4-Methyl-2-pentanone	UG/KG	14	U	2	J	13	U	14	U
Methylene Chloride	UG/KG	14	U	13	U	13	U	14	U
Styrene	UG/KG	14	U	13	U	13	U	14	U
1,1,2,2-Tetrachloroethane	UG/KG	14	U	13	U	13	U	14	U
Tetrachloroethene	UG/KG	14	U	13	U	13	U	14	U
Toluene	UG/KG	14	U	2	J	13	U	14	U
1,1,1-Trichloroethane	UG/KG	14	U	13	U	13	U	14	U
1,1,2-Trichloroethane	UG/KG	14	U	13	U	13	U	14	U
Trichloroethene	UG/KG	14	U	13	U	13	U	14	U
Trichlorotrifluoroethane	UG/KG	14	U	13	U	13	U	14	U
Vinyl Acetate	UG/KG	14	U	13	U	13	U	14	U
Vinyl Chloride	UG/KG	14	U	13	U	13	U	14	U
Xylene, Total	UG/KG	27	U	1	J	27	U	29	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		A0201032.D REG		A0501035.D REG		A0601036.D REG		A0701037.D REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units								
Acenaphthene	UG/KG	450	U	420	U	440	U	480	U
Acenaphthylene	UG/KG	450	U	420	U	440	U	480	U
Anthracene	UG/KG	450	U	420	U	440	U	480	U
Benzo(a)anthracene	UG/KG	450	U	420	U	440	U	480	U
Benzo(a)pyrene	UG/KG	450	U	420	U	440	U	480	U
Benzo(b)fluoranthene	UG/KG	450	U	420	U	440	U	480	U
Benzo(g,h,i)perylene	UG/KG	450	U	420	U	440	U	480	U
Benzo(k)fluoranthene	UG/KG	450	U	420	U	440	U	50	J
Benzoic Acid	UG/KG	2200	U	2100	U	2200	U	68	J
Benzyl Alcohol	UG/KG	450	U	420	U	440	U	480	U
2-Benzyl-4-Chlorophenol	UG/KG	110	J	420	U	440	U	480	U
bis(2-Chloroethoxy)methane	UG/KG	450	U	420	U	440	U	480	U
bis(2-Chloroethyl)ether	UG/KG	450	U	420	U	440	U	480	U
bis(2-Ethylhexyl)phthalate	UG/KG	450	U	420	U	440	U	480	U
4-Bromophenyl-phenylether	UG/KG	450	U	420	U	440	U	480	U
Butylbenzylphthalate	UG/KG	450	U	420	U	440	U	480	U
Carbazole	UG/KG	450	U	420	U	440	U	480	U
4-Chloro-3-methylphenol	UG/KG	450	U	420	U	440	U	480	U
4-Chloroaniline	UG/KG	450	U	420	U	440	U	480	U
2-Chloronaphthalene	UG/KG	450	U	420	U	440	U	480	U
2-Chlorophenol	UG/KG	450	U	420	U	440	U	480	U
4-Chlorophenyl-phenylether	UG/KG	450	U	420	U	440	U	480	U
Chrysene	UG/KG	450	U	420	U	440	U	77	J
Di-n-butylphthalate	UG/KG	450	U	420	U	440	U	480	U
Di-n-octylphthalate	UG/KG	450	U	420	U	440	U	480	U
Dibenzo(a,h)anthracene	UG/KG	450	U	420	U	440	U	480	U
Dibenzofuran	UG/KG	450	U	420	U	440	U	480	U
1,2-Dichlorobenzene	UG/KG	450	U	420	U	440	U	480	U
1,3-Dichlorobenzene	UG/KG	450	U	420	U	440	U	480	U
1,4-Dichlorobenzene	UG/KG	450	U	420	U	440	U	480	U
3,3'-Dichlorobenzidine	UG/KG	450	U	420	U	440	U	480	U
2,4-Dichlorophenol	UG/KG	450	U	420	U	440	U	480	U
Diethylphthalate	UG/KG	450	U	420	U	440	U	480	U
2,4-Dimethylphenol	UG/KG	450	U	420	U	440	U	480	U
Dimethylphthalate	UG/KG	450	U	420	U	440	U	480	U
4,6-Dinitro-2-methylphenol	UG/KG	1100	U	1000	U	1100	U	1200	U
2,4-Dinitrophenol	UG/KG	1100	UJ	1000	UJ	1100	UJ	1200	UJ
2,4-Dinitrotoluene	UG/KG	450	UJ	420	UJ	440	UJ	480	UJ
2,6-Dinitrotoluene	UG/KG	450	U	420	U	440	U	480	U
Fluoranthene	UG/KG	450	U	420	U	61	J	120	J
Fluorene	UG/KG	450	U	420	U	440	U	480	U
Hexachlorobenzene	UG/KG	450	U	420	U	440	U	480	U
Hexachlorobutadiene	UG/KG	450	U	420	U	440	U	480	U
Hexachlorocyclopentadiene	UG/KG	450	U	420	U	440	U	480	U
Hexachloroethane	UG/KG	450	U	420	U	440	U	480	U
Indeno(1,2,3-c,d)pyrene	UG/KG	450	U	420	U	440	U	480	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		A0201032.D REG		A0501035.D REG		A0601036.D REG		A0701037.D REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	**Units**								
Isophorone	UG/KG	450	U	420	U	440	U	480	U
2-Methylnaphthalene	UG/KG	450	U	420	U	440	U	480	U
2-Methylphenol	UG/KG	450	U	420	U	440	U	480	U
4-Methylphenol	UG/KG	450	U	420	U	440	U	480	U
N-Nitroso-di-n-propylamine	UG/KG	450	U	420	U	440	U	480	U
N-Nitrosodiphenylamine	UG/KG	450	U	420	U	440	U	480	U
Naphthalene	UG/KG	450	U	420	U	440	U	480	U
2-Nitroaniline	UG/KG	1100	U	1000	U	1100	U	1200	U
3-Nitroaniline	UG/KG	1100	U	1000	U	1100	U	1200	U
4-Nitroaniline	UG/KG	1100	U	1000	U	1100	U	1200	U
Nitrobenzene	UG/KG	450	U	420	U	440	U	480	U
2-Nitrophenol	UG/KG	450	U	420	U	440	U	480	U
4-Nitrophenol	UG/KG	1100	U	1000	U	1100	U	1200	U
2,2'-oxybis(1-Chloropropane)	UG/KG	450	U	420	U	440	U	480	U
Pentachlorophenol	UG/KG	1100	U	1000	U	1100	U	1200	U
Phenanthrene	UG/KG	450	U	420	U	440	U	480	U
Phenol	UG/KG	450	U	420	U	440	U	480	U
Pyrene	UG/KG	450	U	420	U	45	J	82	J
1,2,4-Trichlorobenzene	UG/KG	450	U	420	U	440	U	480	U
2,4,5-Trichlorophenol	UG/KG	1100	U	1000	U	1100	U	1200	U
2,4,6-Trichlorophenol	UG/KG	450	U	420	U	440	U	480	U
Tentatively Identified Compounds		30		21		30		30	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		36191-12 REG		36191-13 REG		36191-14 REG		36191-15 REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**								
Aldrin	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
alpha-BHC	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
alpha-Chlordane	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
Aroclor 1232	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
Aroclor-1016	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
Aroclor-1221	UG/KG	18	U	17	U	18	U	19	U
Aroclor-1242	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
Aroclor-1248	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
Aroclor-1254	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
Aroclor-1260	UG/KG	8.9	U	8.4	U	8.8	U	9.5	U
beta-BHC	UG/KG	0.31	J	0.43	U	0.45	U	0.49	U
4,4'-DDD	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
4,4'-DDE	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
4,4'-DDT	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
delta-BHC	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
Dieldrin	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
Endosulfan I	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
Endosulfan II	UG/KG	0.89	UJ	0.84	UJ	0.88	UJ	0.95	UJ
Endosulfan Sulfate	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
Endrin	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
Endrin Aldehyde	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
Endrin Ketone	UG/KG	0.89	U	0.84	U	0.88	U	0.95	U
gamma-BHC (Lindane)	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
gamma-Chlordane	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
Heptachlor	UG/KG	0.26	J	0.43	U	0.45	U	0.49	U
Heptachlor Epoxide	UG/KG	0.46	U	0.43	U	0.45	U	0.49	U
p,p'-Methoxychlor	UG/KG	4.6	U	4.3	U	4.5	U	4.9	U
Toxaphene	UG/KG	46	U	43	U	45	U	49	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		3618912 REG		3618913 REG		3618914 REG		3618915 REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units								
Aluminum	MG/KG	17300		20700		16300		13400	
Antimony	MG/KG	0.84	R	0.79	R	0.82	R	0.9	R
Arsenic	MG/KG	5		10.4		3.9		12.3	
Barium	MG/KG	106		101		47.5		75.8	
Beryllium	MG/KG	0.9		1		0.92		0.74	
Bismuth	MG/KG	49.2		51.2		52.2		46.7	
Cadmium	MG/KG	0.62	U	0.58	U	0.61	U	0.67	U
Calcium	MG/KG	40700	J	4540	J	85600	J	57700	J
Chromium	MG/KG	23		26.4		21.5		20.9	
Cobalt	MG/KG	15.9		17.5		19		13.4	
Copper	MG/KG	25.8		26.7		23.1		28.5	
Cyanide	MG/KG	0.01	U	0.01	U	0.01	U	0.01	U
Iron	MG/KG	32600		38800		31800		30000	
Lead	MG/KG	9.8		15.2		12.1		19.7	
Magnesium	MG/KG	7260		5770		9140		12100	
Manganese	MG/KG	1180		1060		782		570	
Mercury	MG/KG	0.14	U	0.13	U	0.13	U	0.14	U
Nickel	MG/KG	33.2		37.4		34.3		27.6	
Potassium	MG/KG	3750		2800		3420		2650	
Selenium	MG/KG	0.54	UJ	0.51	UJ	0.53	UJ	0.58	UJ
Silver	MG/KG	1.3	U	1.2	U	1.3	U	1.4	U
Sodium	MG/KG	725		752		710		947	
Thallium	MG/KG	0.98	U	0.91	U	0.96	U	1	U
Vanadium	MG/KG	22.3	J	34.8	J	21.4		22.1	J
Zinc	MG/KG	65.1	J	79.9	J	69	J	79.4	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602									
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		0362150015SA REG		0362150016SA REG		0362150017SA REG		0362150018SA REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units								
Chloride	MG/KG	280		535		114		227	
Fluoride	MG/KG	2.1		1.4		1.6		2.5	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.66	UJ	0.65	UJ	0.66	UJ	1.5	J
Sulfate	MG/KG	292		392		92.1		422	
		S21301		S21302		S22301		S23301	
		902-S21301		902-S21302		902-S22301		902-S23301	
		0362150015SA REG		0362150016SA REG		0362150017SA REG		0362150018SA REG	
		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Miscellaneous	Units								
Cation Exchange Capacity as Na	MEQ/100	21.3							
PH	UNITS	7.8	J	7.6	J	7.8	J	7.6	J
Total Organic Carbon	%	0.6633		0.575		0.315		1.75	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602			
		S21301	
		902-S21301	
		0362150015SA REG	
		6/21/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.34	UJ
1,3-Dinitrobenzene	UG/G	0.34	UJ
2,4-Dinitrotoluene	UG/G	0.34	UJ
2,6-Dinitrotoluene	UG/G	0.35	UJ
HMX	UG/G	3	UJ
Nitrobenzene	UG/G	0.35	UJ
PETN	UG/G	1.4	UJ
RDX	UG/G	1.4	UJ
TETRYL	UG/G	0.88	UJ
1,3,5-Trinitrobenzene	UG/G	0.34	UJ
2,4,6-Trinitrotoluene	UG/G	0.34	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 602													
		S21301			S21302			S22301			S23301		
		902-S21301			902-S21302			902-S22301			902-S23301		
		3228663 REG			3228664 REG			3228665 REG			3228666 REG		
		34506			34506			34506			34506		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units												
Am-241	PCI/G	0.112	NA	U	0.169	NA	U	0.183	NA	U	0.115	NA	U
Bi-207	PCI/G	0.0269	NA	U	0.0675	NA	U	0.0682	NA	U	0.0274	NA	U
Bi-210m	PCI/G	0.0294	NA	U	0.072	NA	U	0.0655	NA	U	0.0306	NA	U
Co-60	PCI/G	0.0345	NA	U	0.089	NA	U	0.101	NA	U	0.0402	NA	U
Cs-137	PCI/G	0.115	0.0319		0.0765	NA	U	0.262	0.0755		0.32	0.046	
K-40	PCI/G	26.8	2.79		28.5	3.53		31.6	3.69		29.4	3.11	
Pu-238	PCI/G	0.284	0.0488		0.154	0.035		0.501	0.0675		0.584	0.092	J
Pu-239/240	PCI/G	0.00809	NA	U	0.0128	NA	U	0.00866	NA	U	0.0156	0.0101	J
Pu-242	PCI/G	0.00808	NA	U	0.0128	NA	U	0.00288	0.00289		0.00423	NA	UJ
Ra-226	PCI/G	2.47	0.7		1.28	NA	U	1.06	NA	U	2.3	0.768	
Sr-90	PCI/G	0.605	NA	U	1.55	0.339		16	0.896	J	0.755	NA	U
Th-228	PCI/G	1.06	0.175		1.2	0.178		1.09	0.169		0.985	0.152	
Th-230	PCI/G	1	0.166		1.36	0.198		0.866	0.14		1.03	0.157	
Th-232	PCI/G	1.01	0.166		1.07	0.163		1.05	0.163		0.846	0.135	
Tritium	PCI/G	1.37	0.114		1.25	0.0966		2.42	0.139		3.04	0.182	
U-234	PCI/G	0.963	0.172		1.16	0.203		0.793	0.152		0.819	0.145	
U-235	PCI/G	0.035	NA	U	0.0575	NA	U	0.05	0.0341		0.06	0.0312	
U-238	PCI/G	0.849	0.158		1.07	0.192		0.827	0.156		0.803	0.143	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603							
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		H4483.D REG		H4484.D REG		H4485.D REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	Units						
Acetone	UG/KG	13	U	13	U	12	U
Acetonitrile	UG/KG	126	U	133	U	120	U
Acrylonitrile	UG/KG	126	U	133	U	120	U
Benzene	UG/KG	13	U	13	U	12	U
Bromodichloromethane	UG/KG	13	U	13	U	12	U
Bromoform	UG/KG	13	U	13	U	12	U
Bromomethane	UG/KG	13	UJ	13	UJ	12	UJ
2-Butanone	UG/KG	13	U	13	U	12	U
Carbon Disulfide	UG/KG	13	U	13	U	12	U
Carbon Tetrachloride	UG/KG	13	U	13	U	12	U
Chlorobenzene	UG/KG	13	U	13	U	12	U
Chlorodibromomethane	UG/KG	13	U	13	U	12	U
Chloroethane	UG/KG	13	U	13	U	12	U
Chloroform	UG/KG	13	U	13	U	12	U
Chloromethane	UG/KG	13	U	13	U	12	U
1,1-Dichloroethane	UG/KG	13	U	13	U	12	U
1,2-Dichloroethane	UG/KG	13	U	13	U	12	U
1,1-Dichloroethene	UG/KG	13	U	13	U	12	U
1,2-Dichloroethene	UG/KG	25	U	27	U	24	U
1,2-Dichloropropane	UG/KG	13	U	13	U	12	U
cis-1,3-Dichloropropene	UG/KG	13	U	13	U	12	U
trans-1,3-Dichloropropene	UG/KG	13	U	13	U	12	U
1,2-Diethylbenzene	UG/KG	25	U	27	U	24	U
Ethylbenzene	UG/KG	13	U	13	U	12	U
Hexane	UG/KG	13	U	13	U	12	U
2-Hexanone	UG/KG	13	U	13	U	12	U
Iodomethane	UG/KG	13	U	13	U	12	U
4-Methyl-2-pentanone	UG/KG	13	U	13	U	12	U
Methylene Chloride	UG/KG	3	J	13	U	12	U
Styrene	UG/KG	13	U	13	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	13	U	13	U	12	U
Tetrachloroethene	UG/KG	13	U	13	U	12	U
Toluene	UG/KG	13	U	13	U	12	U
1,1,1-Trichloroethane	UG/KG	13	U	13	U	12	U
1,1,2-Trichloroethane	UG/KG	13	U	13	U	12	U
Trichloroethene	UG/KG	13	U	13	U	12	U
Trichlorotrifluoroethane	UG/KG	13	U	13	U	12	U
Vinyl Acetate	UG/KG	13	U	13	U	12	U
Vinyl Chloride	UG/KG	13	U	13	U	12	U
Xylene, Total	UG/KG	25	U	27	U	24	U
Tentatively Identified Compounds		1					

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603							
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		A0501136.D REG		A0601137.D REG		A0701138.D REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Acenaphthene	UG/KG	420	U	440	U	400	U
Acenaphthylene	UG/KG	420	U	440	U	400	U
Anthracene	UG/KG	420	U	440	U	400	U
Benzo(a)anthracene	UG/KG	420	U	440	U	51	J
Benzo(a)pyrene	UG/KG	420	U	440	U	61	J
Benzo(b)fluoranthene	UG/KG	420	U	440	U	64	J
Benzo(g,h,i)perylene	UG/KG	420	U	440	U	400	U
Benzo(k)fluoranthene	UG/KG	420	U	440	U	76	J
Benzoic Acid	UG/KG	2100	U	2200	U	2000	U
Benzyl Alcohol	UG/KG	420	U	440	U	400	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U	440	U	400	U
bis(2-Chloroethoxy)methane	UG/KG	420	U	440	U	400	U
bis(2-Chloroethyl)ether	UG/KG	420	U	440	U	400	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	UJ	440	UJ	400	UJ
4-Bromophenyl-phenylether	UG/KG	420	U	440	U	400	U
Butylbenzylphthalate	UG/KG	420	U	440	U	400	U
Carbazole	UG/KG	420	U	440	U	400	U
4-Chloro-3-methylphenol	UG/KG	420	U	440	U	400	U
4-Chloroaniline	UG/KG	420	U	440	U	400	U
2-Chloronaphthalene	UG/KG	420	U	440	U	400	U
2-Chlorophenol	UG/KG	420	U	440	U	400	U
4-Chlorophenyl-phenylether	UG/KG	420	U	440	U	400	U
Chrysene	UG/KG	420	U	440	U	94	J
Di-n-butylphthalate	UG/KG	420	U	440	U	400	U
Di-n-octylphthalate	UG/KG	420	U	440	U	400	U
Dibenzo(a,h)anthracene	UG/KG	420	U	440	U	400	U
Dibenzofuran	UG/KG	420	U	440	U	400	U
1,2-Dichlorobenzene	UG/KG	420	U	440	U	400	U
1,3-Dichlorobenzene	UG/KG	420	U	440	U	400	U
1,4-Dichlorobenzene	UG/KG	420	U	440	U	400	U
3,3'-Dichlorobenzidine	UG/KG	420	U	440	U	400	U
2,4-Dichlorophenol	UG/KG	420	U	440	U	400	U
Diethylphthalate	UG/KG	420	U	440	U	400	U
2,4-Dimethylphenol	UG/KG	420	U	440	U	400	U
Dimethylphthalate	UG/KG	420	U	440	U	400	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	1100	U	960	U
2,4-Dinitrophenol	UG/KG	1000	U	1100	U	960	U
2,4-Dinitrotoluene	UG/KG	420	U	440	U	400	U
2,6-Dinitrotoluene	UG/KG	420	U	440	U	400	U
Fluoranthene	UG/KG	49	J	64	J	140	J
Fluorene	UG/KG	420	U	440	U	400	U
Hexachlorobenzene	UG/KG	420	U	440	U	400	U
Hexachlorobutadiene	UG/KG	420	U	440	U	400	U
Hexachlorocyclopentadiene	UG/KG	420	U	440	U	400	U
Hexachloroethane	UG/KG	420	U	440	U	400	U
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	440	U	43	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603							
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		A0501136.D REG		A0601137.D REG		A0701138.D REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Isophorone	UG/KG	420	U	440	U	400	U
2-Methylnaphthalene	UG/KG	420	U	440	U	400	U
2-Methylphenol	UG/KG	420	U	440	U	400	U
4-Methylphenol	UG/KG	420	U	440	U	400	U
N-Nitroso-di-n-propylamine	UG/KG	420	U	440	U	400	U
N-Nitrosodiphenylamine	UG/KG	420	U	440	U	400	U
Naphthalene	UG/KG	420	U	440	U	400	U
2-Nitroaniline	UG/KG	1000	U	1100	U	960	U
3-Nitroaniline	UG/KG	1000	U	1100	U	960	U
4-Nitroaniline	UG/KG	1000	U	1100	U	960	U
Nitrobenzene	UG/KG	420	U	440	U	400	U
2-Nitrophenol	UG/KG	420	U	440	U	400	U
4-Nitrophenol	UG/KG	1000	U	1100	U	960	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	440	U	400	U
Pentachlorophenol	UG/KG	1000	U	1100	U	960	U
Phenanthrene	UG/KG	420	U	440	U	43	J
Phenol	UG/KG	420	U	440	U	400	U
Pyrene	UG/KG	420	U	51	J	110	J
1,2,4-Trichlorobenzene	UG/KG	420	U	440	U	400	U
2,4,5-Trichlorophenol	UG/KG	1000	U	1100	U	960	U
2,4,6-Trichlorophenol	UG/KG	420	U	440	U	400	U
Tentatively Identified Compounds		29		27		28	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603											
		S31301		S32301		S32301		S33301		S33301	
		902-S31301		902-S32301		902-S32301		902-S33301		902-S33301	
		36433-01 REG		36433-02DL DIL		36433-02 REG		36433-03DL DIL		36433-03 REG	
		6/21/94		6/21/94		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	0.43	U	9	UJ	3.1	J	1.6	UJ	0.52	J
alpha-BHC	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
alpha-Chlordane	UG/KG	0.54	J	10	J	10		1.6	J	1.2	J
Aroclor 1232	UG/KG	8.3	U	180	UJ	35	U	32	UJ	8	U
Aroclor-1016	UG/KG	8.3	U	180	UJ	35	U	32	UJ	8	U
Aroclor-1221	UG/KG	17	U	360	UJ	71	U	64	UJ	16	U
Aroclor-1242	UG/KG	8.3	U	180	UJ	35	U	32	UJ	8	U
Aroclor-1248	UG/KG	8.3	U	180	UJ	35	U	32	UJ	8	U
Aroclor-1254	UG/KG	3.7	J	180	UJ	35	U	32	UJ	8	U
Aroclor-1260	UG/KG	8.3	U	180	UJ	35	U	32	UJ	8	U
beta-BHC	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
4,4'-DDD	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
4,4'-DDE	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
4,4'-DDT	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
delta-BHC	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
Dieldrin	UG/KG	10		150	J	140		46	J	29	
Endosulfan I	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
Endosulfan II	UG/KG	0.83	UJ	18	UJ	3.5	UJ	3.2	UJ	0.8	UJ
Endosulfan Sulfate	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
Endrin	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
Endrin Aldehyde	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
Endrin Ketone	UG/KG	0.83	U	18	UJ	3.5	U	3.2	UJ	0.8	U
gamma-BHC (Lindane)	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
gamma-Chlordane	UG/KG	0.42	J	7.4	J	7.4		1.3	J	1	
Heptachlor	UG/KG	0.43	U	9	UJ	1.8	U	1.6	UJ	0.41	U
Heptachlor Epoxide	UG/KG	0.43	U	9	UJ	2.2	J	1.6	UJ	0.53	J
p,p'-Methoxychlor	UG/KG	4.3	UJ	90	UJ	18	UJ	16	UJ	4.1	UJ
Toxaphene	UG/KG	43	U	900	UJ	180	U	160	UJ	41	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603							
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		3643501 REG		3643502 REG		3643503 REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Inorganics	Units						
Aluminum	MG/KG	13100		13500		11700	
Antimony	MG/KG	0.78	R	0.83	R	0.74	R
Arsenic	MG/KG	8.9		10.9		10.3	
Barium	MG/KG	105		249		142	
Beryllium	MG/KG	0.75		0.89		0.67	
Bismuth	MG/KG	58.6		48.9		52.1	
Cadmium	MG/KG	0.58	U	0.61	U	0.55	U
Calcium	MG/KG	28200	J	18800	J	63500	J
Chromium	MG/KG	19.8		18.6		14.7	
Cobalt	MG/KG	12.3		9.8		9.7	
Copper	MG/KG	21.6		21.8		22.1	
Cyanide	MG/KG	1.7		0.79		0.6	U
Iron	MG/KG	30600		34700		25100	
Lead	MG/KG	16.6		19.7		19.7	
Magnesium	MG/KG	7810		7160		18700	
Manganese	MG/KG	668		1200		743	
Mercury	MG/KG	0.13	U	0.13	U	0.12	U
Nickel	MG/KG	22.8		20.3		23.4	
Potassium	MG/KG	1680		956		1360	
Selenium	MG/KG	0.51	UJ	0.53	UJ	0.48	UJ
Silver	MG/KG	1.2	U	1.3	U	1.2	U
Sodium	MG/KG	2240	J	2670	J	1420	J
Thallium	MG/KG	0.91	U	0.96	U	0.86	U
Vanadium	MG/KG	21.7		27.9		20.8	
Zinc	MG/KG	66.6		75.8		66.3	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603							
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		036434-0001-SA		0364340002SA REG		0364340003SA REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Anions	Units						
Chloride	MG/KG	1150		1300		372	
Fluoride	MG/KG	1.5		2.1		1.9	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	9		2.4		0.76	
Sulfate	MG/KG	322		81.3		107	
		S31301		S32301		S33301	
		902-S31301		902-S32301		902-S33301	
		REG		0364340002SA REG		0364340003SA REG	
		6/21/94		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val
Miscellaneous	Units						
Cation Exchange Capacity as Na	MEQ/100	12.5					
PH	UNITS	7.8		7.9		8.4	
Total Organic Carbon	%	1.05		2.1667		1.5	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603			
		S31301	
		902-S31301	
		0364340001SA REG	
		6/21/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.32	U
1,3-Dinitrobenzene	UG/G	0.32	U
2,4-Dinitrotoluene	UG/G	0.32	U
2,6-Dinitrotoluene	UG/G	0.33	U
HMX	UG/G	2.8	U
Nitrobenzene	UG/G	0.33	U
PETN	UG/G	1.3	U
RDX	UG/G	1.3	U
TETRYL	UG/G	0.82	U
1,3,5-Trinitrobenzene	UG/G	0.32	U
2,4,6-Trinitrotoluene	UG/G	0.32	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 603										
		S31301			S32301			S33301		
		902-S31301			902-S32301			902-S33301		
		3228673 REG			3228674 REG			3228672 REG		
		34506			34506			34506		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units									
Am-241	PCI/G	0.108	NA	U	0.0854	NA	U	0.0854	NA	U
Bi-207	PCI/G	0.0257	NA	U	0.0191	NA	U	0.0242	NA	U
Bi-210m	PCI/G	0.0293	NA	U	0.0221	NA	U	0.0279	NA	U
Co-60	PCI/G	0.0305	NA	U	0.0247	NA	U	0.0316	NA	U
Cs-137	PCI/G	0.202	0.0344		0.238	0.0323		0.299	0.0451	
K-40	PCI/G	21	2.24		14.3	1.51		16.9	1.87	
Pu-238	PCI/G	0.259	0.0517	J	0.0461	0.0251	J	0.359	0.0672	J
Pu-239/240	PCI/G	0.0328	0.0161	J	0.00629	0.00731	J	0.0215	NA	UJ
Pu-242	PCI/G	0.0125	0.00895	J	0.0154	NA	UJ	0.0143	0.0114	J
Ra-226	PCI/G	2.29	0.636		3.15	0.575		2.24	0.7	
Sr-90	PCI/G	0.492	NA	U	0.537	NA	U	0.384	0.233	J
Th-228	PCI/G	0.828	0.135		0.818	0.132		0.847	0.134	
Th-230	PCI/G	1.08	0.166		1.6	0.228		1.24	0.181	
Th-232	PCI/G	0.718	0.121		0.75	0.123		0.74	0.12	
Tritium	PCI/G	0.175	0.0601	R	0.17	0.0868	R	0.127	0.617	R
U-234	PCI/G	0.809	0.159		0.772	0.138		0.851	0.16	
U-235	PCI/G	0.0399	ND	U	0.042	0.0238		0.0659	0.034	
U-238	PCI/G	0.95	0.179		0.84	0.147		0.962	0.175	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		H4502.D REG		H4503.D REG		H4504.D REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Volatile Organics	Units						
Acetone	UG/KG	15	U	15	U	13	U
Acetonitrile	UG/KG	154	U	152	U	128	U
Acrylonitrile	UG/KG	154	U	152	U	128	U
Benzene	UG/KG	15	U	15	U	13	U
Bromodichloromethane	UG/KG	15	U	15	U	13	U
Bromoform	UG/KG	15	U	15	U	13	U
Bromomethane	UG/KG	15	U	15	U	13	U
2-Butanone	UG/KG	15	U	15	U	13	U
Carbon Disulfide	UG/KG	15	U	15	U	13	U
Carbon Tetrachloride	UG/KG	15	U	15	U	13	U
Chlorobenzene	UG/KG	15	U	15	U	13	U
Chlorodibromomethane	UG/KG	15	U	15	U	13	U
Chloroethane	UG/KG	15	U	15	U	13	U
Chloroform	UG/KG	15	U	15	U	13	U
Chloromethane	UG/KG	15	U	15	U	13	U
1,1-Dichloroethane	UG/KG	15	U	15	U	13	U
1,2-Dichloroethane	UG/KG	15	U	15	U	13	U
1,1-Dichloroethene	UG/KG	15	U	15	U	13	U
1,2-Dichloroethene	UG/KG	31	U	30	U	26	U
1,2-Dichloropropane	UG/KG	15	U	15	U	13	U
cis-1,3-Dichloropropene	UG/KG	15	U	15	U	13	U
trans-1,3-Dichloropropene	UG/KG	15	U	15	U	13	U
1,2-Diethylbenzene	UG/KG	31	U	30	U	26	U
Ethylbenzene	UG/KG	15	U	15	U	13	U
Hexane	UG/KG	15	U	15	U	13	U
2-Hexanone	UG/KG	15	U	15	U	13	U
Iodomethane	UG/KG	15	U	15	U	13	U
4-Methyl-2-pentanone	UG/KG	15	U	15	U	13	U
Methylene Chloride	UG/KG	15	U	15	U	13	U
Styrene	UG/KG	15	U	15	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	15	U	15	U	13	U
Tetrachloroethene	UG/KG	15	U	15	U	13	U
Toluene	UG/KG	15	U	15	U	13	U
1,1,1-Trichloroethane	UG/KG	15	U	15	U	13	U
1,1,2-Trichloroethane	UG/KG	15	U	15	U	13	U
Trichloroethene	UG/KG	15	U	15	U	13	U
Trichlorotrifluoroethane	UG/KG	15	U	15	U	13	U
Vinyl Acetate	UG/KG	15	U	15	U	13	U
Vinyl Chloride	UG/KG	15	U	15	U	13	U
Xylene, Total	UG/KG	31	U	30	U	26	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		A0601155.D REG		A0701156.D REG		A0801157.D REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Acenaphthene	UG/KG	510	U	500	U	430	U
Acenaphthylene	UG/KG	510	U	500	U	430	U
Anthracene	UG/KG	510	U	500	U	430	U
Benzo(a)anthracene	UG/KG	150	J	150	J	78	J
Benzo(a)pyrene	UG/KG	180	J	170	J	90	J
Benzo(b)fluoranthene	UG/KG	300	J	180	J	87	J
Benzo(g,h,i)perylene	UG/KG	110	J	100	J	54	J
Benzo(k)fluoranthene	UG/KG	510	U	180	J	110	J
Benzoic Acid	UG/KG	2500	U	55	J	49	J
Benzyl Alcohol	UG/KG	510	U	500	U	430	U
2-Benzyl-4-Chlorophenol	UG/KG	510	UJ	500	UJ	430	UJ
bis(2-Chloroethoxy)methane	UG/KG	510	U	500	U	430	U
bis(2-Chloroethyl)ether	UG/KG	510	U	500	U	430	U
bis(2-Ethylhexyl)phthalate	UG/KG	510	UJ	69	J	430	UJ
4-Bromophenyl-phenylether	UG/KG	510	U	500	U	430	U
Butylbenzylphthalate	UG/KG	510	U	500	U	430	U
Carbazole	UG/KG	510	U	500	U	430	U
4-Chloro-3-methylphenol	UG/KG	510	U	500	U	430	U
4-Chloroaniline	UG/KG	510	U	500	U	430	U
2-Chloronaphthalene	UG/KG	510	U	500	U	430	U
2-Chlorophenol	UG/KG	510	U	500	U	430	U
4-Chlorophenyl-phenylether	UG/KG	510	U	500	U	430	U
Chrysene	UG/KG	260	J	240	J	130	J
Di-n-butylphthalate	UG/KG	510	U	500	U	430	U
Di-n-octylphthalate	UG/KG	510	U	500	U	430	U
Dibenzo(a,h)anthracene	UG/KG	510	U	500	U	430	U
Dibenzofuran	UG/KG	510	U	500	U	430	U
1,2-Dichlorobenzene	UG/KG	510	U	500	U	430	U
1,3-Dichlorobenzene	UG/KG	510	U	500	U	430	U
1,4-Dichlorobenzene	UG/KG	510	U	500	U	430	U
3,3'-Dichlorobenzidine	UG/KG	510	U	500	U	430	U
2,4-Dichlorophenol	UG/KG	510	U	500	U	430	U
Diethylphthalate	UG/KG	510	U	500	U	430	U
2,4-Dimethylphenol	UG/KG	510	U	500	U	430	U
Dimethylphthalate	UG/KG	510	U	500	U	430	U
4,6-Dinitro-2-methylphenol	UG/KG	1200	U	1200	U	1000	U
2,4-Dinitrophenol	UG/KG	1200	U	1200	U	1000	U
2,4-Dinitrotoluene	UG/KG	510	U	500	U	430	U
2,6-Dinitrotoluene	UG/KG	510	U	500	U	430	U
Fluoranthene	UG/KG	440	J	420	J	200	J
Fluorene	UG/KG	510	U	500	U	430	U
Hexachlorobenzene	UG/KG	510	U	500	U	430	U
Hexachlorobutadiene	UG/KG	510	U	500	U	430	U
Hexachlorocyclopentadiene	UG/KG	510	U	500	U	430	U
Hexachloroethane	UG/KG	510	U	500	U	430	U
Indeno(1,2,3-c,d)pyrene	UG/KG	99	J	100	J	50	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		A0601155.D REG		A0701156.D REG		A0801157.D REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Isophorone	UG/KG	510	U	500	U	430	U
2-Methylnaphthalene	UG/KG	510	U	500	U	430	U
2-Methylphenol	UG/KG	510	U	500	U	430	U
4-Methylphenol	UG/KG	510	U	500	U	430	U
N-Nitroso-di-n-propylamine	UG/KG	510	U	500	U	430	U
N-Nitrosodiphenylamine	UG/KG	510	U	500	U	430	U
Naphthalene	UG/KG	510	U	500	U	430	U
2-Nitroaniline	UG/KG	1200	U	1200	U	1000	U
3-Nitroaniline	UG/KG	1200	U	1200	U	1000	U
4-Nitroaniline	UG/KG	1200	UJ	1200	UJ	1000	UJ
Nitrobenzene	UG/KG	510	U	500	U	430	U
2-Nitrophenol	UG/KG	510	U	500	U	430	U
4-Nitrophenol	UG/KG	1200	U	1200	U	1000	U
2,2'-oxybis(1-Chloropropane)	UG/KG	510	U	500	U	430	U
Pentachlorophenol	UG/KG	1200	U	1200	U	1000	U
Phenanthrene	UG/KG	200	J	240	J	92	J
Phenol	UG/KG	510	U	500	U	430	U
Pyrene	UG/KG	290	J	290	J	140	J
1,2,4-Trichlorobenzene	UG/KG	510	U	500	U	430	U
2,4,5-Trichlorophenol	UG/KG	1200	U	1200	U	1000	U
2,4,6-Trichlorophenol	UG/KG	510	U	500	U	430	U
Tentatively Identified Compounds		30		30		30	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		36433-14 REG		36433-15 REG		36433-16 REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Pesticides and PCBs	**Units**						
Aldrin	UG/KG	1	U	1	U	0.87	U
alpha-BHC	UG/KG	1	U	1	U	0.87	U
alpha-Chlordane	UG/KG	1	U	1	U	0.87	U
Aroclor 1232	UG/KG	20	U	20	U	17	U
Aroclor-1016	UG/KG	20	U	20	U	17	U
Aroclor-1221	UG/KG	41	U	40	U	34	U
Aroclor-1242	UG/KG	20	U	20	U	17	U
Aroclor-1248	UG/KG	20	U	20	U	17	U
Aroclor-1254	UG/KG	17	J	6.4	J	4.8	J
Aroclor-1260	UG/KG	20	U	20	U	17	U
beta-BHC	UG/KG	1	U	1	U	0.87	U
4,4'-DDD	UG/KG	2	U	2.7		1.7	U
4,4'-DDE	UG/KG	1.6	J	2	U	1.7	U
4,4'-DDT	UG/KG	2	U	2	U	1.7	U
delta-BHC	UG/KG	1	U	1	U	0.87	U
Dieldrin	UG/KG	2	U	2	U	1.7	U
Endosulfan I	UG/KG	1	U	1	U	0.87	U
Endosulfan II	UG/KG	2	UJ	2	UJ	1.7	UJ
Endosulfan Sulfate	UG/KG	2	U	2	U	1.7	U
Endrin	UG/KG	2	U	2	U	1.7	U
Endrin Aldehyde	UG/KG	2	U	2	U	1.7	U
Endrin Ketone	UG/KG	2	U	2	U	1.7	U
gamma-BHC (Lindane)	UG/KG	1	U	1	U	0.87	U
gamma-Chlordane	UG/KG	1	U	1	U	0.87	U
Heptachlor	UG/KG	1	U	1	U	0.87	U
Heptachlor Epoxide	UG/KG	1	U	1	U	0.87	U
p,p'-Methoxychlor	UG/KG	10	UJ	10	UJ	8.7	UJ
Toxaphene	UG/KG	100	U	100	U	87	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		3643514 REG		3643515 REG		3643516 REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Inorganics	**Units**						
Aluminum	MG/KG	9490		4910		3340	
Antimony	MG/KG	0.96	R	0.93	R	0.79	R
Arsenic	MG/KG	9		7.9		10.8	
Barium	MG/KG	206		56.4		42.6	
Beryllium	MG/KG	0.6		0.23		0.22	
Bismuth	MG/KG	51.3		166		108	
Cadmium	MG/KG	2.5		1.3		1.9	
Calcium	MG/KG	114000	J	183000	J	129000	J
Chromium	MG/KG	52.9		20.4		16.7	
Cobalt	MG/KG	20.5		8.4		9.8	
Copper	MG/KG	55.7		35.5		45	
Cyanide	MG/KG	0.77	U	2.2		2.1	
Iron	MG/KG	77800		72000		148000	
Lead	MG/KG	1100		1200		926	
Magnesium	MG/KG	7630		50300		46000	
Manganese	MG/KG	2190		538		769	
Mercury	MG/KG	0.15		0.15	U	0.13	U
Nickel	MG/KG	28		16.8		24.4	
Potassium	MG/KG	2200		981		677	
Selenium	MG/KG	0.62	UJ	0.6	UJ	0.51	UJ
Silver	MG/KG	1.5	U	1.4	U	2.4	U
Sodium	MG/KG	818	J	569	U	964	U
Thallium	MG/KG	1.1	U	1.1	U	0.92	U
Vanadium	MG/KG	11.8		6.8		4.2	
Zinc	MG/KG	135		75.2		42.3	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605							
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		REG		0364340016SA REG		0364340017SA REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Anions	Units						
Chloride	MG/KG	602		224		495	
Fluoride	MG/KG	2		1.5		0.92	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	3.2		6		0.64	U
Sulfate	MG/KG	115		45.2		185	
		S51301		S52301		S53301	
		902-S51301		902-S52301		902-S53301	
		REG		0364340016SA REG		0364340017SA REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Miscellaneous	Units						
Cation Exchange Capacity as Na	MEQ/100	15.4					
PH	UNITS	7.8	J	7.7	J	8.3	J
Total Organic Carbon	%	3.45		1.1		1.825	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605			
		S51301	
		902-S51301	
		0364340015SA REG	
		6/22/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.38	U
1,3-Dinitrobenzene	UG/G	0.38	U
2,4-Dinitrotoluene	UG/G	0.38	U
2,6-Dinitrotoluene	UG/G	0.4	U
HMX	UG/G	3.4	U
Nitrobenzene	UG/G	0.4	U
PETN	UG/G	1.5	U
RDX	UG/G	1.5	U
TETRYL	UG/G	1	U
1,3,5-Trinitrobenzene	UG/G	0.38	U
2,4,6-Trinitrotoluene	UG/G	0.38	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 605										
		S51301			S52301			S53301		
		902-S51301			902-S52301			902-S53301		
		3229413 REG			3229414 REG			3229415 REG		
		34507			34507			34507		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units									
Am-241	PCI/G	0.118	NA	U	0.0511	NA	U	0.0812	NA	U
Bi-207	PCI/G	0.0282	NA	U	0.0144	NA	U	0.0167	NA	U
Bi-210m	PCI/G	0.033	NA	U	0.0149	NA	U	0.0195	NA	U
Co-60	PCI/G	0.0347	NA	U	0.019	NA	U	0.0226	NA	U
Cs-137	PCI/G	0.516	0.07		0.183	0.0303		0.115	0.024	
K-40	PCI/G	24.2	2.56		10.2	1.14		8.15	0.99	
Pu-238	PCI/G	0.533	0.0856		0.28	0.0671	J	0.131	0.0344	
Pu-239/240	PCI/G	0.035	0.0161		0.0223	0.016	J	0.0106	NA	U
Pu-242	PCI/G	0.00241	NA	U	0.00755	NA	UJ	0.0106	NA	U
Ra-226	PCI/G	1.79	0.767		1.03	0.366		1.07	0.445	
Sr-90	PCI/G	0.693	0.268		0.469	0.259	R	0.982	NA	UJ
Th-228	PCI/G	1.03	0.174		0.593	0.141	J	0.372	0.0851	
Th-230	PCI/G	0.994	0.168		0.765	0.164	J	0.586	0.115	
Th-232	PCI/G	1.07	0.177		0.416	0.115	J	0.306	0.0743	
Tritium	PCI/G	10.2	0.306		12.1	0.331	U	8.34	0.235	U
U-234	PCI/G	0.705	0.125		0.813	0.147		0.639	0.121	
U-235	PCI/G	0.0373	0.0241		0.194	0.059		0.0677	0.0307	
U-238	PCI/G	0.805	0.138		0.585	0.118		0.572	0.112	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		H4486.D REG		H4494.D REG		H4495.D REG		H4496.D REG		H4497.D REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	12	U	16	U	17	U	14	U
Acetonitrile	UG/KG	123	U	118	U	159	U	167	U	135	U
Acrylonitrile	UG/KG	123	U	118	U	159	U	167	U	135	U
Benzene	UG/KG	12	U	12	U	16	U	17	U	14	U
Bromodichloromethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Bromoform	UG/KG	12	U	12	U	16	U	17	U	14	U
Bromomethane	UG/KG	12	UJ	12	U	16	U	17	U	14	U
2-Butanone	UG/KG	12	U	12	U	16	U	17	U	14	U
Carbon Disulfide	UG/KG	12	U	12	U	16	U	17	U	14	U
Carbon Tetrachloride	UG/KG	12	U	12	U	16	U	17	U	14	U
Chlorobenzene	UG/KG	12	U	12	U	16	U	17	U	14	U
Chlorodibromomethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Chloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Chloroform	UG/KG	12	U	12	U	16	U	17	U	14	U
Chloromethane	UG/KG	12	U	12	U	16	U	17	U	14	U
1,1-Dichloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
1,2-Dichloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
1,1-Dichloroethene	UG/KG	12	U	12	U	16	U	17	U	14	U
1,2-Dichloroethene	UG/KG	25	U	24	U	32	U	33	U	27	U
1,2-Dichloropropane	UG/KG	12	U	12	U	16	U	17	U	14	U
cis-1,3-Dichloropropene	UG/KG	12	U	12	U	16	U	17	U	14	U
trans-1,3-Dichloropropene	UG/KG	12	U	12	U	16	U	17	U	14	U
1,2-Diethylbenzene	UG/KG	25	U	24	U	32	U	33	U	27	U
Ethylbenzene	UG/KG	12	U	12	U	16	U	17	U	14	U
Hexane	UG/KG	12	U	12	U	16	U	17	U	14	U
2-Hexanone	UG/KG	12	U	12	U	16	U	17	U	14	U
Iodomethane	UG/KG	12	U	12	U	16	U	17	U	14	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	16	U	17	U	14	U
Methylene Chloride	UG/KG	12	U	12	U	16	U	17	U	14	U
Styrene	UG/KG	12	U	12	U	16	U	17	U	14	U
1,1,2,2-Tetrachloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Tetrachloroethene	UG/KG	12	U	12	U	16	U	17	U	14	U
Toluene	UG/KG	12	U	12	U	16	U	17	U	4	J
1,1,1-Trichloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
1,1,2-Trichloroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Trichloroethene	UG/KG	12	U	12	U	16	U	17	U	14	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	16	U	17	U	14	U
Vinyl Acetate	UG/KG	12	U	12	U	16	U	17	U	14	U
Vinyl Chloride	UG/KG	12	U	12	U	16	U	17	U	14	U
Xylene, Total	UG/KG	25	U	24	U	32	U	33	U	27	U
Tentatively Identified Compounds				1						1	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		A0801139.D REG		A0901140.D REG		A1001141.D REG		A1101142.D REG		A1201143.D REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	410	U	390	U	530	U	550	U	450	U
Acenaphthylene	UG/KG	410	U	390	U	530	U	550	U	450	U
Anthracene	UG/KG	410	U	390	U	530	U	550	U	450	U
Benzo(a)anthracene	UG/KG	410	U	390	U	130	J	550	U	450	U
Benzo(a)pyrene	UG/KG	410	U	390	U	150	J	550	U	49	J
Benzo(b)fluoranthene	UG/KG	410	U	390	U	140	J	550	U	55	J
Benzo(g,h,i)perylene	UG/KG	410	U	390	U	93	J	550	U	450	U
Benzo(k)fluoranthene	UG/KG	410	U	390	U	530	U	550	U	46	J
Benzoic Acid	UG/KG	2000	U	1900	U	71	J	56	J	48	J
Benzyl Alcohol	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Benzyl-4-Chlorophenol	UG/KG	410	U	390	U	530	U	550	U	450	U
bis(2-Chloroethoxy)methane	UG/KG	410	U	390	U	530	U	550	U	450	U
bis(2-Chloroethyl)ether	UG/KG	410	U	390	U	530	U	550	U	450	U
bis(2-Ethylhexyl)phthalate	UG/KG	410	UJ	390	UJ	530	UJ	550	UJ	450	UJ
4-Bromophenyl-phenylether	UG/KG	410	U	390	U	530	U	550	U	450	U
Butylbenzylphthalate	UG/KG	410	U	390	U	530	U	550	U	450	U
Carbazole	UG/KG	410	U	390	U	530	U	550	U	450	U
4-Chloro-3-methylphenol	UG/KG	410	U	390	U	530	U	550	U	450	U
4-Chloroaniline	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Chloronaphthalene	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Chlorophenol	UG/KG	410	U	390	U	530	U	550	U	450	U
4-Chlorophenyl-phenylether	UG/KG	410	U	390	U	530	U	550	U	450	U
Chrysene	UG/KG	410	U	390	U	210	J	56	J	61	J
Di-n-butylphthalate	UG/KG	410	U	390	U	530	U	550	U	450	U
Di-n-octylphthalate	UG/KG	410	U	390	U	530	U	550	U	450	U
Dibenzo(a,h)anthracene	UG/KG	410	U	390	U	530	U	550	U	450	U
Dibenzofuran	UG/KG	410	U	390	U	530	U	550	U	450	U
1,2-Dichlorobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
1,3-Dichlorobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
1,4-Dichlorobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
3,3'-Dichlorobenzidine	UG/KG	410	U	390	U	530	U	550	U	450	U
2,4-Dichlorophenol	UG/KG	410	U	390	U	530	U	550	U	450	U
Diethylphthalate	UG/KG	410	U	390	U	530	U	550	U	450	U
2,4-Dimethylphenol	UG/KG	410	U	390	U	530	U	550	U	450	U
Dimethylphthalate	UG/KG	410	U	390	U	530	U	550	U	450	U
4,6-Dinitro-2-methylphenol	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
2,4-Dinitrophenol	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
2,4-Dinitrotoluene	UG/KG	410	U	390	U	530	U	550	U	450	U
2,6-Dinitrotoluene	UG/KG	410	U	390	U	530	U	550	U	450	U
Fluoranthene	UG/KG	410	U	390	U	360	J	91	J	110	J
Fluorene	UG/KG	410	U	390	U	530	U	550	U	450	U
Hexachlorobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
Hexachlorobutadiene	UG/KG	410	U	390	U	530	U	550	U	450	U
Hexachlorocyclopentadiene	UG/KG	410	U	390	U	530	U	550	U	450	U
Hexachloroethane	UG/KG	410	U	390	U	530	U	550	U	450	U
Indeno(1,2,3-c,d)pyrene	UG/KG	410	U	390	U	95	J	550	U	450	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		A0801139.D REG		A0901140.D REG		A1001141.D REG		A1101142.D REG		A1201143.D REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Isophorone	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Methylnaphthalene	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Methylphenol	UG/KG	410	U	390	U	530	U	550	U	450	U
4-Methylphenol	UG/KG	410	U	390	U	530	U	550	U	450	U
N-Nitroso-di-n-propylamine	UG/KG	410	U	390	U	530	U	550	U	450	U
N-Nitrosodiphenylamine	UG/KG	410	U	390	U	530	U	550	U	450	U
Naphthalene	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Nitroaniline	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
3-Nitroaniline	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
4-Nitroaniline	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
Nitrobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
2-Nitrophenol	UG/KG	410	U	390	U	530	U	550	U	450	U
4-Nitrophenol	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
2,2'-oxybis(1-Chloropropane)	UG/KG	410	U	390	U	530	U	550	U	450	U
Pentachlorophenol	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
Phenanthrene	UG/KG	410	U	390	U	170	J	550	U	46	J
Phenol	UG/KG	410	U	390	U	530	U	550	U	450	U
Pyrene	UG/KG	410	U	390	U	270	J	74	J	87	J
1,2,4-Trichlorobenzene	UG/KG	410	U	390	U	530	U	550	U	450	U
2,4,5-Trichlorophenol	UG/KG	990	U	940	U	1300	U	1300	U	1100	U
2,4,6-Trichlorophenol	UG/KG	410	U	390	U	530	U	550	U	450	U
Tentatively Identified Compounds		13		8		30		28		29	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		36433-04 REG		36433-05 REG		36433-06 REG		36433-07 REG		36433-08 REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
alpha-BHC	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
alpha-Chlordane	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
Aroclor 1232	UG/KG	8.1	U	7.8	U	10	U	11	U	8.9	U
Aroclor-1016	UG/KG	8.1	U	7.8	U	10	U	11	U	8.9	U
Aroclor-1221	UG/KG	16	U	16	U	21	U	22	U	18	U
Aroclor-1242	UG/KG	8.1	U	7.8	U	10	U	11	U	8.9	U
Aroclor-1248	UG/KG	8.1	U	7.8	U	10	U	11	U	8.9	U
Aroclor-1254	UG/KG	8.1	U	7.8	U	4.6	J	5.3	J	4.3	J
Aroclor-1260	UG/KG	8.1	U	7.8	U	10	U	11	U	8.9	U
beta-BHC	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
4,4'-DDD	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
4,4'-DDE	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
4,4'-DDT	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
delta-BHC	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
Dieldrin	UG/KG	0.81	U	0.78	U	1	U	0.57	J	0.89	U
Endosulfan I	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
Endosulfan II	UG/KG	0.5	J	0.78	UJ	1	UJ	1.1	UJ	1.2	J
Endosulfan Sulfate	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
Endrin	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
Endrin Aldehyde	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
Endrin Ketone	UG/KG	0.81	U	0.78	U	1	U	1.1	U	0.89	U
gamma-BHC (Lindane)	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
gamma-Chlordane	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
Heptachlor	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
Heptachlor Epoxide	UG/KG	0.42	U	0.4	U	0.54	U	0.56	U	0.46	U
p,p'-Methoxychlor	UG/KG	4.2	UJ	4	UJ	5.4	UJ	5.6	UJ	4.6	UJ
Toxaphene	UG/KG	42	U	40	U	54	U	56	U	46	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		3643504 REG		3643505 REG		3643506 REG		3643507 REG		3643508 REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	11700		13600		17200		15400		16900	
Antimony	MG/KG	0.76	R	0.73	R	0.99	R	1	R	0.84	R
Arsenic	MG/KG	3.2		4.7		5.3		6.7		5.3	
Barium	MG/KG	50.7		60.6		143		126		132	
Beryllium	MG/KG	0.57		0.67		1		0.89		1	
Bismuth	MG/KG	45.7		49.3		51.3		50.1		50.9	
Cadmium	MG/KG	0.57	U	0.54	U	0.73	U	0.77	U	0.62	U
Calcium	MG/KG	131000	J	113000	J	34600	J	49200	J	20300	J
Chromium	MG/KG	15.7		19		20.6		18.5		21.7	
Cobalt	MG/KG	13.1		14.3		16.2		14.3		15.4	
Copper	MG/KG	13.6		19.7		23.2		22.3		23.3	
Cyanide	MG/KG	0.62	U	0.59	U	0.8	U	0.84	U	0.68	U
Iron	MG/KG	27000		29300		37600		33800		38000	
Lead	MG/KG	7.5		5.4		18.7		22.3		21.8	
Magnesium	MG/KG	7280		11300		6350		6110		6090	
Manganese	MG/KG	557		548		1450		1170		1320	
Mercury	MG/KG	0.12	U	0.12	U	0.16	U	0.17	U	0.14	U
Nickel	MG/KG	23.7		28		29.2		26.6		32.9	
Potassium	MG/KG	580		3090		2910		2760		3480	
Selenium	MG/KG	0.49	UJ	4.7	UJ	0.64	UJ	0.67	UJ	0.54	UJ
Silver	MG/KG	1.2	U	1.1	U	1.5	U	1.6	U	1.3	U
Sodium	MG/KG	466	U	446	U	871	J	924	J	513	U
Thallium	MG/KG	0.89	U	0.85	U	1.1	U	1.2	U	0.98	U
Vanadium	MG/KG	12.8		14.6		23.5		20.7		23.5	
Zinc	MG/KG	55.8		55.1		86.2		88.7		93.2	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606											
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		REG		0364340006SA REG		0364340007SA REG		0364340008SA REG		0364340009SA REG	
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	163		165		623		722		290	
Fluoride	MG/KG	2.6		2.2		1.4		1.4		1.1	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	1.4		0.59	U	1.9		2.7		4.7	
Sulfate	MG/KG	61.7		99.1		124		108		33.9	U
		S61301		S61302		S62301		S62311		S63301	
		902-S61301		902-S61302		902-S62301		902-S62311		902-S63301	
		REG		0364340006SA REG		0364340007SA REG		0364340008SA REG		03643400	Val
		6/22/94		6/22/94		6/22/94		06/22/94DUPE		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	
Miscellaneous	Units										J
Cation Exchange Capacity as Na	MEQ/100	7.7									
PH	UNITS	8.1	J	8.3	J	7.6	J	7.7	J	7.7	
Total Organic Carbon	%	0.2825		0.2	U	2.475		2.05		3.65	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606			
		S61301	
		902-S61301	
		0364340005SA REG	
		6/22/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.31	U
1,3-Dinitrobenzene	UG/G	0.31	U
2,4-Dinitrotoluene	UG/G	0.31	U
2,6-Dinitrotoluene	UG/G	0.32	U
HMX	UG/G	2.7	U
Nitrobenzene	UG/G	0.32	U
PETN	UG/G	1.2	U
RDX	UG/G	1.2	U
TETRYL	UG/G	0.8	U
1,3,5-Trinitrobenzene	UG/G	0.31	U
2,4,6-Trinitrotoluene	UG/G	0.31	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 606																
		S61301			S61302			S62301			S62311			S63301		
		902-S61301			902-S61302			902-S62301			902-S62311			902-S63301		
		3229416 REG			3229417 REG			3229418 REG			3229419 REG			3229423 REG		
		34507			34507			34507			06/22/94DUPE			34507		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units															
Am-241	PCI/G	0.118	NA	U	0.13	NA	U	0.118	NA	U	0.144	NA	U	0.136	NA	U
Bi-207	PCI/G	0.0317	NA	U	0.0343	NA	U	0.0361	NA	U	0.0375	NA	U	0.0343	NA	U
Bi-210m	PCI/G	0.0357	NA	U	0.04	NA	U	0.0404	NA	U	0.0418	NA	U	0.0392	NA	U
Co-60	PCI/G	0.042	NA	U	0.0448	NA	U	0.0459	NA	U	0.0465	NA	U	0.0461	NA	U
Cs-137	PCI/G	0.0362	NA	U	0.0398	NA	U	0.119	0.0415		0.18	0.0475		0.189	0.0371	
K-40	PCI/G	27.1	2.9		32	3.44		30.3	3.29		29.1	3.1		34.3	3.66	
Pu-238	PCI/G	0.12	0.0295		0.0793	0.0236		0.204	0.0491		0.209	0.0509		0.213	0.0413	
Pu-239/240	PCI/G	0.00349	NA	U	0.00833	NA	U	0.0209	NA	U	0.0169	NA	U	0.0136	0.00939	
Pu-242	PCI/G	0.00567	NA	U	0.00214	NA	U	0.0133	NA	U	0.00584	NA	U	0.00235	NA	U
Ra-226	PCI/G	0.775	NA	U	0.701	NA	U	0.69	NA	U	2.3	0.962		2.66	0.983	
Sr-90	PCI/G	2.17	0.696		0.905	NA	U	2.32	0.609		0.974	NA	U	3.48	0.675	
Th-228	PCI/G	1.22	0.201		1.05	0.189		1.15	0.19		1.27	0.199		1.27	0.199	
Th-230	PCI/G	0.941	0.166		0.946	0.174		1.28	0.206		1.06	0.172		1.25	0.194	
Th-232	PCI/G	1.28	0.209		1.07	0.189		1.13	0.186		1.13	0.18		1.32	0.203	
Tritium	PCI/G	3.66	1.37	U	3.18	0.111		19	0.44		13.2	0.353		3.1	0.165	
U-234	PCI/G	0.746	0.136		0.697	0.127		0.677	0.123		0.641	0.117		0.885	0.15	
U-235	PCI/G	0.0433	0.0246		0.0453	NA	U	0.0477	0.026		0.0305	NA	U	0.0477	0.0246	
U-238	PCI/G	0.783	0.14		0.778	0.138		0.9	0.152		0.858	0.145		0.817	0.141	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607									
		S71301		S72301		S73301		S73301	
		902-S71301		902-S72301		902-S73301		902-S73301	
		H4505.D REG		H4506.D REG		H4513.D REA		H4513.D REG	
		6/22/94		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units								
Acetone	UG/KG	12	U	12	U	16		16	U
Acetonitrile	UG/KG	125	U	120	U	159		159	U
Acrylonitrile	UG/KG	125	U	120	U	159		159	U
Benzene	UG/KG	12	U	12	U	16		16	U
Bromodichloromethane	UG/KG	12	U	12	U	16		16	U
Bromoform	UG/KG	12	U	12	U	16		16	U
Bromomethane	UG/KG	12	U	12	U	16		16	U
2-Butanone	UG/KG	12	U	12	U	16		16	U
Carbon Disulfide	UG/KG	12	U	12	U	16		16	U
Carbon Tetrachloride	UG/KG	12	U	12	U	16		16	U
Chlorobenzene	UG/KG	12	U	12	U	16		16	UJ
Chlorodibromomethane	UG/KG	12	U	12	U	16		16	U
Chloroethane	UG/KG	12	U	12	U	16		16	U
Chloroform	UG/KG	12	U	12	U	16		16	U
Chloromethane	UG/KG	12	U	12	U	16		16	U
1,1-Dichloroethane	UG/KG	12	U	12	U	16		16	U
1,2-Dichloroethane	UG/KG	12	U	12	U	16		16	U
1,1-Dichloroethene	UG/KG	12	U	12	U	16		16	U
1,2-Dichloroethene	UG/KG	25	U	24	U	32		32	U
1,2-Dichloropropane	UG/KG	12	U	12	U	16		16	U
cis-1,3-Dichloropropene	UG/KG	12	U	12	U	16		16	U
trans-1,3-Dichloropropene	UG/KG	12	U	12	U	16		16	U
1,2-Diethylbenzene	UG/KG	25	U	24	U	32		32	UJ
Ethylbenzene	UG/KG	12	U	12	U	16		16	UJ
Hexane	UG/KG	12	U	12	U	16		16	U
2-Hexanone	UG/KG	12	U	12	U	16		16	UJ
Iodomethane	UG/KG	12	U	12	U	16		16	U
4-Methyl-2-pentanone	UG/KG	12	U	12	U	16		16	UJ
Methylene Chloride	UG/KG	12	U	12	U	4		16	U
Styrene	UG/KG	12	U	12	U	16		16	UJ
1,1,2,2-Tetrachloroethane	UG/KG	12	U	12	U	16		16	UJ
Tetrachloroethene	UG/KG	12	U	12	U	16		16	UJ
Toluene	UG/KG	12	U	12	U	16		16	UJ
1,1,1-Trichloroethane	UG/KG	12	U	12	U	16		16	U
1,1,2-Trichloroethane	UG/KG	12	U	12	U	16		16	U
Trichloroethene	UG/KG	12	U	4	J	16		16	U
Trichlorotrifluoroethane	UG/KG	12	U	12	U	16		16	U
Vinyl Acetate	UG/KG	12	U	12	U	16		16	U
Vinyl Chloride	UG/KG	12	U	12	U	16		16	U
Xylene, Total	UG/KG	25	U	24	U	32		32	UJ
Tentatively Identified Compounds				1					

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607							
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		A0901158.D REG		A1001159.D REG		A1101160.D REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Acenaphthene	UG/KG	420	U	400	U	530	U
Acenaphthylene	UG/KG	420	U	400	U	530	U
Anthracene	UG/KG	420	U	400	U	530	U
Benzo(a)anthracene	UG/KG	46	J	400	U	110	J
Benzo(a)pyrene	UG/KG	62	J	400	U	150	J
Benzo(b)fluoranthene	UG/KG	63	J	400	U	140	J
Benzo(g,h,i)perylene	UG/KG	420	U	400	U	83	J
Benzo(k)fluoranthene	UG/KG	78	J	400	U	180	J
Benzoic Acid	UG/KG	2000	U	2000	U	65	J
Benzyl Alcohol	UG/KG	420	U	400	U	530	U
2-Benzyl-4-Chlorophenol	UG/KG	420	UJ	400	UJ	530	UJ
bis(2-Chloroethoxy)methane	UG/KG	420	U	400	U	530	U
bis(2-Chloroethyl)ether	UG/KG	420	U	400	U	530	U
bis(2-Ethylhexyl)phthalate	UG/KG	110	J	400	UJ	530	UJ
4-Bromophenyl-phenylether	UG/KG	420	U	400	U	530	U
Butylbenzylphthalate	UG/KG	420	U	400	U	530	U
Carbazole	UG/KG	420	U	400	U	530	U
4-Chloro-3-methylphenol	UG/KG	420	U	400	U	530	U
4-Chloroaniline	UG/KG	420	U	400	U	530	U
2-Chloronaphthalene	UG/KG	420	U	400	U	530	U
2-Chlorophenol	UG/KG	420	U	400	U	530	U
4-Chlorophenyl-phenylether	UG/KG	420	U	400	U	530	U
Chrysene	UG/KG	88	J	400	U	200	J
Di-n-butylphthalate	UG/KG	420	U	400	U	530	U
Di-n-octylphthalate	UG/KG	160	J	400	U	530	U
Dibenzo(a,h)anthracene	UG/KG	420	U	400	U	530	U
Dibenzofuran	UG/KG	420	U	400	U	530	U
1,2-Dichlorobenzene	UG/KG	420	U	400	U	530	U
1,3-Dichlorobenzene	UG/KG	420	U	400	U	530	U
1,4-Dichlorobenzene	UG/KG	420	U	400	U	530	U
3,3'-Dichlorobenzidine	UG/KG	420	U	400	U	530	U
2,4-Dichlorophenol	UG/KG	420	U	400	U	530	U
Diethylphthalate	UG/KG	420	U	400	U	530	U
2,4-Dimethylphenol	UG/KG	420	U	400	U	530	U
Dimethylphthalate	UG/KG	420	U	400	U	530	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	960	U	1300	U
2,4-Dinitrophenol	UG/KG	1000	U	960	U	1300	U
2,4-Dinitrotoluene	UG/KG	420	U	400	U	530	U
2,6-Dinitrotoluene	UG/KG	420	U	400	U	530	U
Fluoranthene	UG/KG	150	J	400	U	340	J
Fluorene	UG/KG	420	U	400	U	530	U
Hexachlorobenzene	UG/KG	420	U	400	U	530	U
Hexachlorobutadiene	UG/KG	420	U	400	U	530	U
Hexachlorocyclopentadiene	UG/KG	420	U	400	U	530	U
Hexachloroethane	UG/KG	420	U	400	U	530	U
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	400	U	88	J

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607							
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		A0901158.D REG		A1001159.D REG		A1101160.D REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units						
Isophorone	UG/KG	420	U	400	U	530	U
2-Methylnaphthalene	UG/KG	420	U	400	U	530	U
2-Methylphenol	UG/KG	420	U	400	U	530	U
4-Methylphenol	UG/KG	420	U	400	U	530	U
N-Nitroso-di-n-propylamine	UG/KG	420	U	400	U	530	U
N-Nitrosodiphenylamine	UG/KG	420	U	400	U	530	U
Naphthalene	UG/KG	420	U	400	U	530	U
2-Nitroaniline	UG/KG	1000	U	960	U	1300	U
3-Nitroaniline	UG/KG	1000	U	960	U	1300	U
4-Nitroaniline	UG/KG	1000	U	960	UJ	1300	UJ
Nitrobenzene	UG/KG	420	U	400	U	530	U
2-Nitrophenol	UG/KG	420	U	400	U	530	U
4-Nitrophenol	UG/KG	1000	U	960	U	1300	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	400	U	530	U
Pentachlorophenol	UG/KG	1000	U	960	U	1300	U
Phenanthrene	UG/KG	63	J	400	U	130	J
Phenol	UG/KG	420	U	400	U	530	U
Pyrene	UG/KG	110	J	400	U	230	J
1,2,4-Trichlorobenzene	UG/KG	420	U	400	U	530	U
2,4,5-Trichlorophenol	UG/KG	1000	U	960	U	1300	U
2,4,6-Trichlorophenol	UG/KG	420	U	400	U	530	U
Tentatively Identified Compounds		30		29		30	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607							
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		36433-17 REG		36433-18 REG		36433-19 REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units						
Aldrin	UG/KG	0.85	U	0.41	U	2.2	U
alpha-BHC	UG/KG	0.85	U	0.41	U	2.2	U
alpha-Chlordane	UG/KG	0.85	U	0.41	U	2.2	U
Aroclor 1232	UG/KG	16	U	7.9	U	42	U
Aroclor-1016	UG/KG	16	U	7.9	U	42	U
Aroclor-1221	UG/KG	33	U	16	U	85	U
Aroclor-1242	UG/KG	16	U	7.9	U	42	U
Aroclor-1248	UG/KG	16	U	7.9	U	42	U
Aroclor-1254	UG/KG	11	J	3	J	17	J
Aroclor-1260	UG/KG	16	U	7.9	U	42	U
beta-BHC	UG/KG	0.85	U	0.41	U	2.2	U
4,4'-DDD	UG/KG	1.6	U	0.56	J	4.2	U
4,4'-DDE	UG/KG	1.6	U	0.79	U	4.2	U
4,4'-DDT	UG/KG	1.6	U	0.79	U	4.2	U
delta-BHC	UG/KG	0.85	U	0.41	U	2.2	U
Dieldrin	UG/KG	1.6	U	0.79	U	4.2	U
Endosulfan I	UG/KG	0.85	U	0.41	U	2.2	U
Endosulfan II	UG/KG	1.4	J	0.79	UJ	4.2	UJ
Endosulfan Sulfate	UG/KG	1.6	U	0.79	U	4.2	U
Endrin	UG/KG	1.6	U	0.79	U	4.2	U
Endrin Aldehyde	UG/KG	1.6	U	0.79	U	4.2	U
Endrin Ketone	UG/KG	1.6	U	0.79	U	4.2	U
gamma-BHC (Lindane)	UG/KG	0.85	U	0.41	U	2.2	U
gamma-Chlordane	UG/KG	0.85	U	0.41	U	2.2	U
Heptachlor	UG/KG	0.85	U	0.41	U	2.2	U
Heptachlor Epoxide	UG/KG	0.85	U	0.41	U	2.2	U
p,p'-Methoxychlor	UG/KG	8.5	UJ	4.1	UJ	22	UJ
Toxaphene	UG/KG	85	U	41	U	220	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607							
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		3643517 REG		3643518 REG		3643519 REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Inorganics	Units						
Aluminum	MG/KG	12400		3110		9060	
Antimony	MG/KG	0.77	R	0.75	R	0.99	R
Arsenic	MG/KG	5.5		5.3		4	
Barium	MG/KG	78.6		52.3		103	
Beryllium	MG/KG	0.7		0.24		0.64	
Bismuth	MG/KG	40.9		28.9		33.4	
Cadmium	MG/KG	0.57	U	0.55	U	0.73	U
Calcium	MG/KG	101000	J	217000	J	124000	J
Chromium	MG/KG	16.1		7		12	
Cobalt	MG/KG	12.5		7.3		9.6	
Copper	MG/KG	20.3		10.4		22.9	
Cyanide	MG/KG	0.64		0.6	U	0.8	U
Iron	MG/KG	29400		11800		23400	
Lead	MG/KG	23.4		10		40.3	
Magnesium	MG/KG	6330		5970		6540	
Manganese	MG/KG	756		635		733	
Mercury	MG/KG	0.12	U	0.12	U	0.16	U
Nickel	MG/KG	25.1		8.2		21.7	
Potassium	MG/KG	2200		673		1950	
Selenium	MG/KG	0.5	UJ	0.48	UJ	0.64	UJ
Silver	MG/KG	1.2	U	1.2	U	1.5	U
Sodium	MG/KG	470	U	663	J	1400	J
Thallium	MG/KG	0.9	U	0.87	U	1.2	U
Vanadium	MG/KG	14.1		5.2		12.2	
Zinc	MG/KG	72.3		29.2		66.3	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607							
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		REG		03643400019SA REG		03643400020SA REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Anions	Units						
Chloride	MG/KG	69.9		323		1020	
Fluoride	MG/KG	3		1.2		1.5	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	7		1.1		3.7	
Sulfate	MG/KG	31.1	U	30.7		351	
		S71301		S72301		S73301	
		902-S71301		902-S72301		902-S73301	
		REG		03643400019SA REG		03643400020SA REG	
		6/22/94		6/22/94		6/22/94	
		Result	Val	Result	Val	Result	Val
Miscellaneous	Units						
Cation Exchange Capacity as Na	MEQ/100	13.9					
PH	UNITS	7.4	J	8.3	J	8.2	J
Total Organic Carbon	%	1.2		1.5667		5.0667	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607			
		S71301	
		902-S71301	
		0364340018SA REG	
		6/22/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/G	0.31	U
1,3-Dinitrobenzene	UG/G	0.31	U
2,4-Dinitrotoluene	UG/G	0.31	U
2,6-Dinitrotoluene	UG/G	0.32	U
HMX	UG/G	2.7	U
Nitrobenzene	UG/G	0.32	U
PETN	UG/G	1.2	U
RDX	UG/G	1.2	U
TETRYL	UG/G	0.81	U
1,3,5-Trinitrobenzene	UG/G	0.31	U
2,4,6-Trinitrotoluene	UG/G	0.31	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 607										
		S71301			S72301			S73301		
		902-S71301			902-S72301			902-S73301		
		3229420 REG			3229421 REG			3229422 REG		
		34507			34507			34507		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	Units									
Am-241	PCI/G	0.109	NA	U	0.165	NA	U	0.106	NA	U
Bi-207	PCI/G	0.026	NA	U	0.0307	NA	U	0.0277	NA	U
Bi-210m	PCI/G	0.0294	NA	U	0.0351	NA	U	0.0317	NA	U
Co-60	PCI/G	0.0374	NA	U	0.0421	NA	U	0.0377	NA	U
Cs-137	PCI/G	0.513	0.071		0.0943	0.0334		0.45	0.0587	
K-40	PCI/G	31.5	3.4		13.7	1.72		18.7	2.06	
Pu-238	PCI/G	0.211	0.0427		0.212	0.0376		0.312	0.0478	
Pu-239/240	PCI/G	0.0251	0.0128		0.0104	NA	U	0.0148	0.00896	
Pu-242	PCI/G	0.00989	NA	U	0.00512	NA	U	0.0051	NA	U
Ra-226	PCI/G	1.88	0.631		0.628	NA	U	1.85	0.688	
Sr-90	PCI/G	1.05	NA	U	0.827	NA	U	1.02	NA	U
Th-228	PCI/G	1.23	0.192		0.63	0.125		0.917	0.159	
Th-230	PCI/G	1.07	0.173		0.67	0.129		0.876	0.153	
Th-232	PCI/G	1.17	0.185		0.604	0.119		0.813	0.144	
Tritium	PCI/G	1.58	0.122		36.2	0.76		8.66	0.287	
U-234	PCI/G	0.725	0.126		0.593	0.114		0.604	0.111	
U-235	PCI/G	0.0525	0.0249		0.0311	0.0201		0.0222	0.016	
U-238	PCI/G	0.89	0.147		0.593	0.114		0.568	0.107	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		H4498.D REG		H4500.D REG		H4512.D REG		H4491.D REG		H4501.D REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Volatile Organics	Units										
Acetone	UG/KG	12	U	13	U	12	U	15	UJ	16	U
Acetonitrile	UG/KG	125	U	128	U	122	U	154	U	159	U
Acrylonitrile	UG/KG	125	U	128	U	122	U	154	U	159	U
Benzene	UG/KG	12	U	13	U	12	U	15	U	16	U
Bromodichloromethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Bromoform	UG/KG	12	U	13	U	12	U	15	U	16	U
Bromomethane	UG/KG	12	U	13	U	12	U	15	U	16	U
2-Butanone	UG/KG	12	U	13	U	12	U	15	U	16	U
Carbon Disulfide	UG/KG	12	U	13	U	12	U	15	U	16	U
Carbon Tetrachloride	UG/KG	12	U	13	U	12	U	15	U	16	U
Chlorobenzene	UG/KG	12	U	13	U	12	U	15	U	16	U
Chlorodibromomethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Chloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Chloroform	UG/KG	12	U	13	U	12	U	15	U	16	U
Chloromethane	UG/KG	12	U	13	U	12	UJ	15	U	16	U
1,1-Dichloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
1,2-Dichloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
1,1-Dichloroethene	UG/KG	12	U	13	U	12	U	15	U	16	U
1,2-Dichloroethene	UG/KG	25	U	8	J	24	U	31	U	32	U
1,2-Dichloropropane	UG/KG	12	U	13	U	12	U	15	U	16	U
cis-1,3-Dichloropropene	UG/KG	12	U	13	U	12	U	15	U	16	U
trans-1,3-Dichloropropene	UG/KG	12	U	13	U	12	U	15	U	16	U
1,2-Diethylbenzene	UG/KG	25	U	1	J	24	U	31	U	32	U
Ethylbenzene	UG/KG	12	U	13	U	12	U	15	U	16	U
Hexane	UG/KG	12	U	13	U	12	U	15	U	16	U
2-Hexanone	UG/KG	12	U	13	U	12	U	15	U	16	U
Iodomethane	UG/KG	12	U	13	U	12	U	15	U	16	U
4-Methyl-2-pentanone	UG/KG	12	U	13	U	12	U	15	U	16	U
Methylene Chloride	UG/KG	12	U	13	U	12	U	15	U	16	U
Styrene	UG/KG	12	U	13	U	12	U	15	U	16	U
1,1,2,2-Tetrachloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Tetrachloroethene	UG/KG	12	U	13	U	12	U	15	U	16	U
Toluene	UG/KG	2	J	13	U	12	U	2	J	16	U
1,1,1-Trichloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
1,1,2-Trichloroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Trichloroethene	UG/KG	19	J	17	=	9	J	3	J	16	U
Trichlorotrifluoroethane	UG/KG	12	U	13	U	12	U	15	U	16	U
Vinyl Acetate	UG/KG	12	U	13	U	12	U	15	U	16	U
Vinyl Chloride	UG/KG	12	U	13	U	12	U	15	U	16	U
Xylene, Total	UG/KG	25	U	26	U	24	U	31	U	32	U
Tentatively Identified Compounds				1				3			

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		A1301144.D REG		A0101150.D REG		A1401145.D REG		A0201151.D REG		A0501154.D REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Acenaphthene	UG/KG	420	U	430	U	410	U	510	U	530	U
Acenaphthylene	UG/KG	420	U	430	U	410	U	510	U	530	U
Anthracene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzo(a)anthracene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzo(a)pyrene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzo(b)fluoranthene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzo(g,h,i)perylene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzo(k)fluoranthene	UG/KG	420	U	430	U	410	U	510	U	530	U
Benzoic Acid	UG/KG	45	J	2100	U	2000	U	58	J	2600	U
Benzyl Alcohol	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Benzyl-4-Chlorophenol	UG/KG	420	U	430	UJ	410	U	510	UJ	530	UJ
bis(2-Chloroethoxy)methane	UG/KG	420	U	430	U	410	U	510	U	530	U
bis(2-Chloroethyl)ether	UG/KG	420	U	430	U	410	U	510	U	530	U
bis(2-Ethylhexyl)phthalate	UG/KG	420	UJ	430	UJ	410	UJ	510	UJ	530	UJ
4-Bromophenyl-phenylether	UG/KG	420	U	430	U	410	U	510	U	530	U
Butylbenzylphthalate	UG/KG	420	U	430	U	410	U	510	U	530	U
Carbazole	UG/KG	420	U	430	U	410	U	510	U	530	U
4-Chloro-3-methylphenol	UG/KG	420	U	430	U	410	U	510	U	530	U
4-Chloroaniline	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Chloronaphthalene	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Chlorophenol	UG/KG	420	U	430	U	410	U	510	U	530	U
4-Chlorophenyl-phenylether	UG/KG	420	U	430	U	410	U	510	U	530	U
Chrysene	UG/KG	420	U	430	U	410	U	510	U	53	J
Di-n-butylphthalate	UG/KG	420	U	430	U	410	U	510	U	530	U
Di-n-octylphthalate	UG/KG	420	U	430	U	410	U	510	U	530	U
Dibenzo(a,h)anthracene	UG/KG	420	U	430	U	410	U	510	U	530	U
Dibenzofuran	UG/KG	420	U	430	U	410	U	510	U	530	U
1,2-Dichlorobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
1,3-Dichlorobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
1,4-Dichlorobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
3,3'-Dichlorobenzidine	UG/KG	420	U	430	U	410	U	510	U	530	U
2,4-Dichlorophenol	UG/KG	420	U	430	U	410	U	510	U	530	U
Diethylphthalate	UG/KG	420	U	430	U	410	U	510	U	530	U
2,4-Dimethylphenol	UG/KG	420	U	430	U	410	U	510	U	530	U
Dimethylphthalate	UG/KG	420	U	430	U	410	U	510	U	530	U
4,6-Dinitro-2-methylphenol	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
2,4-Dinitrophenol	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
2,4-Dinitrotoluene	UG/KG	420	U	430	U	410	U	510	U	530	U
2,6-Dinitrotoluene	UG/KG	420	U	430	U	410	U	510	U	530	U
Fluoranthene	UG/KG	420	U	430	U	410	U	510	U	79	J
Fluorene	UG/KG	420	U	430	U	410	U	510	U	530	U
Hexachlorobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
Hexachlorobutadiene	UG/KG	420	U	430	U	410	U	510	U	530	U
Hexachlorocyclopentadiene	UG/KG	420	U	430	U	410	U	510	U	530	U
Hexachloroethane	UG/KG	420	U	430	U	410	U	510	U	530	U
Indeno(1,2,3-c,d)pyrene	UG/KG	420	U	430	U	410	U	510	U	530	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		A1301144.D REG		A0101150.D REG		A1401145.D REG		A0201151.D REG		A0501154.D REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Semi-volatile Organics	Units										
Isophorone	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Methylnaphthalene	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Methylphenol	UG/KG	420	U	430	U	410	U	510	U	530	U
4-Methylphenol	UG/KG	420	U	430	U	410	U	510	U	530	U
N-Nitroso-di-n-propylamine	UG/KG	420	U	430	U	410	U	510	U	530	U
N-Nitrosodiphenylamine	UG/KG	420	U	430	U	410	U	510	U	530	U
Naphthalene	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Nitroaniline	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
3-Nitroaniline	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
4-Nitroaniline	UG/KG	1000	U	1000	UJ	980	U	1200	UJ	1300	UJ
Nitrobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
2-Nitrophenol	UG/KG	420	U	430	U	410	U	510	U	530	U
4-Nitrophenol	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
2,2'-oxybis(1-Chloropropane)	UG/KG	420	U	430	U	410	U	510	U	530	U
Pentachlorophenol	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
Phenanthrene	UG/KG	420	U	430	U	410	U	510	U	530	U
Phenol	UG/KG	420	U	430	U	410	U	510	U	530	U
Pyrene	UG/KG	420	U	430	U	410	U	510	U	55	J
1,2,4-Trichlorobenzene	UG/KG	420	U	430	U	410	U	510	U	530	U
2,4,5-Trichlorophenol	UG/KG	1000	U	1000	U	980	U	1200	U	1300	U
2,4,6-Trichlorophenol	UG/KG	420	U	430	U	410	U	510	U	530	U
Tentatively Identified Compounds		30		30		30		30		30	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		36433-09 REG		36433-11 REG		36433-10 REG		36433-12 REG		36433-13 REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Pesticides and PCBs	Units										
Aldrin	UG/KG	0.23	J	0.25	J	0.24	J	0.32	J	0.46	J
alpha-BHC	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
alpha-Chlordane	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
Aroclor 1232	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
Aroclor-1016	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
Aroclor-1221	UG/KG	17	U	17	U	16	U	20	U	21	U
Aroclor-1242	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
Aroclor-1248	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
Aroclor-1254	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
Aroclor-1260	UG/KG	8.2	U	8.4	U	8	U	10	U	10	U
beta-BHC	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.95	J
4,4'-DDD	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
4,4'-DDE	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
4,4'-DDT	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
delta-BHC	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
Dieldrin	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
Endosulfan I	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
Endosulfan II	UG/KG	0.82	UJ	0.84	UJ	0.8	UJ	1	UJ	1	UJ
Endosulfan Sulfate	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
Endrin	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
Endrin Aldehyde	UG/KG	0.82	U	0.84	U	0.8	U	1	U	1	U
Endrin Ketone	UG/KG	0.49	J	0.47	J	0.58	J	0.69	J	0.61	J
gamma-BHC (Lindane)	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
gamma-Chlordane	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
Heptachlor	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
Heptachlor Epoxide	UG/KG	0.42	U	0.44	U	0.41	U	0.52	U	0.54	U
p,p'-Methoxychlor	UG/KG	4.2	UJ	4.4	UJ	4.1	UJ	5.2	UJ	5.4	UJ
Toxaphene	UG/KG	42	U	44	U	41	U	52	U	54	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		3643509 REG		3643511 REG		3643510 REG		3643512 REG		3643513 REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Inorganics	Units										
Aluminum	MG/KG	8580		8010		8060		12800		13700	
Antimony	MG/KG	0.77	R	0.79	R	0.75	R	0.95	R	0.98	R
Arsenic	MG/KG	3.8		4.8		3.4		5.3		4.1	
Barium	MG/KG	27		25.9		33.5		35.3		35.7	
Beryllium	MG/KG	0.44		0.4		0.39		0.64		0.7	
Bismuth	MG/KG	36.2		32.4		32.9		57.6		57.7	
Cadmium	MG/KG	0.57	U	0.59	U	0.56	U	0.71	U	0.73	U
Calcium	MG/KG	39600	J	68100	J	30600	J	182000	J	162000	J
Chromium	MG/KG	23		22.3		24.4		17.3		16.9	
Cobalt	MG/KG	20.4		19.9		20.7		15.7		16.2	
Copper	MG/KG	34.4		34.4		36.3		30.8		31.1	
Cyanide	MG/KG	0.62	U	0.64	U	0.61	U	0.77	U	0.79	U
Iron	MG/KG	39700		37900		41000		34200		34900	
Lead	MG/KG	11.9		8.3		13.4		13		12.3	
Magnesium	MG/KG	10900		10400		11200		11000		11100	
Manganese	MG/KG	538		706		505		980		841	
Mercury	MG/KG	0.12	U	0.13	U	0.12	U	0.15	U	0.16	U
Nickel	MG/KG	40.2		37.1		42		31.7		32.7	
Potassium	MG/KG	3340		3750		3490		3000		2790	
Selenium	MG/KG	0.5	UJ	0.51	UJ	0.49	UJ	0.62	UJ	0.63	UJ
Silver	MG/KG	1.2	U	1.2	U	1.2	U	1.5	U	1.5	U
Sodium	MG/KG	471	U	482	U	459	U	582	U	597	U
Thallium	MG/KG	0.9	U	0.92	U	0.87	U	1.1	U	1.1	U
Vanadium	MG/KG	10.7		10.5		10.3		16.7		17.5	
Zinc	MG/KG	80.4		78.3		67.7		76.2		67.4	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608											
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		REG		0364340012SA REG		0364340011SA REG		0364340013SA REG		0364340014SA REG	
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Anions	Units										
Chloride	MG/KG	83.3		111		88.5		224		235	
Fluoride	MG/KG	1.2		1.7		1.1		1.4		1.5	
Nitrate/Nitrite (NO3/NO2-N)	MG/KG	0.89		0.83		0.84		0.77	U	0.98	
Sulfate	MG/KG	152		152		146		248		51.4	
		S81301		S81302		S81311		S82301		S83301	
		902-S81301		902-S81302		902-S81311		902-S82301		902-S83301	
		REG		0364340012SA REG		REG		0364340013SA REG		03643400	Val
		6/21/94		6/21/94		06/21/94DUPE		6/21/94		6/21/94	
		Result	Val	Result	Val	Result	Val	Result	Val	Result	
Miscellaneous	Units										J
Cation Exchange Capacity as Na	MEQ/100	7.2									
PH	UNITS	8.6	J			7.7	J	7.7	J	7.3	
Total Organic Carbon	%	0.3913		0.27		0.3425		0.85		0.81	
PH	MEQ/100			8.6							

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608					
		S81301		S81311	
		902-S81301		902-S81311	
		0364340010SA REG		0364340011SA REG	
		6/21/94		06/21/94DUPE	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/G	0.31	U	0.3	U
1,3-Dinitrobenzene	UG/G	0.31	U	0.3	U
2,4-Dinitrotoluene	UG/G	0.31	U	0.3	U
2,6-Dinitrotoluene	UG/G	0.32	U	0.32	U
HMX	UG/G	2.7	U	2.7	U
Nitrobenzene	UG/G	0.32	U	0.32	U
PETN	UG/G	1.2	U	1.2	U
RDX	UG/G	1.2	U	1.2	U
TETRYL	UG/G	0.81	U	0.79	U
1,3,5-Trinitrobenzene	UG/G	0.31	U	0.3	U
2,4,6-Trinitrotoluene	UG/G	0.31	U	0.3	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (SOIL)

MAIN HILL SEEP 608																
		S81301			S81302			S81311			S82301			S83301		
		902-S81301			902-S81302			902-S81311			902-S82301			902-S83301		
		3228660 REG			3228662 REG			3228661 REG			3228667 REG			3228668 REG		
		34506			34506			06/21/94DUPE			34506			34506		
		Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val	Result	UNC	Val
Radiological	**Units**															
Am-241	PCI/G	0.106	NA	U	0.111	NA	U	0.107	NA	U	0.1	NA	U	0.134	NA	U
Bi-207	PCI/G	0.0258	NA	U	0.0272	NA	U	0.0269	NA	U	0.0233	NA	U	0.0262	NA	U
Bi-210m	PCI/G	0.0274	NA	U	0.0311	NA	U	0.0308	NA	U	0.0258	NA	U	0.0302	NA	U
Co-60	PCI/G	0.0367	NA	U	0.0364	NA	U	0.0363	NA	U	0.0356	NA	U	0.0357	NA	U
Cs-137	PCI/G	0.0294	NA	U	0.0306	NA	U	0.0307	NA	U	0.0257	NA	U	0.0289	NA	U
K-40	PCI/G	45.3	4.81		43.6	4.51		41.6	4.26		39.3	4.18		33.3	3.56	
Pu-238	PCI/G	0.0395	0.0229	J	0.0372	0.0223	J	0.099	0.0238		0.0199	0.0108		0.0495	0.0236	J
Pu-239/240	PCI/G	0.0153	NA	UJ	0.0236	NA	UJ	0.0128	NA	U	0.00915	NA	U	0.014	NA	UJ
Pu-242	PCI/G	0.0193	NA	UJ	0.0236	NA	UJ	0.00903	NA	U	0.00372	0.00432		0.014	NA	UJ
Ra-226	PCI/G	2.12	0.688		0.699	NA	U	2.62	0.625		2.48	0.71		1.66	0.698	
Sr-90	PCI/G	0.361	NA	U	0.919	0.365		0.759	NA	U	0.528	NA		1.18	NA	U
Th-228	PCI/G	1.26	0.199		1.27	0.198		1.32	0.204		1.13	0.181		1.08	0.165	
Th-230	PCI/G	1.04	0.171		1.04	0.169		0.974	0.161		0.87	0.148		0.837	0.135	
Th-232	PCI/G	1.25	0.197		1.27	0.197		1.23	0.193		1.04	0.169		0.996	0.155	
Tritium	PCI/G	2.1	0.111		3.68	0.157		2.51	0.119		4.44	0.199		5.71	0.247	
U-234	PCI/G	0.931	0.165		0.965	0.174		0.974	0.169		0.919	0.162		0.795	0.15	
U-235	PCI/G	0.0735	0.0357		0.0593	0.0334		0.0495	0.0306		0.0451	NA	U	0.0506	0.0308	
U-238	PCI/G	1.04	0.18		1.12	0.193		1.05	0.18		1.05	0.178		0.791	0.149	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		J0869.D REG		J0873.D REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Volatile Organics	**Units**				
Acetone	UG/L	10	U	10	U
Acetonitrile	UG/L	100	U	100	U
Acrylonitrile	UG/L	100	U	100	U
Benzene	UG/L	5	UJ	5	UJ
Bromodichloromethane	UG/L	5	UJ	5	UJ
Bromoform	UG/L	5	UJ	5	UJ
Bromomethane	UG/L	10	UJ	10	UJ
2-Butanone	UG/L	10	U	10	U
Carbon Disulfide	UG/L	5	UJ	5	UJ
Carbon Tetrachloride	UG/L	5	UJ	5	UJ
Chlorobenzene	UG/L	5	UJ	5	UJ
Chlorodibromomethane	UG/L	5	UJ	5	UJ
Chloroethane	UG/L	10	U	10	U
Chloroform	UG/L	5	UJ	5	UJ
Chloromethane	UG/L	10	U	10	U
1,1-Dichloroethane	UG/L	5	UJ	5	UJ
1,2-Dichloroethane	UG/L	5	UJ	5	UJ
1,1-Dichloroethene	UG/L	5	UJ	5	UJ
1,2-Dichloroethene	UG/L	5	UJ	5	UJ
1,2-Dichloropropane	UG/L	5	UJ	5	UJ
cis-1,3-Dichloropropene	UG/L	5	UJ	5	UJ
trans-1,3-Dichloropropene	UG/L	5	UJ	5	UJ
1,2-Diethylbenzene	UG/L	5	UJ	5	UJ
Ethylbenzene	UG/L	5	UJ	5	UJ
Hexane	UG/L	10	U	10	U
2-Hexanone	UG/L	10	U	10	U
Iodomethane	UG/L	10	U	10	U
4-Methyl-2-pentanone	UG/L	10	U	10	U
Methylene Chloride	UG/L	10	U	10	U
Styrene	UG/L	5	UJ	5	UJ
1,1,2,2-Tetrachloroethane	UG/L	5	UJ	5	UJ
Tetrachloroethene	UG/L	15		17	
Toluene	UG/L	5	UJ	5	UJ
1,1,1-Trichloroethane	UG/L	5	UJ	5	UJ
1,1,2-Trichloroethane	UG/L	5	UJ	5	UJ
Trichloroethene	UG/L	6	J	6	J
Trichlorotrifluoroethane	UG/L	5	UJ	5	UJ
Vinyl Acetate	UG/L	10	U	10	U
Vinyl Chloride	UG/L	10	U	10	U
Xylene, Total	UG/L	5	UJ	5	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		A1301273.D REG		A1401274.D REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
Acenaphthene	UG/L	10	U	10	U
Acenaphthylene	UG/L	10	U	10	U
Anthracene	UG/L	10	U	10	U
Benzo(a)anthracene	UG/L	10	U	10	U
Benzo(a)pyrene	UG/L	10	U	10	U
Benzo(b)fluoranthene	UG/L	10	U	10	U
Benzo(g,h,i)perylene	UG/L	10	U	10	U
Benzo(k)fluoranthene	UG/L	10	U	10	U
Benzoic Acid	UG/L	1	J	1	J
Benzyl Alcohol	UG/L	10	U	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U	10	U
bis(2-Chloroethyl)ether	UG/L	10	U	10	U
bis(2-Ethylhexyl)phthalate	UG/L	10	U	2	J
4-Bromophenyl-phenylether	UG/L	10	U	10	U
Butylbenzylphthalate	UG/L	10	U	10	U
Carbazole	UG/L	10	U	10	U
4-Chloro-3-methylphenol	UG/L	10	U	10	U
4-Chloroaniline	UG/L	10	U	10	U
2-Chloronaphthalene	UG/L	10	U	10	U
2-Chlorophenol	UG/L	10	U	10	U
4-Chlorophenyl-phenylether	UG/L	10	U	10	U
Chrysene	UG/L	10	U	10	U
Di-n-butylphthalate	UG/L	10	U	10	U
Di-n-octylphthalate	UG/L	10	U	10	U
Dibenzo(a,h)anthracene	UG/L	10	U	10	U
Dibenzofuran	UG/L	10	U	10	U
1,2-Dichlorobenzene	UG/L	10	U	10	U
1,3-Dichlorobenzene	UG/L	10	U	10	U
1,4-Dichlorobenzene	UG/L	10	U	10	U
3,3'-Dichlorobenzidine	UG/L	10	U	10	U
2,4-Dichlorophenol	UG/L	10	U	10	U
Diethylphthalate	UG/L	10	U	10	U
2,4-Dimethylphenol	UG/L	10	U	10	U
Dimethylphthalate	UG/L	10	U	10	U
4,6-Dinitro-2-methylphenol	UG/L	25	U	25	U
2,4-Dinitrophenol	UG/L	25	U	25	U
2,4-Dinitrotoluene	UG/L	10	U	10	U
2,6-Dinitrotoluene	UG/L	10	U	10	U
Fluoranthene	UG/L	10	U	10	U
Fluorene	UG/L	10	U	10	U
Hexachlorobenzene	UG/L	10	U	10	U
Hexachlorobutadiene	UG/L	10	U	10	U
Hexachlorocyclopentadiene	UG/L	10	U	10	U
Hexachloroethane	UG/L	10	U	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U	10	U

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		A1301273.D REG		A1401274.D REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Semi-volatile Organics	Units				
2-Methylphenol	UG/L	10	U	10	U
4-Methylphenol	UG/L	10	U	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U	10	U
N-Nitrosodiphenylamine	UG/L	10	U	10	U
Naphthalene	UG/L	10	U	10	U
2-Nitroaniline	UG/L	25	U	25	U
3-Nitroaniline	UG/L	25	U	25	U
4-Nitroaniline	UG/L	25	U	25	U
Nitrobenzene	UG/L	10	U	10	U
2-Nitrophenol	UG/L	10	U	10	U
4-Nitrophenol	UG/L	25	U	25	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	U	10	U
Pentachlorophenol	UG/L	25	U	25	U
Phenanthrene	UG/L	10	U	10	U
Phenol	UG/L	10	U	10	U
Pyrene	UG/L	10	U	10	U
1,2,4-Trichlorobenzene	UG/L	10	U	10	U
2,4,5-Trichlorophenol	UG/L	25	U	25	U
2,4,6-Trichlorophenol	UG/L	10	U	10	U
Tentatively Identified Compounds		7		8	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		35727-01 REG		35727-02 REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Pesticides and PCBs	**Units**				
Aldrin	UG/L	0.01	U	0.01	U
alpha-BHC	UG/L	0.01	U	0.01	U
alpha-Chlordane	UG/L	0.01	U	0.01	U
Aroclor 1232	UG/L	0.2	U	0.2	U
Aroclor-1016	UG/L	0.2	U	0.2	U
Aroclor-1221	UG/L	0.4	U	0.4	U
Aroclor-1242	UG/L	0.2	U	0.2	U
Aroclor-1248	UG/L	0.2	U	0.2	U
Aroclor-1254	UG/L	0.2	U	0.2	U
Aroclor-1260	UG/L	0.2	U	0.2	U
beta-BHC	UG/L	0.01	U	0.01	U
4,4'-DDD	UG/L	0.02	U	0.02	U
4,4'-DDE	UG/L	0.02	U	0.02	U
4,4'-DDT	UG/L	0.02	U	0.02	U
delta-BHC	UG/L	0.01	U	0.01	U
Dieldrin	UG/L	0.02	U	0.02	U
Endosulfan I	UG/L	0.01	U	0.01	U
Endosulfan II	UG/L	0.02	U	0.02	U
Endosulfan Sulfate	UG/L	0.02	U	0.02	U
Endrin	UG/L	0.01	U	0.01	U
Endrin Aldehyde	UG/L	0.02	U	0.02	U
Endrin Ketone	UG/L	0.02	U	0.02	U
gamma-BHC (Lindane)	UG/L	0.01	U	0.01	U
gamma-Chlordane	UG/L	0.01	U	0.01	U
Heptachlor	UG/L	0.01	U	0.01	U
Heptachlor Epoxide	UG/L	0.01	U	0.01	U
p,p'-Methoxychlor	UG/L	0.1	U	0.1	U
Toxaphene	UG/L	1	U	1	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		3573101 REG		3573102 REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Inorganics	**Units**				
Aluminum	UG/L	81.5		88.7	
Antimony	UG/L	3.1	U	3.1	U
Arsenic	UG/L	4.3	U	4.3	U
Barium	UG/L	71		71.1	
Beryllium	UG/L	0.55		0.5	U
Bismuth	UG/L	140	U	136	U
Cadmium	UG/L	2.3	U	2.3	U
Calcium	UG/L	170000		171000	
Chromium	UG/L	7.9	U	7.9	U
Cobalt	UG/L	6.5	U	6.5	U
Copper	UG/L	4.6	U	4.6	U
Cyanide	UG/L	10	U	10	U
Iron	UG/L	598	J	1910	J
Lead	UG/L	2.8	U	2.8	U
Magnesium	UG/L	44400		44700	
Manganese	UG/L	30.8		38	
Mercury	UG/L	0.2	U	0.2	U
Nickel	UG/L	8.1	U	8.1	U
Potassium	UG/L	2980		3160	
Selenium	UG/L	4.6	U	4.6	U
Silver	UG/L	4.8	U	4.8	U
Sodium	UG/L	197000		199000	
Thallium	UG/L	3.6	U	3.6	U
Vanadium	UG/L	4.9	U	4.9	U
Zinc	UG/L	11.6	U	6.3	U

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		3573001 REG		3573002 REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Dissolved Inorganics	**Units**				
Aluminum	UG/L	20.3	U	20.3	U
Antimony	UG/L	3.1	U	3.1	U
Arsenic	UG/L	4.3	U	4.3	U
Barium	UG/L	60.1		65.8	
Beryllium	UG/L	1.7	U	1.7	U
Bismuth	UG/L	NR		NR	
Cadmium	UG/L	2.3	U	2.3	U
Calcium	UG/L	156244		165679	
Chromium	UG/L	9.1	U	9.1	U
Cobalt	UG/L	3.1	U	3.1	U
Copper	UG/L	2.7	U	2.7	U
Cyanide	UG/L	NR		NR	
Iron	UG/L	15.6	U	15.6	U
Lead	UG/L	2.8	U	2.8	U
Magnesium	UG/L	38705		41108	
Manganese	UG/L	19.6		21.4	
Mercury	UG/L	0.2	U	0.2	U
Nickel	UG/L	NR		NR	
Potassium	UG/L	2857		3290	
Selenium	UG/L	NR		NR	
Silver	UG/L	2.8	U	2.8	U
Sodium	UG/L	NR		NR	
Thallium	UG/L	4.9	U	5.3	U
Vanadium	UG/L	4.7	U	4.7	U
Zinc	UG/L	2.5	U	2.4	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		0357290001SA REG		0357290002SA REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Anions	Units				
Ammonia as N	MG/L	0.1	U	0.1	U
Chloride	MG/L	360		373	
Fluoride	MG/L	0.17		0.17	
Nitrate/Nitrite (NO3/NO2-N)	MG/L	7.5	J	14.9	J
Sulfate	MG/L	87	J	97	J

		S11101		S11111	
		902-S11101		902-S11111	
		0357290001SA REG		0357290002SA REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
Miscellaneous	Units				
Alkalinity, Total as CaCO3 at	MG/L	342		341	
Phosphorus, Total as P	MG/L	0.05	U	0.05	U
Total Dissolved Solids	MG/L	1060		1030	
Total Kjeldahl Nitrogen as N	MG/L	0.5	U	0.5	U
Total Suspended Solids	MG/L	2	U	2.8	J
Total Organic Carbon	MG/L	1.6		1.15	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601					
		S11101		S11111	
		902-S11101		902-S11111	
		0357290001SA REG		0357290002SA REG	
		5/24/94		05/24/94DUPE	
		Result	Val	Result	Val
EXPLOSIVES	Units				
2-Amino-4,6-dinitrotoluene	UG/L	0.035	UJ	0.035	UJ
1,3-Dinitrobenzene	UG/L	0.11	UJ	0.11	UJ
2,4-Dinitrotoluene	UG/L	0.02	UJ	0.02	UJ
2,6-Dinitrotoluene	UG/L	0.31	UJ	0.31	UJ
HMX	UG/L	0.8	UJ	0.8	UJ
Nitrobenzene	UG/L	0.25	UJ	0.25	UJ
PETN	UG/L	1	UJ	1	UJ
RDX	UG/L	0.84	UJ	0.84	UJ
TETRYL	UG/L	0.8	UJ	0.8	UJ
1,3,5-Trinitrobenzene	UG/L	0.26	UJ	0.26	UJ
2,4,6-Trinitrotoluene	UG/L	0.11	UJ	0.11	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 601							
		S11101			S11111		
		902-S11101			902-S11111		
		3218521 REG			3218524 REG		
		5/24/94			05/24/94DUPE		
		Result	UNC	Val	Result	UNC	Val
Radiological	Units						
Am-241	PCI/L	9.48E-01	NA	UJ	7.92E-01	NA	UJ
Bi-207	PCI/L	3.29E+00	NA	U	4.97E+00	NA	U
Bi-210m	PCI/L	4.09E+00	NA	U	6.24E+00	NA	U
Co-60	PCI/L	3.73E+00	NA	U	6.17E+00	NA	U
Cs-137	PCI/L	3.66E+00	NA	U	5.45E+00	NA	U
K-40	PCI/L	3.56E+01	NA	U	5.10E+01	NA	U
Pu-238	PCI/L	1.87E+00	4.83E-01		2.08E+00	4.97E-01	
Pu-239/240	PCI/L	6.03E-02	NA	U	2.02E-01	NA	U
Pu-242	PCI/L	1.11E-01	1.01E-01		1.60E-01	NA	U
Ra-226	PCI/L	3.71E+00	4.64E-01		3.46E+00	4.62E-01	
Sr-90	PCI/L	4.24E+01	2.08E+00		4.17E+01	2.09E+00	
Th-228	PCI/L	3.40E-01	NA	U	3.48E-01	NA	U
Th-230	PCI/L	3.63E-01	2.24E-01		5.58E-01	2.64E-01	
Th-232	PCI/L	5.18E-02	1.27E-01		2.47E-01	NA	U
Tritium	PCI/L	5.53E+05	1.97E+03		5.52E+05	1.97E+03	
U-234	PCI/L	5.91E+01	7.55E+00		6.71E+01	8.46E+00	
U-235	PCI/L	1.19E-01	9.84E-02		5.27E-02	NA	U
U-238	PCI/L	6.73E-01	2.58E-01		1.05E+00	3.23E-01	

MAIN HILL SEEP 601							
		S11101			S11111		
		902-S11101			902-S11111		
		3218523 REG			3218524 REG		
		34478			05/24/94DUPE		
		Result	UNC	Val	Result	UNC	Val
Rads, Dissolved	Units						
Am-241	PCI/L	0.532	NA	UJ	1.08	NA	UJ
Bi-207	PCI/L	3.16	NA	U	3.01	NA	U
Bi-210m	PCI/L	4.01	NA	U	3.91	NA	U
Co-60	PCI/L	3.76	NA	U	3.5	NA	U
Cs-137	PCI/L	3.51	NA	U	3.3	NA	U
K-40	PCI/L	199	88.1		31.4	NA	U
Pu-238	PCI/L	1.55	0.492		1.52	0.441	
Pu-239/240	PCI/L	0.0726	NA	U	0.0616	NA	U
Pu-242	PCI/L	0.107	0.108		0.159	0.123	
Ra-226	PCI/L	1.62	0.327		1.51	0.317	
Sr-90	PCI/L	41.5	2.11		46	2.31	
Th-228	PCI/L	0.332	NA	U	0.364	NA	U
Th-230	PCI/L	0.359	0.218		0.387	0.205	
Th-232	PCI/L	0.203	NA	U	0.385	NA	U
Tritium	PCI/L	563000	2010		568000	2010	
U-234	PCI/L	66.9	8.96		62.7	8.01	
U-235	PCI/L	8.25	1.45		0.213	0.142	
U-238	PCI/L	6.58	1.23		1	0.31	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		J0876.D REG	
		5/26/94	
		Result	Val
Volatile Organics	Units		
Acetone	UG/L	10	U
Acetonitrile	UG/L	100	U
Acrylonitrile	UG/L	100	U
Benzene	UG/L	5	UJ
Bromodichloromethane	UG/L	2	J
Bromoform	UG/L	2	J
Bromomethane	UG/L	10	UJ
2-Butanone	UG/L	10	U
Carbon Disulfide	UG/L	5	UJ
Carbon Tetrachloride	UG/L	5	UJ
Chlorobenzene	UG/L	5	UJ
Chlorodibromomethane	UG/L	3	J
Chloroethane	UG/L	10	U
Chloroform	UG/L	1	J
Chloromethane	UG/L	10	U
1,1-Dichloroethane	UG/L	5	UJ
1,2-Dichloroethane	UG/L	5	UJ
1,1-Dichloroethene	UG/L	1	J
1,2-Dichloroethene	UG/L	3	J
1,2-Dichloropropane	UG/L	5	UJ
cis-1,3-Dichloropropene	UG/L	5	UJ
trans-1,3-Dichloropropene	UG/L	5	UJ
1,2-Diethylbenzene	UG/L	5	UJ
Ethylbenzene	UG/L	5	UJ
Hexane	UG/L	10	U
2-Hexanone	UG/L	10	U
Iodomethane	UG/L	10	U
4-Methyl-2-pentanone	UG/L	10	U
Methylene Chloride	UG/L	10	U
Styrene	UG/L	5	UJ
1,1,2,2-Tetrachloroethane	UG/L	5	UJ
Tetrachloroethene	UG/L	5	UJ
Toluene	UG/L	5	UJ
1,1,1-Trichloroethane	UG/L	5	UJ
1,1,2-Trichloroethane	UG/L	5	UJ
Trichloroethene	UG/L	6	J
Trichlorotrifluoroethane	UG/L	5	UJ
Vinyl Acetate	UG/L	10	U
Vinyl Chloride	UG/L	10	U
Xylene, Total	UG/L	5	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		A1501275.D REG	
		5/26/94	
		Result	Val
Semi-volatile Organics	Units		
Acenaphthene	UG/L	10	U
Acenaphthylene	UG/L	10	U
Anthracene	UG/L	10	U
Benzo(a)anthracene	UG/L	10	U
Benzo(a)pyrene	UG/L	10	U
Benzo(b)fluoranthene	UG/L	10	U
Benzo(g,h,i)perylene	UG/L	10	U
Benzo(k)fluoranthene	UG/L	10	U
Benzoic Acid	UG/L	1	J
Benzyl Alcohol	UG/L	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U
bis(2-Chloroethyl)ether	UG/L	10	U
bis(2-Ethylhexyl)phthalate	UG/L	10	U
4-Bromophenyl-phenylether	UG/L	10	U
Butylbenzylphthalate	UG/L	10	U
Carbazole	UG/L	10	U
4-Chloro-3-methylphenol	UG/L	10	U
4-Chloroaniline	UG/L	10	U
2-Chloronaphthalene	UG/L	10	U
2-Chlorophenol	UG/L	10	U
4-Chlorophenyl-phenylether	UG/L	10	U
Chrysene	UG/L	10	U
Di-n-butylphthalate	UG/L	2	J
Di-n-octylphthalate	UG/L	10	U
Dibenzo(a,h)anthracene	UG/L	10	U
Dibenzofuran	UG/L	10	U
1,2-Dichlorobenzene	UG/L	10	U
1,3-Dichlorobenzene	UG/L	10	U
1,4-Dichlorobenzene	UG/L	10	U
3,3'-Dichlorobenzidine	UG/L	10	U
2,4-Dichlorophenol	UG/L	10	U
Diethylphthalate	UG/L	10	U
2,4-Dimethylphenol	UG/L	10	U
Dimethylphthalate	UG/L	10	U
4,6-Dinitro-2-methylphenol	UG/L	25	U
2,4-Dinitrophenol	UG/L	25	U
2,4-Dinitrotoluene	UG/L	10	U
2,6-Dinitrotoluene	UG/L	10	U
Fluoranthene	UG/L	10	U
Fluorene	UG/L	10	U
Hexachlorobenzene	UG/L	10	U
Hexachlorobutadiene	UG/L	10	U
Hexachlorocyclopentadiene	UG/L	10	U
Hexachloroethane	UG/L	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		A1501275.D REG	
		5/26/94	
		Result	Val
Semi-volatile Organics	Units		
2-Methylphenol	UG/L	10	U
4-Methylphenol	UG/L	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U
N-Nitrosodiphenylamine	UG/L	10	U
Naphthalene	UG/L	10	U
2-Nitroaniline	UG/L	25	U
3-Nitroaniline	UG/L	25	U
4-Nitroaniline	UG/L	25	U
Nitrobenzene	UG/L	10	U
2-Nitrophenol	UG/L	10	U
4-Nitrophenol	UG/L	25	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	U
Pentachlorophenol	UG/L	25	U
Phenanthrene	UG/L	10	U
Phenol	UG/L	10	U
Pyrene	UG/L	10	U
1,2,4-Trichlorobenzene	UG/L	10	U
2,4,5-Trichlorophenol	UG/L	25	U
2,4,6-Trichlorophenol	UG/L	10	U
Tentatively Identified Compounds		11	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		35727-05 REG	
		5/26/94	
		Result	Val
Pesticides and PCBs	**Units**		
Aldrin	UG/L	0.01	U
alpha-BHC	UG/L	0.01	U
alpha-Chlordane	UG/L	0.01	U
Aroclor 1232	UG/L	0.2	U
Aroclor-1016	UG/L	0.2	U
Aroclor-1221	UG/L	0.4	U
Aroclor-1242	UG/L	0.2	U
Aroclor-1248	UG/L	0.2	U
Aroclor-1254	UG/L	0.2	U
Aroclor-1260	UG/L	0.2	U
beta-BHC	UG/L	0.01	U
4,4'-DDD	UG/L	0.02	U
4,4'-DDE	UG/L	0.02	U
4,4'-DDT	UG/L	0.02	U
delta-BHC	UG/L	0.01	U
Dieldrin	UG/L	0.02	U
Endosulfan I	UG/L	0.01	U
Endosulfan II	UG/L	0.02	U
Endosulfan Sulfate	UG/L	0.02	U
Endrin	UG/L	0.01	U
Endrin Aldehyde	UG/L	0.02	U
Endrin Ketone	UG/L	0.02	U
gamma-BHC (Lindane)	UG/L	0.01	U
gamma-Chlordane	UG/L	0.01	U
Heptachlor	UG/L	0.01	U
Heptachlor Epoxide	UG/L	0.01	U
p,p'-Methoxychlor	UG/L	0.1	U
Toxaphene	UG/L	1	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		3573103 REG	
		5/26/94	
		Result	Val
Inorganics	Units		
Aluminum	UG/L	304	
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	18.5	
Beryllium	UG/L	0.5	U
Bismuth	UG/L	60.4	U
Cadmium	UG/L	2.3	U
Calcium	UG/L	34100	
Chromium	UG/L	7.9	U
Cobalt	UG/L	6.5	U
Copper	UG/L	69.2	U
Cyanide	UG/L	10	U
Iron	UG/L	1170	J
Lead	UG/L	2.8	U
Magnesium	UG/L	7400	
Manganese	UG/L	18.7	
Mercury	UG/L	0.2	U
Nickel	UG/L	8.1	U
Potassium	UG/L	2520	
Selenium	UG/L	4.6	U
Silver	UG/L	4.8	U
Sodium	UG/L	305000	
Thallium	UG/L	3.6	U
Vanadium	UG/L	4.9	U
Zinc	UG/L	18.6	U

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		3573003 REG	
		5/26/94	
		Result	Val
Dissolved Inorganics	Units		
Aluminum	UG/L	32.7	
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	15.7	
Beryllium	UG/L	1.7	U
Bismuth	UG/L	NR	
Cadmium	UG/L	2.3	U
Calcium	UG/L	31800	
Chromium	UG/L	9.1	U
Cobalt	UG/L	3.1	U
Copper	UG/L	55.4	
Cyanide	UG/L	NR	
Iron	UG/L	61.6	
Lead	UG/L	2.8	U
Magnesium	UG/L	6770	
Manganese	UG/L	6.2	U
Mercury	UG/L	0.2	U
Nickel	UG/L	NR	
Potassium	UG/L	2340	
Selenium	UG/L	NR	
Silver	UG/L	3.2	J
Sodium	UG/L	NR	
Thallium	UG/L	8.2	U
Vanadium	UG/L	4.7	U
Zinc	UG/L	3	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602			
		S21101	
		902-S21101	
		0357290003SA REG	
		5/26/94	
		Result	Val
Anions	Units		
Ammonia as N	MG/L	0.1	U
Chloride	MG/L	226	
Fluoride	MG/L	0.17	
Nitrate/Nitrite (NO3/NO2-N)	MG/L	1.4	
Sulfate	MG/L	79.2	J

		S21101	
		902-S21101	
		0357290003SA REG	
		5/26/94	
		Result	Val
Miscellaneous	Units		
Alkalinity, Total as CaCO3 at	MG/L	350	
Phosphorus, Total as P	MG/L	0.078	
Total Dissolved Solids	MG/L	1020	
Total Kjeldahl Nitrogen as N	MG/L	0.5	U
Total Suspended Solids	MG/L	2	
Total Organic Carbon	MG/L	1.15	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 602				
		S21101		
		902-S21101		
		3219708 REG		
		5/26/94		
		Result	UNC	Val
Radiological	Units			
Am-241	PCI/L	7.96E-01	NA	UJ
Bi-207	PCI/L	3.27E+00	NA	U
Bi-210m	PCI/L	3.55E+00	NA	U
Co-60	PCI/L	4.06E+00	NA	U
Cs-137	PCI/L	3.49E+00	NA	U
K-40	PCI/L	1.30E+02	5.14E+01	
Pu-238	PCI/L	5.79E-01	2.95E-01	
Pu-239/240	PCI/L	2.03E-01	NA	U
Pu-242	PCI/L	7.47E-02	NA	U
Ra-226	PCI/L	1.68E+00	NA	U
Sr-90	PCI/L	2.49E+00	NA	U
Th-228	PCI/L	4.33E-01	NA	U
Th-230	PCI/L	4.41E-01	2.32E-01	
Th-232	PCI/L	1.91E-01	NA	U
Tritium	PCI/L	1.69E+04	4.96E+02	
U-234	PCI/L	9.65E-01	3.57E-01	
U-235	PCI/L	2.16E-01	NA	U
U-238	PCI/L	5.26E-01	2.94E-01	

MAIN HILL SEEP 602				
		S21101		
		902-S21101		
		3219708 REG		
		34480		
		Result	UNC	Val
Rads, Dissolved	Units			
Am-241	PCI/L	1.19	NA	UJ
Bi-207	PCI/L	3.6	NA	U
Bi-210m	PCI/L	4.29	NA	U
Co-60	PCI/L	4.29	NA	U
Cs-137	PCI/L	3.91	NA	U
K-40	PCI/L	84.8	NA	U
Pu-238	PCI/L	0.581	0.281	
Pu-239/240	PCI/L	0.0685	NA	U
Pu-242	PCI/L	0.186	NA	U
Ra-226	PCI/L	0.454	NA	U
Sr-90	PCI/L	3.41	1.01	
Th-228	PCI/L	0.482	NA	U
Th-230	PCI/L	0.239	0.183	
Th-232	PCI/L	0.252	NA	U
Tritium	PCI/L	5240	332	
U-234	PCI/L	0.435	0.246	
U-235	PCI/L	0.201	NA	U
U-238	PCI/L	0.462	0.288	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		J1225.D REG	
		6/14/94	
		Result	Val
Volatile Organics	Units		
Acetone	UG/L	10	U
Acetonitrile	UG/L	100	U
Acrylonitrile	UG/L	100	UJ
Benzene	UG/L	5	UJ
Bromodichloromethane	UG/L	5	UJ
Bromoform	UG/L	5	UJ
Bromomethane	UG/L	10	U
2-Butanone	UG/L	10	U
Carbon Disulfide	UG/L	5	UJ
Carbon Tetrachloride	UG/L	5	UJ
Chlorobenzene	UG/L	5	UJ
Chlorodibromomethane	UG/L	5	UJ
Chloroethane	UG/L	10	U
Chloroform	UG/L	5	UJ
Chloromethane	UG/L	10	U
1,1-Dichloroethane	UG/L	5	UJ
1,2-Dichloroethane	UG/L	5	UJ
1,1-Dichloroethene	UG/L	5	UJ
1,2-Dichloroethene	UG/L	2	J
1,2-Dichloropropane	UG/L	5	UJ
cis-1,3-Dichloropropene	UG/L	5	UJ
trans-1,3-Dichloropropene	UG/L	5	UJ
1,2-Diethylbenzene	UG/L	5	UJ
Ethylbenzene	UG/L	5	UJ
Hexane	UG/L	10	U
2-Hexanone	UG/L	10	U
Iodomethane	UG/L	10	U
4-Methyl-2-pentanone	UG/L	10	U
Methylene Chloride	UG/L	6	UJ
Styrene	UG/L	5	UJ
1,1,2,2-Tetrachloroethane	UG/L	5	UJ
Tetrachloroethene	UG/L	5	UJ
Toluene	UG/L	5	UJ
1,1,1-Trichloroethane	UG/L	5	UJ
1,1,2-Trichloroethane	UG/L	5	UJ
Trichloroethene	UG/L	4	J
Trichlorotrifluoroethane	UG/L	5	UJ
Vinyl Acetate	UG/L	10	U
Vinyl Chloride	UG/L	10	U
Xylene, Total	UG/L	5	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		REG	
		6/14/94	
		Result	Val
Semi-volatile Organics	Units		
Acenaphthene	UG/L	10	U
Acenaphthylene	UG/L	10	U
Anthracene	UG/L	10	U
Benzo(a)anthracene	UG/L	10	U
Benzo(a)pyrene	UG/L	10	U
Benzo(b)fluoranthene	UG/L	10	U
Benzo(g,h,i)perylene	UG/L	10	U
Benzo(k)fluoranthene	UG/L	10	U
Benzoic Acid	UG/L	50	U
Benzyl Alcohol	UG/L	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U
bis(2-Chloroethyl)ether	UG/L	10	U
bis(2-Ethylhexyl)phthalate	UG/L	10	U
4-Bromophenyl-phenylether	UG/L	10	U
Butylbenzylphthalate	UG/L	10	U
Carbazole	UG/L	10	U
4-Chloro-3-methylphenol	UG/L	10	U
4-Chloroaniline	UG/L	10	U
2-Chloronaphthalene	UG/L	10	U
2-Chlorophenol	UG/L	10	U
4-Chlorophenyl-phenylether	UG/L	10	U
Chrysene	UG/L	10	U
Di-n-butylphthalate	UG/L	10	U
Di-n-octylphthalate	UG/L	10	U
Dibenzo(a,h)anthracene	UG/L	10	U
Dibenzofuran	UG/L	10	U
1,2-Dichlorobenzene	UG/L	10	U
1,3-Dichlorobenzene	UG/L	10	U
1,4-Dichlorobenzene	UG/L	10	U
3,3'-Dichlorobenzidine	UG/L	10	U
2,4-Dichlorophenol	UG/L	10	U
Diethylphthalate	UG/L	10	U
2,4-Dimethylphenol	UG/L	10	U
Dimethylphthalate	UG/L	10	U
4,6-Dinitro-2-methylphenol	UG/L	25	U
2,4-Dinitrophenol	UG/L	25	U
2,4-Dinitrotoluene	UG/L	10	U
2,6-Dinitrotoluene	UG/L	10	U
Fluoranthene	UG/L	10	U
Fluorene	UG/L	10	U
Hexachlorobenzene	UG/L	10	U
Hexachlorobutadiene	UG/L	10	U
Hexachlorocyclopentadiene	UG/L	10	U
Hexachloroethane	UG/L	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		REG	
		6/14/94	
		Result	Val
Semi-volatile Organics	Units		
2-Methylphenol	UG/L	10	U
4-Methylphenol	UG/L	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U
N-Nitrosodiphenylamine	UG/L	10	U
Naphthalene	UG/L	10	U
2-Nitroaniline	UG/L	25	U
3-Nitroaniline	UG/L	25	U
4-Nitroaniline	UG/L	25	U
Nitrobenzene	UG/L	10	U
2-Nitrophenol	UG/L	10	U
4-Nitrophenol	UG/L	25	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	U
Pentachlorophenol	UG/L	25	U
Phenanthrene	UG/L	10	U
Phenol	UG/L	10	U
Pyrene	UG/L	10	U
1,2,4-Trichlorobenzene	UG/L	10	U
2,4,5-Trichlorophenol	UG/L	25	U
2,4,6-Trichlorophenol	UG/L	10	U
Tentatively Identified Compounds		9	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		36135-07 REG	
		6/14/94	
		Result	Val
Pesticides and PCBs	**Units**		
Aldrin	UG/L	0.01	U
alpha-BHC	UG/L	0.01	U
alpha-Chlordane	UG/L	0.01	U
Aroclor 1232	UG/L	0.2	U
Aroclor-1016	UG/L	0.2	U
Aroclor-1221	UG/L	0.4	U
Aroclor-1242	UG/L	0.2	U
Aroclor-1248	UG/L	0.2	U
Aroclor-1254	UG/L	0.2	U
Aroclor-1260	UG/L	0.2	U
beta-BHC	UG/L	0.01	U
4,4'-DDD	UG/L	0.02	U
4,4'-DDE	UG/L	0.02	U
4,4'-DDT	UG/L	0.02	UJ
delta-BHC	UG/L	0.01	U
Dieldrin	UG/L	0.02	U
Endosulfan I	UG/L	0.01	U
Endosulfan II	UG/L	0.02	U
Endosulfan Sulfate	UG/L	0.02	U
Endrin	UG/L	0.01	UJ
Endrin Aldehyde	UG/L	0.02	U
Endrin Ketone	UG/L	0.02	U
gamma-BHC (Lindane)	UG/L	0.01	U
gamma-Chlordane	UG/L	0.01	U
Heptachlor	UG/L	0.01	U
Heptachlor Epoxide	UG/L	0.01	U
p,p'-Methoxychlor	UG/L	0.1	UJ
Toxaphene	UG/L	1	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		3621601 REG	
		6/14/94	
		Result	Val
Inorganics	**Units**		
Aluminum	UG/L	80.9	
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	115	
Beryllium	UG/L	0.5	U
Bismuth	UG/L	114	U
Cadmium	UG/L	2.3	U
Calcium	UG/L	194000	
Chromium	UG/L	7.9	U
Cobalt	UG/L	6.5	U
Copper	UG/L	4.6	U
Cyanide	UG/L	10	U
Iron	UG/L	101	
Lead	UG/L	2.8	U
Magnesium	UG/L	67600	
Manganese	UG/L	1.4	U
Mercury	UG/L	0.2	U
Nickel	UG/L	8.1	U
Potassium	UG/L	8410	
Selenium	UG/L	4.6	U
Silver	UG/L	4.8	U
Sodium	UG/L	569000	
Thallium	UG/L	6.9	
Vanadium	UG/L	4.9	U
Zinc	UG/L	3.4	U

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		3621601 REG	
		6/14/94	
		Result	Val
Dissolved Inorganics	**Units**		
Aluminum	UG/L	30.5	U
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	131	J
Beryllium	UG/L	0.71	U
Bismuth	UG/L	NR	
Cadmium	UG/L	2.3	U
Calcium	UG/L	231000	J
Chromium	UG/L	7.9	U
Cobalt	UG/L	8.4	U
Copper	UG/L	4.6	U
Cyanide	UG/L	NR	
Iron	UG/L	60.5	U
Lead	UG/L	2.8	U
Magnesium	UG/L	79200	J
Manganese	UG/L	1.4	U
Mercury	UG/L	0.2	NV
Nickel	UG/L	NR	
Potassium	UG/L	10800	
Selenium	UG/L	NR	
Silver	UG/L	4.8	U
Sodium	UG/L	NR	
Thallium	UG/L	9.5	U
Vanadium	UG/L	4.9	U
Zinc	UG/L	2.4	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		0362150001SA REG	
		6/14/94	
		Result	Val
Anions	Units		
Ammonia as N	MG/L	0.1	UJ
Chloride	MG/L	1070	
Fluoride	MG/L	0.18	
Nitrate/Nitrite (NO3/NO2-N)	MG/L	6.4	
Sulfate	MG/L	185	

		S71101	
		902-S71101	
		0362150001SA REG	
		6/14/94	
		Result	Val
Miscellaneous	Units		
Alkalinity, Total as CaCO3 at	MG/L	285	
Phosphorus, Total as P	MG/L	0.05	U
Total Dissolved Solids	MG/L	2390	
Total Kjeldahl Nitrogen as N	MG/L	0.5	U
Total Suspended Solids	MG/L	6.4	
Total Organic Carbon	MG/L	1.25	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607			
		S71101	
		902-S71101	
		0362150001SA REG	
		6/14/94	
		Result	Val
EXPLOSIVES	Units		
2-Amino-4,6-dinitrotoluene	UG/L	0.035	UJ
1,3-Dinitrobenzene	UG/L	0.11	UJ
2,4-Dinitrotoluene	UG/L	0.02	UJ
2,6-Dinitrotoluene	UG/L	0.31	UJ
HMX	UG/L	0.8	UJ
Nitrobenzene	UG/L	0.25	UJ
PETN	UG/L	1	UJ
RDX	UG/L	0.84	UJ
TETRYL	UG/L	0.8	UJ
1,3,5-Trinitrobenzene	UG/L	0.26	UJ
2,4,6-Trinitrotoluene	UG/L	0.11	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 607				
		S71101		
		902-S71101		
		3225703 REG		
		6/14/94		
		Result	UNC	Val
Radiological	Units			
Am-241	PCI/L	1.14E+00	NA	UJ
Bi-207	PCI/L	3.42E+00	NA	U
Bi-210m	PCI/L	4.38E+00	NA	U
Co-60	PCI/L	4.09E+00	NA	U
Cs-137	PCI/L	3.88E+00	NA	U
K-40	PCI/L	3.66E+01	NA	U
Pu-238	PCI/L	1.57E-01	NA	UJ
Pu-239/240	PCI/L	8.80E-02	NA	UJ
Pu-242	PCI/L	1.11E-01	NA	UJ
Ra-226	PCI/L	1.54E+00	NA	U
Sr-90	PCI/L	1.01E+00	NA	U
Th-228	PCI/L	4.64E-01	NA	U
Th-230	PCI/L	4.02E-01	2.60E-01	
Th-232	PCI/L	2.87E-01	NA	U
Tritium	PCI/L	6.63E+04	8.95E+02	
U-234	PCI/L	6.59E-01	3.07E-01	
U-235	PCI/L	2.36E-01	NA	U
U-238	PCI/L	3.55E-01	2.20E-01	

MAIN HILL SEEP 607				
		S71101		
		902-S71101		
		3225703 REG		
		34499		
		Result	UNC	Val
Rads, Dissolved	Units			
Am-241	PCI/L	0.553	NA	UJ
Bi-207	PCI/L	3.2	NA	U
Bi-210m	PCI/L	3.81	NA	U
Co-60	PCI/L	3.39	NA	U
Cs-137	PCI/L	3.48	NA	U
K-40	PCI/L	185	75.4	
Pu-238	PCI/L	1.13	0.287	
Pu-239/240	PCI/L	0.145	NA	U
Pu-242	PCI/L	0.145	NA	U
Ra-226	PCI/L	1.56	NA	U
Sr-90	PCI/L	0.881	NA	
Th-228	PCI/L	0.471	NA	U
Th-230	PCI/L	0.367	0.208	
Th-232	PCI/L	0.261	NA	U
Tritium	PCI/L	64800	883	
U-234	PCI/L	0.837	0.323	
U-235	PCI/L	0.0758	NA	U
U-238	PCI/L	0.474	0.25	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		J0870.D REG	
		5/31/94	
		Result	Val
Volatile Organics	Units		
Acetone	UG/L	10	U
Acetonitrile	UG/L	100	U
Acrylonitrile	UG/L	100	U
Benzene	UG/L	5	UJ
Bromodichloromethane	UG/L	5	UJ
Bromoform	UG/L	5	UJ
Bromomethane	UG/L	10	UJ
2-Butanone	UG/L	10	U
Carbon Disulfide	UG/L	5	UJ
Carbon Tetrachloride	UG/L	5	UJ
Chlorobenzene	UG/L	5	UJ
Chlorodibromomethane	UG/L	5	UJ
Chloroethane	UG/L	10	U
Chloroform	UG/L	5	UJ
Chloromethane	UG/L	10	U
1,1-Dichloroethane	UG/L	5	UJ
1,2-Dichloroethane	UG/L	5	UJ
1,1-Dichloroethene	UG/L	1	J
1,2-Dichloroethene	UG/L	1	J
1,2-Dichloropropane	UG/L	5	UJ
cis-1,3-Dichloropropene	UG/L	5	UJ
trans-1,3-Dichloropropene	UG/L	5	UJ
1,2-Diethylbenzene	UG/L	5	UJ
Ethylbenzene	UG/L	5	UJ
Hexane	UG/L	10	U
2-Hexanone	UG/L	10	U
Iodomethane	UG/L	10	U
4-Methyl-2-pentanone	UG/L	10	U
Methylene Chloride	UG/L	10	U
Styrene	UG/L	5	UJ
1,1,2,2-Tetrachloroethane	UG/L	5	UJ
Tetrachloroethene	UG/L	5	UJ
Toluene	UG/L	5	UJ
1,1,1-Trichloroethane	UG/L	5	UJ
1,1,2-Trichloroethane	UG/L	5	UJ
Trichloroethene	UG/L	7	J
Trichlorotrifluoroethane	UG/L	5	UJ
Vinyl Acetate	UG/L	10	U
Vinyl Chloride	UG/L	10	U
Xylene, Total	UG/L	5	UJ

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		A1801278.D REG	
		5/31/94	
		Result	Val
Semi-volatile Organics	**Units**		
Acenaphthene	UG/L	10	U
Acenaphthylene	UG/L	10	U
Anthracene	UG/L	10	U
Benzo(a)anthracene	UG/L	10	U
Benzo(a)pyrene	UG/L	10	U
Benzo(b)fluoranthene	UG/L	10	U
Benzo(g,h,i)perylene	UG/L	10	U
Benzo(k)fluoranthene	UG/L	10	U
Benzoic Acid	UG/L	50	U
Benzyl Alcohol	UG/L	10	U
2-Benzyl-4-Chlorophenol	UG/L	10	U
bis(2-Chloroethoxy)methane	UG/L	10	U
bis(2-Chloroethyl)ether	UG/L	10	U
bis(2-Ethylhexyl)phthalate	UG/L	10	U
4-Bromophenyl-phenylether	UG/L	10	U
Butylbenzylphthalate	UG/L	10	U
Carbazole	UG/L	10	U
4-Chloro-3-methylphenol	UG/L	10	U
4-Chloroaniline	UG/L	10	U
2-Chloronaphthalene	UG/L	10	U
2-Chlorophenol	UG/L	10	U
4-Chlorophenyl-phenylether	UG/L	10	U
Chrysene	UG/L	10	U
Di-n-butylphthalate	UG/L	10	U
Di-n-octylphthalate	UG/L	10	U
Dibenzo(a,h)anthracene	UG/L	10	U
Dibenzofuran	UG/L	10	U
1,2-Dichlorobenzene	UG/L	10	U
1,3-Dichlorobenzene	UG/L	10	U
1,4-Dichlorobenzene	UG/L	10	U
3,3'-Dichlorobenzidine	UG/L	10	U
2,4-Dichlorophenol	UG/L	10	U
Diethylphthalate	UG/L	10	U
2,4-Dimethylphenol	UG/L	10	U
Dimethylphthalate	UG/L	10	U
4,6-Dinitro-2-methylphenol	UG/L	25	U
2,4-Dinitrophenol	UG/L	25	U
2,4-Dinitrotoluene	UG/L	10	U
2,6-Dinitrotoluene	UG/L	10	U
Fluoranthene	UG/L	10	U
Fluorene	UG/L	10	U
Hexachlorobenzene	UG/L	10	U
Hexachlorobutadiene	UG/L	10	U
Hexachlorocyclopentadiene	UG/L	10	U
Hexachloroethane	UG/L	10	U
Indeno(1,2,3-c,d)pyrene	UG/L	10	U

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		A1801278.D REG	
		5/31/94	
		Result	Val
Semi-volatile Organics	**Units**		
2-Methylphenol	UG/L	10	U
4-Methylphenol	UG/L	10	U
N-Nitroso-di-n-propylamine	UG/L	10	U
N-Nitrosodiphenylamine	UG/L	10	U
Naphthalene	UG/L	10	U
2-Nitroaniline	UG/L	25	U
3-Nitroaniline	UG/L	25	U
4-Nitroaniline	UG/L	25	U
Nitrobenzene	UG/L	10	U
2-Nitrophenol	UG/L	10	U
4-Nitrophenol	UG/L	25	U
2,2'-oxybis(1-Chloropropane)	UG/L	10	U
Pentachlorophenol	UG/L	25	U
Phenanthrene	UG/L	10	U
Phenol	UG/L	10	U
Pyrene	UG/L	10	U
1,2,4-Trichlorobenzene	UG/L	10	U
2,4,5-Trichlorophenol	UG/L	25	U
2,4,6-Trichlorophenol	UG/L	10	U
Tentatively Identified Compounds		3	

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		35727-07 REG	
		5/31/94	
		Result	Val
Pesticides and PCBs	**Units**		
Aldrin	UG/L	0.01	U
alpha-BHC	UG/L	0.01	U
alpha-Chlordane	UG/L	0.01	U
Aroclor 1232	UG/L	0.2	U
Aroclor-1016	UG/L	0.2	U
Aroclor-1221	UG/L	0.4	U
Aroclor-1242	UG/L	0.2	U
Aroclor-1248	UG/L	0.2	U
Aroclor-1254	UG/L	0.2	U
Aroclor-1260	UG/L	0.2	U
beta-BHC	UG/L	0.01	U
4,4'-DDD	UG/L	0.02	U
4,4'-DDE	UG/L	0.02	U
4,4'-DDT	UG/L	0.02	U
delta-BHC	UG/L	0.01	U
Dieldrin	UG/L	0.02	U
Endosulfan I	UG/L	0.01	U
Endosulfan II	UG/L	0.02	U
Endosulfan Sulfate	UG/L	0.02	U
Endrin	UG/L	0.01	U
Endrin Aldehyde	UG/L	0.02	U
Endrin Ketone	UG/L	0.02	U
gamma-BHC (Lindane)	UG/L	0.01	U
gamma-Chlordane	UG/L	0.01	U
Heptachlor	UG/L	0.01	U
Heptachlor Epoxide	UG/L	0.01	U
p,p'-Methoxychlor	UG/L	0.1	U
Toxaphene	UG/L	1	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		3573104 REG	
		5/31/94	
		Result	Val
Inorganics	**Units**		
Aluminum	UG/L	2110	
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	76.2	
Beryllium	UG/L	0.76	
Bismuth	UG/L	217	U
Cadmium	UG/L	2.3	U
Calcium	UG/L	200000	
Chromium	UG/L	7.9	U
Cobalt	UG/L	7.8	
Copper	UG/L	5.3	
Cyanide	UG/L	10	U
Iron	UG/L	3770	J
Lead	UG/L	2.8	U
Magnesium	UG/L	74100	
Manganese	UG/L	51.5	
Mercury	UG/L	0.2	U
Nickel	UG/L	8.1	U
Potassium	UG/L	6450	
Selenium	UG/L	4.6	U
Silver	UG/L	4.8	U
Sodium	UG/L	146000	
Thallium	UG/L	3.6	U
Vanadium	UG/L	4.9	U
Zinc	UG/L	13.3	U

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		3573004 REG	
		5/31/94	
		Result	Val
Dissolved Inorganics	**Units**		
Aluminum	UG/L	20.3	U
Antimony	UG/L	3.1	U
Arsenic	UG/L	4.3	U
Barium	UG/L	78.8	
Beryllium	UG/L	1.7	U
Bismuth	UG/L	NR	
Cadmium	UG/L	2.3	U
Calcium	UG/L	210000	
Chromium	UG/L	9.1	U
Cobalt	UG/L	3.1	U
Copper	UG/L	2.7	U
Cyanide	UG/L	NR	
Iron	UG/L	15.6	U
Lead	UG/L	2.8	U
Magnesium	UG/L	77000	
Manganese	UG/L	6.2	U
Mercury	UG/L	0.2	U
Nickel	UG/L	NR	
Potassium	UG/L	7750	
Selenium	UG/L	NR	
Silver	UG/L	2.8	U
Sodium	UG/L	NR	
Thallium	UG/L	6.1	U
Vanadium	UG/L	4.7	U
Zinc	UG/L	1.7	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608			
		S81101	
		902-S81101	
		0357290004SA REG	
		5/31/94	
		Result	Val
Anions	Units		
Ammonia as N	MG/L	0.1	U
Chloride	MG/L	441	
Fluoride	MG/L	0.1	U
Nitrate/Nitrite (NO3/NO2-N)	MG/L	3.7	
Sulfate	MG/L	104	J

		S81101	
		902-S81101	
		0357290004SA REG	
		5/31/94	
		Result	Val
Miscellaneous	Units		
Alkalinity, Total as CaCO3 at	MG/L	293	
Phosphorus, Total as P	MG/L	0.05	U
Total Dissolved Solids	MG/L	1090	
Total Kjeldahl Nitrogen as N	MG/L	0.5	U
Total Suspended Solids	MG/L	58.4	
Total Organic Carbon	MG/L	1	U

APPENDIX E.3 MAIN HILL SEEPS SOIL INVESTIGATION (WATERS)

MAIN HILL SEEP 608				
		S81101		
		902-S81101		
		3219709 REG		
		5/31/94		
		Result	UNC	Val
Radiological	**Units**			
Am-241	PCI/L	9.79E-01	NA	UJ
Bi-207	PCI/L	2.18E+00	NA	U
Bi-210m	PCI/L	2.51E+00	NA	U
Co-60	PCI/L	2.80E+00	NA	U
Cs-137	PCI/L	2.32E+00	NA	U
K-40	PCI/L	3.86E+01	NA	U
Pu-238	PCI/L	6.57E-01	3.48E-01	
Pu-239/240	PCI/L	8.10E-02	NA	U
Pu-242	PCI/L	8.10E-02	NA	U
Ra-226	PCI/L	4.11E-01	NA	U
Sr-90	PCI/L	4.26E+00	NA	U
Th-228	PCI/L	4.05E-01	NA	U
Th-230	PCI/L	2.04E-01	1.47E-01	
Th-232	PCI/L	2.37E-01	NA	U
Tritium	PCI/L	5.52E+03	3.38E+02	
U-234	PCI/L	4.47E-01	2.69E-01	
U-235	PCI/L	7.14E-02	NA	U
U-238	PCI/L	3.68E-01	2.62E-01	

MAIN HILL SEEP 608				
		S81101		
		902-S81101		
		3219709 REG		
		34485		
		Result	UNC	Val
Rads, Dissolved	**Units**			
Am-241	PCI/L	0.527	NA	UJ
Bi-207	PCI/L	4.69	NA	U
Bi-210m	PCI/L	5.45	NA	U
Co-60	PCI/L	5.28	NA	U
Cs-137	PCI/L	5.29	NA	U
K-40	PCI/L	148	NA	U
Pu-238	PCI/L	0.431	NA	U
Pu-239/240	PCI/L	0.0827	NA	U
Pu-242	PCI/L	0.0827	NA	U
Ra-226	PCI/L	0.453	NA	U
Sr-90	PCI/L	4.92	1.33	
Th-228	PCI/L	0.611	NA	U
Th-230	PCI/L	0.302	NA	U
Th-232	PCI/L	0.301	NA	U
Tritium	PCI/L	16500	489	
U-234	PCI/L	0.453	NA	UJ
U-235	PCI/L	0.311	NA	UJ
U-238	PCI/L	0.505	0.363	J