U.S. Army
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Engineers

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Luckey Site
Luckey, Ohio

FINAL
Remedial Investigation Report
Volume II (Appendices)

Prepared for:
U.S. Army Corps of Engineers
Buffalo District

Prepared by:
Science Applications International Corporation
Dublin, Ohio

Managed by:
Montgomery Watson

Total Environmental Restoration Contract
DACW27-97-D-0015 Task Order 0009
U.S. Army Corps of Engineers
Louisville District

September 2000

MONTGOMERY WATSON
Serving The World's Environmental Needs

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contributed to the preparation of this document and should not be considered an eligible contractor for its review.

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ACRONYMS AND ABBREVIATIONS

AASHO	American Association of State Highway Officials
ACGIH	American Conference of Governmental Industrial Hygienists
ADD	average daily dose
AEC	Atomic Energy Commission
AMSL	above mean sea level
ANL	Argonne National Laboratories
ANSI	American National Standards Institute
ARAR	Applicable or Relevant and Appropriate Requirement
ASTM	American Society for Testing and Materials
ATSDR	Agency for Toxic Substances Disease Registry
ATV	all terrain vehicle
AUF	area use factor
BAF	bioaccumulation factor
BBC	Brush Beryllium Company
BCF	bioaccumulation concentration
BeOH	beryllium hydroxide
bgs	below ground surface
bls	below land surface
BMW	background monitoring well
BNI	Bechtel National, Inc
BRA	baseline risk assessment
BZ	breathing zone
CBD	chronic beryllium desease
CDC	Centers for Disease Control and Prevention
CEC	cation exchange capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm^2	square centimeters
COCs	constituents of concern
COPCs	constituents of potential concern
CPECs	constituents of potential ecological concern
cpm	counts per minute
CSF	cancer slope factor
CT	central tendency
DACs	derived air concentrations
DAD	dermal absorbed dose
DAF	dilution attenuation factor
DCF	dose conversion factor
DCGL	Derived Concentration Guidance Level
DOD	Department of Defense
DOE	Department of Energy
DPC	Defense Plant Corporation
dpm	disintegrations per minute
DQA	data quality assessment
DQI	data quality indicators
DQO	Data Quality Objective
EDD	electronic data deliverable
EDQL	Ecological Data Quality Level
EEQ	environmental effects quotient
Eh	redox potential
ELCR	excess lifetime cancer risk

ACRONYMS AND ABBREVIATIONS

EM	electromagnetic
EPA	Environmental Protection Agency
EPC	exposure point concentration
EPI	Environmental Physics Incorporated
ERA	ecological risk assessment
ESA	Endangered Species Act
EU	exposure unit
FA	functional area
FBI	family biotic index
FID	flame-ionization detector
FIDLER	field instrument for detecting low-energy radiation
foc	fraction of organic carbon
FOV	fields of view
FP	Field Procedure
FS	Feasibility Study
ft	foot or feet
FUSRAP	Formerly Utilized Sites Remedial Action Program
GEL	General Engineering Laboratories
GI	gastrointestinal
GPS	Global Positioning System
GPR	ground penetrating radar
GSA	General Services Administration
H&S	Health and Safety
ha	hectares
HEAST	Health Effects and Assessment Summary Tables
HELP	Huron/Erie Lake Plain
HEPA	High Efficiency Particulate Air
HHRA	Human Health Risk Assessment
HI	hazard index
HQ	hazard quotient
HVAC	heating, ventilating, and air conditioning
IA	Investigation Area
IAEA	International Atomic Energy Agency
IDL	instrument detection limit
IEUBK	Integrated Exposure Uptake Biokinetic Model
ILCRs	incremental lifetime cancer risk
IRIS	Integrated Risk Information System
ISGS	in situ gamma-ray spectroscopy
kg	kilograms
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LIBS	Laser Induced Breakdown Spectroscopy
LOAEL	lowest observed adverse effects level
LOSA	Lake Ontario Storage Area
m^2	square meters
MARRSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MCE	mixed cellulose ester
MCL	maximum contaminant level
MED	Manhattan Engineering District
mg/kg	milligrams/kilogram
mm	millimeter

ACRONYMS AND ABBREVIATIONS

MOA	Memorandum of Agreement
MS/MSD	matrix spike/matrix spike duplicate
MW	monitoring well
NARA	National Archive and Records Administration
NCEA	National Center for Environmental Assessment
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NOAEL	no observed adverse effect level
NPDES	National Pollution Discharge Elimination System
NRC	Nuclear Regulatory Commission
NYCRR	New York Central Railroad
Ohio DOH	Ohio Department of Health
ODNR	Ohio Department of Natural Resources
Ohio EPA	Ohio Environmental Protection Agency
OMW	off-site monitoring well
ORNL	Oak Ridge National Laboratory
OSHA	Occupation Safety and Health Administration
OSWER	Office of Solid Waste and Emergency Response
OVA	Organic Vapor Analyzer
PACM	presumed asbestos-containing material
PAH	polyaromatic hydrocarbon
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PCOC	potential constituent of concern
pCi	picocuries
pCi/g	picocuries per gram
pCi/L	picocuries per liter
PE	performance evaluation
PEL	Permissible Exposure Limits
PID	photoionization detector
ppb	parts per billion
PPE	Personal Protective Equipment
ppm	parts per million
PRGs	Preliminary Remediation Goals
PRP	potentially responsible party
PVC	polyvinyl chloride
PZ	piezometer
QA	Quality Assurance
QC	Quality Control
QAPP	quality assurance project plan
Ra	radium
RAGS	Risk Assessment Guidance for Superfund
RBCs	risk-based concentrations
RBP	rapid bioassessment protocol
RCRA	Resource Conservation and Recovery Act
RESRAD	residual radiation computer code
RfD	reference dose factor
RHTG	Records Holding Technical Group

ACRONYMS AND ABBREVIATIONS

RI	Remedial Investigation
RME	reasonable maximum exposure
RPD	relative percent difference
RPM	radiation protection manager
SAFER	Streamlined Approach for Environmental Restoration
SAIC	Science Applications International Corporation
SAP	sampling and analysis
SI	Site Investigation
SOP	standard operating procedure
SQL	sample quantitation limit
STP	sewage treatment facility
SVOCs	semi-volatile organic compounds
SWSD	surface water and sediment
T&E	threatened and endangered
TAL	target analyte list
TBC	to be considered
TCE	trichloroethene
TCL	target compound list
TDS	total dissolved solids
Th	thorium
TIC	tentatively identified compound
TLV	Threshold Limit Value
TM	Technical Memorandum
TOC	total organic carbon
TRACER	Transportable Remote Analyzer for Characterization and Environmental Remediation
TRPH	total recoverable petroleum hydrocarbons
TRV	toxicity reference values
TRW	Technical Review Workgroup
TSS	total suspended solids
TUF	temporal use factor
TW	test well
TWA	time-weighted average
U	uranium
UCL	upper confidence limit
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USCS	Unified Soil Classification Service
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UTL	upper tolerance limit
VFT	vinyl floor tile
VOCs	Volatile Organic Compounds
WP	Work Plan
WWII	World War II
µg	micrograms
µg/dL	micrograms per deciliter
$\mu g/ft^2$	micrograms per square feet

ACRONYMS AND ABBREVIATIONS

µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m^3	micrograms per meter cubed
µrem	microrem
µrem/hr	microrem per hour
µR/h	microRoentgen per hour

APPENDIX 2A:
Records Search

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LIST OF ATTACHMENTS

Attachment 1: Record of Interviews with Robert Bowman, Former Employee at Luckey Site

ACRONYMS

AEC	Atomic Energy Commission
BBC	Brush Beryllium Company
BZ	breathing zone
DOE	Department of Energy
FUSRAP	Formerly Utilized Site Remedial Action Program
LOSA	Lake Ontario Storage Area
MED	Manhattan Engineering District of the U.S. Army Corps of Engineers
NARA	National Archives and Records Administration
NRC	Nuclear Regulatory Commission
RHTG	Records Holding Technical Group
USACE	United States Army Corps of Engineers

2A.0 RECORDS SEARCH

The Brush Beryllium Corporation (BBC) leased the entire site of the closed magnesium reduction plant in Luckey, Ohio, known as the Luckey site, in 1949. They entered into a contract with the Atomic Energy Commission (AEC) to design, construct, operate and maintain a plant for the production of beryllium and to maintain the former magnesium plant facilities in standby status. BBC operated the AEC-owned beryllium production plant between 1949 and 1960 but all beryllium production ceased in 1958. Recent anecdotal evidence suggests that although beryllium production had stopped in 1958, sintering and powder blending of beryllium may have occurred at the site between 1958 and 1962.

A records search was conducted to gather additional important historical information about the former Brush Beryllium Plant in Luckey, Ohio. The records search was divided into three separate activities. The first activity was to review the available information at the C.B. Sawyer collection at Case Western Reserve University in Cleveland Ohio. The second was to review the federal archives for information pertaining to the Luckey site. And the third was to review several potential leads for identifying vicinity properties (discussed in Section 8 of this RI Report). The historical information to be gathered included:

- identification of areas where sludges or other waste material may have been disposed;
- information pertaining to thorium shipments to the plant, and any operations relating to thorium or other radionuclides;
- sources of contamination including beryl ore and metal from the Lake Ontario Storage Area (LOSA); and
- beryllium processing information.

2A.1 THE DR. C. B. SAWYER COLLECTION

The Dr. C. B. Sawyer collection is housed at the Case Western Reserve University Special Collections Library in Cleveland, Ohio and contains the personal files of Charles Baldwin Sawyer. Dr. Sawyer was the driving force behind BBC, Brush Laboratories, and the Brush Development Corporation during the 1940's, 50's and early 1960's. He was the Chief Executive Officer for most of that time, a member of the board of directors, and the director of research. The Dr. C. B. Sawyer collection consists of his records of activities going on throughout the growth of these companies. The review of this collection primarily focused on the activities and records of BBC during the period from 1946 until 1959, pertaining specifically to the Luckey site, thorium, and other AEC research. Appendix A contains a finder's guide to the collection and copies of all documents retrieved from the collection.

BBC records from 1950 to 1962 are not in the collection although Dr. Sawyer's personal journals from some of this period are. His personal journals from December of 1947 until April of 1952 are missing from the collection.

2A.1.1 Dr. C. B. Sawyer Collection Search Results

The records search suggests that Dr. Sawyer did not have much direct contact with the operations at the Luckey site. It appears he was not working for Brush Beryllium from about 1948 to 1954. His time during this period was spent with Brush Laboratories, Brush Development, the Clevite Corporation and Cleveland Graphite and Bronze. His primary role seems to have been as a researcher and organizer. Others at the Luckey site (Bengt Kjellgren and Carl Schwenzfeier) were left to the task of production. The collection does contain information on the process of beryllium production. This includes a description of the material inputs and the results of steps in the process.

There were several mentions of thorium work in the collection, but records indicated that BBC at the Luckey site was not actually working with it. Brush Laboratories, whose offices were located in Cleveland, did do some powder metallurgy work with thorium in 1952 and federal records indicate that BBC Cleveland did thorium machining.

Very little was said about the closing of the Luckey facility. It was mostly shut down before March of 1955 and indications are that some operations continued until at least 1957. Most Brush operations had moved to BBC's Elmore, Ohio plant after its completion in 1954. The AEC was apparently very sensitive about allowing Brush to do anything but AEC work at Luckey. This forced Brush Beryllium to increase their activities in Elmore and hastened the shut down of the plant at the Luckey Facility. However, even in 1957 there is mention of setting up the sintering furnace at the Luckey site.

Dr. Sawyers records contain no mention of scrap metal sent to the Luckey site.

2A.2 FEDERAL RECORDS ARCHIVES

The focus of the second activity was to review federal archives for information pertaining to the Luckey site. There are a number of locations where federal archives store information of interest to the Formerly Utilized Site Remedial Action Program (FUSRAP) program. They include:

- Department of Energy (DOE) public reading room archives, Oak Ridge
- Records Holding Technical Group (RHTG) Archive
- National Archives and Records Administration (NARA Atlanta)
- DOE FUSRAP records
- Nuclear Regulatory Commission (NRC) dockets
- NARA College Park

The DOE maintains a public records archive in Oak Ridge, TN. This archive is accessible on the World Wide Web at:

http://www.oakridge.doe.gov/Foia/DOE_Public_Reading_Room.htm

Also in Oak Ridge is the RHTG Archive of DOE and AEC/Manhattan Engineering District (MED) material that is or was classified. Records in this archive were removed from their original context due to national security concerns during declassification. This archive is not publicly available but requests can be made for documents. If the documents can be declassified they will be provided. In order to determine which documents are relevant, a listing is available which shows one line per document indicating the date, author, recipient and subject of each document. This listing is 4,000 pages long and is only available in hard copy. Even then, some information has been blanked out for national security reasons.

A third archive is the National Archives and Records Administration (NARA) archive in Atlanta, GA. This archive contains unclassified information pertaining to MED/AEC. There are various finder's guides for the NARA archive on three feet of shelf space. A fourth source of information is the DOE FUSRAP records center. This center contains information DOE has gathered on all the FUSRAP sites. Requests for lists of this information, specific as to the site, are made through a contact person in the United States Army Corps of Engineers (USACE). Requests for copies of documents can then be made from the listing. Additional sources of information are the NRC records center and the national archives in College Park, MD. Copies of all documents retrieved that are relevant to the Luckey site are included in Appendix B.

2A.2.1 Federal Records Archives Search Results

Various communications found in the archival material from 1948 and 1949 indicated that the AEC selected BBC based on perceived cost of producing beryllium and to foster competition in beryllium production (AEC 1949). Documents show the issuance of a permit by the Federal Works Agency for the AEC to use the Luckey site (FWA 1949) and conditional approval by the Ohio Department of Health of the plan to use lagoons for waste liquids at the site (ODH 1949). Although beryllium-uranium is mentioned in some documents they are either not site-specific, or indicate that the Cleveland plant was involved (BBC 1949).

In 1950 and 1951, a number of things happened that impacted the Luckey site. A problem was realized with waste disposal at the site (BBC 1950a). There also were documents pertaining to air sampling around the plant and an incident involving one breathing zone (BZ) sample (BBC 1950b/c). At locations 2,500 and 5,000 feet north of the site concentrations are reported as being at background levels. There is no indication of what is being measured although it is probably beryllium. The units are given as γ/m^3 (BBC 1950c). A BZ sample taken at Luckey (LKI 1679) in the melts crusher room on July 13, 1950 was measured as 44.4 $\mu g/m^3$, this is compared to another sample from the same location at 6.65 $\mu g/m^3$ (BBC 1950b). These documents indicated that data was regularly being collected, not only around the plant, but also within the plant with BZ samplers. No records of this data, however, have been located.

Towards the end of 1950, approval to use mercury electrolysis at Luckey was issued (Velton 1950). The reason for this approval is not clear from the letter. Indeed, it is not clear whether this was to be a step in the beryllium production or not, although the contract vehicle is the one under which BBC was producing beryllium.

The NARA archives contained several letters referring to the return of contaminated scrap beryllium to Luckey for reprocessing. Beryllium was considered a strategic metal for the country and was expensive to make. After use in experiments it was cost effective to recover the material for further use. Many of the experiments had to do with reactor components including fuel assemblies. One of these letters (Smith 1950) specifically recognized that the contaminated beryllium powder being returned contained 0.22% Uranium. This indicates another pathway for radionuclides to arrive at the site. Comments by Dr. Sawyer in his journal indicate that the Luckey Process was conducive to removing contaminants from beryllium metal that was introduced after the initial steps of the ore processing.

The Munitions Board (U.S. government board controlling the manufacture of munitions for the war effort) issued plans to restart the magnesium production process in 1951. The AEC proposed to run the Luckey Plant at full capacity for a year to 18 months and then shut it down.). This elicited a series of proposals, plans, and revisions from BBC (Kjellgren 1951a/b) for joint operation of the site and for extended beryllium operations (AEC 1951). In 1951, a waste disposal well also was considered for disposal of liquid waste that had been impounded in the lagoons. Eventually the idea was dropped and the permit for drilling the well was returned to the state.

Thorium was mentioned in a number of documents relating to BBC during 1951, however, in most cases there is no mention of Luckey. Most of the thorium activity was probably located at the Cleveland office where machining and powder metallurgy were taking place. There are, however, a few documents which specifically mention Luckey when referring to thorium inventories (Del Vecchia 1951/1952). One document requesting an amendment to contract AT(30-1)-541 specifically lists activities at Luckey and Cleveland being done under the contract (Sargent 1951). The contract activities included:

- Production at Luckey
  - Pebbles

- Vacuum cast billets
- Beryllium oxide

- Production work or machining at Cleveland
  - Machined shapes
  - Thorium machining

- Research work both at Luckey and Cleveland
  - Continuation of approved projects.

In 1953, the AEC once again recommended that production of beryllium at Luckey be maximized until a stockpile was filled and then shut down (AEC 1953). Archival documents indicated that production continued until at least 1954 (AEC 1956) and that the plant had visitors in 1959 (Sapirie 1959). The federal archives yielded no information on the shutdown and decontamination of the plant. However, Robert Bowman a former Brush employee spoke up at a public meeting and was later interviewed. He indicated that BBC had powder blending and sintering operations, in a portion of the plant, going on until the middle of 1960 (Attachment 1).

Nuclear Regulatory Commission Records

A search of the NRC dockets turned up no licenses held by Brush during the time period 1949 to 1960. This was expected since the NRC was not established by congress until 1974.

DOE FUSRAP Records

The DOE FUSRAP records contain a large number of documents pertaining to the Luckey site. Sixty-one documents either not in other files or that could not be eliminated as already being available were requested. These documents were received from USACE as part of a document collection sent by USACE Headquarters. These documents confirmed already known information but provided no new insights in to the source of radioactivity or disposition of the contaminated scrap metal received at the Luckey site.

2A.3 SUMMARY OF MAJOR FINDINGS

The records search resulted in several major findings:

1) Reprocessing of radioactively contaminated beryllium could account for radioactivity in by-products such as the lagoon sludges.
2) Current evidence suggests that thorium processing was confined to operations in Cleveland.
3) Air monitoring was done both inside and outside the plant although results are very limited.
4) Although production of beryllium from ore may have ceased by 1958, some operations were continuing at the Luckey Plant until at least 1960.
5) After the government sold the property, some material associated with AEC operations was moved to other locations.
6) No information has been found that would indicate that the building cleanup in 1959 actually achieved the standards proposed and there is no information that any cleanup was done after the reported sintering, and powder blending and compacting, operations ceased in the early 1960's.

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ATTACHMENT 1
Record of Interviews with Robert Bowman, Former Employee at Luckey Site

Record of preliminary contact with Robert Bowman ~ June 15, 1999

Mr. Bowman was a Brush Beryllium employee in 1960. He spoke up at the public meeting June 15th in Luckey to say that operations at the Luckey facility did not end in 1958 but continued at least until the middle of 1960.

I approached him after the meeting to get more particulars.

He indicated that he had been hired by Brush Beryllium in early 1960 (or late 1959) and spent about a month working at Elmore before being told to report to the Luckey plant. There he directed a group that was engaged in sintering powdered beryllium into shapes. The reason for using the Luckey plant was because of the size of the large furnace. It was the largest of its type in the country at the time. He indicated that the sintering in the large furnace took days per run and they would use the smaller furnaces to sinter smaller shapes in between runs of the large furnace. He indicated that he thought that some of the shapes were for the AEC.

I asked if they sintered anything other than beryllium but he said no it was just beryllium powder that came from Elmore in sealed drums.

Follow up interview ~ July 8, 1999

Mr. Bowman was diagnosed about a year ago with Chronic Beryllium Disease. Brush Beryllium is paying for related medical expenses although his service with them ended in 1966 or 1967. When I talked with him at his home he had just returned from outpatient surgery for some skin lesions which may or may not be related to his Brush days.

He indicated activities at the site were sintering and powder blending and compacting. No decontamination or cleaning was done during the 5-6 months he worked at Luckey. Their operations were all in the west end of the annex. The east end was walled off by a plastic barrier.

Both a large furnace capable of five-foot diameter shapes and a smaller one were in use. The larger was on a cycle of up to five or six days. The furnace would be loaded and then the heat and pressure adjusted manually until the desired results had been achieved. The operation involved compressing the powder, in a mold, under heat until the desired density had been achieved.

Three, three-man crews manned the furnaces for 24 hour a day operations. With the compacting blending operations and some maintenance and boiler operations personnel Mr. Bowman estimated that about 18 people worked at the plant. There were no supervisory personnel at Luckey. All supervision came from Elmore. AEC was rarely onsite and then only for tours with visitors.

Also there was a powder blending and compacting operation. Some of their output was sintered in the Luckey furnaces and some sent back to Elmore. One of the shapes believed to have been sintered was the rough blank for the Mercury Program's heat shield.

Some time after Mr. Bowman returned to working at Elmore the equipment from Luckey was brought to Elmore.

APPENDIX 3A:
Boring Logs and Well Construction Diagrams

APPENDIX 3A: BORING LOGS AND WELL CONSTRUCTION DIAGRAMS

LIST OF APPENDIX COMPONENTS

- Table 3A.1. Borehole and Monitoring Well Completion Summary
- Boring Log Fill Pattern Guide
- IA01: Boring Logs
- IA02: Boring Logs
- IA03: Boring Logs
- IA04: Boring Logs
- IA05: Boring Logs
- IA07: Boring Logs
- IA08: Boring Logs
- IA09: Boring Logs and Well Construction Diagrams
- IA10: Boring Logs
- BACKGROUND: Boring Logs

Table 3A.1. Borehole and Monitoring Well Completion Summary

Station ID	total depth (bgs)	screened interval (bgs)	termination point	final disposition
BKG-SB0001	2.5	na	overburden	abandoned
BKG-SB0002	2.5	na	overburden	abandoned
BKG-SB0003	2.5	na	overburden	abandoned
BKG-SB0004	2.5	na	overburden	abandoned
BKG-SB0005	2.5	na	overburden	abandoned
BKG-SB0006	2.5	na	overburden	abandoned
BKG-SB0008	3	na	overburden	abandoned
BKG-SB0009	3	na	overburden	abandoned
BKG-SB0010	3	na	overburden	abandoned
BKG-SB0011	3	na	overburden	abandoned
BKG-SB0012	3	na	overburden	abandoned
IA01-SB0001	15	na	overburden	abandoned
IA01-SB0002	18	na	overburden	abandoned
IA01-SB0003	20	na	bedrock	abandoned
IA01-SB0004	18	na	overburden	abandoned
IA01-SB0007	10	na	overburden	abandoned
IA01-SB0008	10	na	overburden	abandoned
IA01-SB0009	10.5	na	overburden	abandoned
IA01-SB0010	12	na	overburden	abandoned
IA01-SB0011	11.2	na	overburden	abandoned
IA01-SB0012	8	na	overburden	abandoned
IA01-SB0013	9	na	overburden	abandoned
IA01-SB0014	6	na	overburden	abandoned
IA01-SB0015	9	na	overburden	abandoned
IA01-SB0016	15	na	overburden	abandoned
IA01-SB0017	10	na	overburden	abandoned
IA01-SB0018	14.4	na	overburden	abandoned
IA01-SB0019	8.2	na	overburden	abandoned
IA01-SB0020	8.2	na	overburden	abandoned
IA01-SB0021	7	na	overburden	abandoned
IA01-SB0022	6	na	overburden	abandoned
IA01-SB0023	20	na	overburden	abandoned
IA01-SB0024	16.5	na	overburden	abandoned
IA01-SB0025	17	na	overburden	abandoned
IA01-SB0026	15.5	na	overburden	abandoned
IA01-SB0027	17	na	overburden	abandoned
IA01-SB0028	11	na	overburden	abandoned
IA01-SB0029	13	na	overburden	abandoned
IA01-SB0030	12	na	overburden	abandoned
IA01-SB0031	16.25	na	overburden	abandoned
IA01-SB0032	12	na	overburden	abandoned
IA01-SB0033	17.5	na	overburden	abandoned
IA01-SB0034	14.8	na	overburden	abandoned
IA01-SB0035	17	na	overburden	abandoned
IA01-SB0036	14.5	na	overburden	abandoned
IA01-SB0041	12	na	overburden	abandoned
IA01-SB0042	12	na	overburden	abandoned

bgs - below ground surface
na - not applicable

Table 3A.1. Borehole and Monitoring Well Completion Summary

Station ID	total depth (bgs)	screened interval (bgs)	termination point	final disposition
IA02-SB0001	10	na	overburden	abandoned
IA02-SB0002	9.15	na	overburden	abandoned
IA02-SB0003	10	na	overburden	abandoned
IA02-SB0004	11.7	na	overburden	abandoned
IA02-SB0005	9.8	na	overburden	abandoned
IA02-SB0006	6	na	overburden	abandoned
IA02-SB0007	6	na	overburden	abandoned
IA02-SB0008	5.3	na	overburden	abandoned
IA02-SB0009	6	na	overburden	abandoned
IA02-SB0010	5.5	na	overburden	abandoned
IA02-SB0011	6	na	overburden	abandoned
IA02-SB0012	6	na	overburden	abandoned
IA02-SB0013	5.5	na	overburden	abandoned
IA02-SB0014	10	na	overburden	abandoned
IA02-SB0015	9.1	na	overburden	abandoned
IA02-SB0016	10	na	overburden	abandoned
IA02-SB0017	10	na	overburden	abandoned
IA02-SB0018	10	na	overburden	abandoned
IA02-SB0019	8	na	overburden	abandoned
IA02-SB0020	8	na	overburden	abandoned
IA02-SB0021	8	na	overburden	abandoned
IA02-SB0022	10	na	overburden	abandoned
IA02-SB0023	10	na	overburden	abandoned
IA02-SB0024	10	na	overburden	abandoned
IA02-SB0025	8	na	overburden	abandoned
IA02-SB0026	10	na	overburden	abandoned
IA03-SB0001	11.3	na	overburden	abandoned
IA03-SB0002	18	na	overburden	abandoned
IA03-SB0003	18	na	overburden	abandoned
IA03-SB0004	15.7	na	overburden	abandoned
IA03-SB0005	14.5	na	overburden	abandoned
IA03-SB0006	15	na	overburden	abandoned
IA03-SB0007	16	na	overburden	abandoned
IA03-SB0008	10	na	overburden	abandoned
IA03-SB0009	10	na	overburden	abandoned
IA03-SB0010	10	na	overburden	abandoned
IA03-SB0011	10	na	overburden	abandoned
IA03-SB0012	16	na	overburden	abandoned
IA03-SB0013	16	na	overburden	abandoned
IA03-SB0014	16	na	overburden	abandoned
IA03-SB0015	16	na	overburden	abandoned
IA03-SB0016	10	na	overburden	abandoned
IA04-SB0017	5	na	overburden	abandoned
IA04-SB0018	5	na	overburden	abandoned
IA04-SB0019	5	na	overburden	abandoned
IA04-SB0020	5	na	overburden	abandoned
IA04-SB0021	5	na	overburden	abandoned

bgs - below ground surface
na - not applicable

Table 3A.1. Borehole and Monitoring Well Completion Summary

Station ID	total depth (bgs)	screened interval (bgs)	termination point	final disposition
IA04-SB0022	5	na	overburden	abandoned
IA04-SB0023	5	na	overburden	abandoned
IA04-SB0024	5	na	overburden	abandoned
IA04-SB0025	5	na	overburden	abandoned
IA04-SB0026	7	na	overburden	abandoned
IA04-SB0027	6	na	overburden	abandoned
IA04-SB0028	6	na	overburden	abandoned
IA04-SB0029	12	na	overburden	abandoned
IA04-SB0030	12	na	overburden	abandoned
IA04-SB0031	11	na	overburden	abandoned
IA04-SB0032	10	na	overburden	abandoned
IA04-SB0033	10	na	overburden	abandoned
IA04-SB0034	10	na	overburden	abandoned
IA04-SB0035	12	na	overburden	abandoned
IA04-SB0036	12	na	overburden	abandoned
IA04-SB0037	11	na	overburden	abandoned
IA04-SB0038	12	na	overburden	abandoned
IA05-SB0001	8	na	overburden	abandoned
IA05-SB0002	4	na	overburden	abandoned
IA05-SB0003	11	na	overburden	abandoned
IA05-SB0004	2.5	na	overburden	abandoned
IA05-SB0005	4.5	na	overburden	abandoned
IA05-SB0006	7	na	overburden	abandoned
IA05-SB0007	15	na	overburden	abandoned
IA05-SB0008	15	na	overburden	abandoned
IA05-SB0009	5	na	overburden	abandoned
IA05-SB0010	5	na	overburden	abandoned
IA05-SB0011	5	na	overburden	abandoned
IA05-SB0012	5	na	overburden	abandoned
IA05-SB0013	14.1	na	overburden	abandoned
IA05-SB0014	5	na	overburden	abandoned
IA05-SB0015	5	na	overburden	abandoned
IA05-SB0016	4	na	overburden	abandoned
IA05-SB0017	4	na	overburden	abandoned
IA05-SB0018	10	na	overburden	abandoned
IA05-SB0019	11	na	overburden	abandoned
IA05-SB0020	10	na	overburden	abandoned
IA05-SB0021	10	na	overburden	abandoned
IA05-SB0022	10	na	overburden	abandoned
IA05-SB0023	10	na	overburden	abandoned
IA05-SB0024	10	na	overburden	abandoned
IA05-SB0025	7	na	overburden	abandoned
IA07-SB0001	12	na	overburden	abandoned
IA07-SB0002	12	na	overburden	abandoned
IA07-SB0003	8	na	overburden	abandoned
IA07-SB0004	6.8	na	overburden	abandoned
IA07-SB0005	7.8	na	overburden	abandoned

bgs - below ground surface
na - not applicable

Table 3A.1. Borehole and Monitoring Well Completion Summary

Station ID	total depth (bgs)	screened interval (bgs)	termination point	final disposition
IA07-SB0006	7	na	overburden	abandoned
IA07-SB0007	7	na	overburden	abandoned
IA07-SB0008	7	na	overburden	abandoned
IA07-SB0009	7.5	na	overburden	abandoned
IA07-SB0010	6	na	overburden	abandoned
IA07-SB0011	5	na	overburden	abandoned
IA07-SB0012	5	na	overburden	abandoned
IA07-SB0013	5	na	overburden	abandoned
IA07-SB0014	5	na	overburden	abandoned
IA08-SB0001	3	na	overburden	abandoned
IA08-SB0002	3	na	overburden	abandoned
IA08-SB0003	5	na	overburden	abandoned
IA08-SB0004	5	na	overburden	abandoned
IA08-SB0005	5	na	overburden	abandoned
IA09-MW-01(I)	30	24.6-29.6	bedrock	monitoring well
IA09-MW-02(S)	19.5	14.2-19.2	bedrock	monitoring well
IA09-MW-03(I)	27	21.7-26.7	bedrock	monitoring well
IA09-MW-04(S)	17.2	11.7-16.7	bedrock	monitoring well
IA09-MW-05(I)	30	24.55-29.55	bedrock	monitoring well
IA09-MW-06(S)	18.3	13.1-18.1	overburden	monitoring well
IA09-MW-07(I)	31.2	25.9-30.9	bedrock	monitoring well
IA09-MW-08(S)	20.3	15.0-20.0	bedrock	monitoring well
IA09-MW-13(S)	18	11.9-16.9	overburden	monitoring well
IA09-MW-14(S)	17.5	12.3-17.3	overburden	monitoring well
IA09-MW-17(S)	20.03	14.73-19.73	overburden	monitoring well
IA09-MW-18(I)	33	27.65-32.65	bedrock	monitoring well
IA09-MW-19(I)	29	23.69-28.69	bedrock	monitoring well
IA09-MW-21(I)	29	22.68-27.68	bedrock	monitoring well
IA09-MW-22(I)	27.5	22.12-27.12	bedrock	monitoring well
IA09-MW-23(S)	15.55	10.31-15.31	overburden	monitoring well
IA09-MW-24(S)	23.5	18.13-23.15	bedrock	monitoring well
IA09-MW-25(I)	30.5	25.15-30.15	bedrock	monitoring well
IA09-MW-39(B)	92	85.0-91.28	bedrock	monitoring well
IA09-MW-40(B)	56.2	51.61-55.61	bedrock	monitoring well
IA09-MW-41(B)	56	51.28-55.28	bedrock	monitoring well
IA09-OMW-27(I)	30	25.17-29.17	bedrock	monitoring well
IA09-OMW-28(B)	55	50.5-54.5	bedrock	monitoring well
IA09-OMW-29(I)	34	28.5-32.5	bedrock	monitoring well
IA09-OMW-30(B)	55	52.92-56.92	bedrock	monitoring well
IA09-OMW-31(I)	31	26.35-30.35	bedrock	monitoring well
IA09-OMW-32(B)	56	51.78-55.78	bedrock	monitoring well
IA09-OMW-33(I)	58	51.8-55.8	bedrock	monitoring well
IA09-OMW-34(B)	96	83.08-87.08	bedrock	monitoring well
IA09-OMW-35(I)	31.4	26.4-30.4	bedrock	monitoring well
IA09-OMW-36(B)	55.2	48.98-52.98	bedrock	monitoring well
IA09-OMW-37(I)	35	30.38-34.38	bedrock	monitoring well
IA09-OMW-38(B)	55	53.1-57.1	bedrock	monitoring well

bgs - below ground surface
na - not applicable

Table 3A.1. Borehole and Monitoring Well Completion Summary

Station ID	total depth (bgs)	screened interval (bgs)	termination point	final disposition
PZ-01	18.57	13.59-18.09	overburden	piezometer
PZ-02	16.9	11.54-16.2	overburden	piezometer
PZ-03	16	10.97-15.47	overburden	piezometer
PZ-04	17.91	12.55-17.05	overburden	piezometer
PZ-05	12.5	7.30-11.80	overburden	piezometer
PZ-06	18.16	13.39-17.86	overburden	piezometer
IA10-SB0006	2.3	N.A.	overburden	abandoned
IA10-SB0007	2	N.A.	overburden	abandoned
IA10-SB0008	2.6	N.A.	overburden	abandoned
IA10-SB0009	4	N.A.	overburden	abandoned
IA10-SB0010	1.9	N.A.	overburden	abandoned
IA10-SB0011	5	N.A.	overburden	abandoned
IA10-SB0012	5	N.A.	overburden	abandoned
IA10-SB0013	3	N.A.	overburden	abandoned
IA10-SB0014	5	N.A.	overburden	abandoned
IA10-SB0015	4	N.A.	overburden	abandoned
IA10-SB0016	2	N.A.	overburden	abandoned
IA10-SB0017	3	N.A.	overburden	abandoned
IA10-SB0018	3	N.A.	overburden	abandoned
IA10-SB0019	2	N.A.	overburden	abandoned
IA10-SB0020	1	N.A.	overburden	abandoned
IA10-SB0023	5	N.A.	overburden	abandoned
IA10-SB0027	33	N.A.	bedrock	abandoned
IA10-SB0030	16	N.A.	bedrock	abandoned
IA10-SB0087	10.25	N.A.	overburden	abandoned
IA10-SB0088	12.5	N.A.	overburden	abandoned

bgs - below ground surface
na - not applicable

Boring Log Fill Pattern Guide

GW, Well Graded Gravels

GP, Poorly Graded Gravels

GM, Silty Gravels

GC, Clayey Gravels

SW, Well Graded Sands

SP, Poorly Graded Sands

SM, Silty Sands

SC, Clayey Sands

ML, Silts

CL, Clays

FL, Fill Material

DO, Dolomite – Also described in the logs as Dolomitic Limestone and Limestone.

IA01:
Boring Logs

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Soil Boring IA01-SB0001

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/8/98
End Date	: 07/8/98
Northing Coord.	: 654533.2886
Easting Coord.	: 1698119.5545 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4'' Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.99	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
			FL		Gray beryllium sludge; thixotropic.			Rad bkg Beta 952 alpha 8.
1	650							
						LUSB0001	0-5' 80% 4.0'	LUSB0001 Collected 1-2' bgs. Rad Beta 1022 alpha 14.
2	649							
3	648					LUSB1019		LUSB1019 Collected 3-4' bgs. Rad Beta 1139 alpha 19.
4	647		CL		CLAY; some silt; trace sand; stiff; medium plasticity; 10YR4/3 Brown.			
5	646					LUSB0071		LUSB0071 Collected 5-6' bgs. Rad Beta 794 alpha 12.
6	645							
7	644					LUSB0072		LUSB0072 Collected 7-8' bgs Rad Beta 714 alpha 15.
8	643							
9	642					LUSB0073	5-15' 100% 10.0'	LUSB0073 Collected 9-10' bgs Rad Beta 645 alpha 23.
10	641							
11	640					LUSB0074		LUSB0074 Collected 11-12' bgs
12	639				Color change to 10YR4/1 Dark Gray.			
13	638					LUSB0075	Total Recovery 14'/15' 93%	LUSB0075 Collected 13-14' bgs
14	637							
15	636				Bottom of Boring at 15.0 ft bgs			
16	635							All colors from Munsell Soil Color Chart 1992 Revised Edition
17	634							
18	633							
19	632							
20	631							

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Soil Boring IA01-SB0002

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654596.5970
Easting Coord.	: 1698043.4345 OH83/N ft.
Total Depth of Boring	: 18.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: 18.0 feet
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4'' Core Barrel 10' Long

Depth in feet	Surf. Elev. 651.37	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		FL		Tannish gray colored sludge; thixotropic.			All samples except LUSB0002 were resampled on 7/10/98.
1	650					LUSB0002		LUSB0002 Collected 1-2' bgs Rad Beta 937.
2	649							
3	648					LUSB0081		LUSB0081 Collected 2.5-3.5' bgs. Rad Beta 885.
4	647		CL		CLAY; some silt; trace sand; moist; firm; medium plasticity; 10YR4/4 Dark Yellowish Brown.		0-8' 75% 6.0'	Rad Beta 636 @ 3-4' bgs.
5	646		FL		Black sludge; silt and sand/cinders type material mixture.	LUSB1020		LUSB1020 Collected 5-6' bgs. Rad Beta 575 @ 4-8' bgs.
6	645		CL		CLAY; some silt; trace sand; moist; stiff; medium plasticity; 10YR4/4 Dark Yellowish Brown.			
7	644							
8	643					LUSB0082		LUSB0082 Collected 8-9' bgs Rad Beta 482 @ 8-18' bgs.
9	642							
10	641					LUSB0083		LUSB0083 Collected 10-11' bgs
11	640						8-18' 100% 10.0'	
12	639				Color change to 10YR4/3 Brown.	LUSB0084		LUSB0084 Collected 12-13' bgs
13	638							
14	637				increased sand content 15-20%. Chunk of twisted metal in sand @ 14.5' bgs.	LUSB0085		LUSB0085 Collected 14-15' bgs
15	636							
16	635		GW		GRAVEL and SAND, gravel to 3" and fine to coarse sand; trace silt; dry; loose; 10YR4/3 Brown.	LUSB0086		LUSB0086 Collected 16-17' bgs
17	634						Total Recovery 16'/18' 89%	
18	633		DO		Bottom of Boring at 18.0 ft bgs Bedrock			Boring originally drilled on 7/9/98. Redrilled 7/10/98.
19	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
20								

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Soil Boring IA01-SB0003

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/13/98
End Date	: 07/14/98
Northing Coord.	: 654504.9483
Easting Coord.	: 1697924.4207 OH83/N ft.
Total Depth of Boring	: 20.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: 3.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.07	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650							
1	649		FL		FILL/trash; brick material, metal debris, concrete pieces, large nuts and bolts, and shredded wood in a silt matrix; soft; 10YR4/3 Brown.	LUSB0003 LUSB9058		LUSB0003 Collected 1-2' bgs with duplicate sample LUSB9058
2	648							
3	647				Becoming firm.	LUSB0095	0-8' 56% 4.0'	LUSB0095 Collected 3-4' bgs
4	646				Concrete rubble, large metal, ceramic board; roofing sheets.			
5	645							4'-6.5' zone recovered in 2nd boring.
6	644				Large void down hole as drill rods drop 6-7' bgs.			
7	643							
8	642		CL		CLAY; some silt; moist; stiff; medium plasticity; 10YR4/3 Brown.	LUSB1022 LUSB0091 LUSB0092		LUSB1022 Collected 8.5-9.5' bgs LUSB0091 Collected 8-9' bgs
9	641							
10	640				10YR3/2 Very Dark Grayish Brown.			LUSB0092 Collected 9-10' bgs
11	639						8-18' 100% 10.0'	
12	638		ML		SILT; trace sand and gravel tp 2"; little clay; moist; firm; Very Dark Grayish Brown 10YR3/2.	LUSB0093		LUSB0093 Collected 12-13' bgs
13	637							
14	636							
15	635					LUSB0094		LUSB0094 Collected 15-16' bgs
16	634				soft; Large Cobble @ 16' bgs.			Water @ approx. 16', Bubbling in bottom of boring.
17	633		DO		Bedrock; Dolomite. Lockport Formation.			
18	632							
19	631						18-20 100% 2.0	
20	630				Bottom of Boring at 20.0 ft bgs			
21	629						Total Recovery 16.5'/20' 83%	
22	628							
23	627							All colors from Munsell Soil Color Chart 1992 Revised Edition
24	626							
25								

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Soil Boring IA01-SB0004

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654701.8247
Easting Coord.	: 1697895.1493 OH83/N ft.
Total Depth of Boring	: 18.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.17	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649		ML		SILT; some fine sand; moist; soft; 10YR4/3 Brown.			
1	648					LUSB0004		LUSB0004 Collected 1-2' bgs
2	647				trace sand.		0-5' 50% 2.5	
3	646							
4	645							
5	644				black mottling; with 1-2" black sand lenses.			
						LUSB0101		LUSB0101 Collected 5-6' bgs
6	643						5-8'	
						LUSB1025	100%	LUSB1025 Collected 6-7' bgs
7	642		ML		SILT; trace sand; moist; firm; 10YR3/2 Very Dark Grayish Brown.		3.0'	
8	641					LUSB0102		LUSB0102 Collected 8-9' bgs
9	640							
10	639		SM		SAND, fine to coarse; some silt; trace gravel; slightly moist; Very Dark Grayish Brown 10YR3/2.	LUSB0103		LUSB0103 Collected 10-11' bgs
11	638							
12	637					LUSB0104	8-18 100% 10.0	LUSB0104 Collected 12-13' bgs
13	636							
14	635					LUSB0105		LUSB0105 Collected 14-15' bgs
15	634							
16	633					LUSB0106	Total Recovery 15.5'/18' 86%	LUSB0106 Collected 16-17' bgs
17	632							
18	631				Bottom of Boring at 18.0 ft bgs			All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20								

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Soil Boring IA01-SB0007

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654320.6448
Easting Coord.	: 1698156.2911 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4'' Core Barrel 10' Long

Surf. Elev. 650.94

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
1	650		ML		SILT; moist; soft; thixotropic; 2.5Y4/2 Dark Grayish Brown.	LUSB0007		LUSB0007 Collected 1-2' bgs
2	649		CL		CLAY; some silt; trace sand (5-10%); moist; firm to stiff; medium plasticity; 10YR4/4 Dark Yellowish Brown.		0-5' 80% 4.0	
3	648					LUSB0008		LUSB0008 Collected 3-4' bgs
4	647							
5	646				increased sand (10-20%) and gravel content; slightly moist; very stiff; 10YR3/2 Very Dark Grayish Brown.	LUSB0009		LUSB0009 Collected 5-6' bgs
6	645						5-10' 100% 5.0	
7	644							
8	643							
9	642							
10	641					LUSB0010		LUSB0010 Collected 9-10' bgs
11	640				Bottom of Boring at 10.0 ft bgs		Total Recovery 9'/10' 90%	
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA01-SB0008

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654404.4018
Easting Coord.	: 1698175.3572 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Surf. Elev. 649.90

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
1	649		ML		SILT; trace sand; moist; soft; 10YR3/2 Very Dark Grayish Brown.			
						LUSB0011		LUSB0011 Collected 1-2' bgs
2	648						0-5' 100% 5.0	
3	647		CL		CLAY and SILT; moist; firm; low plasticity; 10YR4/3 Brown.			
						LUSB0012		LUSB0012 Collected 3-4' bgs
4	646							
5	645							
						LUSB0013		LUSB0013 Collected 5-6' bgs
6	644						5-10' 100% 5.0	
7	643							
8	642		ML		SILT; trace clay; trace sand and gravel; slightly moist; hard; 10YR4/2 Dark Grayish Brown.			
9	641						Total Recovery 10'/10' 100%	
						LUSB0014		LUSB0014 Collected 9-10' bgs
10	640				Bottom of Boring at 10.0 ft bgs			
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20	630							

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Soil Boring IA01-SB0009

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/14/98 1300
End Date	: 07/14/98 1530
Northing Coord.	: 654493.5417
Easting Coord.	: 1697954.0295 OH83/N ft.
Total Depth of Boring	: 10.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Surf. Elev. 650.07

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0 (650)		FL		FILL; sand, gravel and silt; bricks, concrete, shredded paper and wood, metal; 10YR4/3 Brown with Black.			0 ppm on PID
1 (649)					LUSB0015	0-4' 100% 4.0'	LUSB0015 Collected 1-2' bgs
2 (648)		CL		CLAY; some silt; moist; stiff; medium plasticity; 10YR4/6 Dark Yellowish Brown with gray mottling.			
3 (647)					LUSB0016		LUSB0016 Collected 3-4' bgs
4 (646)							
5 (645)						4-8' 100% 4.0'	
6 (644)		ML		SILT; some clay; trace very fine to fine sand and gravel; moist; 10YR4/2 Dark Grayish Brown.			
7 (643)					LUSB0017		LUSB0017 Collected 7-8' bgs
8 (642)		CL		CLAY; some silt; trace sand and gravel; moist; firm; medium plasticity; 10YR4/1 Dark Gray.		8-10' 100% 2.0'	
9 (641)							
10 (640)					LUSB0018		LUSB0018 Collected 9.5-10.5' bgs
11 (639)				Bottom of Boring at 10.5 ft bgs		Total Recovery 10'/10' 100%	
12 (638)							
13 (637)							
14 (636)							
15 (635)							
16 (634)							
17 (633)							
18 (632)							All colors from Munsell Soil Color Chart 1992 Revised Edition
19 (631)							
20							

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Soil Boring IA01-SB0010

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/15/98
End Date	: 07/15/98
Northing Coord.	: 654460.0693
Easting Coord.	: 1697919.2644 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.07	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		FL		FILL; fine to medium sand; glass, bricks; moist to wet; loose; 10YR4/3 Brown.			
1	649		CL		CLAY; some silt; trace sand; moist; firm; medium plasticity; 10YR3/2 Very Dark Grayish Brown.		0-4' 100% 4.0'	Cored through large sandstone cobble @ 2.5' bgs.
2	648							
3	647				10YR4/6 Dark Yellowish Brown with gray mottling.	LUSB0019		LUSB0019 Collected 3-4' bgs
4	646							
5	645							
6	644		ML		SILT; some clay; trace fine to coarse sand and fine gravel; slightly moist; firm; 10YR4/3 Brown.			
7	643					LUSB0020	4-12' 100% 8.0'	LUSB0020 Collected 7-8' bgs
8	642		CL		CLAY; some silt; moist; stiff; low plasticity; 10YR3/2 Very Dark Grayish Brown.			
9	641					LUSB0021		LUSB0021 Collected 9-10' bgs
10	640							
11	639						Total Recovery 12'/12' 100%	
12	638		SP		SAND; some gravel; wet; loose; 10YR3/2 Very Dark Grayish Brown.			
13	637				Bottom of Boring at 12.0 ft bgs			
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA01-SB0011

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/23/98
End Date	: 07/23/98
Northing Coord.	: 654487.9545
Easting Coord.	: 1697877.5567 OH83/N ft.
Total Depth of Boring	: 11.2 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 2" Spilt Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 650.07

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0 (650)							
1 (649)		FL		No description available. Augered past bricks @ 1' bgs.			
2 (648)		CL		CLAY; some silt; trace gravel; damp; firm; moderately plastic; 10YR5/8 Yellowish Brown and 10YR5/1 Gray.	LUSB0023	NR	LUSB0023 Collected 2-3.5' bgs 0 ppm Rad Beta 488 alpha 5
3 (647)							
4 (646)					LUSB0024		LUSB0024 Collected 4-5' bgs 0 ppm Rad Beta 486 alpha 6
5 (645)							
6 (644)		CL		same as above except stiff and non-plastic; 10YR4/3 Brown and 10YR5/1 Gray.			
7 (643)					LUSB0025		LUSB0025 Collected 7-8' bgs 0 ppm Rad Beta 483 alpha 10
8 (642)				Spoon refusal @ 8' bgs.			
9 (641)		CL		Lean Clay. Geotechnical Sample LUSB0252			LUSB0252 Geotech bucket sample collected 5-9' bgs
10 (640)					Shelby Tube		LUSB0252 Shelby Tube collected 9-11.2' bgs
11 (639)				Bottom of Boring at 11.2 ft bgs			
12 (638)							Rad Bkg: Beta 455 alpha 5
13 (637)							
14 (636)							
15 (635)							
16 (634)							
17 (633)							
18 (632)							All colors from Munsell Soil Color Chart 1992 Revised Edition
19 (631)							
20							

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Soil Boring IA01-SB0012

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/23/98
End Date	: 07/23/98
Northing Coord.	: 654526.4569
Easting Coord.	: 1697922.2146 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650				No description available.			
1	649		FL		Gravel; sand; brick fragments; loose; wet.			
2	648		CL		CLAY; some silt; trace gravel; wet; firm; plastic; 10YR5/8 Yellowish Brown mottled with 10YR5/1 Gray.	LUSB0027		LUSB0027 Collected 1-2' bgs 0 ppm Rad Beta 477 alpha 11
3	647							
4	646				same as above except damp.		NR	
5	645					LUSB0028		LUSB0028 Collected 4-5' bgs 0 ppm Rad Beta 457 alpha 10
6	644							
7	643				same as above except stiff and non-plastic.	LUSB0029		LUSB0029 Collected 7-8' bgs 0 ppm Rad Beta 476 alpha 5
8	642				Spoon refusal @ 8' bgs.			
9	641				Bottom of Boring at 8.0 ft bgs			Rad bkg: Beta 368 alpha 4
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA01-SB0013

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/14/98
End Date	: 07/14/98
Northing Coord.	: 654419.5202
Easting Coord.	: 1698046.0394 OH83/N ft.
Total Depth of Boring	: 9.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 652.53

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		CL		CLAY and GRAVEL; some silt; 10YR4/3 Brown; unable to push spoon above 3' bgs.			
3		CL		CLAY; some silt; trace gravel; dry; non-plastic; 10YR4/3 Brown with 10YR5/8 Yellowish Brown and 10YR5/1 Gray.	LUSB0031	NR	LUSB0031 Collected 3-4' bgs
5				Same as above except damp; slightly more plastic.	LUSB0032		LUSB0032 Collected 5-6' bgs
7				Same as above except non-plastic.	LUSB0033		LUSB0033 Collected 8-9' bgs
9				Bottom of Boring at 9.0 ft bgs			

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Soil Boring IA01-SB0014

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654500.4314
Easting Coord.	: 1698077.8409 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ Drop

Surf. Elev. 651.68

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		No recovery 0-1' bgs.		0-1' 0%	
1	CL	CLAY; some silt; trace gravel; trace roots; dry; slightly plastic; 10YR3/2 Very Dark Grayish Brown with 10YR5/8 Yellowish Brown and 10YR5/1 Gray mottling.	LUSB0035		LUSB0035 Collected 1-2' bgs. Rinsate equipment ER0004 used. 0 ppm Rad Beta 752.
3	CL	same as above except less grayish brown color; damp; softer; medium plasticity.	LUSB0036	NR	LUSB0036 and duplicate LUSB9004 Collected 3-4.5' bgs. Rad Beta 729.
5	CL	Clay; some silt; damp; soft; very plastic; 10YR6/1 Gray.	LUSB0037		LUSB0037 Collected 5-5.8' bgs. Rad Beta 725.
6		No description available.			
		Bottom of Boring at 6.0 ft bgs			

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Soil Boring IA01-SB0015

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654517.2109
Easting Coord.	: 1698024.7794 OH83/N ft.
Total Depth of Boring	: 9.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.56	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651				No description available.			Blow counts not recorded.
1	650		CL		CLAY; some silt; trace sand; trace gravel; wet; soft; plastic; 10YR5/8 Yellowish Brown and 10YR5/1 Gray.	LUSB0039		LUSB0039 Colected 1-2' bgs. 0 ppm Rad Beta 989.
2	649				less sand; damp; more firm; 10YR3/2 Vary Dark Grayish Brown.			
3	648				same as above except damp; medium plasticity.	LUSB0040		LUSB0040 Collected 3-4' bgs. 0 ppm Rad Beta 607.
4	647						NR	
5	646					LUSB0041		LUSB0041 Collected 5-6' bgs. 0 ppm Rad Beta 500.
6	645							
7	644				CLAY; some silt; trace gravel; dry; stiff; 10YR3/2 Very Dark Grayish Brown and 10YR5/1 Gray.	LUSB0042		LUSB0042 Collected 7-8' bgs. 0 ppm Rad Beta 457.
8	643							
9	642				Bottom of Boring at 9.0 ft bgs			
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0016

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654626.8459
Easting Coord.	: 1697109.0667 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.19	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651				No description available.			Blow counts not recorded.
1	650		CL		CLAY; some silt; trace fine sand; trace gravel; wet; soft; slightly plastic; 10YR4/3 Brown and 10YR6/1 Gray.	LUSB0043		LUSB0043 Colected 1-2' bgs
2	649		ML		SILT; saturated; Black.			
3	648				No Recovery, water in hole; trace black sludge.			
4	647							
5	646				No Recovery, something blocking bit, soft material all the way to 15' bgs.			
6	645							
7	644						NR	
8	643							
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636				Bottom of Boring at 15.0 ft bgs			
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0017

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/21/98
End Date	: 07/21/98
Northing Coord.	: 654778.9217
Easting Coord.	: 1697918.4628 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 648	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648							
1	647		CL		CLAY; some silt; moist; soft; 10YR4/3 Brown.		0-2' 100% 2'	
2	646		CL		Metal debris in CLAY; moist; firm; medium plastic; 10YR4/6 Dark Yellowish Brown.	LUSB0047		LUSB0047 Collected 2-3' bgs
3	645		CL		CLAY; trace sand and gravel; slightly moist; hard; 10YR3/2 Very Dark Grayish Brown.			
4	644					LUSB0048		LUSB0048 Collected 4-5' bgs
5	643						2-10' 75% 6'	
6	642							
7	641							
8	640					LUSB0049		LUSB0049 Collected 8-9' bgs
9	639							
10	638				Bottom of Boring at 10.0 ft bgs		Total Recovery 8'/10' 80%	Two borings needed for enough recovery to collect samples.
11	637							
12	636							
13	635							
14	634							
15	633							
16	632							
17	631							
18	630							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	629							
20								

Remedial Investigation
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Soil Boring IA01-SB0018

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/22/98
End Date	: 07/22/98
Northing Coord.	: 654648.5518
Easting Coord.	: 1698065.4320 OH83/N ft.
Total Depth of Boring	: 14.4 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 651.39

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available.			Blow counts not recorded.
1		SM		SAND, fine; some silt; trace roots; wet; non-plastic; 10YR6/1 Gray and 10YR5/8 Yellowish Brown; crystalline white material at bottom.	LUSB0051		LUSB0051 Collected 1-2' bgs. 0 ppm Rad Beta 1594 alpha 29.
2				No description available.			
3		CL		CLAY; some sand; Black; logged from soil cuttings.			
6		CL		CLAY; some silt; damp; firm; slightly plastic; 10YR4/3 Brown mottled with 10YR5/1 Gray (gray appears to be along fractures).	LUSB0052	NR	LUSB0052 Collected 6-7' bgs. 0 ppm Rad Beta 984 alpha 55.
8		CL		same as above, logged from soil cuttings.			LUSB0251 bucket for geotech sample collected from 10-14' bgs.
13		ML		SILT; some sand; trace rounded pebbles; trace limestone fragments; moist; stiff; non-plastic; 10YR4/1 Dark Gray.	LUSB0053		LUSB0053 Collected 13-14' bgs Rad Beta 928 alpha 15.
14		SM		Shelby tube sample collected. Silty SAND. Geotechnical Sample LUSB0251.	Shelby tube LUSB0251		Shelby tube, LUSB0251, collected from 14-14.4' bgs.
15				Bottom of Boring at 14.4 ft bgs			
18							All colors from Munsell Soil Color Chart 1992 Revised Edition

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Soil Boring IA01-SB0019

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/23/98
End Date	: 07/23/98
Northing Coord.	: 654665.9219
Easting Coord.	: 1697904.8769 OH83/N ft.
Total Depth of Boring	: 8.2 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.29	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650				No description available.			
1	649		CL		CLAY; some silt; trace gravel; moist; soft; medium plasticity; 10YR5/8 Yellowish Brown and 10YR5/1 Gray, some 10YR4/3 Brown.	LUSB0055	NR	LUSB0055 Collected 1-2' bgs. Rad Beta 547 alpha 12.
2	648							
3	647				same as above except no 10YR4/3 Brown; damp.			
4	646					LUSB0056		LUSB0056 Collected 3-4' bgs. Rad Beta 491 alpha 9.
5	645							
6	644					LUSB0057		LUSB0057 Collected 5-6' bgs. Rad Beta 497 alpha 11.
7	643					LUSB0058		LUSB0058 Collected 6-7' bgs. Rad Beta 490 alpha 7.
8	642		CL		Shelby tube sample collected. Lean CLAY with Sand. Geotechnical Sample LUSB0253.	Shelby tube LUSB0253		Shelby tube, LUSB0253, collected from 7-8.2' bgs. LUSB0253 bucket for geotech sample collected from 2-7' bgs.
9	641				Bottom of Boring at 8.2 ft bgs			
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA01-SB0020

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/25/98
End Date	: 07/25/98
Northing Coord.	: 654690.9258
Easting Coord.	: 1697997.8052 OH83/N ft.
Total Depth of Boring	: 8.2 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 650.00

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650				No description available.			
1	649							
2	648				CLAY; some silt; trace gravel; damp; medium plastic; 10YR4/3 Brown with 10YR5/1 Gray and 10YR5/8 Yellowish Brown mottling.	LUSB0059		LUSB0059 Collected 1-2' bgs. Rad Beta 463 alpha 13.
3	647				same as above except firm; more plastic.			
4	646		CL			LUSB0060	NR	LUSB0060 Collected 3-4' bgs. Rad Beta 466 alpha 11.
5	645				same as above except dry; stiff; mostly 10YR4/3 Brown only trace 10YR5/8 and 10YR5/1.	LUSB0061		LUSB0061 Collected 5-6' bgs. Rad Beta 483 alpha 9.
6	644					LUSB0062		LUSB0062 Collected 6-7' bgs.
7	643		CL		Shelby tube sample collected. Lean CLAY with Sand. Geotechnical Sample LUSB0254.	Shelby Tube LUSB0254		Shelby tube sample, LUSB0254, collected 7-8.2' bgs. LUSB0254 bucket collected for geotech sample from 2-7' bgs.
8	642				Bottom of Boring at 8.2 ft bgs			
9	641							
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA01-SB0021

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/25/98
End Date	: 07/25/98
Northing Coord.	: 654737.0957
Easting Coord.	: 1697981.6144 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 649.56

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available.			
1		CL		CLAY; some silt; trace small gravel; damp; slightly plastic; 10YR5/1 Gray and 10YR5/8 Yellowish Brown.	LUSB0063		LUSB0063 Collected 1-2' bgs. Rad Beta 482 alpha 7.
2							
3				same as above except dry; stiff.			
4					LUSB0064	NR	LUSB0064 Collected 3-4' bgs. Rad Beta 492 alpha 9.
5				same as above except more silty in lower 1'; dry.			
6					LUSB0065		LUSB0065 Collected 5-6' bgs. Rad Beta 459 alpha 13.
7					LUSB0066		LUSB0066 Collected 6-7' bgs.
				Bottom of Boring at 7.0 ft bgs			
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Soil Boring IA01-SB0022

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/25/98
End Date	: 07/25/98
Northing Coord.	: 654708.6401
Easting Coord.	: 1697859.1291 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 648.90	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					No description available.			
1	648		CL		CLAY; some silt; trace small gravel; damp; slightly plastic; 10YR5/1 Gray and 10YR5/8 Yellowish Brown.	LUSB0067	NR	LUSB0067 Collected 1-2' bgs. Rad Beta 390 alpha 14.
2	647							
3	646				same as above except dry; stiffer.			
4	645					LUSB0068		LUSB0068 Collected 3-4' bgs. Rad Beta 401 alpha 13.
5	644				same as above except dry; hard.			
6	643					LUSB0069		LUSB0069 Collected 5-6' bgs. Rad Beta 381 alpha 13.
					Bottom of Boring at 6.0 ft bgs. Split Spoon refusal.			
7	642							
8	641							
9	640							
10	639							
11	638							
12	637							
13	636							
14	635							
15	634							
16	633							
17	632							
18	631							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20	629							

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Soil Boring IA01-SB0023

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/27/98
End Date	: 06/27/98
Northing Coord.	: 654581.7285
Easting Coord.	: 1698129.1672 OH83/N ft.
Total Depth of Boring	: 20.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.96	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; some fine sand; roots; dry; loose; non-plastic; 10YR4/2 Dark Grayish Brown.			
1	650		ML		SILT; some fine sand; dry; loose; non-plastic; 2.5Y5/2 Grayish Brown mottled with 2.5Y6/1 Gray.	LUSB0131	0-4' 93% 3.7'	LUSB0131 Collected 1-2' bgs. Rinsate equipment used. 0 ppm Rad < bkg.
2	649		CL		CLAY; some fine sand; dry; very soft; very plastic; 2.5Y3/1 Very Dark Gray.			
3	648		ML		SILT; some fine to medium sand; trace clay; dry; loose; non-plastic; 2.5Y5/1 Gray mottled with 2.5Y4/3 Olive Brown.	LUSB0132		LUSB0132 Collected 3-4' bgs.
4	647							
5	646					LUSB0133	4-8' 60% 2.4	LUSB0133 Collected 5-6' bgs 0918 SVOC and TPH parameters also collected. 0.4 ppm Rad < bkg.
6	645		GC		GRAVEL and CLAY; some fine to very coarse sand; wet; very soft; non-plastic; 5Y3/1 Very Dark Gray.			
7	644							
8	643					LUSB0134		LUSB0134 Collected 8-9' bgs. Rad < bkg.
9	642		ML		SILT; trace clay; trace medium sand; dry; very dense; non-plastic; 10YR4/3 Brown.		8-12' 100% 4.0'	
10	641					LUSB0135		LUSB0135 Collected 10-11' bgs. 0.2 ppm Rad < bkg.
11	640							
12	639					LUSB0136		LUSB0136 Collected 12-13' bgs. Rad < bkg.
13	638		CL		CLAY; some fine to medium sand; trace gravel to 10mm; moist to wet; very soft; plastic; 10YR4/2 Dark Grayish Brown.		12-15' 100% 3.0'	
14	637					LUSB0137		LUSB0137 Collected 14-15' bgs. Duplicate and split samples collected. Rad < bkg.
15	636		SC		SAND, medium and CLAY; trace gravel to 10mm, subrounded; some fine and coarse sand; moist; medium dense; 10YR3/1 Very Dark Gray.			
16	635					LUSB0138	15-18' 100% 3.0'	LUSB0138 Collected 16-17' bgs. Rad < bkg.
17	634							
18	633						18-20' 100% 3.0'	LUSB0139 Collected 19-20' bgs. Rad < bkg.
19	632				Bottom of Boring at 20.0 ft bgs. Bedrock.	LUSB0139		All colors from Munsell Soil Color Chart 1992 Revised Edition
20	631							

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Soil Boring IA01-SB0024

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/28/98
End Date	: 06/28/98
Northing Coord.	: 654480.0338
Easting Coord.	: 1698155.4839 OH83/N ft.
Total Depth of Boring	: 16.5 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.10	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		ML		SILT; some fine sand; dry; loose; non-plastic; 10YR5/2 Grayish Brown. Roots and 10YR4/2 Dark Grayish Brown top 1".			
1	649		CL		CLAY; some fine sand; trace fine gravel to 8mm, subrounded; dry; medium stiff; slightly plastic; 10YR4/4 Dark Yellowish Brown mottled with 10YR5/1 Gray.	LUSB0141	0-4' 68% 2.7'	LUSB0141 Collected 1-2' bgs.
2	648							
3	647							
4	646							
5	645					LUSB0142	4-8' 100% 4.0'	LUSB0142 Collected 5-6' bgs. Rinsate equipment ER0015 used.
6	644							
7	643				Wet @ 8' bgs. Some gravel to 15mm, angular; trace coarse sand; clay is soft; medium plastic.	LUSB0143		LUSB0143 Collected 7-8' bgs.
8	642		CL		same as above except some silt; dry.			
9	641						8-12'	
10	640					LUSB0144	100% 4.0'	LUSB0144 Collected 9-10' bgs.
11	639					LUSB0145		LUSB0145 Collected 11-12' bgs
12	638							
13	637		ML		SILT; some fine to coarse sand; trace clay; trace gravel to 40mm, subangular; dry; medium dense; non-plastic; 10YR4/1 Dark Gray.	LUSB0146	12-16' 100% 4.0'	LUSB0146 Collected 13-14' bgs
14	636							
15	635					LUSB0147		LUSB0147 Collected 15-16' bgs Duplicate sample collected.
16	634		SM ML		SAND, coarse; some silt; moist; loose; non-plastic; 10YR4/1 Dark Gray.		16-16.5 NR	
17	633				SILT; some fine to coarse sand; trace gravel to 15mm, subrounded; dry; very dense; non-plastic; 10YR4/1 Dark Gray.			
18	632				Bottom of Boring at 16.5 ft bgs			All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA01-SB0025

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/28/98
End Date	: 06/29/98
Northing Coord.	: 654386.8294
Easting Coord.	: 1698171.2152 OH83/N ft.
Total Depth of Boring	: 17.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 650.38

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; some fine sand; roots; dry; loose; non-plastic; 10YR4/2 Dark Grayish Brown.			
1		CL		CLAY; some fine sand; trace silt; trace fine gravel to 8mm, subangular; dry; very stiff; non-plastic; 10YR4/3 Brown.	LUSB0151	0-4' 75% 3.0'	LUSB0151 Collected 1-2' bgs. 0 ppm Rad < bkg.
3		CL		CLAY; some fine to coarse sand; trace fine gravel, subrounded to subangular; dry; stiff; slightly plastic; 10YR5/1 Gray mottled with 10YR4/4 Dark Yellowish Brown.	LUSB0152	4-8' 100% 4.0'	LUSB0152 Collected 5-6' bgs. 0 ppm Rad < bkg.
7					LUSB0153	8-10' 100% 4.0'	LUSB0153 Collected 7-8' bgs. 0 ppm Rad < bkg.
9		CL		CLAY; some silt; trace fine gravel to 8mm, subrounded; dry; medium stiff; non-plastic; 10YR4/2 Dark Grayish Brown. Vertical iron staining 10YR5/8 Yellowish Brown.	LUSB0154	10-12' 100% 2.0'	LUSB0154 Collected 9-10' bgs. 0 ppm Rad < bkg.
11					LUSB0155	12-15' 100% 3.0'	LUSB0155 Collected 11-12' bgs 0 ppm Rad < bkg.
13		CL		CLAY; trace silt; trace fine sand; trace fine gravel, subangular to subrounded; dry; stiff; plastic; 10YR3/1 Very Dark Gray.	LUSB0156	15-17' 100% 2.0'	LUSB0156 Collected 13-14' bgs 0 ppm Rad < bkg.
15				same as above except moist; medium stiff.	LUSB0157		LUSB0157 Collected 15-16' bgs 0 ppm Rad < bkg. Bedrock at 17.0' bgs
17				Bottom of Boring at 17.0 ft bgs Bedrock.			Three borings drilled to get to required depth. All colors from Munsell Soil Color Chart 1992 Revised Edition
20							

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Soil Boring IA01-SB0026

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654582.8633
Easting Coord.	: 1698101.3186 OH83/N ft.
Total Depth of Boring	: 15.5 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 15.5 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.01	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; roots; damp; loose; non-plastic; 10YR3/2 Very Dark Grayish Brown.			
1	650		ML		SILT (Possibly Lime Sludge); damp; loose; 10YR6/3 Pale Brown, 10YR5/1 Gray and 10YR6/6 Brownish Yellow.	LUSB0161	0-4' 63% 2.5'	LUSB0161 Collected 1-2' bgs.
2	649		ML		same as above except 10YR4/1 Dark Gray.			
			CL		CLAY; some silt; moist; soft; plastic; 10YR4/1 Dark Gray.			
3	648		CL		CLAY; trace silt; trace medium sand; trace gravel to 10mm, subrounded; dry; stiff; medium plastic; 10YR4/2 Dark Grayish Brown with 10YR4/4 Dark Yellowish Brown mottling.	LUSB0162		LUSB0162 Collected 3-4' bgs. Rinsate ER0017 equipment used.
4	647							
5	646					LUSB0163	4-8' 100% 4.2'	LUSB0163 Collected 5-6' bgs.
6	645							
7	644					LUSB0164		LUSB0164 Collected 7-8' bgs.
8	643							
9	642					LUSB0165	8-11' 100% 4.0'	LUSB0165 Collected 9-10' bgs.
10	641		ML		SILT; trace gravel to 8mm, subrounded to subangular; trace fine sand; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.			
11	640					LUSB0166	11-14 100% 3.8'	LUSB0166 Collected 11-12' bgs
12	639							
13	638		ML		SILT; trace fine sand; dry; medium dense; slightly plastic; 10YR3/1 Very Dark Gray.	LUSB0167		LUSB0167 Collected 13-14' bgs
14	637		SM		SAND, fine; some silt; trace gravel to 12mm, subangular to subrounded; dry; dense; non-plastic; 10YR3/1 Very Dark Gray.		14-15.5 100% 2.5	
15	636					LUSB0168		LUSB0168 Collected 15-15.5' bgs.
16	635				Bottom of Boring at 15.5 ft bgs Bedrock.			Bedrock at 15.5' bgs
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Remedial Investigation
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Soil Boring IA01-SB0027

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654673.5038
Easting Coord.	: 1698062.1581 OH83/N ft.
Total Depth of Boring	: 17.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 651.39

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine sand; roots; dry; loose; non-plastic; 10YR6/2 Light Brownish Gray.			
1		ML		SILT (Possibly Lime Sludge); dry; loose; non-plastic; 10YR6/2 Light Brownish Gray, 10YR5/1 Gray and 10YR6/4 Light Yellowish Brown.	LUSB0171	0-4' 90% 3.6'	LUSB0171 Collected 1-2' bgs.
2		CL		CLAY; trace silt; trace sand; dry; soft; medium plasticity; 10YR4/3 Brown.			
3					LUSB0172		LUSB0172 Collected 3-3.6' bgs. Rinsate ER0018 equipment used.
4		SM		SAND, fine (beryllium sludge); trace silt; trace gravel to 20mm, angular to subangular; moist; loose; non-plastic; 2.5Y2.5/1 Black.			
5					LUSB0173 LUSB9016	4-8' 50% 2.0'	LUSB0173 Collected 5-6' bgs. Duplicate sample LUSB9016 collected.
6							
7							
8		SM		same as above except wet.			
9		ML		SILT; trace fine sand; dry; dense; non-plastic; 10YR4/4 Dark Yellowish Brown.			
10					LUSB0174	8-11' 100% 3.0'	LUSB0174 Collected 9-10' bgs.
11		ML		SILT; trace fine to medium sand; trace gravel to 10mm, subangular; dry; dense; non-plastic; 10YR4/1 Dark Gray.	LUSB0175 LUSB9017	11-15' 93% 3.7	LUSB0175 Collected 11-12' bgs Duplicate sample LUSB9017 collected.
12							
13					LUSB0176		LUSB0176 Collected 13-14' bgs
14							
15					LUSB0177	15-17' 100% 2.0'	LUSB0177 Collected 15-16' bgs
16							
17		GM		GRAVEL; some silt; trace medium sand; dry; dense; non-plastic; 10YR4/1 Dark Gray.			Bedrock at 17.0' bgs
18				Bottom of Boring at 17.0 ft bgs			All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Soil Boring IA01-SB0028

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654715.2329
Easting Coord.	: 1698036.1854 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.85	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace fine sand; roots; dry; loose; non-plastic; 10YR5/4 Yellowish Brown.			
1	650		CL		CLAY; trace silt; trace medium sand; dry; stiff; slightly plastic; 10YR4/3 Brown and 10YR4/4 Dark Yellowish Brown.	LUSB0181	0-4' 58% 2.3'	LUSB0181 Collected 1-2' bgs.
2	649							
3	648		CL		CLAY; trace fine sand; trace silt; dry; medium stiff; slightly plastic; 10YR5/2 Grayish Brown with 10YR4/4 Dark Yellowish Brown.	LUSB0182		LUSB0182 Collected 3-4' bgs.
4	647							
5	646		SM		SAND, fine (beryllium sludge); trace silt; trace gravel to 20mm, angular to subangular; wet; loose; non-plastic; 2.5Y2.5/1 Black.		4-8' 33% 1.3	Water bearing zone @ 5' bgs.
6	645							
7	644					LUSB0183		LUSB0183 Collected 6-8' bgs.
8	643		ML		SILT; trace fine to medium sand; dry; dense; slightly plastic; 10YR3/3 Dark Brown.			
9	642						8-11' 100% 3.5	
10	641					LUSB0184		LUSB0184 Collected 9-10' bgs.
11	640				Bottom of Boring at 11.0 ft bgs			
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA01-SB0029

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654757.9267
Easting Coord.	: 1698055.4572 OH83/N ft.
Total Depth of Boring	: 13.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 650.14

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine sand; roots; dry; loose; non-plastic; 10YR6/3 Pale Brown.			
1		ML		SILT (Possibly Lime Sludge); trace fine sand; 10YR4/3 Brown; 10YR5/1 Gray and 10YR7/2 Light Gray.	LUSB0191	0-4' 83% 3.3'	LUSB0191 Collected 1-2' bgs. Duplicate sample collected.
2		CL		CLAY; trace silt; trace fine to coarse sand; dry; medium stiff; medium plastic; 10YR3/2 Very Dark Grayish Brown.			LUSB0192 Collected 2.7-3.3' bgs.
3		CL		CLAY; trace fine sand; trace gravel to 10mm, subangular to subrounded; dry; medium stiff; medium plastic to plastic; 10YR5/2 Grayish Brown with 10YR4/4 Dark Yellowish Brown.	LUSB0192		
4							
5					LUSB0193	4-8' 100% 4.0'	LUSB0193 Collected 5-6' bgs.
6		ML		SILT; trace fine to coarse sand; dry; dense; non-plastic; 10YR5/2 Grayish Brown and 10YR4/4 Dark Yellowish Brown.			
7					LUSB0194		LUSB0194 Collected 7-8' bgs.
8							
9					LUSB0195	8-11' 100% 3.0'	LUSB0195 Collected 9-10' bgs.
10							
11					LUSB0196	11-13' 100% 2.0'	LISB0196 Collected 11-12' bgs.
12							
13		ML		SILT; trace fine sand; trace very coarse sand, subrounded; dry; very dense; non-plastic; 10YR4/1 Dark Gray.			Geoprobe could not push below 13' because of expanding clays and dense silt.
14				Bottom of Boring at 13.0 ft bgs			
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Soil Boring IA01-SB0030

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/14/98
End Date	: 07/14/98
Northing Coord.	: 654755.6058
Easting Coord.	: 1697956.1636 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.09	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649		ML		SILT; trace medium to coarse sand; roots; dry; loose; non-plastic; 10YR4/3 Brown.			
1	648		CL		CLAY; trace silt; trace medium to coarse sand; trace fine gravel; dry; medium stiff; slightly plastic; 10YR4/2 Dark Grayish Brown.	LUSB0201	0-4' 45% 1.8'	LUSB0201 Collected 1-2' bgs. Rinsate ER0019 equipment used.
2	647				No description available.			
3	646							
4	645		SC		SAND and fine GRAVEL; some clay; wet; loose; non-plastic; 10YR4/6 Dark Yellowish Brown.			Water bearing zone @ 4' bgs.
5	644		ML		SILT; some medium sand; trace gravel; wet; soft; plastic; 10YR2/1 Black.	LUSB0205	4-8' 53% 2.1'	LUSB0205 Collected 4-6' bgs.
6	643		ML		SILT; trace medium sand; trace gravel to 20mm, subangular to subrounded; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.			
7	642		ML		same as above except very dense.	LUSB0202		LUSB0202 Collected 7-8' bgs.
8	641							
9	640					LUSB0203	8-12' 100% 4.0	LUSB0203 Collected 9-10' bgs.
10	639							
11	638		ML		SILT; trace medium sand; trace gravel to 20mm, subrounded; dry; dense; dry; non-plastic; 10YR4/1 Dark Gray.	LUSB0204		LUSB0204 Collected 11-12' bgs
12	637				Bottom of Boring at 12.0 ft bgs			
13	636							
14	635							
15	634							
16	633							
17	632							
18	631							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20								

Remedial Investigation
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Soil Boring IA01-SB0031

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/15/98
End Date	: 07/15/98
Northing Coord.	: 654702.8292
Easting Coord.	: 1697949.9707 OH83/N ft.
Total Depth of Boring	: 16.25 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.90	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace fine sand; roots; dry; loose; non-plastic; 10YR6/4 Light Yellowish Brown.			
1	648		ML		SILT; trace fine to medium sand; dry; medium dense; non-plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0211	0-4' 70% 2.8'	LUSB0211 Collected 1-2' bgs.
2	647		CL		CLAY; trace silt; trace fine sand; trace fine gravel to 8mm, subrounded; dry; medium stiff; slightly plastic; 10YR5/1 Gray and 10YR5/6 Yellowish Brown.			
3	646							
4	645					LUSB0212		LUSB0212 Collected 3-4' bgs.
5	644							
6	643					LUSB0213	4-8' 100% 4.0'	LUSB0213 Collected 5-6' bgs.
7	642		ML		SILT; trace fine to medium sand; trace gravel to 10mm, subrounded; dry; dense; non-plastic; 10YR5/3 Brown.			
8	641					LUSB0214		LUSB0214 Collected 7-8' bgs. Duplicate sample collected.
9	640		ML		same as above except very dense; 10YR4/3 Brown horizontally and 10YR5/8 Yellowish Brown and 10YR3/1 Very Dark Gray vertically.		8-11'	
10	639					LUSB0215	100% 3.0'	LUSB0215 Collected 9-10' bgs.
11	638							
12	637		CL		CLAY; trace silt; trace fine sand; dry; medium stiff; medium plastic; 10YR4/1 Very Dark Gray.	LUSB0216	11-15' 95% 3.8'	LUSB0216 Collected 11-12' bgs
13	636							
14	635		SP		SAND, coarse; some gravel to 15mm, subrounded; dry; dense; non-plastic; 10YR3/1 Dark Gray.	LUSB0217		LUSB0217 Collected 13-14' bgs
15	634		CL		CLAY; same as the 11-13.4 interval with sand stringers as described above.	LUSB0218	15-16.25' NR NR	LUSB0218 Collected 15-16' bgs
16	633		GP		GRAVEL to 40mm, angular; some clay; dry; dense; non-plastic.			Bedrock at 16.25' bgs
17	632				Bottom of Boring at 16.25 ft bgs			
18	631							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20	629							

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Soil Boring IA01-SB0032

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654753.4751
Easting Coord.	: 1697881.0862 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.05	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649		ML		SILT; trace medium sand; roots; moist; loose; non-plastic; 10YR4/2 Dark Grayish Brown.			
1	648		ML		SILT; trace fine to coarse sand; trace gravel to 8mm, angular to subangular; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.	LUSB0221	0-4' 73% 2.9'	LUSB0221 Collected 1-2' bgs. 0.3 ppm
2	647		CL		CLAY; trace fine sand; dry; stiff; slightly plastic; 10YR5/2 Grayish Brown with 10YR4/4 Dark Yellowish Brown mottling.			
3	646		CL		same as above except medium plasticity.	LUSB0222		LUSB0222 Collected 3-4' bgs. 0.6 ppm
4	645							
5	644		ML		SILT; fine to coarse sand; wet; loose; non-plastic; 10YR2/1 Black.	LUSB0223	4-8' 75% 3.0'	Water bearing zone @ 5' bgs. LUSB0223 Collected 5-6' bgs. 0.4 ppm in first boring 0.6 ppm in second boring Refusal in first boring @ 6.2' bgs.
6	643		ML		SILT; trace fine sand; trace clay; dry; medium dense; slightly plastic; 10YR4/3 Brown.			
7	642					LUSB0224		LUSB0224 Collected 7-8' bgs.
8	641							
9	640						8-12' 100% 4.0	
10	639		ML		SILT; some medium to coarse sand; trace gravel to 20mm, subrounded; dry; dense; slightly plastic; 10YR4/2 Dark Grayish Brown.			
11	638					LUSB0225		LUSB0225 Collected 10-12' bgs Duplicate sample collected.
12	637				Bottom of Boring at 12.0 ft bgs			
13	636							Two borings needed to get to required depth.
14	635							
15	634							
16	633							
17	632							
18	631							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20								

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Remedial Investigation
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Soil Boring IA01-SB0033

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/20/98
End Date	: 07/20/98
Northing Coord.	: 654410.1096
Easting Coord.	: 1698131.7516 OH83/N ft.
Total Depth of Boring	: 17.5 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 17.5 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.15	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; trace medium sand; roots; dry; loose; non-plastic; 10YR5/2 Grayish Brown.			
1	650		ML		SILT; trace medium sand; dry; loose; slightly plastic; 10YR5/1 Gray.	LUSB0231	0-4' 100% 4.0'	LUSB0231 Collected 1-2' bgs. 0 ppm
2	649				moist just above the clay			
3	648		CL		CLAY; trace fine sand; dry; stiff; slightly to medium plastic; 10YR5/2 Grayish Brown with 10YR4/4 Dark Yellowish Brown mottling.	LUSB0232		LUSB0232 Collected 3-4' bgs. 0 ppm
4	647							
5	646					LUSB0233	4-8' 100% 4.0'	LUSB0233 Collected 5-6' bgs. 0 ppm
6	645							
7	644					LUSB0234		LUSB0234 Collected 7-8' bgs. 0 ppm
8	643		ML		SILT; trace medium to coarse sand; dry; dense to very dense; non-plastic; 10YR3/4 Dark Yellowish Brown.			
9	642					LUSB0235	8-11' 100% 3.0'	LUSB0235 Collected 9-10' bgs. 0 ppm
10	641							
11	640		ML		SILT; trace medium sand; dry; dense to very dense; slightly plastic; 10YR4/1 Dark Gray.	LUSB0236	11-14' 100% 3.0'	LUSB0236 Collected 11-12' bgs 0 ppm
12	639							
13	638					LUSB0237		LUSB0237 Collected 13-14' bgs 0 ppm
14	637		SM		SAND, medium; trace silt; trace gravel to 10mm, subrounded; moist; dense; non-plastic; 10YR4/1 Dark Gray.			
15	636					LUSB0238	14-17.5' 100% 3.5'	LUSB0238 Collected 15-16' bgs 0 ppm
16	635		SP		SAND, grades into a fine sand; trace gravel to 25mm, subrounded to subangular; moist to dry; 10YR4/1 Dark Gray.			
17	634							
18	633				Bottom of Boring at 17.5 ft bgs Bedrock			Bedrock at 17.5' bgs All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0034

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/23/98
End Date	: 07/23/98
Northing Coord.	: 654557.5258
Easting Coord.	: 1698108.2182 OH83/N ft.
Total Depth of Boring	: 14.8 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.32	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; trace fine sand; trace roots; moist; loose; non-plastic; 2.5Y3/2 Very Dark Grayish Brown.			
1	650		ML		SILT; trace fine sand; dry; loose; slightly plastic; 10YR5/1 Gray, 10YR5/6 Yellowish Brown and 10YR4/1 Dark Gray.	LUSB0241	0-4' 88% 3.5'	LUSB0241 Collected 1-2' bgs. 0.1 ppm
2	649							
3	648					LUSB0242		LUSB0242 Collected 3-3.5' bgs. Rinsate ER0022 equipment used. 0.1 ppm
4	647		CL		CLAY; trace fine sand; trace silt; dry; stiff; slightly plastic; 10YR3/2 Very Dark Grayish Brown.			
5	646		CL		CLAY; trace fine sand; trace fine gravel, subangular; dry; stiff; plastic; 10YR4/1 Dark Gray and 10YR4/6 Dark Yellowish Brown.	LUSB0243	4-8' 100% 4.0'	LUSB0243 Collected 5-6' bgs. Rinsate ER0023 equipment used. 0.0 ppm
6	645							
7	644		ML		SILT; trace medium to coarse sand; dry; dense; non-plastic; 10YR4/3 Brown.	LUSB0244		LUSB0244 Collected 7-8' bgs. 0.0 ppm
8	643							
9	642					LUSB0245	8-11' 100% 3.0'	LUSB0245 Collected 9-10' bgs.
10	641							
11	640					LUSB0246	11-14' 100% 3.0'	LUSB0246 Collected 11-12' bgs
12	639							
13	638		ML		SILT; trace fine sand; trace fine gravel, subangular to subrounded; dry; very dense; non-plastic; 10YR3/1 Very Dark Gray.	LUSB0247		LUSB0247 Collected 13-14' bgs
14	637						14-14.8 100% 0.8'	Refusal at 14.8' bgs
15	636				Bottom of Boring at 14.8 ft bgs			
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0035

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Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/27/98
End Date	: 07/27/98
Northing Coord.	: 654578.9379
Easting Coord.	: 1698004.5538 OH83/N ft.
Total Depth of Boring	: 17.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; some fine sand; dry; loose; non-plastic; 10YR5/4 Yellowish Brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	650		ML		SILT; trace fine sand; dry; loose; non-plastic; 10YR5/8 Yellowish Brown.	LUSB1030	0-4' 100% 4.0'	LUSB1030 Collected 1-2' bgs.
2	649							
3	648		CL		CLAY; trace fine to medium sand; trace silt; dry; medium stiff; medium plastic; 10YR4/2 Dark Grayish Brown.	LUSB1031		LUSB1031 Collected 3-4' bgs. Rinsate ER0021 equipment used.
			ML		SILT; trace clay; trace fine sand; dry; medium dense; non-plastic; 10YR3/1 Very Dark Gray.			
4	647							
5	646		CL		CLAY; trace fine to medium sand; dry; stiff; medium plastic; 10YR5/1 Gray and 10YR4/4 Dark Yellowish Brown.	LUSB1032	4-8' 100% 4.0'	LUSB1032 Collected 5-6' bgs.
6	645							
7	644					LUSB1033		LUSB1033 Collected 7-8' bgs. Rinsate ER0024 equipment used.
8	643		ML		SILT; trace fine to coarse sand; dry; dense; non-plastic; 10YR4/3 Brown.			
9	642					LUSB1034	8-11' 100% 3.0'	LUSB1034 Collected 9-10' bgs.
10	641							
11	640		ML		SILT; trace fine sand; trace clay; dry; medium dense; slightly plastic; 10YR4/1 Dark Gray.	LUSB1035		LUSB1035 Collected 11-12' bgs
12	639						11-14' 100% 3.0'	
13	638		CL		CLAY; trace fine sand; trace silt; dry; medium stiff; slightly plastic; 10YR4/1 Dark Gray.	LUSB1036		LUSB1036 Collected 13-14' bgs
14	637		SM		SAND and GRAVEL, subangular; some silt; dry; dense; non-plastic; 10YR4/1 Dark Gray.			
15	636					LUSB1037	14-17' 100% 3.0'	LUSB1037 Collected 15-16' bgs
16	635							
17	634				Bottom of Boring at 17.0 ft bgs Bedrock			Bedrock at 17.0' bgs
18	633							
19	632							
20								

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Soil Boring IA01-SB0036

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/27/98
End Date	: 07/27/98
Northing Coord.	: 654650.6145
Easting Coord.	: 1698008.2762 OH83/N ft.
Total Depth of Boring	: 14.5 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.48	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace fine sand; dry; loose; non-plastic; 10YR5/3 Brown.			
	650		ML					
1					SILT; trace fine sand; 10YR5/1 Gray, 10YR6/1Gray, and 10YR5/2 Grayish Brown.			
	649					LUSB1053	0-4'	LUSB1053 Collected 1-2' bgs.
2					CLAY; trace fine sand; dry; soft; medium plasticity; 10YR4/2 Dark Grayish Brown.		75%	
	648		CL				3.0'	
3								
	647					LUSB1054		LUSB1054 Collected 3-4' bgs. Rinsate ER0025 equipment used.
4					CLAY; trace silt; trace fine to medium sand; dry; medium stiff; plastic; 10YR5/1 Gray and 10YR4/4 Dark Yellowish Brown.			
	646							
5								
	645					LUSB1055	4-8'	LUSB1055 Collected 5-6' bgs. Duplicate Collected.
6			CL				100%	
	644						4.0'	
7								
	643					LUSB1056		LUSB1056 Collected 7-8' bgs.
8					SILT; trace fine to coarse sand; dry; dense; non-plastic; 10YR4/3 Brown.			
	642							
9							8-11'	
	641		ML			LUSB1057	100%	LUSB1057 Collected 9-10' bgs.
10							3.0'	
	640							
11			ML		SILT; trace fine sand; trace clay; dry; medium dense; slightly plastic; 10YR4/1 Dark Gray.			
	639				No Description Available		11-13.5'	Liner stuck in core barrel, unable to sample interval.
12							100%	
	638						2.5'	
13								
	637						13.5-14.5'	
14			ML		SILT; some sand and gravel to 20mm, subangular; moist; very dense; non-plastic; 10YR3/1 Very Dark Gray.	LUSB1058	100%	LUSB1058 Collected 13.5-14' bgs.
	636						1.0'	
15					Bottom of Boring at 14.5 ft bgs			Refusal at 14.5 bgs because silt is too dense.
	635							
16								
	634							
17								
	633							
18								All colors from Munsell Soil Color Chart 1992 Revised Edition
	632							
19								
	631							
20								

Remedial Investigation
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Soil Boring IA01-SB0038

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/24/98
End Date	: 07/24/98
Northing Coord.	: 654519.7962
Easting Coord.	: 1698119.7011 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML ML		SILT; trace fine sand; roots; dry to moist; loose; slightly plastic; 7.5YR3/2 Dark Brown.	No Samples Collected		
1	650				SILT and SAND, fine; dry; loose; non-plastic; 7.5YR5/1 Gray.			
2	649		ML		SILT; trace fine sand; dry to moist; very loose; slightly plastic; 7.5YR5/1 Gray, 10YR6/3 Pale Brown and 10YR5/6 Yellowish Brown.		0-4' 85% 3.4'	0 ppm
3	648							
4	647		CL		CLAY; trace fine to medium sand; trace gravel to 10mm, subrounded to subangular; dry; medium stiff to stiff; medium plastic; 10YR5/1 Gray and 10YR4/4 Dark Yellowish Brown.			
5	646							
6	645						4-8' 100% 4.0'	0 ppm
7	644							
8	643		ML		SILT; some fine sand; dry; dense; non-plastic; 10YR4/3 Brown.			
9	642						8-11' 100% 3.0'	0 ppm
10	641		ML		SILT; trace fine sand; dry; dense; non-plastic; 10YR4/1 Dark Gray.			
11	640				Bottom of Boring at 11.0 ft bgs			
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0039

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/24/98
End Date	: 07/24/98
Northing Coord.	: 654450.8987
Easting Coord.	: 1698126.2628 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.40	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; some medium sand; roots; moist; loose; non-plastic; 2.5Y5/3 Olive Brown.			
1	650		ML		SILT; trace medium sand; moist (moisture increases with depth); loose; slightly plastic; 10YR5/2 Grayish Brown, 10YR6/1 Gray and 10YR5/6 Yellowish Brown.		0-4' 60% 2.4	0 ppm
2	649							
3	648							
4	647		CL		CLAY; trace fine to medium sand; trace silt; dry; stiff; medium plastic to plastic; 10YR5/1 Gray and 10YR4/4 Dark Yellowish Brown.	No Samples Collected		0 ppm
5	646						4-8' 100% 4.0'	
6	645							0 ppm
7	644							
8	643							
9	642		ML		SILT; trace clay; trace fine to medium sand; dry; dense; non-plastic; 10YR4/3 Brown.		8-11' 100% 3.0'	
10	641		ML		SILT; trace fine sand; dry; very dense; non-plastic; 10YR4/1 Dark Gray.			
11	640				Bottom of Boring at 11.0 ft bgs			
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA01-SB0040

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/27/98
End Date	: 07/27/98
Northing Coord.	: 654699.7827
Easting Coord.	: 1698078.4610 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 651.39

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine to medium sand; roots; dry; soft; slightly plastic; 10YR5/2 Grayish Brown.	No Samples Collected		
1		ML		SILT; moist to dry; loose; non-plastic; 10YR4/1 Dark Gray, 10YR5/1 Gray and 10YR4/6 Dark Yellowish Brown.		0-4' 88% 3.5	
2		CL		CLAY; trace fine to coarse sand; dry; medium stiff; medium plastic; 10YR3/1 Very Dark Gray.			
3		CL		CLAY; trace fine to medium sand; trace gravel to 10mm, subangular; dry; stiff; medium plastic; 10YR5/1 Gray 10YR4/4 Dark Yellowish Brown.			
5						4-8' 100% 4.0'	
8		ML		SILT; trace fine to coarse sand; dry; dense; non-plastic; 10YR4/3 Brown.		8-10' 100% 2.0'	
10				Bottom of Boring at 10.0 ft bgs			
18							All colors from Munsell Soil Color Chart 1992 Revised Edition

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Remedial Investigation
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Soil Boring IA01-SB0041

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 12.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		SILT; trace fine to medium sand; trace clay; dry; loose; slightly plastic; 10YR4/3 Brown.			
1	-1		CL		CLAY; trace fine to medium sand; trace gravel to 10mm, subangular to subrounded; dry; stiff; 10YR4/4 Dark Yellowish Brown with 10YR5/1 Gray mottling.		0-4' 60% 2.4'	
2	-2							0 ppm
3	-3							
4	-4							0 ppm
5	-5						4-7' 100% 3.0'	
6	-6							0 ppm
7	-7		ML		SILT; trace fine to medium sand; dry; dense; non-plastic; 10YR4/3 Brown.			
8	-8						7-10' 100% 3.0'	
9	-9							
10	-10		ML		SILT; trace fine sand; dry; very dense; non-plastic; 10YR3/1 Very Dark Gray.		10-12' 100% 2.0'	
11	-11					LUSB1067		LUSB1067 Collected 11-12' bgs 0 ppm
12	-12				Bottom of Boring at 12.0 ft bgs			
13	-13							
14	-14							
15	-15							
16	-16							
17	-17							
18	-18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	-19							
20								

Remedial Investigation
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Soil Boring IA01-SB0042

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: 654753.4751
Easting Coord.	: 1697853.0810 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 648.57

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine to medium sand; dry; loose; slightly plastic; 10YR4/3 Brown.			
		ML		SILT; trace fine to coarse sand; dry; medium dense; slightly plastic; 10YR3/2 Very Dark Grayish Brown.			
1						0-4'	
2		CL		CLAY; trace fine sand; trace gravel to 10mm, subangular to subrounded; dry; stiff; medium plastic; 10YR4/4 Dark Yellowish Brown with 10YR5/1 Gray mottling.		83%	0 ppm
						3.3'	
3							
4							0 ppm
5						4-7'	
						100%	
6		ML		SILT; trace fine to medium sand; dry; dense; non-plastic; 10YR4/3 Brown.		3.0'	
7							
8						7-10'	
						100%	
9						3.0'	0 ppm
10		ML		SILT; trace fine sand; dry; very dense; non-plastic; 10YR3/1 Very Dark Gray.			
11						10-12'	
						90%	
					LUSB1068	1.8	LUSB1068 Collected 11-11.8' bgs. 0 ppm
12				Bottom of Boring at 12.0 ft bgs			
13							
14							
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Remedial Investigation
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Soil Boring IA01-SB0044

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML CL		SILT; trace fine sand; roots; dry; loose; slightly plastic; 10YR3/1 Very Dark Gray.	No Samples Collected		
1	-1		CL		CLAY; trace fine sand; dry; stiff; medium plastic; 10YR4/4 Dark Yellowish Brown.		0-4' 55% 2.2	
2	-2				CLAY; trace fine to medium sand; dry; stiff; medium plastic; 10YR5/1 Gray and 10YR4/4 Dark Yellowish Brown.			0.0 ppm
3	-3		CL		same as above except wet @ 2.2' bgs but dry below that.			
4	-4							
5	-5						4-8' 100% 4.0'	
6	-6							0.0 ppm
7	-7		ML		SILT; trace fine sand; trace clay; dry; very dense; non-plastic; 10YR4/3 Brown. 1ft. of Black Sludge on top of soil cuttings. Probably fell in from the drum.			
8	-8						8-10' 100% 2.0'	
9	-9							0.0 ppm
10	-10				Bottom of Boring at 10.0 ft bgs			There is a void in the borehole. Possibly hit a drum. 2 and 1/4 five gallon buckets of bentonite pellets used to backfill the borehole.
11	-11							
12	-12							
13	-13							
14	-14							
15	-15							
16	-16							
17	-17							
18	-18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	-19							
20								

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Soil Boring IA01-SB0045

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/26/98
End Date	: 06/26/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 14.1 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 14.0 feet
Depth Drilled Into Rock	: 0.1 feet
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		SILT; some fine sand; roots; moist; loose; non-plastic; 10YR3/3 Dark Brown.	No Samples Collected		
			ML					
1	-1		CL		SILT; some fine sand; trace roots; dry; loose; non-plastic; 10YR4/1 Dark Gray.		0-4' 60% 2.4'	
2	-2				CLAY; some fine sand; dry to moist; soft; plastic; 10YR3/1 Very Dark Gray.			0.4 ppm
3	-3				CLAY; some fine to medium sand; dry; medium stiff; plastic; 10YR4/2 Dark Grayish Brown mottled with 10YR5/6 Yellowish Brown.			
4	-4		CL					
5	-5						4-8' 95% 3.8'	
6	-6							0.0 ppm
7	-7		CL		same as above except wet; soft; medium plastic.			
8	-8		ML		SILT; some fine sand; some very fine gravel to 8mm, subrounded; dry; dense to very dense; non-plastic; 10YR4/3 Brown.			
9	-9						8-11' 100% 3.0'	0.0 ppm
10	-10		ML		SILT; some fine to medium sand; trace clay; dry; dense; non-plastic; 10YR4/1 Dark Gray.			
11	-11							
12	-12		CL		CLAY; some fine to very coarse sand; trace silt; trace gravel to 30mm, subrounded to subangular; dry; very dense; non-plastic. Very small sand stringers, no water.		11-14.1' 100% 3.1'	
13	-13							0.0 ppm
14	-14		DO		Bedrock			Bedrock at 14.0' bgs
15	-15				Bottom of Boring at 14.1 ft bgs			Boring originally drilled to install piezometer but changed to a soil boring.
16	-16							
17	-17							
18	-18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	-19							
20								

IA02:
Boring Logs

Remedial Investigation
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Soil Boring IA02-SB0001

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/6/98
End Date	: 07/6/98
Northing Coord.	: 653897.0947
Easting Coord.	: 1697616.7384 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.96	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			SM		SAND, fine; some silt; trace clay; 10YR4/2 Dark Grayish Brown.			
1	651		CL		CLAY; some silt; wet; very soft; 10YR5/1 Gray and 10YR5/6 Yellowish Brown.		1-3' 100% 2.0'	Sample collected 1-2' bgs. Rinsate ER0026 equipment used. Split Spoon 1-3' Blow Counts 2/2/2/2
2	650							
3	649						3-5' 68% 1.35'	Split Spoon 3-5' Blow Counts 1/1/2/5
4	648							
5	647		CL		CLAY; trace fine to coarse sand; trace gravel; moist; hard; 10YR5/1 Gray mottled with 10YR5/6 Yellowish Brown.		5-7' 83% 1.65	Split Spoon 5-7' Blow Counts 2/8/9/11
6	646							
7	645		CL		same as above except 10YR5/1 Gray, 10YR5/3 Brown and 10YR2/1 Black.		7-9' 95% 1.9'	Split Spoon 7-9' Blow Counts 2/9/18/30
8	644							
9	643				Increased fine sand content.		9-10' 100% 1.0'	Split Spoon 9-10' Blow Counts 8/26
10	642				Bottom of Boring at 10.0 ft bgs			
11	641							
12	640							
13	639							
14	638							
15	637							
16	636							
17	635							
18	634							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	633							
20	632							

Remedial Investigation
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Soil Boring IA02-SB0002

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/6/98
End Date	: 07/6/98
Northing Coord.	: 653901.5760
Easting Coord.	: 1698163.2603 OH83/N ft.
Total Depth of Boring	: 9.2 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		CL		CLAY; some silt and fine sand; trace fine gravel; hard; 10YR4/2 Dark Gryaish Brown.			
1	649		CL		CLAY; moist; soft; 10YR5/1 Gray.		1-3' NR	Split Spoon 1-3' Blow Counts 4/7/7/9
2	648							
3	647				Augered through 3-4' interval.		4-6' 90% 1.8	
4	646		CL		CLAY; little to some very fine sand; dry to damp; 10YR5/1 Gray mottled with 10YR4/4 Dark Yellowish Brown, trace black color.			
5	645						6-8' 85% 1.7	Split Spoon 4-6' Blow Counts 6/19/20/31
6	644							
7	643							Split Spoon 6-8' Blow Counts Not Recorded
8	642		CL		Shelby Tube collected 8.2-9.2' bgs. Sandy Lean CLAY. Geotechnical Sample LUSB1045.	Shelby Tube	8.2-9.15' 92% 0.85'	
9	641				Bottom of Boring at 9.2 ft bgs			
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA02-SB0003

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Investigative Area 02	: Lagoons A, B and C
Start Date	: 06/30/98
End Date	: 06/30/98
Northing Coord.	: 653916.6658
Easting Coord.	: 1697206.8339 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 652.39

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				Augered through 0-1' interval. No description available.			
1		ML		SILT; little very fine sand; trace fine gravel; trace clay;; 10YR4/2 Dark Grayish Brown.		1-3' 20% 0.4'	Sample collected 1-2' bgs. Split Spoon 1-3' Blow Counts 7/19/14/7
3						3-5' 78% 1.55'	Be sample collected 3-3.4' bgs. COPC sample collected 3.5-4.5' bgs. Split Spoon 3-5' Blow Counts 3/8/14/17
5		CL		CLAY; trace coarse sand; soft; 10YR5/1 Gray and 10YR5/3 Brown.			
6		CL		CLAY; little fine sand; trace fine gravel; damp; medium hard; 10YR5/1 Gray mottled with 10YR5/3 Brown.		5-7' 75% 1.5'	COPC sample collected 4.5-5.5' bgs. Split Spoon 5-7' Blow Counts 3/8/13/15
7						7-9' 83% 1.65'	Be sample collected 6.5-7.5' bgs. Duplicate also collected. Split Spoon 7-9' Blow Counts 3/7/12/23
9				No recovery. No description available.		9-10' 75% 0.75	Be sample collected 9-10' bgs. Split Spoon 9-10' Blow Counts 7/20
10		CL		CLAY; some silt and very fine sand; trace fine sand; trace fine gravel; dry; hard; 10YR4/2 Dark Grayish Brown and 10YR6/1 Gray. Geotechnical Laboratory description Sandy Lean CLAY. Geotechnical Sample LUSB1046.			
11				Bottom of Boring at 10.0 ft bgs			
18							All colors from Munsell Soil Color Chart 1992 Revised Edition

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Soil Boring IA02-SB0004

Investigative Area 02	: Lagoons A, B and C
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 653953.2120
Easting Coord.	: 1697370.1260 OH83/N ft.
Total Depth of Boring	: 11.7 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 653.38	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	653				Augered through 0-1' interval. No description available.			
1	652		CL		CLAY; trace fine to coarse gravel; moist; soft; medium plastic; 10YR4/2 Dark Grayish Brown.	LUSB0258	1-2' 70% 0.7'	LUSB0258 collected 1-2' bgs Split Sample LUSB9526 collected. Split Spoon 1-2' Blow Counts 4/8
2	651		SM		SAND, fine; some silt; soft; 10YR6/1 Gray and 10YR5/2 Grayish Brown.		2-4' 80% 1.6'	Split Spoon 2-4' Blow Counts 3/4/4/7
3	650							
4	649		CL		CLAY; some silt; wet; very soft; 10YR6/1 Gray.	LUSB0321	4-6' 75% 1.5'	LUSB0321 collected 4.5-5.5' bgs. Split Spoon 4-6' Blow Counts 2/2/2/2
5	648							
6	647		CL		CLAY; wet; very soft; Light Gray and 10YR8/6 Yellow.		6-8' 100% 2.0'	LUSB0302 collected 7-8' bgs Split Spoon 6-8' Blow Counts 0/1/3/0
7	646		CL		CLAY; trace coarse sand; trace fine gravel, subrounded; 10YR4/3 Brown.	LUSB0302		
8	645		CL		CLAY; little very fine sand; little silt; dry; hard; 10YR5/1 Gray and 10YR5/3 Brown. Geotechnical Laboratory description Lean CLAY. Geotechnical Sample LUSB1047.	LUSB0303	8-10' 100% 2.0	LUSB0303 collected 8-9' bgs Split Spoon 8-10' Blow Counts 4/9/15/28
9	644							
10	643							
11	642					Shelby Tube		Shelby Tube 10-11.7' bgs
12	641				Bottom of Boring at 11.7 ft bgs			
13	640							
14	639							
15	638							
16	637							
17	636							
18	635							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	634							
20								

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Soil Boring IA02-SB005

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/29/98
End Date	: 06/29/98
Northing Coord.	: 653919.0577
Easting Coord.	: 1697065.9698 OH83/N ft.
Total Depth of Boring	: 9.8 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.25	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651				Augered through 0-1' interval. No description available.			
1	650		CL		CLAY; some silt; trace fine gravel; damp; non-plastic; 10YR4/1 Dark Gray overall with some 10YR4/6 Dark Yellowish Brown mottling. Limestone fragments.	LUSB0259	1-3' 75% 1.5	LUSB0259 collected 1-2' bgs 1325. Full Suite Sample. Split Spoon 1-3' Blow Counts 6/11/11/12
2	649							
3	648				damp.	LUSB0326	3-5' 90% 1.8	LUSB0326 collected 3-3.8' bgs. Be sample.
4	647		CL		same as above except damp; softer; more plastic; 10YR5/1 Gray and 10YR4/6 Dark Yellowish Brown.	LUSB0304		LUSB0304 collected 3.8-4.8' bgs. COPC sample. Split Spoon 3-5' Blow Counts 3/8/14/16
5	646				Weathered limestone and shale fragments.			
6	645					LUSB0305	5-7' 100% 2.0'	LUSB0305 collected 5-6' bgs 1415. COPC sample. Split Spoon 5-7' Blow Counts Not Recorded
7	644		CL		same as above except damp; more weathered limestone and black shale fragments.	LUSB0327	7-9' 100% 2.0'	LUSB0327 collected 7-8' bgs. Be sample and Duplicate. Split Spoon 7-9' Blow Counts 2/5/9/18
8	643				Dryer and firmer below 8.5' bgs.			
9	642				Shelby tube collected. No description available.	Shelby Tube		Shelby Tube 9-9.8'
10	641				Bottom of Boring at 9.8 ft bgs			
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA02-SB0006

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 654056.5082
Easting Coord.	: 1698186.4879 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.90	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			SM		SAND; silt and fine to medium gravel; 10YR5/3 Brown.			
1	650		CL		CLAY; some silt; trace to little fine sand; trace coarse sand and fine gravel; dry; 10YR4/1 Dark Gray.		0-2' 65% 1.3'	COPC sample collected Split Spoon 0-2' Blow Counts 4/4/8/10
2	649		CL		CLAY; trace fine to coarse gravel, rounded; 10YR6/1 Gray and 10YR6/6 Brownish Yellow.		2-4' 75% 1.5'	COPC sample collected Split Spoon 2-4' Blow Counts 3/5/8/12
3	648							
4	647							
5	646						4-6' 83% 1.65'	COPC sample collected. Split Spoon 4-6' Blow Counts 3/9/12/16
6	645				Bottom of Boring at 6.0 ft bgs			
7	644							
8	643							
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA02-SB0007

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 653838.8939
Easting Coord.	: 1698090.9832 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.80	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
1	650		CL		CLAY; some silt; trace fine sand; rootlets; 10YR4/1 Dark Gray to 10YR3/1 Very Dark Gray.		0-2' 50% 1.0'	COPC sample collected Split Spoon 0-2' Blow Counts 3/5/9/12
2	649							
3	648		CL		CLAY; some fine sand; little fine gravel and coarse sand; moist; hard; 10YR6/1 Gray and 10YR5/6 Yellowish Brown.		2-4' 70% 1.4'	COPC sample collected Split Spoon 2-4' Blow Counts 4/7/8/9
4	647							
5	646						4-6' 68% 1.35'	COPC sample collected. Split Spoon 4-6' Blow Counts 2/6/6/7
6	645				Bottom of Boring at 6.0 ft bgs			
7	644							
8	643							
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA02-SB0008

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 653843.6443
Easting Coord.	: 1697598.6925 OH83/N ft.
Total Depth of Boring	: 5.3 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 650.79

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0–1 (650)		ML		SILT; some sand; trace clay; 10YR5/3 Brown. Augered because of cobbles.		0-2' NA	Split Spoon 0-2' Blow Counts 9/12/10/10
1–3 (650–648)		CL		CLAY; some silt; trace to little fine sand; trace fine gravel; moist; 10YR6/1 Gray and 10YR5/6 Yellowish Brown mottling.		1.3-3.3' 83% 1.65'	COPC sample collected 1.3-2.3' bgs. Split Spoon 1.3-3.3' Blow Counts 3/7/10/11
3–5 (648–646)		CL		CLAY; little to some fine sand; little fine gravel; damp; medium hard; non-plastic; 10YR6/1 Gray and 10YR5/6 Yellowish Brown.		3.3-5.3' 70% 1.4'	COPC sample collected 3.7-4.7' bgs. Split Spoon 3.3-5.3' Blow Counts 3/5/6/10
5–20 (646–631)				Bottom of Boring at 5.3 ft bgs			All colors from Munsell Soil Color Chart 1992 Revised Edition

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Soil Boring IA02-SB0009

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 654070.0890
Easting Coord.	: 1697782.9569 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.10	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651							
1	650		CL		CLAY; some very fine sand; little to some fine to coarse gravel; dry; non-plastic; 10YR5/2 Grayish Brown.	LUSB0272	0-2' 68% 1.35'	LUSB0272 collected 0.5-1.4' bgs. Split Spoon 0-2' Blow Counts 4/9/15/10
2	649							
3	648		CL		CLAY; some very fine sand; little fine to coarse gravel; moist; 10YR5/1 Gray and 10YR5/6 Yellowish Brown.	LUSB0273	2-4' 80% 1.6'	LUSB0273 collected 2.5-3.5' bgs. Split Spoon 2-4' Blow Counts 7/9/11/15
4	647							
5	646					LUSB0274	4-6' 60% 1.2	LUSB0274 collected 4.5-5.2' bgs. Duplicate LUSB9028 collected. Split Spoon 4-6' Blow Counts 3/8/13/20
6	645				Bottom of Boring at 6.0 ft bgs			
7	644							
8	643							
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA02-SB0010

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 653977.4643
Easting Coord.	: 1697068.6977 OH83/N ft.
Total Depth of Boring	: 5.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 650.48

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		GP		GRAVEL; limestone gravel, unable to sample.			
1		CL		CLAY; damp; plastic; Black.			
2		CL		CLAY; trace silt; trace gravel; damp; plastic; 10YR4/1 Dark Gray and 10YR6/8 Brownish Yellow.	LUSB0276	1.5-3.5' 75% 1.5'	LUSB0276 collected 1.5-2.5' bgs. Split Spoon 1.5-3.5' Blow Counts 4/9/14/14
3							
4				Silty CLAY same color as above; trace gravel; damp; slightly plastic.		3.5-5.5' 100% 2.0'	
5					LUSB0277		LUSB0277 collected 4.5-5.5' bgs. Split Spoon 3.5-5.5' Blow Counts 3/9/13/15
6				Bottom of Boring at 5.5 ft bgs			
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Soil Boring IA02-SB0011

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 653901.7327
Easting Coord.	: 1697080.8170 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651							
			CL		CLAY; trace gravel; roots; dry; non-plastic; 10YR4/3 Brown, trace black mottling.		0-2'	
1	650					LUSB0280	75%	LUSB0280 collected 0.5-1.5' bgs. Split Spoon 0-2' Blow Counts 7/10/18/18
							1.5'	
2	649				damp; firm; slightly plastic.			
							2-4'	
3	648					LUSB0281	75%	LUSB0281 collected 2.5-3.5' bgs. Split Spoon 2-4' Blow Counts 5/10/12/14
							1.5'	
4	647				trace rounded pebbles; damp; soft; more plastic.			
							4-6'	
5	646						100%	LUSB0282 collected 5-6' bgs. Split Spoon 4-6' Blow Counts 3/6/11/11
						LUSB0282	2.0'	
6	645				Bottom of Boring at 6.0 ft bgs			
7	644							
8	643							
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Soil Boring IA02-SB0012

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 653906.1234
Easting Coord.	: 1696970.0259 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.27	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		CL		CLAY; some silt; gravel; roots; damp; non-plastic; 10YR3/2 Very Dark Grayish Brown mottled with 10YR5/8 Yellowish Brown.	LUSB0284	0-2' 75% 1.5'	LUSB0284 collected 0.5-1.5' bgs. Split Spoon 0-2' Blow Counts 9/15/13/10
1	649							
2	648				trace pebbles, rounded; softer; more plastic; more yellowish brown mottling.	LUSB0285	2-4' 75% 1.5'	LUSB0285 collected 2.5-3.5' bgs. Split Spoon 2-4' Blow Counts 6/7/11/10
3	647							
4	646				more silt; only slightly plastic.	LUSB0286	4-6' 100% 2.0'	LUSB0286 collected 5-6' bgs. Split Spoon 4-6' Blow Counts 2/5/7/13
5	645							
6	644				Bottom of Boring at 6.0 ft bgs			
7	643							
8	642							
9	641							
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA02-SB0013

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654018.8608
Easting Coord.	: 1697204.7188 OH83/N ft.
Total Depth of Boring	: 5.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 652.04

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1		CL		CLAY; some silt; gravel; roots; dry; non-plastic; 10YR4/3 Brown with some 10YR5/8 Yellowish Brown and 10YR5/1 Gray mottling.	LUSB0288	0-2' 75% 1.5'	LUSB0288 collected 0.5-1.5' bgs. Split Spoon 0-2' Blow Counts 10/16/15/20
2							
3		CL		same as above except damp; more plastic; and changes mostly to 10YR4/1 Dark Gray.	LUSB0289	2-4' 75% 1.5'	LUSB0289 collected 2.5-3.5' bgs. Split Spoon 2-4' Blow Counts 4/6/5/10
4							
5					LUSB0290	4-6' 75% 1.5'	LUSB0290 collected 4.5-5.5' bgs. Split Spoon 4-6' Blow Counts 3/10/12/17
6				Bottom of Boring at 5.5 ft bgs			
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

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Soil Boring IA02-SB0014

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/09/98
End Date	: 07/09/98
Northing Coord.	: 653857.4785
Easting Coord.	: 1697400.7346 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 651.56

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		CL		CLAY; some silt; limestone gravel; dry; non-plastic; 10YR4/3 Brown with some 10YR5/8 Yellowish Brown and 10YR5/1 Gray.	LUSB0292	0-2' 100% 2.0	LUSB0292 collected 0.5-1.5' bgs. Split Spoon 0-2' Blow Counts 5/10/15/19
4		CL		same as above except more silty; damp; softer; slightly plastic.	LUSB0293	4-6' 75% 1.5'	LUSB0293 collected 4-5' bgs. Split Spoon 4-6' Blow Counts 3/6/10/11
7		CL		same as above except trace gravel; dry; hard; non-plastic.	LUSB0294	7-9' 100% 2.0'	LUSB0294 collected 7-8' bgs. Split Spoon 7-9' Blow Counts 11/31/46/50
9		CL		same as above except dry; pebbles, rounded.	LUSB0295	9-10' 100% 1.0'	LUSB0295 colected 9-10' bgs. Split Spoon 9-10' Blow Counts Not Recorded
10				Bottom of Boring at 10.0 ft bgs			

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Soil Boring IA02-SB0015

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/29/98
End Date	: 06/29/98
Northing Coord.	: 653843.3349
Easting Coord.	: 1697504.8326 OH83/N ft.
Total Depth of Boring	: 9.1 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 650.57

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine sand; trace clay; roots; dry; loose; non-plastic; 10YR4/3 Brown.			
		GC		Gravel from road bed.		0-4'	LUSB0331 collected 1-2' bgs.
1		CL		CLAY; some silt; some fine to medium sand; dry; medium stiff; non-plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0331	85%	
2						3.4'	
3		CL		CLAY; some fine to medium sand; trace silt; dry; stiff; medium plastic; 10YR5/2 Grayish Brown mottled with 10YR4/6 Dark Yellowish Brown.	LUSB0332		LUSB0332 collected 3-4' bgs.
4							
5						4-8'	
6					LUSB0333	75%	LUSB0333 collected 5-6' bgs.
						3.0'	
7		ML		SILT; some fine to medium sand; trace clay; dry; loose; non-plastic; 10YR4/4 Dark Yellowish Brown.	LUSB0334		LUSB0334 collected 7-8' bgs.
8						8-9'	
					LUSB0335	100%	LUSB0335 collected 8-9' bgs.
9						3.0'	
				Bottom of Boring at 9.1 ft bgs			
10							
11							
12							
13							
14							
15							
16							
17							
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
19							
20							

Elevations: 650, 649, 648, 647, 646, 645, 644, 643, 642, 641, 640, 639, 638, 637, 636, 635, 634, 633, 632, 631

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Soil Boring IA02-SB0016

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/30/98
End Date	: 06/30/98
Northing Coord.	: 653837.2665
Easting Coord.	: 1697847.3918 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.83	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace fine sand; trace clay; roots; dry; loose; non-plastic; 10YR3/2 Very Dark Grayish Brown.			
			GC		Gravel from road bed.			
1	650						0-4'	
					CLAY; trace silt; trace fine sand; dry; stiff; slightly plastic; 10YR4/1 Dark Gray mottled with 10YR4/4 Dark Yellowish Brown.	LUSB0336	83%	LUSB0336 collected 1-2' bgs.
2	649						3.3'	
			CL					
3	648							
						LUSB0337		LUSB0337 collected 3-4' bgs.
4	647							
5	646				CLAY; some silt; trace fine sand; dry; medium stiff; non-plastic; 10YR3/3 Dark Brown.		4-8'	
			CL			LUSB0338	100%	LUSB0338 collected 5-6' bgs. Rinsate ER0035 equipment used.
6	645						4.0'	
7	644				SILT; some fine sand; trace clay; 10YR3/3 Dark Brown with 10YR4/6 Dark Yellowish Brown mottling.			
			ML			LUSB0339		LUSB0339 collected 7-8' bgs. Duplicate and Split samples collected.
8	643							
							8-10'	
9	642		ML		SILT; some fine to medium sand; trace gravel to 8mm, subrounded to subangular; dry; medium dense; non-plastic; 10YR3/1 Very Dark Gray.		100%	
						LUSB0340	2.0'	LUSB0340 collected 9-10' bgs. Water bearing zone encountered @ 9.7' bgs.
10	641		SM		SAND, very fine; trace silt; wet; medium dense; non-plastic; 10YR3/1 Very Dark Gray.			
11	640				Bottom of Boring at 10.0 ft bgs			
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA02-SB0017

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/29/98
End Date	: 06/29/98
Northing Coord.	: 653850.9948
Easting Coord.	: 1698277.1870 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		ML		SILT; some fine sand; roots; dry; loose; non-plastic; 10YR3/2 Very Dark Grayish Brown.			
			ML		SILT; some clay; trace fine to medium sand; dry; stiff; slightly plastic; 10YR3/1 Very Dark Gray.			
1	649						0-4'	
						LUSB0341	75%	LUSB0341 collected 1-2' bgs. Rinsate ER0036 equipment used.
2	648				CLAY; trace silt; dry; stiff; medium plastic; 10YR4/1 Dark Gray with 10YR4/4 Dark Yellowish Brown.		3.0	
			CL					
3	647							
						LUSB0342		LUSB0342 collected 3-4' bgs.
4	646							
			CL		same as above except soft; plastic.			
5	645				SILT; some fine sand; trace clay; trace fine gravel; dry; dense; non-plastic; 10YR4/3 Brown with 10YR4/6 Dark Yellowish Brown.		4-8'	
						LUSB0343	100%	LUSB0343 collected 5-6' bgs.
6	644						4.0'	
			ML					
7	643							
						LUSB0344		LUSB0344 collected 7-8' bgs. Water bearing zone encountered @ 8.0' bgs.
8	642		SP		SAND and GRAVEL; wet; 10YR4/3 Brown.			
					SILT; some clay; trace medium sand; trace fine gravel, subangular to subrounded; dry; very dense; non-plastic; 10YR3/1 Very Dark Gray.		8-10'	
9	641		ML				100%	
						LUSB0345	2.0'	LUSB0345 collected 9-10' bgs.
10	640				Bottom of Boring at 10.0 ft bgs			
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA02-SB0018

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 654124.1638
Easting Coord.	: 1698024.5866 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.01	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		ML		SILT; trace clay; trace gravel to 20mm; roots; dry; loose; non-plastic; 10YR3/3 Dark Brown.			
			ML					
1	649		CL		SILT; trace fine sand; dry; very loose; non-plastic; 10YR6/4 Light Yellowish Brown.	LUSB0346	0-4' 75%	LUSB0346 collected 1-2' bgs.
2	648		CL		CLAY; trace silt; trace fine sand; dry; medium stiff; slightly plastic; 10YR4/2 Dark Grayish Brown.		3.0	
3	647		CL		CLAY; some fine sand; trace silt; trace gravel to 10mm; dry; stiff; medium plastic; 10YR5/1 Gray mottled with 10YR4/4 Dark Yellowish Brown.	LUSB0347		LUSB0347 collected 3-4' bgs.
4	646		CL					
5	645		CL			LUSB0348	4-8' 100%	LUSB0348 collected 5-6' bgs. Duplicate sample collected.
6	644		CL				4.0'	
7	643		CL		same as above except very stiff; slightly plastic; 10YR4/3 Brown.	LUSB0349		LUSB0349 collected 7-8' bgs.
8	642		CL				8-10' 100%	
9	641		ML		SILT; trace fine sand; trace gravel to 8mm; dry; dense; non-plastic; 10YR4/3 Brown.	LUSB0350	2.0'	LUSB0350 collected 9-10' bgs.
			ML					
10	640				same as above except some fine sand.			
					Bottom of Boring at 10.0 ft bgs			
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA02-SB0019

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 653906.2122
Easting Coord.	: 1697012.3528 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; trace fine sand; trace gravel; roots; dry; loose; 10YR4/2 Dark Grayish Brown.			
			CL		CLAY; trace silt; trace fine sand; dry; stiff; slightly plastic; 10YR3/2 Very Dark Grayish Brown.		0-4'	
1	650					LUSB0351	100%	LUSB0351 collected 1-2' bgs.
2	649		ML		SILT; trace fine sand; trace gravel to 10mm, subangular; 10YR4/2 Dark Grayish Brown.		4.0'	
3	648							
4	647		CL		CLAY; trace fine sand; trace silt; trace gravel to 8mm; dry; stiff; plastic; 10YR5/1 Gray mottled with 10YR4/4 Dark Yellowish Brown.	LUSB0352		LUSB0352 collected 3-4' bgs.
5	646						4-8'	
						LUSB0353	100%	LUSB0353 collected 5-6' bgs. Rinsate ER0037 equipment used.
6	645						4.0'	
7	644		ML		SILT; trace clay; trace fine to medium sand; trace gravel to 15mm, subrounded; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.			
						LUSB0354		LUSB0354 collected 7-8' bgs.
8	643				Bottom of Boring at 8.0 ft bgs			
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Soil Boring IA02-SB0020

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 653937.3512
Easting Coord.	: 1696964.4687 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.31	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650		ML		SILT; trace fine sand; trace gravel; roots; dry; loose; 10YR4/2 Dark Grayish Brown.			
			CL		CLAY; trace silt; trace fine sand; dry; stiff; slightly plastic; 10YR3/2 Very Dark Grayish Brown.		0-4'	
1	649					LUSB0356	100%	LUSB0356 collected 1-2' bgs.
2	648		ML		SILT; trace fine sand; trace gravel to 10mm, subangular; 10YR4/2 Dark Grayish Brown.		4.0'	
3	647				CLAY; trace fine sand; trace silt; trace gravel to 8mm; dry; stiff; plastic; 10YR5/1 Gray mottled with 10YR4/4 Dark Yellowish Brown.	LUSB0357		LUSB0357 collected 3-4' bgs.
4	646		CL					
5	645					LUSB0358	4-8' 100% 4.0'	LUSB0353 collected 5-6' bgs. Duplicate sample collected.
6	644				SILT; trace clay; trace fine to medium sand; trace gravel to 15mm, subrounded; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.			
7	643		ML			LUSB0359		LUSB0359 collected 7-8' bgs.
8	642				Bottom of Boring at 8.0 ft bgs			
9	641							
10	640							
11	639							
12	638							
13	637							
14	636							
15	635							
16	634							
17	633							
18	632							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631							
20								

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Soil Boring IA02-SB0021

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/06/98
End Date	: 07/06/98
Northing Coord.	: 653977.3228
Easting Coord.	: 1697023.4199 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.80	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; some medium sand; roots; dry; loose; 10YR4/3 Brown.			
1	650		ML		same as above except grades into some clay.		0-4'	
2	649		CL		CLAY; some silt; trace fine sand; dry; very stiff; slightly plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0361	90% 3.6'	LUSB0361 collected 1-2' bgs. Rinsate ER0038 equipment used.
3	648		CL		CLAY; some fine sand; trace fine gravel, subrounded; dry; very soft; very plastic; 10YR4/1 Dark Gray mottled with 10YR4/6 Dark Yellowish Brown.			
4	647					LUSB0362		LUSB0362 collected 3-4' bgs.
5	646						4-8'	
6	645					LUSB0363	95% 3.8'	LUSB0363 collected 5-6' bgs.
7	644		CL		CLAY; trace fine sand; dry; soft; plastic; 10YR3/2 Very Dark Grayish Brown.			
8	643					LUSB0364		LUSB0364 collected 7-8' bgs. Duplicate sample collected.
					Bottom of Boring at 8.0 ft bgs			
9	642							
10	641							
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20	631							

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Soil Boring IA02-SB0022

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/06/98
End Date	: 07/06/98
Northing Coord.	: 653950.3453
Easting Coord.	: 1697162.3729 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.64	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; some fine to medium sand; roots; dry; loose; non-plastic; 10YR5/2 Grayish Brown.			
1	651		CL		CLAY; some silt; trace fine to coarse sand; dry; medium stiff; slightly plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0366	0-4' 90% 3.6'	LUSB0366 collected 1-2' bgs.
2	650							
3	649		CL		CLAY; some fine to medium sand; trace silt; dry; medium stiff; medium plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0367		LUSB0367 collected 3-4' bgs.
4	648							
5	647		CL		CLAY; wet; very soft; medium plastic; 10YR2/1 Black.			
			CL		CLAY; some silt; some fine to medium sand; dry; soft; non-plastic; 5Y4/4 Olive and 5Y4/2 Olive Gray.	LUSB0368	4-8' 95% 3.8'	LUSB0368 collected 5-6' bgs.
6	646		CL		CLAY; some fine to medium sand; some silt; dry; hard; non-plastic; 10YR4/4 Dark Yellowish Brown mottled with 10YR4/1 Gray.			
7	645		ML		SILT; some fine sand; trace clay; dry; dense; non-plastic; 10YR4/2 Dark Grayish Brown.	LUSB0369		LUSB0369 collected 7-8' bgs.
8	644							
9	643						8-10' 100% 2.0'	
	642					LUSB0370		LUSB0370 collected 9-10' bgs.
10					Bottom of Boring at 10.0 ft bgs			
11	641							
12	640							
13	639							
14	638							
15	637							
16	636							
17	635							
18	634							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	633							
20	632							

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Soil Boring IA02-SB0023

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/06/98
End Date	: 07/06/98
Northing Coord.	: 653875.3792
Easting Coord.	: 1697294.5335 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 652.20	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	652		ML		SILT; some fine to coarse sand; trace clay; roots; dry; loose; non-plastic; 10YR5/2 Grayish Brown.			
1	651		ML		SILT; some fine sand; trace gravel to 15mm; dry; very dense; non-plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0371	0-4' 95% 3.8'	LUSB0371 collected 1-2' bgs.
2	650							
3	649					LUSB0372		LUSB0372 collected 3-4' bgs.
4	648		CL		CLAY; some fine sand; trace gravel to 40mm, subrounded; dry; very stiff; slightly plastic; 10YR5/6 Yellowish Brown and 10YR4/4 Dark Yellowish Brown.			
5	647					LUSB0373	4-8' 100% 4.0'	LUSB0373 collected 5-6' bgs.
6	646							
7	645					LUSB0374		LUSB0374 collected 7-8' bgs.
8	644		ML		SILT; some fine to coarse sand; trace clay; trace gravel to 20mm, subrounded; dry; dense; non-plastic; 10YR4/3 Brown.		8-10' 100% 2.0'	
9	643					LUSB0375		LUSB0375 collected 9-10' bgs.
10	642				Bottom of Boring at 10.0 ft bgs			
11	641							
12	640							
13	639							
14	638							
15	637							
16	636							
17	635							
18	634							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	633							
20								

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Soil Boring IA02-SB0024

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/06/98
End Date	: 07/06/98
Northing Coord.	: 654020.0597
Easting Coord.	: 1697324.8060 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.75	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
1	651		ML		SILT; some fine to coarse sand; trace clay; roots; dry; loose; non-plastic; 10YR4/3 Brown.		0-4'	
2	650		ML		SILT; some fine sand; trace clay; dry; loose; non-plastic; 10YR5/1 Gray and 2.5Y4/3 Olive Brown.	LUSB0376	50% 2.0'	LUSB0376 collected 1-2' bgs.
3	649							
4	648					LUSB0377		LUSB0377 collected 3-4' bgs. Rinsate equipment used.
5	647		ML		same as above except wet.		4-8'	
6	646		ML		same as above except moist.	LUSB0378	100% 4.0'	LUSB0378 collected 5-6' bgs.
7	645		ML		SILT; trace clay; trace fine gravel; trace fine to medium sand; dry; dense; non-plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0379		LUSB0379 collected 7-8' bgs. Duplicate sample collected.
8	644						8-10'	
9	643						100%	
10	642					LUSB0380	2.0'	LUSB0380 collected 9-10' bgs.
11	641				Bottom of Boring at 10.0 ft bgs			
12	640							
13	639							
14	638							
15	637							
16	636							
17	635							
18	634							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	633							
20	632							

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Remedial Investigation
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Soil Boring IA02-SB0025

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 653951.4985
Easting Coord.	: 1697152.1803 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.00	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; some fine sand; trace clay; trace gravel to 8mm, subangular; roots; dry; loose; non-plastic; 10YR5/3 Brown.			
1	650		ML		SILT; trace fine sand; trace gravel to 8mm; dry; dense; non-plastic; 10YR3/2 Very Dark Grayish Brown.		0-4' 93% 3.7'	
2	649							
3	648		CL		CLAY; trace silt; trace fine sand; trace fine gravel, subangular to subrounded; dry; stiff; slightly plastic; 10YR4/6 Dark Yellowish Brown mottled with 10YR4/1 Dark Gray.			
4	647							
			CL		same as above except soft.			
5	646		ML		SILT; trace fine gravel; trace fine to medium sand; dry; very dense; non-plastic; 10YR4/3 Brown.	LUSB1040	4-8' 100% 4.0'	LUSB1040 collected 5-6' bgs.
6	645							
7	644					LUSB1041		LUSB1041 collected 7-8' bgs.
8	643				Bottom of Boring at 8.0 ft bgs			
9	642							
10	641							2nd boring needed to get to the required depth.
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

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Remedial Investigation
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Soil Boring IA02-SB0026

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Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 654026.0668
Easting Coord.	: 1697325.3499 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 651.25	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651		ML		SILT; trace fine sand; trace gravel; roots; dry; loose; non-plastic; 10YR5/2 Grayish Brown.			
			FL		same as above except some gravel to 20mm, subangular. Fill.		0-4' 45% 1.8'	
1	650		ML		SILT; trace clay; trace fine gravel; trace fine to medium sand; dry; dense; non-plastic; 10YR3/2 Very Dark Grayish Brown.			
2	649							
3	648							
4	647							
5	646						4-8' 50% 2.0'	
6	645							
7	644					LUSB1042		LUSB1042 collected 7-8' bgs.
8	643						8-10' 100% 2.0'	
9	642					LUSB1043		LUSB1043 collected 9-10' bgs.
10	641				Bottom of Boring at 10.0 ft bgs			
11	640							
12	639							
13	638							
14	637							
15	636							
16	635							
17	634							
18	633							All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632							
20								

IA03:
Boring Logs

Remedial Investigation
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Soil Boring IA03-SB0001

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654339.0010
Easting Coord.	: 1697614.4556 OH83/N ft.
Total Depth of Boring	: 11.3 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 649.63	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available. Augered through 0-1' interval.			
	649						
1		CL		CLAY; some silt; trace gravel; damp; slightly plastic; 10YR4/3 brown with 10YR5/8 yellowish brown and 10YR5/1 Gray mottling.	LUSB0381	1-3' 80% 1.6	LUSB0381 Collected 1-2' bgs. Split Spoon 1-3' Blow Counts 5/8/8/13
	648						
2							
	647						
3				same as above except damp; more plastic.	LUSB0412	3-5' 90% 1.8'	LUSB0412 Collected 3-4' bgs. Split Spoon 3-5' Blow Counts 3/9/12/13
	646						
4							
	645						
5					LUSB0413	5-7' 75% 1.5'	LUSB0413 Collected 5-6' bgs. Split Spoon 5-7' Blow Counts 2/6/8/12
	644						
6							
	643						
7				same as above except trace pebbles, rounded; stiff; non-plastic.	LUSB0414	7-9' 100% 2.0'	LUSB0414 Collected 7-8' bgs. Split Spoon 7-9' Blow Counts 6/19/35/47
	642						
8							
	641						
9					LUSB1021	9-10.5' 100% 1.5'	LUSB1021 Collected 9-10' bgs. Split Spoon 9-10.5' Blow Counts 9/28/50
	640						
10							
	639	CL		Shelby tube collected 10.5-11.3' bgs. Lean CLAY with Sand. Geotechnical Sample LUSB1048.	Shelby Tube		Shelby tube collected 10.5-11.3' bgs
11							
	638			Bottom of Boring at 11.3 ft bgs			
12						Total Recovery 8.4'/9.5' 88%	Rad bkg Beta 325
	637						
13							
	636						
14							
	635						
15							
	634						
16							
	633						
17							
	632						
18							All colors from Munsell Soil Color Chart 1992 Revised Edition
	631						
19							
	630						
20							

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Remedial Investigation
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Soil Boring IA03-SB0002

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/8/98
End Date	: 07/8/98
Northing Coord.	: 654309.1090
Easting Coord.	: 1697974.6577 OH83/N ft.
Total Depth of Boring	: 18.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: 18.0 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.03	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650						
		ML		SILT; trace (10-20%) fine to medium sand; roots; wet; soft; 10YR4/3 Brown.			
1	649						
				Below 1.5' bgs shredded wood and metallic debris embedded within soil/fill. Reddish brown mottling.	LUSB0416		LUSB0416 Collected 1-2' bgs.
2	648					0-5' 100% 5.0'	
3	647	SP		SAND; stained black with petroleum smell.			
					LUSB0382		LUSB0382 Collected 3-4' bgs.
		ML		SILT; metallic debris; moist; soft; 10YR5/1 gray.			
4	646						
		ML		SILT; trace medium to coarse sand; little clay; slightly moist; hard; 10YR4/4 dark yellowish brown.			
5	645						
					LUSB0417		LUSB0417 Collected 5-6' bgs.
6	644						
7	643						
					LUSB0418		LUSB0418 Collected 7-8' bgs.
8	642						
9	641						
					LUSB0419		LUSB0419 Collected 9-10' bgs.
10	640						
11	639					5-18'	
		CL		CLAY; trace (15-25%) gravel to 3" and sand; moist; stiff; low plasticity; 2.5Y4/1 dark gray.	LUSB0420	100% 13.0'	LUSB0420 Collected 11-12' bgs.
12	638						
13	637				LUSB0421		LUSB0421 Collected 13-14' bgs.
14	636						
15	635						
		ML		SILT; some sand; trace (15-20%) gravel; slightly moist; stiff; 2.5Y4/1 dark gray.	LUSB0422		LUSB0422 Collected 15-16' bgs.
16	634						
17	633					Total Recovery 18'/18' 100%	
				Bedrock encountered at 18.0' bgs. Wet near bedrock contact.	LUSB0423		LUSB0423 Collected 17-18' bgs.
18	632			Bottom of Boring at 18.0 ft bgs			
19	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
20							

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Buffalo, NY 14207-3199

Soil Boring IA03-SB0003

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/8/98
End Date	: 07/8/98
Northing Coord.	: 654248.3645
Easting Coord.	: 1698083.4131 OH83/N ft.
Total Depth of Boring	: 18.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: 18.0 feet
Depth Drilled Into Rock	: <0.1 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.13	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; trace (10-20%) sand; roots; moist; soft; 10YR4/3 brown. 2" Thick layer of Dark Gray/Black sand @ 0.5'.			
1	649	CL		CLAY; some silt; trace fine to coarse sand; firm; medium plasticity; 10YR4/3 brown.			
		SP		SAND; moist; loose; black and gray.	LUSB0383		LUSB0383 Collected 1-2' bgs
2	648	CL		CLAY; some silt; trace fine to coarse sand; firm; medium plasticity 10YR4/3 brown.		0-5' 80% 4.0'	
3	647				LUSB0426		LUSB0426 Collected 3-4' bgs.
4	646						
5	645				LUSB0427		LUSB0427 Collected 5-6' bgs.
6	644						
7	643				LUSB0428		LUSB0428 Collected 7-8' bgs.
8	642	ML		SILT; some clay; trace (15-25%) sand and gravel; moist; stiff; 10YR4/1 dark gray.			
9	641				LUSB0429		LUSB0429 Collected 9-10' bgs.
10	640						
11	639				LUSB0430	5-18' 100% 13.0'	LUSB0430 Collected 11-12' bgs.
12	638						
13	637				LUSB0431		LUSB0431 Collected 13-14' bgs.
14	636						
15	635				LUSB0432		LUSB0432 Collected 15-16' bgs.
16	634						
17	633				LUSB0433	Total Recovery 17'/18' 94%	LUSB0433 Collected 17-18' bgs. Rad bkg Beta 312 alpha 6
18	632			Bedrock encountered at 18.0' bgs. Bottom of Boring at 18.0 ft bgs			All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA03-SB0004

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/27/98
End Date	: 07/27/98
Northing Coord.	: 654356.0037
Easting Coord.	: 1697990.2759 OH83/N ft.
Total Depth of Boring	: 15.7 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.89	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available. Augered through 0-1' interval.			
1	650	CL		CLAY; some silt; trace fine gravel; roots; damp; firm; slightly plastic; 10YR3/2 very dark grayish brown.	LUSB0384	1-3' 100% 2.0'	LUSB0384 Collected 1-2' bgs. Rinsate equipment used. Split Spoon 1-3' Blow Counts Not Recorded Rad Beta 327 alpha 8
2	649	CL		same as above except trace small gravel; 10YR5/8 yellowish brown and 10YR5/1 gray mottle.			
3	648			No description available. Augered through 3-6' interval.			
4	647						
5	646						
6	645	ML		SILT; some clay; trace fine gravel; dry; stiff; non-plastic; 10YR4/3 brown with 10YR5/1 gray.	LUSB0385	6-8' 50% 1.0'	LUSB0385 Collected 6-7' bgs. Split Spoon 6-8' Blow Counts Not Recorded Rad Beta 382 alpha 7
7	644			No description available. Augered through 7-12' interval.			
8	643						
9	642						
10	641						
11	640						
12	639	ML		SILT; some sand; gravel; damp; firm; non-plastic; 10YR4/1 dark gray.	LUSB0386	12-14' 100% 2.0'	LUSB0386 and duplicate LUSB9040 Collected 12-13.5' bgs. Split Spoon 12-14' Blow Counts Not Recorded Rad Beta 319 alpha 8
13	638						
14	637			same as above except moist; abundant limestone fragments.	LUSB0387	14-15' 100% 1.0'	LUSB0387 Collected 14-15' bgs. Split Spoon 9-10.5' Blow Counts Not Recorded Rad Beta 296 alpha 7
15	636	SC		Shelby tube collected 15-15.7' bgs. Clayey SAND. Geotechnical Sample LUSB1044.	Shelby Tube		Shelby tube collected 15-15.7' bgs
16	635			Bottom of Boring at 15.7 ft bgs		Total Recovery 6'/7' 86%	Rad bkg Beta 257 alpha 4
17	634						
18	633						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632						
20	631						

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Soil Boring IA03-SB0005

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/27/98
End Date	: 07/27/98
Northing Coord.	: 654315.7489
Easting Coord.	: 1697954.0818 OH83/N ft.
Total Depth of Boring	: 14.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.21	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650			No description available. Augered through 0-1' interval.			
1	649	CL		CLAY; some silt; trace small gravel; dry; stiff; slightly plastic; 10YR5/8 yellowish brown.	LUSB0388	1-3' 100% 2.0'	LUSB0388 Collected 1-2' bgs. Split Spoon 1-3' bgs Blow Counts Not Recorded Rad Beta 314 alpha 7
2	648						
3	647			No description available. Augered through 3-6' interval.			
4	646						
5	645						
6	644	CL		CLAY; some silt; trace fine gravel; dry; hard; non-plastic; 10YR4/3 brown with 10YR5/1 gray.	LUSB0389	6-7' 100% 1.0'	LUSB0389 Collected 6-7' bgs. Split Spoon 6-7' bgs Blow Counts Not Recorded Rad Beta 353 alpha 10
7	643			No description available. Augered through 7-12' interval.			
8	642						
9	641						
10	640						
11	639						
12	638	CL		CLAY; some silt; some sand and gravel; damp; stiff; 10YR4/1 dark gray.	LUSB0390	12-13' 100% 1.0'	LUSB0340 Collected 12-13' bgs. Split Spoon 12-13' bgs Blow Counts Not Recorded Rad Beta 299 alpha 7
13	637			No description available. Augered through 13-14' interval.			
14	636			No recovery in split spoon from 14-14.5' interval no samples collected from this interval.		14-15' 0% 0.0'	Split Spoon 14-15' bgs
15	635			Bottom of Boring at 14.5 ft bgs			
16	634						Rad bkg Beta 257 alpha 4
17	633					Total Recovery 4'/5' 80%	
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA03-SB0006

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: 654245.3628
Easting Coord.	: 1698055.5183 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.12	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650			No description available. Augered through 0-1' interval.			
1	649	CL		CLAY; some silt; trace gravel; damp; stiff; medium plastic; 10YR5/8 yellowish brown and 10YR5/1 gray. Thin layer of coal(?) at 1' (about 0.1' thick).	LUSB0392	1-3' 75% 1.5'	LUSB0392 Collected 1-2' bgs. Split Spoon 1-3' bgs Blow Counts Not Recorded
2	648						
3	647			No description available. Augered through 3-6' interval.			
4	646						
5	645						
6	644	CL		CLAY; some silt; trace fine gravel; dry; hard; non-plastic; 10YR4/3 brown.	LUSB0393	6-7' 80% 0.8'	LUSB0393 Collected 6-7' bgs. Split Spoon 6-7' bgs Blow Counts Not Recorded
7	643			No description available. Augered through 6.8-12' interval.			
8	642						
9	641						
10	640						
11	639						
12	638	ML		SILT; some sand; limestone fragments and gravel; trace clay; damp to moist; firm; non-plastic; 10YR4/1 dark gray.	LUSB0394	12-14' 75% 1.5'	LUSB0394 Collected 12-13' bgs. Split Spoon 12-13' bgs Blow Counts Not Recorded
13	637						
14	636	ML		same as above except more sand and gravel; damp.	LUSB0395	14-15' 100% 1.0'	LUSB0395 Collected 14-15' bgs. Split Spoon 14-15' bgs Blow Counts Not Recorded
15	635			Bottom of Boring at 15.0 ft bgs			
16	634					Total Recovery 4.8'/6' 80%	
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA03-SB0007

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: 654261.8891
Easting Coord.	: 1698130.7819 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 651.12	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	651	GC		Gravel and black granular material (coal dust?); dry. Augered through 0-3' interval.			
1	650						
2	649						
3	648	CL		CLAY; some silt; trace gravel; damp; medium plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0396	3-5' 100% 2.0'	LUSB0396 Collected 3-4' bgs. Split Spoon 1-3' Blow Counts Not Recorded
4	647						
5	646			No description available. Augered through 5-6' interval.			
6	645	CL		CLAY; some silt; trace gravel; damp; stiff; slightly plastic; 10YR4/3 brown with 10YR5/1 gray.	LUSB0397	6-8' 100% 2.0'	LUSB0397 Collected 6-7' bgs. Split Spoon 6-7' Blow Counts Not Recorded
7	644						
8	643			No description available. Augered through 8-12' interval.			
9	642						
10	641						
11	640						
12	639	CL		CLAY; some silt; trace gravel; damp; stiff; 10YR4/3 brown with 10YR5/1 gray.	LUSB0398	12-13.5 100% 1.5'	LUSB0398 Collected 12-13.5' bgs. Split Spoon 12-13' Blow Counts Not Recorded
13	638	ML		SILT; some sand; some clay; limestone fragments and subangular gravel; damp; firm; non-plastic; 10YR4/1 dark gray.			
14	637				LUSB0399	14-16' 100% 2.0'	LUSB0399 Collected 14-15' bgs. Split Spoon 14-15' Blow Counts Not Recorded
15	636						
16	635			Bottom of Boring at 16.0 ft bgs		Total Recovery 7.5'/7.5' 100%	
17	634						
18	633						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632						
20							

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Soil Boring IA02-SB0008

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 06/28/98
End Date	: 06/28/98
Northing Coord.	: 654279.9624
Easting Coord.	: 1697646.5603 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 649.60

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		No description available. Augered through 0-1' interval.			
1	CL	CLAY; some silt; some medium sand and gravel; trace brick fragments; damp; firm; medium plastic; 10YR3/2 very dark grayish brown.	LUSB0400	1-3' 50% 1.0'	LUSB0400 Collected 1-2' bgs. Split Spoon 1-3' Blow Counts 4/7/7/9
2		No description available. No recovery for the 2-3' interval.			
3	CL	CLAY; some silt; trace small gravel; damp; medium plastic; 10YR4/1 dark gray and 10YR4/4 dark yellowish brown.	LUSB0401	3-5' 50% 1.0'	LUSB0401 Collected 3-4' bgs. Split Spoon 3-5' Blow Counts 3/8/8/10
4		No description available. Augered through 4-6' interval.			
5					
6	CL	CLAY; some silt; trace small gravel; damp; very stiff; 10YR4/1 dark gray and 10YR4/4 dark yellowish brown.	LUSB0402	6-8' 100% 2.0'	LUSB0402 Collected 6-7' bgs. Split Spoon 6-8' Blow Counts 7/20/34/50
7					
8		No description available. Augered through 8-9' interval.			
9	CL	CLAY; some silt; trace small gravel; trace sandstone fragments; damp; very stiff; 10YR4/1 dark gray and 10YR4/4 dark yellowish brown.	LUSB0403	9-10' 100% 1.0'	LUSB0403 Collected 9-10' bgs. Split Spoon 9-10' Blow Counts 7/17
10		Bottom of Boring at 10.0 ft bgs			
11					
12				Total Recovery 5'/7' 71%	Rad bkg Beta 393
13					
14					
15					
16					
17					
18					All colors from Munsell Soil Color Chart 1992 Revised Edition
19					
20					

Remedial Investigation
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Soil Boring IA03-SB0009

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 06/28/98
End Date	: 06/28/98
Northing Coord.	: 654331.3123
Easting Coord.	: 1697798.9189 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 648.31	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648			No description available. Augered through 0-1' interval.			
1	647	CL		CLAY; some silt; trace gravel; damp; medium plastic; 10YR4/4 dark yellowish brown and 10YR5/1 gray.	LUSB0404	1-3' 50% 1.0'	LUSB0404 Collected 1-2' bgs. Split Spoon 1-3' bgs Blow Counts 6/15/12/15
2	646						
3	645			more silty; softer.	LUSB0405	3-5' 75% 1.5'	LUSB0405 Collected 3-4' bgs. Split Spoon 3-5' bgs Blow Counts 3/7/10/13
4	644						
5	643						
6	642			very stiff.	LUSB0406	6-8' 100% 2.0'	LUSB0406 Collected 6-7' bgs. Split Spoon 6-8' bgs Blow Counts 5/17/30/36
7	641						
8	640						
9	639				LUSB0407	9-10' 100% 1.0'	LUSB0407 Collected 9-10' bgs. Split Spoon 9-10' bgs Blow Counts 2/10
10	638			Bottom of Boring at 10.0 ft bgs			
11	637						
12	636					Total Recovery 5.5'/7' 79%	Rad bkg Beta 374
13	635						
14	634						
15	633						
16	632						
17	631						
18	630						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	629						
20							

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Soil Boring IA03-SB0010

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 06/29/98
End Date	: 06/29/98
Northing Coord.	: 654162.5343
Easting Coord.	: 1698055.1776 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 650.71	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available. Augered through 0-1' interval.			
1	650	CL		CLAY; some silt; trace gravel and concrete fragments; damp; stiff; 10YR5/1 gray and 10YR5/4 yellowish brown.	LUSB0408	1-3' 25% 0.5'	LUSB0408 Collected 1-2' bgs. Split Spoon 1-3' bgs Blow Counts 8/13/14/12
2	649						
3	648			come coarse sand and shale fragments, no concrete; moist; softer; more plastic.	LUSB0409	3-5' 60% 1.2'	LUSB0409 Collected 3-4' bgs. Split Spoon 3-5' bgs Blow Counts 4/8/8/12
4	647						
5	646						
6	645			trace gravel <2cm; more silty and stiff; dry; non-plastic.	LUSB0410	6-8' 85% 1.7'	LUSB0410 Collected 6-7' bgs. Split Spoon 6-8' bgs Blow Counts 5/12/22/25
7	644						
8	643						
9	642					9-10' 100% 1.0'	Split Spoon 9-10' bgs Blow Counts 5/24
10	641			Bottom of Boring at 10.0 ft bgs			
11	640						
12	639					Total Recovery 4.4'/7' 63%	Rad bkg Beta 346
13	638						
14	637						
15	636						
16	635						
17	634						
18	633						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632						
20	631						

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Soil Boring IA03-SB0011

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 654173.8975
Easting Coord.	: 1697664.9140 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.98	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML, GM, FL		SILT; some fine sand; trace gravel to 20mm, subangular; roots; dry; loose; 10YR4/2 dark grayish brown.			
1	649	ML		GRAVEL; some silt; trace fine to medium sand, subangular; dry; dense; non-plastic; 10YR6/2 light brownish gray.	LUSB0446	0-4' 85% 3.4'	LUSB0446 collected 1-2' bgs.
2	648			Ash (?); fill material; 10YR3/1 very dark gray.			
				SILT; trace fine sand; dry; dense; non-plastic; 10YR3/2 very dark grayish brown.			
3	647	CL		CLAY; trace silt; trace medium sand; dry; very stiff; non-plastic; 10YR5/6 yellowish brown with 10YR5/1 gray mottling.	LUSB0447		LUSB0447 collected 3-4' bgs.
4	646						
5	645	ML		SILT; some fine to coarse sand; trace gravel to 20mm, subangular; dry; very dense; non-plastic; 7.5YR4/4 brown.	LUSB0448	4-8' 100% 4.0'	LUSB0448 collected 5-6' bgs.
6	644						
7	643				LUSB0449		LUSB0449 and duplicate and split samples collected 7-8' bgs.
8	642					8-10' 100% 4.0'	
9	641	ML		SILT; trace clay; trace fine to medium sand; trace gravel to 15mm, subangular to subrounded; dry; very dense; non-plastic; 10YR4/1 dark gray.	LUSB0450		LUSB0450 collected 9-10' bgs.
10	640			Bottom of Boring at 10.0 ft bgs			
11	639					Total Recovery 9.4'/10' 94%	
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20	630						

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Soil Boring IA03-SB0012

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/25/98
End Date	: 07/25/98
Northing Coord.	: 654230.4161
Easting Coord.	: 1698104.8912 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.45	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; trace fine sand; dry; loose; slightly plastic; 10YR3/2 very dark grayish brown.			
1	649	ML		SILT; trace fine sand; dry; medium dense; non-plastic; 10YR4/2 dark grayish brown.	LUSB0456	0-4' 95% 3.8'	LUSB0456 collected 1-2' bgs.
2	648	ML		SILT; trace fine sand; trace clay; dry; medium dense; slightly plastic; 10YR3/1 very dark gray.			
3	647	CL		CLAY; trace silt; trace fine to medium sand; trace fine gravel to 10mm, subrounded; dry; stiff; medium plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.	LUSB0457		LUSB0457 collected 3-3.8' bgs.
4	646						
5	645				LUSB0458	4-8' 100% 4.0'	LUSB0458 and duplicate sample collected 5-6' bgs.
6	644	ML		SILT; some fine to coarse sand; dry; very dense; non-plastic; 10YR4/1 dark gray.			
7	643			trace gravel to 50mm, subangular with depth	LUSB0459		LUSB0459 collected 7-8' bgs.
8	642						
9	641					8-11' 100% 4.0'	No sample collected because liner stuck in core barrel.
10	640						
11	639				LUSB0460		LUSB0460 collected 11-12' bgs.
12	638					11-14' 100% 4.0'	
13	637				LUSB0461		LUSB0461 collected 13-14' bgs.
14	636					14-16' 100% 3.5'	
15	635				LUSB0462		LUSB0462 collected 15-16' bgs.
16	634			Bottom of Boring at 16.0 ft bgs		Total Recovery 15.8'/16' 99%	
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA03-SB0013

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/26/98
End Date	: 07/26/98
Northing Coord.	: 654258.9699
Easting Coord.	: 1697965.5019 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.12	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; some fine to medium sand; roots; dry; very loose; non-plastic; 10YR2/2 very dark brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649	ML		SILT; trace fine sand; dry; dense; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0466	0-4' 75% 3.0'	LUSB0466 collected 1-2' bgs.
2	648	CL		CLAY; trace fine to medium sand; dry; medium stiff; medium plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.			
3	647				LUSB0467		LUSB0467 collected 3-3.8' bgs.
4	646						
5	645				LUSB0468	4-8' 100% 4.0'	LUSB0468 collected 5-6' bgs.
6	644						
7	643	ML		SILT; trace fine sand; trace gravel to 10mm; dry; dense; non-plastic; 10YR3/3 dark brown.	LUSB0469		LUSB0469 collected 7-8' bgs.
8	642						
9	641				LUSB0470	8-11' 100% 3.0'	LUSB0470 collected 9-10' bgs.
10	640	ML		SILT; some fine sand; trace clay; dry; dense; non-plastic; 10YR4/1 dark gray.			
11	639			trace gravel to 40mm, subrounded to subangular increasing with depth.	LUSB0471		LUSB0471 and duplicate sample collected 11-12' bgs.
12	638			percentage of sand (medium to very coarse) increases with depth.		11-14' 100% 3.0'	
13	637				LUSB0472		LUSB0472 collected 13-14' bgs.
14	636					14-16' 100% 2.0'	
15	635			moist 14.8-15.2' bgs	LUSB0473		LUSB0473 collected 15-16' bgs.
16	634			Bottom of Boring at 16.0 ft bgs			
17	633						
18	632						
19	631						
20							

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Soil Boring IA03-SB0014

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/26/98
End Date	: 07/26/98
Northing Coord.	: 654316.4571
Easting Coord.	: 1698046.6924 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2'' Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.81	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace fine to medium sand; trace gravel to 15mm, subrounded; dry; loose; non-plastic; 10YR3/4 dark yellowish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	650	CL		CLAY; trace fine to medium sand; dry; stiff; medium plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.	LUSB0476	0-4' 100% 4.0'	LUSB0476 collected 1-2' bgs.
2	649						
3	648						
4	647				LUSB0477		LUSB0477 collected 3-3.8' bgs.
5	646	ML		SILT; trace fine to medium sand; trace fine gravel to 10mm, subrounded to subangular; dry; dense; non-plastic; 10YR4/3 brown.			
6	645				LUSB0478	4-8' 100% 4.0'	LUSB0478 collected 5-6' bgs.
7	644						
8	643				LUSB0479		LUSB0479 collected 7-8' bgs.
9	642					8-11'	
10	641				LUSB0480	100% 3.0'	LUSB0480 and duplicate LUSB9050 collected 9-10' bgs.
11	640	ML		SILT; some fine to coarse sand; dry; very dense; non-plastic; 10YR4/1 dark gray.			
12	639				LUSB0481		LUSB0481 collected 11-12' bgs.
13	638					11-14' 100% 3.0'	
14	637				LUSB0482		LUSB0482 collected 13-14' bgs.
15	636					14-16' 100%	
16	635	SM		SAND, medium; trace silt; trace gravel to 15mm, subrounded; moist; loose; non-plastic; 10YR4/1 dark gray.	LUSB0483	2.0'	LUSB0483 collected 15-16' bgs.
17	634			Bottom of Boring at 16.0 ft bgs			
18	633						
19	632						
20	631						

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Soil Boring IA03-SB0015

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/26/98
End Date	: 07/26/98
Northing Coord.	: 654345.3628
Easting Coord.	: 1697909.7294 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.37	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	CL		CLAY; trace fine sand; trace gravel to 10mm, subangular; dry; medium stiff; plastic; iron staining; 10YR4/4 dark yellowish brown with 10YR5/8 yellowish brown and 10YR3/1 very dark gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649				LUSB0484	0-4' 75% 3.0	LUSB0484 collected 1-2' bgs.
2	648						
3	647	SC		SAND, medium; moist; loose; non-plastic; 10YR4/4 dark yellowish brown with 10YR5/8 yellowish brown and 10YR3/1 very dark gray.	LUSB0485		LUSB0485 collected 3-3.8' bgs.
4	646	CL		CLAY; dry; medium stiff; plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.			
5	645				LUSB0486	4-8' 100% 4.0'	LUSB0486 collected 5-6' bgs.
6	644						
7	643	ML		SILT; trace fine to medium sand; trace fine gravel to 10mm, subrounded to subangular; dry; dense; non-plastic; 10YR4/3 brown.	LUSB0487		LUSB0487 collected 7-8' bgs.
8	642					8-10' 100% 2.0'	
9	641				LUSB0488		LUSB0488 collected 9-10' bgs.
10	640	ML		SILT; some fine to coarse sand; trace gravel to 20mm, subrounded to subangular; dry; very dense; non-plastic; 10YR4/1 dark gray.		10-12' 100% 2.0'	
11	639				LUSB0489		LUSB0489 collected 11-12' bgs.
12	638						
13	637				LUSB0490	12-16' 100% 4.0'	LUSB0490 collected 13-14' bgs.
14	636						
15	635				LUSB0452		LUSB0452 collected 15-16' bgs.
16	634			Bottom of Boring at 16.0 ft bgs			
17	633						
18	632						
19	631						
20							

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Soil Boring IA03-SB0016

Investigative Area 03	: Lagoon D Including Railroad
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654374.5928
Easting Coord.	: 1697620.4945 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.51	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649	ML ML GC		SILT; some fine sand; trace clay; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1				same as above except 10YR4/3 brown.			
	648	CL		GRAVEL and COBBLES (Road Bed) Fill.	LUSB0491	0-4'	LUSB0491 collected 1-2' bgs.
2				CLAY; some medium sand; trace silt; trace gravel to 10mm, subangular; dry; medium stiff; slightly plastic; 10YR3/1 very dark gray.		100%	
	647					4.0'	
3				CLAY; trace silt; trace medium sand; trace fine gravel; dry; stiff; medium plastic; 10YR5/1 gray with 10YR5/6 yellowish brown.			
4	646				LUSB0492		LUSB0492 collected 3-3.8' bgs. Rinsate equipment ER0016 used.
	645	CL					
5							
	644				LUSB0493	4-8'	LUSB0493 collected 5-6' bgs.
6						90%	
	643					3.6'	
7				SILT; trace fine sand; trace gravel to 8mm, subangular to subrounded; dry; medium dense; non-plastic; 10YR4/2 dark grayish brown.			
	642				LUSB0494		LUSB0494 collected 7-8' bgs.
8							
	641	ML				8-10'	
9						100%	
	640				LUSB0495	2.0'	LUSB0495 collected 9-10' bgs.
10				Bottom of Boring at 10.0 ft bgs			
	639						
11							
	638						
12							
	637						
13							
	636						
14							
	635						
15							
	634						
16							
	633						
17							
	632						
18							
	631						
19							
	630						
20							

IA04:
Boring Logs

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Soil Boring IA04-SB0017

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/09/98
End Date	: 07/09/98
Northing Coord.	: 654291.2877
Easting Coord.	: 1697406.4004 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.86	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace clay; trace fine to medium sand; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
		ML		SILT; trace fine to medium sand; dry; loose; non-plastic; 10YR5/3 brown.			
	648	ML		SILT; trace fine sand; dry; medium dense; non-plastic; 10YR3/2 very dark grayish brown.		0-2'	
1		CL		CLAY; trace silt; trace fine to medium sand; trace gravel to 15mm, subrounded; medium stiff; slightly plastic; 10YR5/6 yellowish brown and 10YR5/1 gray.		95%	
					LUSB0496	1.9'	LUSB0496 collected 1-2' bgs. Rinsate equipment used.
	647						
2					LUSB0514		LUSB0514 collected 2-3' bgs.
	646						
3					LUSB0515	2-5'	LUSB0515 collected 3-4' bgs.
	645						
4						100%	
					LUSB0516	3.0'	LUSB0516 collected 4-5' bgs.
	644						
5				Bottom of Boring at 5.0 ft bgs			Two borings needed to obtain enough sample material for the full suite analysis from 1-2' bgs.
	643						
6							
	642						
7							
	641						
8							
	640						
9							
	639						
10							

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Soil Boring IA04-SB0018

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/09/98
End Date	: 07/09/98
Northing Coord.	: 654087.8895
Easting Coord.	: 1697392.6087 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev.	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace gravel; roots; dry; loose; non-plastic; 10YR3/1 very dark gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
		GM		GRAVEL to 30mm, angular; trace silt; trace medium to coarse sand; dry; dense; non-plastic; 10YR5/2 grayish brown.		0-2'	
1	-1	CL		CLAY; some gravel to 10mm, subangular; trace medium sand; dry; stiff; slightly plastic; 5Y5/1 gray.	LUSB0497	90%	LUSB0497 collected 1-2' bgs.
						1.8'	
2	-2			ASH; possibly from a furnace; slag; 5Y2.5/1 black.			
		CL		CLAY; trace fine sand; dry; stiff; medium plastic; 5Y5/1 gray.	LUSB0517		LUSB0517 collected 2-3' bgs.
3	-3				LUSB0518	2-5'	LUSB0518 collected 3-4' bgs.
4	-4					100%	
		CL		same as above except 10YR5/1 gray and 10YR4/4 dark yellowish brown.	LUSB0519	3.0'	LUSB0519 collected 4-5' bgs.
5	-5			Bottom of Boring at 5.0 ft bgs			Two borings needed to obtain enough sample material for the full suite analysis from 1-2' bgs.
6	-6						
7	-7						
8	-8						
9	-9						
10							

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Soil Boring IA04-SB0019

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Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/09/98
End Date	: 07/09/98
Northing Coord.	: 654186.0244
Easting Coord.	: 1697552.9942 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2'' Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.52	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; some fine to coarse sand; trace clay; roots; dry; loose; non-plastic; 10YR4/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
	649	GM		GRAVEL to 60mm, angular; some silt; some fine to coarse sand; dry; dense; non-plastic; 10YR5/2 grayish brown.		0-2'	
1		ML		SILT; trace fine sand; trace gravel to 8mm, subrounded; dry; medium dense; medium plastic; 10YR4/3 brown.		80%	
	648				LUSB0498	1.6'	LUSB0498 collected 1-2' bgs.
2		CL		CLAY; trace silt; trace fine to medium sand; dry; stiff; medium plastic; 10YR4/6 dark yellowish brown and 10YR4/1 dark gray.			
	647				LUSB0520		LUSB0520 collected 2-3' bgs.
3							
	646				LUSB0521	2-5'	LUSB0521 and duplicate LUSB9055 and split LUSB9555 collected 3-4' bgs.
4						100%	
	645				LUSB0522	3.0'	LUSB0522 collected 4-5' bgs.
5				Bottom of Boring at 5.0 ft bgs			
	644						Two borings needed to obtain enough sample material for the full suite analysis from 1-2' bgs.
6							
	643						
7							
	642						
8							
	641						
9							
	640						
10							

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Soil Boring IA04-SB0020

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654087.0400
Easting Coord.	: 1696683.5855 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 649.89

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	ML	SILT; trace fine to medium sand; trace clay; roots; dry; medium dense; slightly plastic; 10YR4/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
	GM	GRAVEL; some silt; dry; dense; non-plastic; 10YR4/2 dark grayish brown.		0-2'	
1 (649)	ML	SILT; some fine to medium sand; trace gravel to 10mm, subangular; dry; medium dense; non-plastic; 10YR5/2 grayish brown.		100%	
			LUSB0499		LUSB0499 collected 1-2' bgs.
2 (648)				2.0'	
			LUSB0523		LUSB0523 collected 2-3' bgs. Rinsate equipment ER0055 used.
3 (647)	CL	CLAY; trace fine to medium sand; trace gravel to 10mm, subangular to subrounded; dry; stiff; slightly plastic; 10YR4/1 dark gray with 2.5Y5/6 light olive brown mottling.	LUSB0524	2-5'	LUSB0524 collected 3-4' bgs.
4 (646)				97%	
			LUSB0525	2.9'	LUSB0525 collected 4-5' bgs.
5 (645)		Bottom of Boring at 5.0 ft bgs			
					Two borings needed to obtain enough sample material for the full suite analysis from 1-2' bgs.
6 (644)					
7 (643)					
8 (642)					
9 (641)					
10 (640)					

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Soil Boring IA04-SB0021

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654287.9286
Easting Coord.	: 1696761.1300 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.40	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; trace fine to medium sand; trace gravel to 20mm; roots; dry; loose; non-plastic; 10YR4/2 dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
		GM		GRAVEL; some silt; dry; dense; non-plastic; 10YR4/2 dark grayish brown.		0-2'	
1	649	ML		SILT; trace fine sand; dry; medium dense; non-plastic; 10YR3/1 very dark gray.	LUSB0500	100%	LUSB0500 collected 1-2' bgs.
2	648	CL		CLAY; trace fine sand; dry; stiff; slightly plastic; 10YR4/1 dark gray with 2.5Y5/6 light olive brown mottling.	LUSB0526	2.0'	LUSB0526 collected 2-3' bgs.
3	647				LUSB0527	2-5'	LUSB0527 and duplicate LUSBXXXX collected 3-4' bgs.
4	646				LUSB0528	93% 2.8'	LUSB0528 collected 4-5' bgs.
5	645			Bottom of Boring at 5.0 ft bgs			Three borings needed to obtain enough sample material for the full suite analysis from 1-2' bgs.
6	644						
7	643						
8	642						
9	641						
10							

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Soil Boring IA04-SB0022

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654054.1889
Easting Coord.	: 1696899.7700 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Robert Tucker
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.97	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		SP		SAND and GRAVEL, fine to coarse; some clay; light gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649	CL		CLAY; trace sand and gravel; moist; stiff; medium plastic; 2.5Y3/1 very dark gray.	LUSB0501	0-3' 83% 2.5'	LUSB0501 collected 1-2' bgs.
2	648	CL		CLAY; trace sand and gravel; moist; stiff; medium plastic; 2.5Y4/4 olive brown with 10YR5/1 gray mottling.	LUSB0529		LUSB0529 collected 2-3' bgs.
3	647	CL		CLAY; some silt; trace sand and gravel; 10YR5/1 gray with 10YR5/6 yellowish brown mottling.	LUSB0530	3-5' 100%	LUSB0530 collected 3-4' bgs.
4	646	CL		CLAY; 10YR5/8 yellowish brown with 10YR5/2 grayish brown mottling and <10% greenish mottling.	LUSB0531	2.0'	LUSB0531 collected 4-5' bgs.
5	645			Bottom of Boring at 5.0 ft bgs			
6	644						
7	643						
8	642						
9	641						
10	640						

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Soil Boring IA04-SB0023

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654021.7850
Easting Coord.	: 1696920.7706 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Robert Tucker
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.84	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		SP		SAND and GRAVEL; gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649	CL		CLAY; non-plastic; 2.5Y3/2 dark gray with 10YR5/6 yellowish brown mottling.		0-3'	
						90%	
					LUSB0532		LUSB0532 collected 1-2' bgs.
2	648					2.7'	
					LUSB0502		LUSB0502 collected 2-3' bgs.
3	647						
4	646	CL		CLAY; some silt; trace gravel; non-plastic; 10YR5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0533	3-5'	LUSB0533 collected 3-4' bgs.
						100%	
					LUSB0534	2.0'	LUSB0534 collected 4-5' bgs.
5	645			Bottom of Boring at 5.0 ft bgs			
6	644						
7	643						
8	642						
9	641						
10	640						

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Soil Boring IA04-SB0024

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654044.8628
Easting Coord.	: 1696943.9127 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Robert Tucker
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.03	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	SP		SAND and GRAVEL; 1 limestone cobble; medium brown.		0-3'	All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649	CL		CLAY; some gravel, silt and sand; very firm; non-plastic; sulferous odor; 5Y2/5 dark gray.	LUSB0535	90%	LUSB0535 collected 1-2' bgs.
2	648				LUSB0536	2.7'	LUSB0536 collected 2-3' bgs.
3	647	CL		CLAY; some silt; trace sand and gravel; very firm; non-plastic; 10YR5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0503	3-5'	LUSB0503 collected 3-4' bgs.
4	646				LUSB0537	100%	LUSB0537 collected 4-5' bgs.
5	645			Bottom of Boring at 5.0 ft bgs		2.0'	LUSB0537 collected 4-5' bgs.
6	644						
7	643						
8	642						
9	641						
10							

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Soil Boring IA04-SB0025

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654074.7759
Easting Coord.	: 1696920.4251 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Pete Ferron
Designation of Drill	: Hand Auger
Geologist	: E. Joseph Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Stainless Steel
	: Hand Auger Bucket

Depth in feet	Surf. Elev. 650.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; trace fine to coarse sand; root material; dry; loose; 10YR4/2 dark grayish brown.		0-1.5' 100%	All colors from Munsell Soil Color Chart 1992 Revised Edition
1	649				LUSB0538	1.5'	LUSB0538 collected 1-2' bgs.
2	648	SM		SAND, fine to coarse; some silt; trace gravel; dry; loose; 10YR5/2 grayish brown	LUSB0539	1.5-4.5' 100%	LUSB0539 collected 2-3' bgs.
3	647				LUSB0540	3.0'	LUSB0540 collected 3-4' bgs.
4	646				LUSB0504	4.5-5.0' 100%	LUSB0504 collected 4-5' bgs. Split sample LUSB9553 collected for PCB.
5	645	ML		CLAY; some silt; soft; low plasticity; 10YR3/2 very dark grayish brown.	LUSB9553	0.5	
				Bottom of Boring at 5.0 ft bgs			
6	644						
7	643						
8	642						
9	641						
10							

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Soil Boring IA04-SB0026

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/09/98
End Date	: 07/09/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 7.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	SP		SAND; trace fine gravel; poorly sorted; damp; loose, soft; (foundation backfill); 10YR7/2 light gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	-1					0-3'	
					LUSB0505	66%	LUSB0505 collected 1-2' bgs.
2	-2					2.0'	
3	-3			same as above except saturated.			
					LUSB0506		LUSB0506 collected 3-4' bgs.
4	-4					3-6'	
						66%	
5	-5					2.0'	
6	-6	CL		CLAY; some silt; trace gravel; damp; stiff; non-plastic; 10YR4/3 brown with 10YR5/8 yellowish brown and 10YR5/1 gray mottling.		6-7'	
					LUSB0507	100%	LUSB0507 collected 6-7' bgs.
7	-7			Bottom of Boring at 7.0 ft bgs		1.0'	
8	-8						
9	-9						
10							

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Soil Boring IA04-SB0027

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654306.9331
Easting Coord.	: 1697437.7650 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.87	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; trace clay; trace fine to coarse sand; roots; dry; medium dense; non-plastic; 10YR3/1 very dark gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
		CL		CLAY; trace fine to medium sand; dry; soft; plastic; 10YR3/1 very dark gray.			
	648						
1		CL		CLAY; trace silt; trace fine sand; dry; stiff; slightly plastic; 10YR4/1 dark gray and 10YR4/6 dark yellowish brown.		0-3'	
					LUSB0508	66%	LUSB0508 collected 1-2' bgs.
	647						
2						2.0'	
	646						
3		ML		SILT; trace fine to very coarse sand; dry; very dense; non-plastic.			
					LUSB0509		LUSB0509 collected 3-4' bgs.
	645						
4						3-6'	
						100%	
	644						
5						3.0	
					LUSB0510		LUSB0510 collected 5-6' bgs.
	643						
6				Bottom of Boring at 6.0 ft bgs			
	642						
7							
	641						
8							
	640						
9							
	639						
10							

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Soil Boring IA04-SB0028

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654108.3093
Easting Coord.	: 1697502.3123 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.71	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		SM		SAND, medium; trace gravel to 15mm; trace silt; dry; medium dense; non-plastic; 10YR5/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
	650	GM		GRAVEL, angular to 40mm; (railbed); some silt; dry; dense; non-plastic; 10YR6/2 light brownish gray.			
1					LUSB0511	0-3'	
	649					66%	LUSB0511 and duplicate collected 1-2' bgs.
2						2.0'	
	648						
3		CL		CLAY; trace silt; dry; stiff; slightly plastic; 10YR4/1 dark gray and 10YR4/6 dark yellowish brown.	LUSB0512		LUSB0512 collected 3-4' bgs.
	647						
4						3-6'	
	646					100%	
5						3.0'	
	645				LUSB0513		LUSB0513 collected 5-6' bgs.
6				Bottom of Boring at 6.0 ft bgs			
	644						
7							
	643						
8							
	642						
9							
	641						
10							

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Soil Boring IA04-SB0029

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654279.8083
Easting Coord.	: 1696819.3907 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.98	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		Sandy SILT; some gravel; some roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.			Rad Background Beta 325 Alpha 3 OVA Background 0 ppm
1	649	FL		Crushed stone and brick.		0-4' 88% 3.5'	
2	648	CL		Silty CLAY; trace gravel; moist; medium plasticity; 10YR3/1 very dark gray.			
3	647	CL		Silty CLAY; trace gravel; very hard; medium plasticity; 10YR4/2 dark grayish brown.			
4	646						
5	645				LUSB1158	4-8' 100% 4.0'	LUSB1158 collected 5-6' bgs.
6	644						
7	643						
8	642	CL		Silty CLAY; trace gravel; very hard; medium plasticity; 10YR4/2 dark grayish brown.			
9	641					8-12' 100% 4.0'	
10	640						
11	639				LUSB1159		LUSB1159 collected 11-12' bgs.
12	638			Bottom of Boring at 12.0 ft bgs			All RAD and OVA readings below background
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20	630						

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Soil Boring IA04-SB0030

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654297.6960
Easting Coord.	: 1696832.8244 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		Topsoil; sandy SILT; loose; brown.			Rad Background Beta 325 Alpha 3 OVA Background 0 ppm
1	649	FL		Concrete slab foundation			
		SW		SAND, fine-medium; some gravel; moist; loose; brown.			
2	648	FL		Crushed stone.		1-4' 100% 3.0'	
		CL		Silty CLAY; trace gravel; moist; hard; plastic; 10YR4/3 brown.			
3	647	CL		Same as above except color change to 10YR3/1 very dark gray and petroleum odor.	LUSB1160		LUSB1160 collected 3-4' bgs. Rad Background OVA 200 ppm
4	646	GP		SAND and GRAVEL, medium-coarse; wet; loose.			Rad Background OVA 6 ppm
5	645	CL		Silty CLAY; trace gravel; moist; soft; high plasticity; 10YR5/1 gray with 10YR4/4 dark yellowish brown mottling.		4-8' 100% 4.0'	
6	644						
7	643						Rad Background OVA 0 ppm
8	642	CL		Silty CLAY with (30-40%) gravel; some sand; wet; 10YR5/1 gray.			
9	641	CL		CLAY; trace (5-10%) gravel; moist; soft from 9-9.5', hard from 9.5-12'; high plasticity.			Rad Background OVA 0.6 ppm
10	640					8-12' 100% 4.0'	
11	639				LUSB1161		LUSB1161 collected 11-12' bgs. Rad Background OVA 0 ppm
12	638			Bottom of Boring at 12.0 ft bgs			
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA04-SB0031

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654290.0193
Easting Coord.	: 1696797.4702 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.05	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	ML		SILT; some gravel; trace sand; dry; loose; 10YR4/4 dark yellowish brown.			Rad Background Beta 325 Alpha 3 OVA Background 0 ppm
1	649	CL		Silty CLAY; some (10-20%) gravel; trace sand; moist; hard; plastic; 10YR5/3 brown.		0-4' 100% 4.0'	
2	648						
3	647						
4	646	FL		Red Brick			
5	645	CL		CLAY; some (10-20%) gravel; moist; soft; very plastic; 10YR5/2 grayish brown with 10YR4/4 dark yellowish brown mottling.	LUSB1162	4-8' 100% 4.0'	LUSB1162 collected 4.5-5.5' bgs. Rad Background OVA 0.8 ppm
6	644						
7	643						Rad Background OVA 0 ppm
8	642	CL		CLAY; some (10-20%) gravel; moist; hard; low plasticity; 10YR4/4 dark yellowish brown.			
9	641					8-11' 100% 3.0'	
10	640				LUSB1163		LUSB1163 collected 10-11' bgs. Rad Background OVA 0 ppm
11	639			Bottom of Boring at 11.0 ft bgs			
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA04-SB0032

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654317.6824
Easting Coord.	: 1696810.9514 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 649.33

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	ML	Sandy SILT; some (10-20%) gravel; dry; loose; 10YR4/3 brown.			Rad Background Beta 325 Alpha 3 OVA Background 0 ppm
1	CL	Silty CLAY; trace (5-10%) gravel; moist; firm; very plastic; 10YR4/1 dark gray.		0-4' 100% 4.0'	
4	CL	mottling of 10YR4/4 dark yellowish brown.			
5			LUSB1164	4-8' 100% 4.0'	LUSB1164 collected 5-6' bgs. Rad Background OVA 0 ppm
6	CL	Silty CLAY; trace (5-10%) gravel; slightly moist; hard; low plasticity; 10YR4/4 dark yellowish brown.			
7					Rad Background OVA 0 ppm
8				8-10' 100% 2.0'	
9			LUSB1165		LUSB1165 collected 9-10' bgs. Rad Background OVA 0 ppm
10		Bottom of Boring at 10.0 ft bgs			
18					All colors from Munsell Soil Color Chart 1992 Revised Edition

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Soil Boring IA04-SB0033

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654111.4342
Easting Coord.	: 1697368.3812 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.70	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1	650	SP		SAND, fine-medium; with (50%) gravel; dry; loose.	LUSB1168		LUSB1168 collected 0-0.5' bgs Rad Background Beta 450 Alpha 3 OVA Background 0 ppm
2	649	SP		SAND, fine-coarse; clayey towards bottom; moist; plastic; 10YR2/1 black (sand) and 10YR3/1 very dark gray.	LUSB1166	0-4' 69% 2.75	LUSB1166 collected 1.5-2.5' bgs. Rad Background OVA 0 ppm
3	648	CL		CLAY; trace (5-10%) gravel; moist; soft; high plasticity; 10YR5/1 gray.			
4	647						
5	646						
6	645					4-8' 88% 3.5'	
7	644	SP		SAND, fine-medium; some silt; some gravel; saturated; 10YR4/1 dark gray.			Rad Background OVA 0.1 ppm
8	643	CL		CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR4/4 dark yellowish brown.			
9	642					8-10' 100% 2.0'	
10	641				LUSB1167		LUSB1167 collected 9-10' bgs. Rad Background OVA 0 ppm
11	640			Bottom of Boring at 10.0 ft bgs			
12	639						
13	638						
14	637						
15	636						
16	635						
17	634						
18	633						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632						
20	631						

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Soil Boring IA04-SB0034

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/22/99
End Date	: 06/22/99
Northing Coord.	: 654069.2139
Easting Coord.	: 1697365.9869 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	SP		Silty SAND, fine-coarse; with (25%) gravel; wet; loose; 10YR4/2 dark grayish brown.	LUSB1169		LUSB1169 collected 0-0.5' bgs Rad Background Beta 450 Alpha 3 OVA Background 0 ppm
1	649						
2	648	CL		CLAY; trace (5-10%) gravel; moist; hard; very plastic; 10YR5/1 gray with 10YR4/4 dark yellowish brown mottle.	LUSB1170	0-4' 75% 3.0'	LUSB1170 collected 1.5-2.5' bgs. Rad Background OVA 3 ppm
3	647	SP		Silty SAND, fine-coarse; with (25%) gravel; saturated; loose; 10YR3/1 very dark gray.			
4	646						
5	645	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR5/1 gray mottled 10YR4/4 dark yellowish brown.			
6	644	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR4/4 dark yellowish brown.		4-8' 100% 4.0'	
7	643						Rad Background OVA 0.1 ppm
8	642						
9	641				LUSB1171	8-10' 100% 2.0'	LUSB1171 collected 9-10' bgs. Rad Background OVA 0 ppm
10	640			Bottom of Boring at 10.0 ft bgs			
11	639						
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA04-SB0035

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/23/99
End Date	: 06/23/99
Northing Coord.	: 654266.8378
Easting Coord.	: 1697344.1599 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.58	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649	ML		Sandy SILT; some clay; moist; loose; 10YR3/2 very dark grayish brown.			Rad Background Beta 450 Alpha 2 OVA Background 0 ppm
1	648	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; low plasticity; 10YR4/3 brown.		0-4' 100% 4.0'	
2	647	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; 10YR4/1 dark grayish brown mottled with 10YR4/6 dark yellowish brown.			
3	646						
4	645						
5	644				LUSB1172	4-8' 100% 4.0'	LUSB1172 collected 5-6' bgs. Rad Background OVA 0 ppm
6	643						
7	642	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; low plasticity; 10YR4/3 brown.			Rad Background OVA 0 ppm
8	641						
9	640				LUSB1173	8-12' 100% 4.0'	LUSB1173 collected 9-10' bgs. Rad Background OVA 0 ppm
10	639						
11	638	CL		Color change to 10YR4/1 dark gray.			
12	637			Bottom of Boring at 12.0 ft bgs			
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20							

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Soil Boring IA04-SB0036

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/23/99
End Date	: 06/23/99
Northing Coord.	: 654248.6196
Easting Coord.	: 1697368.0074 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.81	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1	649	ML		Clayey SILT; with (25%) gravel; brick fragments; moist; hard; 10YR3/2 very dark grayish brown.			Rad Background Beta 450 Alpha 2 OVA Background 0 ppm
2	648	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR4/4 dark yellowish brown.		0-4' 100% 4.0'	
3	647						
4	646	CL		Silty CLAY; trace (5-10%) gravel; moist; firm; medium plasticity; 10YR5/1 gray mottled with 10YR4/4 dark yellowish brown.			
5	645						
6	644				LUSB1174	4-8' 100% 4.0'	LUSB1174 collected 5-6' bgs. Rad Background OVA 0.5 ppm
7	643						Rad Background OVA 0 ppm
8	642	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR4/4 dark yellowish brown.			
9	641						
10	640	CL		Color change to 10YR4/3 brown.	LUSB1175	8-12' 100% 4.0'	LUSB1175 collected 9-10' bgs. Rad Background OVA 0 ppm
11	639						
12	638			Bottom of Boring at 12.0 ft bgs			
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20	630						

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Soil Boring IA04-SB0037

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/23/99
End Date	: 06/23/99
Northing Coord.	: 654271.4500
Easting Coord.	: 1697386.2168 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 649.28	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649	ML		SILT; trace (5%) sand; dry; loose; non-plastic; 10YR4/2 dark grayish brown.			Rad Background Beta 450 Alpha 2 OVA Background 0 ppm
1	648	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; low plasticity; 10YR3/1 very dark gray.		0-4' 100% 4.0'	
2	647	CL		Silty CLAY; trace (5-10%) gravel; moist; hard; medium plasticity; 10YR5/1 gray mottled with 10YR4/4 dark yellowish brown.			
3	646						
4	645						
5	644				LUSB1176	4-8' 100% 4.0'	LUSB1176 collected 5-6' bgs. Rad Background OVA 0 ppm
6	643	CL		Silty CLAY; trace (5-10%) gravel; moist; very hard; low plasticity; 10YR4/3 brown.			
7	642						Rad Background OVA 0 ppm
8	641						
9	640					8-11' 100% 3.0'	
10	639				LUSB1177		LUSB1177 collected 9-10' bgs. Rad Background OVA 0 ppm
11	638			Bottom of Boring at 11.0 ft bgs			
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20							

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Soil Boring IA04-SB0038

Investigative Area 04	: Buildings, Interior & Exterior
Start Date	: 06/23/99
End Date	: 06/23/99
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 12.0 feet

Drilling Company	: Terra Probe Environmental
Driller	: J. Maigret
Designation of Drill	: Geoprobe 420 U
Type of Drill Rig	: Direct Push Technology
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		Clayey SILT; trace (5-10%) gravel; moist; soft; plastic; 10YR3/2 very dark grayish brown.			Rad Background Beta 450 Alpha 2 OVA Background 0 ppm
1	-1	CL		Silty CLAY; trace (5-10%) gravel; moist; firm; medium plasticity; 10YR5/1 gray with 10YR4/4 dark yellowish brown mottling.		0-4' 100% 4.0'	
2	-2						
3	-3						
4	-4						
5	-5	CL		Silty CLAY; some (10-20%) gravel; moist; hard; non-plastic; 10YR4/4 dark yellowish brown.	LUSB1178	4-8' 100% 4.0'	LUSB1178 collected 5-6' bgs. Rad Background OVA 0 ppm
6	-6						
7	-7						Rad Background OVA 0 ppm
8	-8						
9	-9					8-12' 100% 4.0'	
10	-10	CL		Color change to 10YR4/2 dark grayish brown.			
11	-11				LUSB1179		LUSB1179 collected 11-12' bgs. Rad Background OVA 0 ppm
12	-12			Bottom of Boring at 12.0 ft bgs			
13	-13						
14	-14						
15	-15						
16	-16						
17	-17						
18	-18						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	-19						
20							

IA05:
Boring Logs

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Soil Boring IA05-SB0001

Investigative Area 05	: Filterbed Area
Start Date	: 06/24/98
End Date	: 06/24/98
Northing Coord.	: 654724.5095
Easting Coord.	: 1697559.7088 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: SAIC
Driller	: Bruce Wappman
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 654.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	654	SM		SAND, fine to very fine; some silt; some gravel; dry; loose.		NR	All colors from Munsell Soil Color Chart 1992 Revised Edition
1	653				LUSB0541		LUSB0541 collected 1-2' bgs.
2	652						
3	651						
4	650						
5	649	FL		Sludge; 3" thick sand-gravel layer on top; moist; soupy; white.	LUSB0598		LUSB0598 collected 5-6' bgs.
6	648						
7	647	CL		CLAY; some silt; trace sand and gravel; moist; stiff; low plasticity.	LUSB0599		LUSB0599 collected 7-8' bgs.
8	646			Bottom of Boring at 8.0 ft bgs			
9	645						
10	644						
11	643						
12	642						
13	641						
14	640						
15	639						
16	638						
17	637						
18	636						
19	635						
20							

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Soil Boring IA05-SB0002

Investigative Area 05	: Filterbed Area
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 654576.1389
Easting Coord.	: 1697514.0832 OH83/N ft.
Total Depth of Boring	: 4.0 feet

Drilling Company	: SAIC
Driller	: Bruce Wappman
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 651.73	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1	651	SW		SAND, very fine to fine, and GRAVEL, angular to 3"; dry; loose; 10YR5/3 brown.	LUSB0542	NR	All colors from Munsell Soil Color Chart 1992 Revised Edition LUSB0542 collected 1-2' bgs.
2	650						
3	649						
4	648						
5	647			Bottom of Boring at 4.0 ft bgs. Refusal at 4.0' ft bgs.			
6	646						
7	645						
8	644						
9	643						
10	642						
11	641						
12	640						
13	639						
14	638						
15	637						
16	636						
17	635						
18	634						
19	633						
20	632						

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Soil Boring IA05-SB0003

Investigative Area 05	: Filterbed Area
Start Date	: 07/14/98
End Date	: 07/14/98
Northing Coord.	: 654597.3404
Easting Coord.	: 1697744.0090 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 652.00

Depth in feet	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0						
	CL		CLAY; some silt; trace gravel (fill); dry; non-plastic; 10YR3/2 very dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1				LUSB0543	1-3' 50% 1.0'	LUSB0543 collected 1-2' bgs.
2						
3						
			brick fragments	LUSB0604	3-5' 50% 1.0'	LUSB0604 collected 3-4' bgs
4						
5			no brick fragments	LUSB0605	5-7' 25% 0.5	LUSB0605 collected 5-5.5' bgs
6						
7						
	CL		CLAY; some silt; trace gravel, weathered granite fragments; damp; moderately plastic; 10YR4/3 brown with 10YR5/1 gray and 10YR5/8 yellowish brown mottling.	LUSB0606	7-9' 75% 1.5'	LUSB0606 collected 7.5-8.5' bgs
8						
			No description available.			
9						
10						
	CL		Shelby tube collected 10-11' bgs. Lean CLAY with Sand. Geotechnical Sample LUSB1051.	Shelby Tube	10-11 NR	
11						
			Bottom of Boring at 11.0 ft bgs.			
12						
13						
14						
15						
16						
17						
18						
19						
20						

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Soil Boring IA05-SB0004

Investigative Area 05	: Filterbed Area
Start Date	: 07/22/98
End Date	: 07/22/98
Northing Coord.	: 654639.5466
Easting Coord.	: 1697791.6177 OH83/N ft.
Total Depth of Boring	: 2.5 feet

Drilling Company	: SAIC
Driller	: Beau Williams
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Parrish/Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Surf. Elev. 651.82

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	ML	SILT; some clay; roots; slightly moist; light grayish brown.	LUSB0544 LUSB9558	NR	All colors from Munsell Soil Color Chart 1992 Revised Edition
1 (651)	FL	SILT; some sand; moist; (LIME); White with 10YR7/4 very pale brown.			LUSB0544 and split sample LUSB9558 collected 1-2' bgs.
2 (650)	FL	SILT; some fire brick; dry; medium dense; non-plastic; 10YR4/3 brown.			Refusal @ 2.5' bgs. Attempted 6 borings to get to depth. Refusal in all at the same depth because of fire bricks.
3 (649)		Bottom of Boring at 2.5 ft bgs. Refusal at 2.5 ft bgs.			
4 (648)					
5 (647)					
6 (646)					
7 (645)					
8 (644)					
9 (643)					
10 (642)					
11 (641)					
12 (640)					
13 (639)					
14 (638)					
15 (637)					
16 (636)					
17 (635)					
18 (634)					
19 (633)					
20 (632)					

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Soil Boring IA05-SB0005

Investigative Area 05	: Filterbed Area
Start Date	: 08/03/98
End Date	: 08/03/98
Northing Coord.	: 654486.4112
Easting Coord.	: 1697678.1928 OH83/N ft.
Total Depth of Boring	: 4.5 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Auger Bucket

Depth in feet	Surf. Elev. 654.78	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1	654	CL		CLAY; some silt; trace sand; some roots; occasional piece of glass or metal; dry; non-cohesive; 2.5Y light brownish gray.			All colors from Munsell Soil Color Chart 1992 Revised Edition
					LUSB0545		LUSB0545 collected 1-2' bgs.
2	653					NR	
3	652						
					LUSB0610		LUSB0610 collected 3-4' bgs.
4	651						
5	650			Bottom of Boring at 4.5 ft bgs. Refusal at 4.5 ft bgs.			Refusal @ 4.5' bgs. Attempted 2 borings to get to depth. Refusal in both at the same depth.
6	649						
7	648						
					LUSB0611		LUSB0611 collected 7-8' bgs. The sample was collected near the base of the pile in order to get below the pile.
8	647						
9	646						
10	645						
11	644						
12	643						
13	642						
14	641						
15	640						
16	639						
17	638						
18	637						
19	636						
20	635						

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Soil Boring IA05-SB0006

Investigative Area 05	: Filterbed Area
Start Date	: 08/04/98
End Date	: 08/04/98
Northing Coord.	: 654713.8557
Easting Coord.	: 1697809.4006 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. 653.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	653	CL		CLAY; some silt; trace roots; dry; very stiff; non-plastic, blocky; 2.5Y5/3 light olive brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	652				LUSB0546		
2	651				LUSB9058		LUSB0546 and duplicate LUSB9058 collected 1-2' bgs.
3	650						
4	649				LUSB0613	NR	LUSB0613 collected 3-4' bgs.
5	648	FL		CLAY; some silt; trace sand; slightly moist; firm; non-plastic; 10YR4/2 brown. Whitish gray silt (LIME) intermixed throughout the entire interval.			
6	647				LUSB0614		LUSB0614 collected 5-6' bgs.
7	646	CL		CLAY; trace sand, rounded; slightly moist; sitff; low plasticity; 2.5Y4/2 dark grayish brown.	LUSB0615		LUSB0615 collected 6.5-7' bgs.
8	645			Bottom of Boring at 7.0 ft bgs.			
9	644						
10	643						
11	642						
12	641						
13	640						
14	639						
15	638						
16	637						
17	636						
18	635						
19	634						
20							

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Soil Boring IA05-SB0007

Investigative Area 05	: Filterbed Area
Start Date	: 07/07/98
End Date	: 07/07/98
Northing Coord.	: 654739.8948
Easting Coord.	: 1697658.7748 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Corebarrel 10' Long

Surf. Elev. 648.62

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	CL	CLAY; some silt; moist; firm; medium to low plasticity; 10YR4/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1			LUSB0547		LUSB0547 collected 1-2' bgs.
2	SM	SAND; some silt; moist; loose; 10YR4/3 brown.			
3	FL	Trench waste material. Layers of tan/buff colored waste. very light in weight. Friable. metal, burnt ash material. Brick.	LUSB0575		LUSB0575 collected 3-4' bgs.
5		Black/Dark Brown sooty silt material.	LUSB0548		LUSB0548 collected 5-6' bgs.
6		very light, strong ceramic or brick material.			
7	SW	SAND, fine to coarse; 40-50% gravel; 10-20% silt; poorly sorted.		NR	
8			LUSB0576		LUSB0576 collected 8-9' bgs.
9			LUSB0577		LUSB0577 collected 9-10' bgs.
15		Bottom of Boring at 15.0 ft bgs.			

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Soil Boring IA05-SB0008

Investigative Area 05	: Filterbed Area
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654750.6686
Easting Coord.	: 1697714.8384 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Corebarrel 10' Long

Depth in feet	Surf. Elev. 648.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648						
		ML		SILT; some sand; soft; 10YR4/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	647				LUSB1023		LUSB1023 collected 1-2' bgs.
2	646						
3	645	FL		Shredded wood; ash; brick debris in silty soil; very moist to wet; trace fine to coarse sand; glass; metal.	LUSB1024		LUSB1024 collected 3-4' bgs.
4	644	CL		SILT; some clay; trace sand; moist; stiff; 10YR4/3 brown.			
5	643						
					LUSB0579		LUSB0579 collected 5-6' bgs.
6	642				LUSB0580		LUSB0580 collected 6-7' bgs.
7	641					100%	
8	640	ML		SILT; moist; soft; 10YR4/2 dark grayish brown.			
9	639						
10	638						
11	637						
12	636						
13	635			12-14 bgs super saturated silt; phixotropic.			
14	634	CL		CLAY; some silt; moist; stiff; 10YR4/2 dark grayish brown.			
15	633			Bottom of Boring at 15.0 ft bgs.			
16	632						
17	631						
18	630						
19	629						
20							

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Soil Boring IA05-SB0009

Investigative Area 05	: Filterbed Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654495.1137
Easting Coord.	: 1697719.7305 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 649.59	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
	649	CL		CLAY; some silt; trace sand and gravel; roots; dry; non-coheisive; 10YR6/2 light brownish gray. variable below 1', whitish gray, brownish yellow mottling.	LUSB0549	0-2' 75% 1.5'	Surface Beta 2680 alpha 48 0-1' Beta 1616 alpha 26 LUSB0549 collected 0-1' bgs.
1							
	648						
2							
	647	CL		CLAY; trace sand; very moist; slightly stiff; high plasticity; 2.5Y5/3 light olive brown	LUSB0616	2-4' 90%	LUSB0616 collected 2-3' bgs.
3				more sand; wet; medium plastic; color grades to Strong Brown 7.5Y4/6. 2.5-3.5' bgs	LUSB0617	1.8' 4-5'	LUSB0617 collected 3-4' bgs. Beta 578 alpha 12
4	646	CL		very moist; some silt; trace sand and gravel; 5Y4/1 dark gray. 3.5-4' bgs	LUSB0618	100% 1.0'	LUSB0618 collected 4-5' bgs. Beta 478 alpha 7
5	645			CLAY; some silt; trace sand and gravel; very moist; slightly stiff; fiberous; 2.5Y5/3 light olive brown. soft; very moist; looks greasy; 10YR4/6 dark yellowish brown. 4.5-5' bgs			
6	644						
7	643			Bottom of Boring at 5.0 ft bgs.			Driller pushed split spoons. Rad Background Beta 584 Alpha 48
8	642						
9	641						
10	640						
11	639						
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20	630						

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Soil Boring IA05-SB0010

Investigative Area 05	: Filterbed Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654683.3457
Easting Coord.	: 1697752.2478 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.68	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
	648	CL		CLAY; some silt; trace sand and gravel; roots; moist; stiff; low plasticity; 5Y3/2 dark olive gray.		0-2' 75%	Rad Background Beta 428 alpha 3 Drillers pushed split spoons
1				CLAY; trace sand and gravel, well rounded; moist; high plasticity; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0550 LUSB9559	1.5'	LUSB0550 and duplicate sample LUSB9559 collected 1-2' bgs. Beta 446 alpha 10
2	647						
	646	CL		some sand and gravel.		2-4' 75%	
3					LUSB0551	1.5'	LUSB0551 collected 3-4' bgs. Beta 436 alpha 10
4	645					4-5'	
	644			Large cobble at 4.6' bgs.	LUSB0552	75% 0.75'	LUSB0552 collected 4-5' bgs. Beta 433 alpha 10
5				Bottom of Boring at 5.0 ft bgs.			
6	643						
7	642						
8	641						
9	640						
10	639						
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20	629						

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Soil Boring IA05-SB0011

Investigative Area 05	: Filterbed Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654642.6543
Easting Coord.	: 1697684.3127 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.75	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		CL		CLAY; some silt; trace sand and gravel; roots; moist; stiff; medium plasticity; 5Y3/2 dark olive gray.		0-2' 100%	All colors from Munsell Soil Color Chart 1992 Revised Edition
1	648	CL		CLAY; trace sand and gravel, well rounded; moist; high plasticity; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0553	2.0'	LUSB0553 collected 1-2' bgs.
2	647					2-4' 100%	
3	646	CL		CLAY; some sand, very fine and gravel, well rounded; moist; 5Y5/1 gray with yellowish brown mottling.	LUSB0554	2.0'	LUSB0554 collected 3-4' bgs.
4	645	CL		CLAY; some silt; little sand and gravel, well rounded; stiff; medium plasticity; 10YR5/8 yellowish brown with grayish brown mottling.	LUSB0555	4-5' 100% 1.0'	LUSB0555 collected 4-5' bgs.
5	644			Bottom of Boring at 5.0 ft bgs.			
6	643						
7	642						
8	641						
9	640						
10	639						
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						
19	630						
20	629						

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Soil Boring IA05-SB0012

Investigative Area 05	: Filterbed Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654520.6811
Easting Coord.	: 1697750.1443 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.85	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		CL		CLAY; some silt; trace sand and gravel; roots; slightly moist; stiff; low plasticity; 5Y3/2 dark olive gray.		0-2' 75%	Rad Background Beta 439 alpha 7 Drillers pushing split spoon
1	648	CL		CLAY; trace sand and gravel, well rounded; moist; high plasticity; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0556	1.5'	LUSB0556 collected 1-2' bgs.
2	647	CL		Silty CLAY; trace sand, very fine and gravel, well rounded; slightly moist; stiff; low plasticity; 10YR5/8 yellowish brown with 2.5Y5/2 grayish brown mottling.		2-4' NR	
3	646	CL		CLAY; little sand and gravel; slightly moist; stiff; low plasticity; trace dendritic manganese staining; 10YR5/8 yellowish brown.	LUSB0557	NR	LUSB0557 collected 3-4' bgs. Beta 429 alpha 9
4	645			Color change to 10YR5/4 yellowish brown @ 4'.	LUSB0558	4-5' NR	LUSB0558 collected 4-5' bgs. Beta 430 alpha 11
5	644			Bottom of Boring at 5.0 ft bgs.		NR	
6	643						
7	642						
8	641						
9	640						
10	639						
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20	629						

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Soil Boring IA05-SB0013

Investigative Area 05	: Filterbed Area
Start Date	: 07/12/98
End Date	: 07/12/98
Northing Coord.	: 654547.4055
Easting Coord.	: 1697576.2402 OH83/N ft.
Total Depth of Boring	: 14.1 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 649.23	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649	CL		CLAY; some silt; trace sand and gravel; roots; damp; stiff; low plasticity; 5Y3/2 dark olive gray.		0-2' 60% 1.2'	Rad Background Beta 352 alpha 7 Driller is pushing split spoons
1	648	CL		CLAY; trace sand and gravel, well rounded; slightly moist; medium plasticity; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.			Beta 440 alpha 11
2	647					2-4' 60% 1.2'	
3	646						
4	645	CL		CLAY; trace sand and gravel, well rounded; damp; 10YR5/6 yellowish brown with 2.5Y5/2 grayish brown mottling.		4-6' 70% 1.4	Beta 440 alpha 8
5	644	CL		CLAY; trace sand and gravel, rounded; damp; very stiff; 10YR4/3 brown with grayish brown mottling.			
		SC		SAND, very fine to fine; some clay; trace coarse sand; damp; slightly coheisive; 2.5Y6/3 light yellowish brown.			
6	643	CL		CLAY; trace sand and gravel, rounded; damp; very stiff; 10YR4/3 brown with grayish brown mottling.		6-8' NR NR	Beta 466 alpha 7
7	642			CLAY; trace sand and gravel, well rounded to 2"; very stiff; 2.5Y4/3 olive brown.			
8	641	CL		CLAY; trace sand and gravel, well rounded; slightly moist; very stiff; 10YR4/2 dark grayish brown.		8-10' NR NR	Beta 462 alpha 8
9	640						
10	639					10-12' NR NR	Beta 411 alpha 2
11	638	CL		CLAY; trace sand, rounded; slightly stiff; high plasticity; 2.5Y4/1 dark gray with 7.5YR6/3 mottling.			
12	637			increasing silt content with depth.		12-14' NR NR	Beta 420 alpha 7
13	636						
14	635	CL		CLAY; very moist; slightly stiff; medium plasticity; 10YR5/1 gray; medium to coarse sand seen in the bottom 1" of the shoe.			
15	634			Bottom of Boring at 14.1 ft bgs. Refusal @ 14.1' bgs possibly bedrock?			
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20							

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Soil Boring IA05-SB0014

Investigative Area 05	: Filterbed Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654527.5310
Easting Coord.	: 1697518.2123 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 650.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650			No description available, drilled through this interval.			
1	649	CL		Silty CLAY; some gravel; trace sand; roots; dry; stiff; 10YR4/2 dark grayish brown.	LUSB0562	1-3' 50% 1.0'	LUSB0562 collected 1-2' bgs. Rinsate ER0060 equipment used. Beta 392 alpha 13
2	648			No description available, no recovery.			
3	647	CL		CLAY; trace sand and gravel, rounded; slightly moist; medium plasticity; 2.5Y4/2 dark grayish brown with 10YR4/4 dark yellowish brown mottling.	LUSB0563	3-5' 100% 2.0'	LUSB0563 collected 3-4' bgs. Beta 409 alpha 9
4	646				LUSB0564		LUSB0564 collected 4-5' bgs. Beta 448 alpha 12
5	645			Bottom of Boring at 5.0 ft bgs.			
6	644						
7	643						
8	642						
9	641						
10	640						
11	639						
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA05-SB0015

Investigative Area 05	: Filterbed Area
Start Date	: 07/13/98
End Date	: 07/13/98
Northing Coord.	: 654688.7893
Easting Coord.	: 1697787.0720 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.80	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0				No description available, drilled through this interval.			Rad Background Beta 377 alpha 4 Drillers pushing split spoons
1	648	CL		CLAY; trace sand and gravel; roots; slightly moist; stiff; medium plasticity; 10YR4/2 dark grayish brown with 10YR5/6 yellowish brown mottling.	LUSB0565	1-2' 100% 1.0'	LUSB0565 collected 1-2' bgs. Beta 452 alpha 5
2	647			No description available, drilled through this interval.			
3	646	CL		CLAY; trace sand and gravel; slightly moist; stiff; low plasticity; 10YR4/3 brown with 10YR5/1 gray mottling.	LUSB0566	3-5' NR	LUSB0566 collected 3-4' bgs. Beta 440 alpha 8
4	645				LUSB0567	NR	LUSB0567 collected 4-5' bgs. Beta 412 alpha 6
5	644			Bottom of Boring at 5.0 ft bgs.			
6	643						
7	642						
8	641						
9	640						
10	639						
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20	629						

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Remedial Investigation
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Soil Boring IA05-SB0016

Investigative Area 05	: Filterbed Area
Start Date	: 07/21/98
End Date	: 07/21/98
Northing Coord.	: 654555.8854
Easting Coord.	: 1697793.2582 OH83/N ft.
Total Depth of Boring	: 4.0 feet

Drilling Company	: SAIC
Driller	: Beau Williams
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. 652.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	652						
		CL		CLAY; some silt; brick fragments; dry; stiff; non-plastic; 10YR4/3 brown.			Rad Background Beta 305 alpha 2
1	651						
					LUSB0568		LUSB0568 collected 1-2' bgs.
2	650					NR	
					LUSB0569		LUSB0569 collected 2-3' bgs.
3	649						
					LUSB0570		LUSB0570 collected 3-4' bgs.
4	648			Bottom of Boring at 4.0 ft bgs.			
5	647						
							Depths measured from surface of pile. Estimated pile at 3' high.
6	646						
7	645						
8	644						
9	643						
10	642						
11	641						
12	640						
13	639						
14	638						
15	637						
16	636						
17	635						
18	634						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	633						
20							

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Soil Boring IA05-SB0017

Investigative Area 05	: Filterbed Area
Start Date	: 07/21/98
End Date	: 07/21/98
Northing Coord.	: 654590.3341
Easting Coord.	: 1697781.7752 OH83/N ft.
Total Depth of Boring	: 4.0 feet

Drilling Company	: SAIC
Driller	: Beau Williams
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. 650.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	650	CL		CLAY; some silt; rock and brick fragments; cardboard; dry; firm; 10YR4/3 brown.		NR	Rad Background Beta 301 alpha 4
1	649				LUSB0571		LUSB0571 collected 1-2' bgs.
2	648				LUSB0572		LUSB0572 collected 2-3' bgs.
3	647				LUSB0573		LUSB0573 collected 3-4' bgs.
4	646			Bottom of Boring at 4.0 ft bgs.			
5	645						Depths measured from surface of pile. Estimated pile at 3' high.
6	644						
7	643						
8	642						
9	641						
10	640						
11	639						
12	638						
13	637						
14	636						
15	635						
16	634						
17	633						
18	632						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631						
20							

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Soil Boring IA05-SB0018

Investigative Area 05	: Filterbed Area
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654780.3200
Easting Coord.	: 1697626.8527 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 648.51	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648			No description available, drilled through this interval.			Rad Background Beta 368
1	647	CL		CLAY; some silt; trace gravel; damp; firm; slightly plastic; 10YR4/2 dark grayish brown with 10YR5/6 yellowish brown.	LUSB0582	1-3' 100%	LUSB0582 collected 1-2' bgs. Split spoon 1-3' Blow Counts 6/11/14/15
2	646					2.0'	
3	645				LUSB0583	3-5' 92%	LUSB0583 collected 3-3.8' bgs. Split spoon 3-5' Blow Counts 8/8/9/12
4	644				LUSB0584	4.6'	LUSB0584 collected 3.8-4.6' bgs.
5	643			No description available, drilled through this interval.			
6	642						
7	641						
8	640						
9	639	CL		same as above except damp; softer; more plastic; mostly brown.	LUSB0585		LUSB0585 collected 9-10' bgs. Split spoon 9-10' Blow Counts 5/18
10	638			Bottom of Boring at 10.0 ft bgs.			
11	637						
12	636						
13	635						
14	634						
15	633						
16	632						
17	631						
18	630						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	629						
20							

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Soil Boring IA05-SB0019

Investigative Area 05	: Filterbed Area
Start Date	: 07/10/98
End Date	: 07/10/98
Northing Coord.	: 654781.5673
Easting Coord.	: 1697747.4261 OH83/N ft.
Total Depth of Boring	: 11.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.47	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648			No description available, drilled through this interval.			Rad Background Beta 354 alpha 9
1	647	CL		CLAY; trace gravel, rounded; slightly moist; stiff; 5Y4/1 dark gray with 10YR5/6 yellowish brown mottling.	LUSB0586 LUSB9026	1-2' 100% 1.0'	LUSB0586 and duplicate LUSB9026 collected 1-2' bgs. Split spoon 1-2' 9/19/19/21
2	646						
3	645				LUSB0587	3-5' <10% <0.2'	LUSB0587 collected 3-4' bgs. Split spoon 3-5' 2/9/13/10
4	644						
5	643			No description available, drilled through this interval.			
6	642						
7	641						
8	640						
9	639	CL		CLAY; trace gravel, rounded; slightly stiff; medium plasticity; 10YR4/1 dark gray.	LUSB0589	9-10' 25% 0.25'	LUSB0589 collected 9-10' bgs. Split spoon 9-10' 5/14
10	638	CL ML		Shelby Tube Collected 10.0-11.0' bgs. Sandy Silty CLAY. Geotechnical Sample LUSB1050.	Shelby tube		Shelby tube collected 10-11' bgs. Two borings used to obtain enough sample material.
11	637			Bottom of Boring at 11.0 ft bgs.			
12	636						
13	635						
14	634						
15	633						
16	632						
17	631						
18	630						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	629						
20							

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Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IA05-SB0020

Investigative Area 05	: Filterbed Area
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654686.9559
Easting Coord.	: 1697648.8356 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 648.88	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0							
1	648	SM		SAND, fine to coarse, well rounded; some silt; roots; 2.5Y7/1 light gray.	LUSB0590 LUSB9063	0-2' 80% 1.6'	Rad Background Beta 434 alpha 4 LUSB0590 and duplicate LUSB9063 collected 1-2' bgs. Split spoon 0-2' Blow Counts 2/4/3/5
2	647			No description available, drilled through this interval.			
3	646						
4	645	CL		CLAY; trace sand and gravel, well rounded; moist; plastic; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.	LUSB0591 LUSB0592	3-5' 75% 1.5'	LUSB0591 collected 3-4' bgs. Beta 424 alpha 5 Split spoon 3-5' Blow Counts NR LUSB0592 collected 4-5' bgs. Beta 444 alpha 4
5	644			No description available, drilled through this interval.			
6	643						
7	642						
8	641						
9	640	CL		CLAY; trace very fine sand; low plasticity; 2.5Y4/2 dark grayish brown. (black magnesium?) staining along planes of weakness in soil.	LUSB0593	9-10' 100% 1.0'	LUSB0593 collected 9-10' bgs. Split spoon 9-10' Blow Counts 25/50
10	639			Bottom of Boring at 10.0 ft bgs.			
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20	629						

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Remedial Investigation
Feasibility Action Program
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Buffalo, NY 14207-3199

Soil Boring IA05-SB0021

Investigative Area 05	: Filterbed Area
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654735.8391
Easting Coord.	: 1697765.3711 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140 Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 649.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649						
		CL		CLAY; trace sand; dry; very stiff; 2.5Y4/2 dark grayish brown.			Rad Background Beta 329 alpha 4
1	648					0-2'	
				Trench material; charcoal like (crushed); dry; black.	LUSB0594	50%	LUSB0594 collected 1-2' bgs.
2	647			CLAY; trace sand and gravel, well rounded; moist; plastic; 2.5Y5/2 grayish brown with 10YR5/8 yellowish brown mottling.		1.0'	Split spoon 0-2' Blow Counts 5/7/11/12 Beta 391 alpha 7
3	646	CL					
					LUSB0595	3-5'	LUSB0595 collected 3-4' bgs.
4	645					75%	Beta 443 alpha 12 Split spoon 3-5'
					LUSB0596	1.5'	Blow Counts 5/8/10/10 LUSB0596 collected 4-5' bgs. Beta 474 alpha 7
5	644			No description available, drilled through this interval.			
6	643						
7	642						
8	641						
9	640					9-10'	
		CL		CLAY; trace fine to coarse sand; slightly moist; very stiff; low plasticity; 2.5Y4/2 dark grayish brown; black staining.	LUSB0593	NR	LUSB0597 collected 9-10' bgs.
10	639			Bottom of Boring at 10.0 ft bgs.		NR	Beta 402 alpha 8 Split spoon 9-10' Blow Counts 10/39
11	638						
12	637						
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630						
20							

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Remedial Investigation
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Soil Boring IA05-SB0022

Investigative Area 05	: Filterbed Area
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654732.4229
Easting Coord.	: 1697633.5587 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Corebarrel 4' Long

Depth in feet	Surf. Elev. 648.95	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0		ML		SILT; some medium to coarse sand; roots; dry; loose; non-plastic; 10YR5/2 grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	648	ML		SILT; trace clay; trace fine sand; trace gravel to 10mm, subangular; 10YR3/2 very dark grayish brown.	LUSB0629	0-4' 83% 1st 100% 2nd 3.3' 1st 4.0' 2nd	LUSB0629 collected 1-2' bgs.
2	647						
3	646	CL		CLAY; trace medium sand; dry; stiff; non-plastic; 10YR5/1 gray and 10YR5/6 yellowish brown.	LUSB0630		LUSB0630 collected 3-4' bgs.
4	645						
5	644	ML		SILT; trace fine sand; trace fine gravel, subangular; dry; dense; non-plastic; 10YR4/2 dark grayish brown and 10YR5/1 gray.	LUSB0631	4-7' 50% 1.5'	LUSB0631 collected 5-6' bgs.
6	643						
7	642	ML		SILT; trace fine to coarse sand; dry; medium dense; non-plastic; 10YR4/3 brown.	LUSB0632	7-10' 100% 3.0'	LUSB0632 collected 7-8' bgs.
8	641						
9	640				LUSB0633		LUSB0633 collected 9-10' bgs.
10	639	CL		CLAY; trace silt; trace medium sand; dry; medium dense; slightly plastic; 10YR4/2 dark grayish brown.			
				Bottom of Boring at 10.0 ft bgs.			
11	638						All rad readings below background
12	637						Refusal @ 3.3' bgs in two borings. Three borings needed to obtain sampling depths.
13	636						
14	635						
15	634						
16	633						
17	632						
18	631						
19	630						
20	629						

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Soil Boring IA05-SB0023

Investigative Area 05	: Filterbed Area
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654760.5064
Easting Coord.	: 1697695.2501 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Corebarrel 4' Long

Depth in feet	Surf. Elev. 648.26	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648	ML		SILT; some sand; trace clay; roots; dry; soft; slightly plastic; 10YR4/3 brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	647	CL		CLAY; trace silt; trace fine to medium sand; dry; stiff; slightly plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.	LUSB0639	0-4' 75% 3.0'	LUSB0639 collected 1-2' bgs.
2	646	ML		SILT; trace fine to coarse sand; trace gravel to 20mm, subangular; dry; loose; non-plastic; 10YR4/4 dark yellowish brown.			
3	645				LUSB0640		LUSB0640 collected 3-4' bgs. Rinsate equipment ER0067 used.
4	644						
5	643				LUSB0641	4-7' 100% 3.0'	LUSB0641 collected 5-6' bgs.
6	642						
7	641				LUSB0642	7-10' 100% 3.0'	LUSB0642 collected 7-8' bgs.
8	640						
9	639	ML		SILT; trace clay; trace medium to very coarse sand, subrounded to subangular; dry; dense; non-plastic; 10YR4/1 dark gray.	LUSB0643		LUSB0643 collected 9-10' bgs.
10	638			Bottom of Boring at 10.0 ft bgs.			
11	637						All rad readings below background
12	636						
13	635						
14	634						
15	633						
16	632						
17	631						
18	630						
19	629						
20							

Remedial Investigation
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Soil Boring IA05-SB0024

Investigative Area 05	: Filterbed Area
Start Date	: 07/08/98
End Date	: 07/08/98
Northing Coord.	: 654778.8533
Easting Coord.	: 1697689.2499 OH83/N ft.
Total Depth of Boring	: 10.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 2" Corebarrel 4' Long

Surf. Elev. 648.37

Depth in feet	USCS	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	ML	SILT; trace medium sand; trace clay; roots; dry; loose; slightly plastic; 10YR3/2 very dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	ML	SILT; trace fine sand; trace very fine gravel; dry; dense; non-plastic; 10YR3/1 dark gray.		0-4'	
	CL	CLAY; trace silt; trace fine to medium sand; dry; stiff; slightly plastic; 10YR5/1 gray and 10YR4/4 dark yellowish brown.	LUSB0649	90%	LUSB0649 collected 1-2' bgs.
2				3.6'	
3					
4			LUSB0650		LUSB0650 collected 3-4' bgs. Rinsate equipment ER0068 used.
5			LUSB0651	4-8'	LUSB0651 collected 5-6' bgs.
6	ML	SILT; trace fine to coarse sand; trace gravel to 20mm, subangular; dry; loose; non-plastic; 10YR4/4 dark yellowish brown.		100%	
7				4.0'	
8			LUSB0652		LUSB0652 collected 7-8' bgs.
9				8-10'	
				100%	
10	ML	SILT; trace clay; trace medium sand; trace very fine gravel; dry; very dense; non-plastic; 10YR4/1 dark gray.	LUSB0653	2.0	LUSB0653 collected 9-10' bgs.
		Bottom of Boring at 10.0 ft bgs.			
11					All rad readings below background
12					
13					
14					
15					
16					
17					
18					
19					
20					

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Remedial Investigation
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Soil Boring IA05-SB0025

Investigative Area 05	: Filterbed Area
Start Date	: 07/11/98
End Date	: 07/11/98
Northing Coord.	: 654521.1974
Easting Coord.	: 1697588.6181 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: SAIC
Driller	: Pete Ferron
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: E. Joseph Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Auger Bucket

Depth in feet	Surf. Elev. 652.00	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	652						
		ML		SILT; 20% medium to coarse sand; trace fine gravel; roots; dry; loose; non-plastic; 10YR4/2 dark grayish brown.			All colors from Munsell Soil Color Chart 1992 Revised Edition
1	651				LUSB0659		
		SM		SAND, fine to medium; some silt; trace gravel; dry; loose; non-plastic; 10YR5/3 brown.	LUSB9568		LUSB0659 and duplicate LUSB9568 collected 1-2' bgs.
2	650						
3	649			Cobble Zone 3.5-4.5' bgs	LUSB0660	100	LUSB0660 collected 3-4' bgs.
4	648						
5	647						
		ML		SILT; some clay; trace fine to medium sand; slightly moist; low plasticity; 10YR3/2 dark grayish brown.	LUSB0661		LUSB0661 collected 5-6' bgs.
6	646				LUSB0662		LUSB0662 collected 6-7' bgs.
7	645			Bottom of Boring at 7.0 ft bgs.			
8	644						
9	643						
10	642						
11	641						
12	640						
13	639						
14	638						
15	637						
16	636						
17	635						
18	634						
19	633						
20							

IA07:
Boring Logs

Remedial Investigation
Feasibility Action Program
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1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IA07-SB0001

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/23/98
End Date	: 06/23/98
Northing Coord.	: 654487.4050
Easting Coord.	: 1697201.6909 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 648.81

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Augered through 0-1' Interval.			Rad bkg Beta 243 alpha 2.
1	648		CL		Silty CLAY; also fine sand and gravel; 10YR3/2 very dark grayish brown.	LUSB0707	1-2' 100% 1.0'	Sample LUSB0707 collected 1-2' bgs. Split Spoon 1-2' bgs Blow Counts 4/7
2	647							
3	646							
4	645		SM		SAND, fine to medium; with silt; wet; soft.	LUSB0708	3-4' 80% 0.8'	Sample LUSB0708 collected 3-3.8' bgs. Split Spoon 3-4' bgs Blow Counts 2/5
					Drillers missed sample interval and augered through.			
5	644							
6	643		CL		Sandy CLAY; trace small gravel; wet; soft; very plastic; 2.5Y4/2 dark grayish brown; sand is gray.	LUSB0709	6-7' 100% 1.0'	Sample LUSB0709 collected 6-7' bgs. Split Spoon 6-7' bgs Blow Counts 2/2
7	642				Augered through 7-8' interval.			
8	641		SP		SAND, fine to medium; black sand layer at 8.4'; saturated.	LUSB0710	8-9' 80% 0.8'	Sample LUSB0710 collected 8-8.8' bgs. Split Spoon 8-9' bgs Blow Counts 2/2
9	640				No recovery for description.			
10	639		SP		SAND, fine to medium; trace gravel <2cm, subangular; saturated; gray.	LUSB0679	9-10' 100% 1.0'	Sample LUSB0679 collected 9-10' bgs. Split Spoon 9-10' bgs. Blow Counts 2/3
					No recovery, sand blowing in augers, can't drive spoon.			
11	638							
12	637				Bottom of Boring at 12.0 ft bgs. Auger refusal.			
13	636							
14	635							
15	634							
16	633							
17	632							
18	631							Colors from Munsell Soil Color Chart 1992 Revised Edition
19	630							
20	629							

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Remedial Investigation
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Soil Boring IA07-SB0002

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/24/98
End Date	: 06/24/98
Northing Coord.	: 654502.4312
Easting Coord.	: 1697223.6069 OH83/N ft.
Total Depth of Boring	: 12.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 648.80

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Augered through 0-1' Interval.			Rad bkg Beta 246 alpha 2.
1	648		CL		Silty CLAY; with fine sand; damp; moderately plastic; 10YR4/4 dark yellowish brown.	LUSB0711	1-2' 50% 0.5'	Sample LUSB0711 collected 1-1.5' bgs. Split Spoon 1-2' bgs. Blow Counts 4/6
2	647							
3	646							
4	645		SC		SAND; with clay; moist. 3.5'-3.6 ' bgs.	LUSB0712	3-4' 60% 0.6'	Sample LUSB0712 collected 3-3.6' bgs. Split Spoon 3-4' bgs Blow Counts 2/4
					Augered through 4-5' interval.			
5	644		CL		Sandy CLAY; wet; very plastic; 10YR4/1 dark gray.	LUSB0713	5-6' 100% 1.0'	Sample LUSB0713 collected 5-6' bgs. Split Spoon 5-6' bgs Blow Counts 2/2
6	643				Augered through 6-7' interval.			
7	642		SP		SAND, poorly sorted; saturated; mostly gray with some thin black layers.	LUSB0714	7-8' 100% 1.0'	Sample LUSB0714 collected 7-8' bgs. Split Spoon 7-8' bgs Blow Counts NR
8	641				Augered through 8-9' interval. 9-9.2' interval same as above.			
9	640		CL		Silty CLAY; trace gravel, subangular; damp; stiff; 10YR3/3 dark brown.	LUSB0680	9-10' 100% 1.0'	Sample LUSB0680 collected 9-10' bgs. Split Spoon 9-10' bgs. Blow Counts 11/13
10	639				Augered through 10-11' interval.			
11	638		CL		Silty CLAY; trace gravel <2cm, subangular/subrounded; damp; stiff; moderately plastic; 10YR5/1 gray.	LUSB0715	11-12' 100% 1.0'	Sample LUSB0715 collected 11-12' bgs. Split Spoon 11-12' bgs. Blow counts 10/18.
12	637				Augered through 12-13' interval. 13-13.8' interval same as above.			
13	636					LUSB0716	13-14' 100% 1.0'	Sample LUSB0716 collected 13-14' bgs. Split Spoon 13-14' bgs. Blow counts 3/7
14	635		CL		Changing to 5YR3/2 dark reddish brown with more sand, moist. (color change in lower 0.2')			
15	634				Augered through 14-15' interval.			
16	633		CL		Same gray Silty CLAY as above; moist; firm; plastic. Augered through 15-16' interval.	LUSB0717	15-16' 100% 1.0'	Sample LUSB0717 collected 15-16' bgs. Split Spoon 15-16' bgs. Blow counts 2/10
17	632							
18	631				Same as above except sandy; wet; softer; more rounded gravel <5cm.	LUSB0718	17-18' 100% 1.0'	Sample LUSB0718 collected 17-18' bgs. Split Spoon 17-18' bgs. Blow counts 6-19
					Augered through 18-18.5' interval.			
19	630				Bottom of Boring at 18.5 ft bgs. Auger refusal.			Colors from Munsell Soil Color Chart 1992 Revised Edition
20	629							

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Soil Boring IA07-SB0003

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/19/98
End Date	: 06/22/98
Northing Coord.	: 654672.2471
Easting Coord.	: 1697324.5154 OH83/N ft.
Total Depth of Boring	: 8.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 647.97	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			CL		Silty CLAY; limestone gravel at surface; damp; firm; moderately plastic; 10YR2/2 very dark brown.			
1	647		CL		Silty CLAY; trace (10%) gravel, subangular, <1cm; overall damp (moist at 2.5'); moderately plastic; mottled 10YR4/6 dark yellowish brown and 10YR5/1 gray.	LUSB0681	0-2' 100% 2.0'	Sample LUSB0681 collected 1-2' bgs. Split Spoon 1-2' bgs Blow Counts NR
2	646							
3	645					LUSB0687	2-4' 80% 1.6	Sample LUSB0687 collected 2.6-3.6' bgs. Split Spoon 2-4' bgs. Blow Counts 4/5/5/7
4	644				No recovery.			
5	643		CL		Same as above; trace white crystlline powder; overall damp;	LUSB0688		Sample LUSB0688 collected 4-5' bgs. Sample LUSB0727 collected 5-5.6' bgs. Split Spoon 4-6' bgs. Blow Counts 6/7/8/4
			ML		Becomes mostly SILT; with some sand, fine; moist.	LUSB0727	4-6' 80% 1.6'	
					No recovery.			
6	642		ML		Same; overall moist and Silty; also some clay; very plastic.	LUSB0728		Sample LUSB0728 collected 6-7' bgs. Split Spoon 6-8' bgs Blow Counts 4/10/15/27
7	641						6-8' 100% 2.0'	Note: had to complete hole on 6-22-98 due to difficulty in obtaining recovery from 0-2' (rocks).
8	640				Bottom of Boring at 8.0 ft bgs.			
9	639							Colors from Munsell Soil Color Chart 1992 Revised Edition
10	638							

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Soil Boring IA07-SB0004

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/22/98
End Date	: 06/22/98
Northing Coord.	: 654612.4047
Easting Coord.	: 1697309.4663 OH83/N ft.
Total Depth of Boring	: 6.8 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 647.89

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			CL		Silty CLAY; limestone gravel at surface; damp; firm; moderately plastic; 10YR2/2 very dark brown.			
1	647		CL		Silty CLAY; trace gravel, subangular; moist; soft; plastic; mottled 10YR4/6 dark yellowish brown and 10YR5/1 gray.	LUSB0684		Sample LUSB0684 collected 1-2' bgs. Split Spoon 1-3' bgs Blow Counts 4/9/12/17
2	646						1-3' 75% 1.5'	
					No recovery.			
3	645		CL		Same as above; except 20% gravel <1cm; damp; very firm; mostly 10YR3/4 dark yellowish brown with gray mottle.	LUSB0689		Sample LUSB0689 collected 3-4' bgs. Sample LUSB0690 collected 4-5' bgs. Split Spoon 3-5' bgs. Blow Counts 4/19/26/40
4	644					LUSB0690	3-5' 100% 2.0'	
5	643		ML		Same as above except mostly SILT; with some clay and gravel; dry; stiff.	LUSB0729		Sample LUSB0729 collected 5-6' bgs. Sample LUSB0730 collected 6-6.8' bgs. Split Spoon 5-7' bgs. Blow Counts 4/22/27/50-3"
6	642					LUSB0730	5-7' 90% 1.8'	
7	641				Bottom of Boring at 6.8 ft bgs.			
8	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	639							
10	638							

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Soil Boring IA07-SB0005

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/22/98
End Date	: 06/22/98
Northing Coord.	: 654629.9572
Easting Coord.	: 1697377.1171 OH83/N ft.
Total Depth of Boring	: 7.8 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 648.10	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648		CL		Silty CLAY; limestone gravel; damp; firm; 10YR2/2 very dark brown.			
1	647		CL		Silty CLAY; damp; firm; moderately plastic; mottled 10YR4/6 dark yellowish brown and 10YR5/1 gray.	LUSB0685		Sample LUSB0685 collected 1-2.5' bgs. Split Spoon 1-3' bgs. Blow Counts 4/12/14/14
2	646		CL				1-3' 100% 2.0'	
3	645		CL			LUSB0691		Sample LUSB0691 collected 3-4' bgs. Sample LUSB0692 collected 4-5' bgs. Split Spoon 3-5' bgs. Blow Counts 2/4/11/16
4	644		CL		Same as above; more silt; damp; firm; gravel, subangular.	LUSB0692	3-5' 100% 2.0'	
5	643		CL			LUSB0731		Sample LUSB0731 collected 5-6' bgs. Sample LUSB0732 collected 6-7' bgs. Split Spoon 5-7' bgs. Blow Counts 4/5/15/21
6	642		CL		Same as above; damp.	LUSB0732	5-7' 100% 2.0'	
7	641		CL		Shelby Tube refusal at 7.8'. Lean CLAY with SAND. Geotechnical Sample LUSB1052.			Shelby tube and bucket sample collected for geotechnical sample.
8	640				Bottom of Boring at 7.8 ft bgs.			Note: collected shelby tube from 7-7.8' bgs and bucket (cuttings) from 5-7.8' bgs.
9	639							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

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Soil Boring IA07-SB0006

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 654733.6643
Easting Coord.	: 1697134.3026 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 647.82	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Augered through 0-1' interval.			Rad bkg Beta 266
	647							
1			CL		Silty CLAY; trace gravel to 3cm; damp; stiff; moderately plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0682		Sample LUSB0682 collected 1-2' bgs. Split Spoon 1-3' bgs. Blow Counts 5/10/10/11
	646							
2							1-3' 65% 1.3'	
	645							
3			CL		Same as above; more clay; stiff; trace gravel to 3cm, subangular.	LUSB0693		Sample LUSB0693 collected 3-4' bgs. Sample LUSB0694 collected 4-5' bgs. Split Spoon 3-5' bgs. Blow Counts NR
	644							
4					Same as above; damp.	LUSB0694	3-5' 100% 2.0'	
	643							
5			CL		Same as above; damp; very stiff.	LUSB0733		Sample LUSB0733 collected 5-6' bgs. Sample LUSB0734 collected 6-7' bgs. Split Spoon 5-7' bgs. Blow Counts 3/18/29/50
	642							
6					Same as above; damp.	LUSB0734	5-7' 100% 2.0'	
	641							
7					Bottom of Boring at 7.0 ft bgs.			
	640							
8								Colors from Munsell Soil Color Chart 1992 Revised Edition
	639							
9								
	638							
10								

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Soil Boring IA07-SB0007

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 654725.0685
Easting Coord.	: 1697299.4269 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 647.99	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Augered through 0-1' interval.			Rad bkg Beta 271
1	647							
			CL		Silty CLAY; trace gravel; damp; moderately plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0683		Sample LUSB0683 collected 1-2' bgs. Split Spoon 1-3' bgs. Blow Counts 4/7/9/12
2	646						1-3' 50% 1.0'	
3	645				Same as above; more clay; trace roots; trace gravel; damp.	LUSB0695		Sample LUSB0695 collected 3-4' bgs. Sample LUSB0696 collected 4-4.5' bgs. Split Spoon 3-5' bgs. Blow Counts 3/7/13/14
4	644		CL		Same as above; damp.	LUSB0696	3-5' 75% 1.5'	
5	643				Same as above	LUSB0735		Sample LUSB0735 collected 5-6' bgs. Sample LUSB0736 collected 6-7' bgs. Split Spoon 5-7' bgs. Blow Counts 4/9/23/36
6	642		CL			LUSB0736	5-7' 100% 2.0'	
7	641				Bottom of Boring at 7.0 ft bgs.			
8	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	639							
10	638							

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Soil Boring IA07-SB0008

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 654738.6512
Easting Coord.	: 1696986.1073 OH83/N ft.
Total Depth of Boring	: 7.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 647.79	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Augered through 0-1' interval.			Rad bkg Beta 253
	647							
1			CL		Silty CLAY; damp; stiff; slightly plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0686		Sample LUSB0686 collected 1-1.5' bgs. Split Spoon 1-3' bgs. Blow Counts 4/12/12/11
	646							
2							1-3' 25%	
	645						0.5'	
3			CL		Same as above; trace gravel.	LUSB0697		Sample LUSB0697 collected 3-4' bgs. Sample LUSB0698 collected 4-5' bgs. Split Spoon 3-5' bgs. Blow Counts NR
	644							
4							3-5'	
						LUSB0698	100%	
	643						2.0'	
5			CL		Same as above; dry; very stiff.	LUSB0737		Sample LUSB0737 collected 5-6' bgs. Sample LUSB0738 collected 6-7' bgs. Split Spoon 5-7' bgs. Blow Counts 3/16/27/35
	642							
6							5-7'	
						LUSB0738	100%	
	641						2.0'	
7					Bottom of Boring at 7.0 ft bgs.			
	640							
8								Colors from Munsell Soil Color Chart 1992 Revised Edition
	639							
9								
	638							
10								

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Soil Boring IA07-SB0009

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/27/98
End Date	: 06/27/98
Northing Coord.	: 654505.3806
Easting Coord.	: 1696787.6298 OH83/N ft.
Total Depth of Boring	: 7.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Surf. Elev. 649.02

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649							
			CL		Silty CLAY; some sand and gravel; trace organic material; damp; 10YR3/2 very dark grayish brown; looks like fill.			Rad bkg Beta 273
1	648					LUSB0699	0-2' 100% 2.0'	Sample LUSB0699 collected 0.5-1.5' bgs. Split Spoon 0-2' bgs. Blow Counts 4/5/8/8
2	647							Augered 2-3' interval due to rock.
3	646		FL		light gray material; saturated. white saturated soft material.	LUSB0700		Sample LUSB0700 and duplicate collected 3-4' bgs. Sample LUSB0701 collected 4-5' bgs. Split Spoon 3-5' bgs. Blow Counts 2/2/6/13
4	645		FL		CLAY/SILT; wet; soft; 10YR4/1 dark gray; also streaks of light gray material as above.	LUSB0701	3-5' 100% 2.0'	
5	644							Sample LUSB0702 collected 6.5-7.5' bgs. Split Spoon 6-8' bgs. Blow Counts 8/29/33-4"
6	643		CL		Silty CLAY; damp; firm; not plastic; mottled 10YR5/1 gray and 10YR5/8 yellowish brown. Same as above; trace gravel to 2 cm, rounded; damp.		6-8' 75% 1.5'	
7	642					LUSB0702		
					Bottom of Boring at 7.5 ft bgs.			
8	641							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	640							
10								

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Soil Boring IA07-SB0010

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/27/98
End Date	: 06/27/98
Northing Coord.	: 654531.7894
Easting Coord.	: 1696801.1549 OH83/N ft.
Total Depth of Boring	: 6.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 45 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. 648.51	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0								
	648		FL		Silty CLAY; some sand and gravel; damp; 10YR3/2 very dark grayish brown; Fill.			Rad bkg Beta 273
1						LUSB0703	0-2' 100% 2.0'	Sample LUSB0703 collected 0.5-1.5' bgs. Split Spoon 0-2' bgs. Blow Counts 6/8/6/7
	647							
2								
	646				SLUDGE; saturated; soft; light gray/white.	LUSB0704		
3							2-4' 80% 1.6	Sample LUSB0704 collected 3-4' bgs. Split Spoon 2-4' bgs. Blow Counts 2/4/2/3
	645		CL		Silty CLAY; trace gravel and shale fragments; firm; mottled 10YR5/1 gray and 10YR5/8 yellowish brown.			
4								
	644							
5							4-6' 100% 2.0'	Sample LUSB0705 collected 5-6' bgs. Split Spoon 4-6' bgs. Blow Counts 3/10/18/20
	643					LUSB0705		
6					Bottom of Boring at 6.0 ft bgs.			
	642							
7								
	641							
8								Colors from Munsell Soil Color Chart 1992 Revised Edition
	640							
9								
	639							
10								

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Soil Boring IA07-SB0011

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/23/98
End Date	: 06/23/98
Northing Coord.	: 654566.6043
Easting Coord.	: 1697210.5163 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Surf. Elev. 648.01

Depth in feet	Elev.	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648		ML		SILT; trace clay; trace medium sand; trace gravel to 8mm, subrounded; roots; dry; loose; non-plastic; 10YR3/2 Very Dark Grayish Brown.	LUSB0739		Sample LUSB0739 collected 0.0-1.0' bgs. 3.0 ppm Beta <1000dpm alpha <300dpm
1	647		CL		CLAY; trace medium sand; dry; stiff; slightly plastic; 10YR4/2 dark grayish brown.	LUSB0740	0-3' 100% 3.0'	Sample LUSB0740 collected 1-2' bgs.
2	646		CL		CLAY; some fine to medium sand; trace gravel to 10mm, subrounded to subangular; dry; very stiff; medium plastic; 10YR5/1 gray mottled with 10YR5/6 yellowish brown.	LUSB0741 LUSB9078 LUSB9578		Sample LUSB0741 collected with duplicate LUSB9078 and split LUSB9578 2-3' bgs.
3	645					LUSB0742		Sample LUSB0742 collected 3-4' bgs. 0 ppm Beta <1000dpm alpha <300dpm
4	644					LUSB0743	3-5' 100% 2.0'	Sample LUSB0743 collected 4-5' bgs.
5	643				Bottom of Boring at 5.0 ft bgs.			
6	642							
7	641							
8	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	639							
10								

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Soil Boring IA07-SB0012

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/23/98
End Date	: 06/23/98
Northing Coord.	: 654593.0806
Easting Coord.	: 1697439.3545 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.84	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace fine sand; trace clay; roots; dry; loose; non-plastic; 10YR5/2 grayish brown.			
			GP		GRAVEL, road bed.	LUSB0744		Sample LUSB0744 collected 0.0-1.0' bgs.
1	648					LUSB0745	0-3' 100% 3.0'	Sample LUSB0745 collected 1-2' bgs.
2	647		CL		CLAY; trace fine sand; dry; stiff; plastic; 10YR3/2 very dark grayish brown.			Sample LUSB0746 collected 2-3' bgs.
			CL		CLAY; some fine to medium sand; dry; stiff; medium plasticity; 10YR4/1 dark gray mottled with 10YR4/6 dark yellowish brown.	LUSB0746		
3	646					LUSB0747		Sample LUSB0747 collected 3-4' bgs.
4	645					LUSB0748	3-5' 100% 2.0'	Sample LUSB0748 collected 4-5' bgs.
5	644				Bottom of Boring at 5.0 ft bgs.			
6	643							PID down, no readings taken Beta <1000 dpm alpha <300 dpm
7	642							
8	641							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	640							
10	639							

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Soil Boring IA07-SB0013

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/24/98
End Date	: 06/24/98
Northing Coord.	: 654666.9978
Easting Coord.	: 1697415.0435 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.16	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	648		ML		SILT; some medium to coarse sand; trace gravel to 10mm, subangular; roots; dry; loose; non-plastic; 10YR4/1 dark gray.	LUSB0749		Sample LUSB0749 collected 0.0-1.0' bgs.
			CL		CLAY; trace fine sand; trace gravel to 40mm, subrounded to subangular; dry; stiff; slightly plastic; 10YR4/6 dark yellowish brown mottled with 10YR5/2 grayish brown.			
1	647					LUSB0750	0-3' 100% 3.0'	Sample LUSB0750 and duplicate LUSB9079 collected 1-2' bgs.
						LUSB9079		
2	646					LUSB0751		Sample LUSB0751 collected 2-3' bgs.
3	645					LUSB0752		Sample LUSB0752 collected 3-4' bgs.
4	644					LUSB0753	3-5' 100% 2.0'	Sample LUSB0753 collected 4-5' bgs. Rinsate equipment ER0078 used.
5	643				Bottom of Boring at 5.0 ft bgs.			
6	642							PID NR Beta <1000 dpm alpha <300 dpm
7	641							
8	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	639							
10								

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Soil Boring IA07-SB0014

Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/24/98
End Date	: 06/24/98
Northing Coord.	: 654756.8926
Easting Coord.	: 1697239.7157 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 647.99	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			ML		SILT; trace medium to coarse sand; roots; dry; loose; non-plastic; 10YR4/2 dark grayish brown.	LUSB0754		Sample LUSB0754 collected 0.0-1.0' bgs. Rinsate equipment ER0079 used.
1	647		CL		CLAY; trace fine to medium sand; dry; stiff; medium plasticity; 10YR4/1 dark gray mottled with 10YR4/4 dark yellowish brown.		0-3'	
						LUSB0755	83%	Sample LUSB0755 collected 1-2' bgs.
2	646						2.5'	
						LUSB0756		Sample LUSB0756 collected 2-3' bgs.
3	645							
					plastic.	LUSB0757		Sample LUSB0757 collected 3-4' bgs.
4	644						3-5'	
					slightly plastic.	LUSB0758	100%	Sample LUSB0758 collected 4-5' bgs.
5	643						2.0'	
					Bottom of Boring at 5.0 ft bgs.			
6	642							PID NR Beta <1000 dpm alpha <300 dpm
7	641							
8	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
9	639							
10	638							

IA08:
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Soil Boring IA08-SB0001

Investigative Area 08	: Plant Area West
Start Date	: 08/03/98
End Date	: 08/03/98
Northing Coord.	: 654802.4133
Easting Coord.	: 1696758.5252 OH83/N ft.
Total Depth of Boring	: 3.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 648.98	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Asphalt 0-2".			
			GP		GRAVEL and SAND 2-4".			
			CL		CLAY; trace sand; moist; slightly stiff; medium plasticity; 5Y5/2 olive gray with some 2.5Y5/6 light olive brown clay mottles.	LUSB0760		Sample LUSB0760 collected 0.0-1.0' bgs. Rad Beta 355cpm alpha 12cpm
1	648					LUSB0765	100%	Sample LUSB0765 collected 1.0-2.0' bgs. Rad Beta 351cpm alpha 14cpm
2	647				light olive brown mottles increased to 50%.	LUSB0766		Sample LUSB0766 collected 2.0-3.0' bgs. Rad NR
3	646				Bottom of Boring at 3.0 ft bgs.			Rad Bkg Beta 191cpm alpha 7cpm
4	645							
5	644							
6	643							
7	642							
8	641							
9	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
10	639							

Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IA08-SB0002

Investigative Area 08	: Plant Area West
Start Date	: 08/03/98
End Date	: 08/03/98
Northing Coord.	: 654595.4179
Easting Coord.	: 1696611.9823 OH83/N ft.
Total Depth of Boring	: 3.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 648.73	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0					Asphalt 0-2".			
			GP		GRAVEL and SAND 2-8".	LUSB0761		Sample LUSB0761 collected 0.0-1.0' bgs. Rad Beta 311cpm alpha 10cpm
	648							
1			CL		CLAY; some gravel and sand; moist; slightly stiff; medium plasticity; GLEY 4/1 dark greenish gray.			
					10YR5/8 yellowish brown mottles, 50%.	LUSB0768	100%	Sample LUSB0768 collected 1.0-2.0' bgs. Rad Beta 355cpm alpha 8cpm
	647							
2						LUSB0769		Sample LUSB0769 collected 2.0-3.0' bgs. Rad Beta 347cpm alpha 7cpm
	646							
3					Bottom of Boring at 3.0 ft bgs.			Rad Bkg Beta 201cpm alpha 5cpm
	645							
4								
	644							
5								
	643							
6								
	642							
7								
	641							
8								
	640							
9								Colors from Munsell Soil Color Chart 1992 Revised Edition
	639							
10								

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Buffalo District
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Soil Boring IA08-SB0003

Investigative Area 08	: Plant Area West
Start Date	: 06/27/98
End Date	: 06/27/98
Northing Coord.	: 654308.5889
Easting Coord.	: 1696584.1932 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Pete Ferron
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Joe Schultheis
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 649.13	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	649		CL		Silty CLAY; moist; soft; plastic; 2.5Y4/2 dark grayish brown with brownish yellow mottles.	LUSB0762	100%	Sample LUSB0762, duplicate and split samples collected 0.5-1.5' bgs.
1	648							
2	647		CL		Same as above with 20% gravel, well rounded, and coarse sand.	LUSB0763		Sample LUSB0763 collected 1.5-2.5' bgs.
3	646							
4	645		CL		Same as above with mottles increasing in size and frequency.	LUSB0764		Sample LUSB0764 collected 4.0-5.0' bgs.
5	644				Bottom of Boring at 5.0 ft bgs.			
6	643							
7	642							
8	641							
9	640							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

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Soil Boring IA08-SB0004

Investigative Area 08	: Plant Area West
Start Date	: 06/29/98
End Date	: 06/29/98
Northing Coord.	: 654001.2777
Easting Coord.	: 1696725.2516 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. 649.87	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0			CL		Silty CLAY; moist; firm; medium plasticity; 2.5Y4/2 dark grayish brown.			
								Sample LUSB0977 collected 0.5-1.5' bgs.
1	649					LUSB0977	100%	
2	648					LUSB0978		Sample LUSB0978 collected 1.5-2.5' bgs.
3	647							
4	646		CL		Silty CLAY; with sand (10-15%) fine to medium; moist; stiff; 2.5Y4/1 gray with reddish brown mottling.			
						LUSB0979		Sample LUSB0979 collected 4.0-5.0' bgs.
5	645				Bottom of Boring at 5.0 ft bgs.			
6	644							
7	643							
8	642							
9	641							Colors from Munsell Soil Color Chart 1992 Revised Edition
10	640							

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Soil Boring IA08-SB0005

Investigative Area 08	: Plant Area West
Start Date	: 07/01/98
End Date	: 07/01/98
Northing Coord.	: 654184.5374
Easting Coord.	: 1696628.6893 OH83/N ft.
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Matt Obloy
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0							
			CL		Silty CLAY; moist; low plasticity; 10YR4/2 dark grayish brown.			
1	-1					LUSB0980		Sample LUSB0980 collected 0.5-1.5' bgs.
			CL		Silty CLAY; moist; medium plasticity; 10YR4/4 dark yellowish brown with gray mottling.		100%	
2	-2					LUSB0981		Sample LUSB0981 collected 1.5-2.5' bgs.
3	-3							
4	-4					LUSB0982		Sample LUSB0982 collected 4.0-5.0' bgs.
5	-5				Bottom of Boring at 5.0 ft bgs.			
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

IA09:
Boring Logs and Well Construction Diagrams

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Well MW-01(I)

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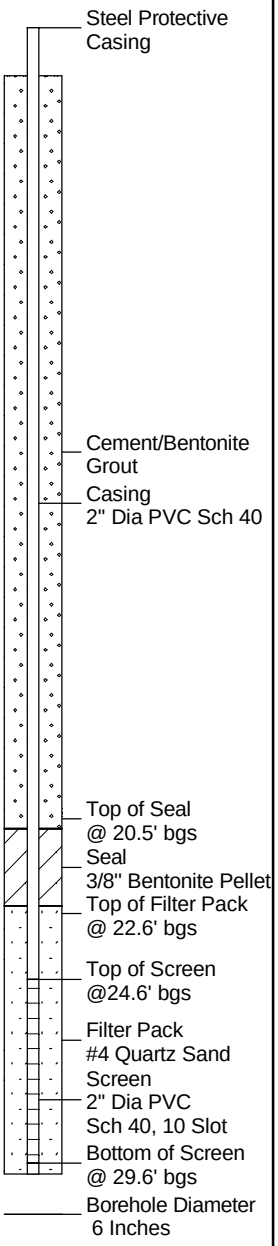
Investigative Area 05	: Filterbed Area
Start Date	: 06/19/98
End Date	: 06/22/98
Northing Coord.	: 654799.4528
Easting Coord.	: 1697509.2071 OH83/N ft.
Total Depth of Boring	: 30 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.0 ft
Depth Drilled Into Rock	: 12.0 ft
Borehole Diameter	: 6 inches
Drilling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.88	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			CL		CLAY; some silt; little gravel and sand; roots; topsoil.	
1	647		CL		CLAY; trace gravel-sand, pieces of angular shale; little silt; slightly moist; hard; medium plasticity; 2.5Y4/2 Dark Grayish Brown.	Sample 0-8' bgs. Recovery 75% 6'. Beta 304 alpha 5 @ 2'
2	646					
3	645					
4	644					
5	643					
6	642					
7	641					
8	640		CL		CLAY; little silt, fine sand; stiff to hard; medium plasticity; 2.5Y4/1 Dark Gray.	
9	639					
10	638					
11	637					
12	636					
13	635					Sample 8-18' bgs. Recovery 60% 6'.
14	634					
15	633					
16	632		SW		SAND; cobbles to 4"; dolomite fragments; trace fines.	
17	631					
18	630		DO		Dolomite Bedrock : Medium light gray N6/0; fossiliferous with corals and bryozoans; abundant vugs.	Bedrock at 18.0' bgs Sample 18-20' bgs. Recovery 100% 2'.
19	629					
20	628					
21	627					
22	626					
23	625					Rad bkg: Beta 222 alpha 5
24	624					
25	623					
26	622					
27	621					
28	620					
29	619					
30	618				Bottom of Boring at 30.0 ft bgs	
31	617					Colors from Munsell Soil Color Chart 1992 Revised Edition and Munsell Rock Color Chart.
32	616					
33	615					
34	614					
35	613					

Well1: MW-01(I)
Elev.: 650.52 TOC



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Well MW-02 (S)

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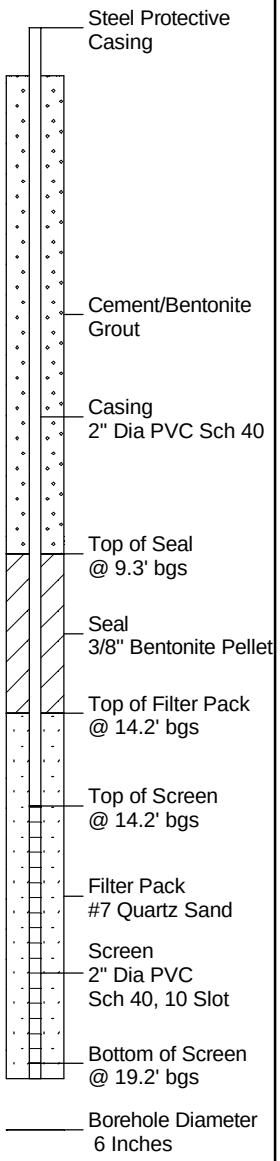
Investigative Area 05	: Filterbed Area
Start Date	: 06/23/98
End Date	: 06/23/98
Northing Coord.	: 654793.2278
Easting Coord.	: 1697495.4652 OH83/N ft.
Total Depth of Boring	: 19.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Desgnation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.8 feet
Depth Drilled Into Rock	: 2.2 feet
Borehole Diameter	: 6 inches
Drilling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.85	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	647		CL		CLAY; some silt; little gravel and sand; roots top 6"; moist; firm; medium plastic; 2.5Y4/2 Dark Grayish Brown.	
2	646					
3	645		CL		CLAY; some silt; (Silty Clay); stiff; Reddish Brown some orange mottling.	
4	644					
5	643		CL		CLAY; some silt; (Silty Clay); 5% sand-gravel fragments; slightly moist; hard; 2.5Y4/1 Dark Gray. (Lacustrine Clay)	Sample 0-8' bgs. Recovery 100% 8'. Beta 376 alpha 9 @ 5'
6	642					
7	641					
8	640					
9	639					Beta 407 alpha 3 @ 9'
10	638					
11	637					
12	636					
13	635		ML		SILT and CLAY; 20% sand and gravel; slightly moist; hard.	Sample 8-17' bgs. Recovery 100% 9'.
14	634					
15	633					
16	632					
17	631		DO		Weathered Dolomite Bedrock	
18	630		DO		Dolomite; fossiliferous; abundant vugs. Medium light Gray N 6/0.	Sample 17-19' bgs. Recovery Not Recorded.
19	629				Bottom of Boring at 19.5 ft bgs	Beta 261 alpha 2 @ 19'
20	628					
21	627					
22	626					Rad bkg: Beta 364 alpha 11
23	625					
24	624					All colors from Munsell Soil Color Chart 1992 Revised Edition
25	623					

Well1: MW-02 (S)
Elev.: 650.27 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
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Well MW-03 (I)

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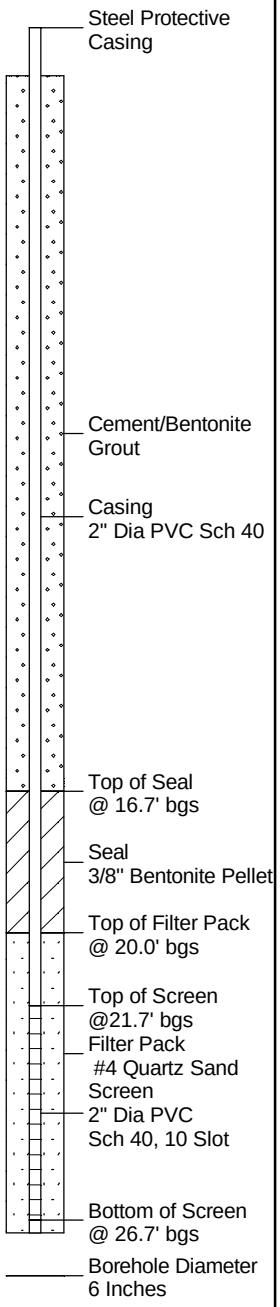
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 653858.5501
Easting Coord.	: 1697057.4841 OH83/N ft.
Total Depth of Boring	: 27.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.33	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–7	649–642		CL		CLAY; little silt; moist; firm; medium plastic; 2.5Y4/2 Dark Grayish Brown. very stiff to hard	Sample 0-8' bgs. Recovery 31% 2.5'. Core lost due to hard clay. Rad: Beta 437 alpha 5
7–12	642–637		CL		CLAY; some silt; (Silty Clay) ; 10-20% sand-gravel; slightly moist; hard; low plasticity; 10YR4/1 Dark Gray .	
12–17	637–632		ML		SILT; some clay; some sand and gravel; moist to wet; firm; 10YR4/1 Dark Gray. Sand (SP) and Sand and Gravel (SW) layers (3"-6") intermittent with silt from 13.5-15.2' interval.	Sample 7-17' bgs. Recovery 100% 10'. Rad: Beta 496 alpha 9 Bedrock @ 17.0' bgs
17–27	632–622		DO		Dolomite; fossiliferous; abundant vugs; pyrite mineralization; Medium Light Gray N 6/0.	Sample 17-27' bgs. Recovery 100% 10'. Rad: Beta 410 alpha 9 Rad bkg: Beta 333 alpha 6 Total Core Recovery 22.5'/27' 83%.
27–30	622–620				Bottom of Boring at 27.0 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: MW-03 (I)
Elev.: 651.66 TOC



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U.S. Army Corp of Engineers
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Well MW-04 (S)

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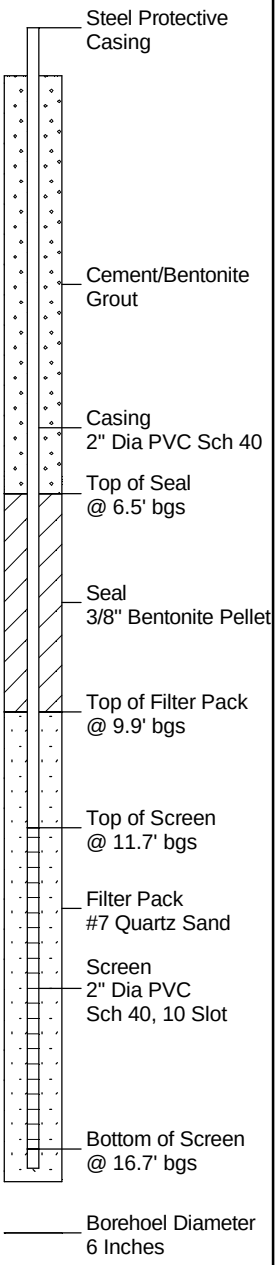
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/24/98
End Date	: 06/25/98
Northing Coord.	: 653859.4454
Easting Coord.	: 1697042.1014 OH83/N ft.
Total Depth of Boring	: 17.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: 13.0 feet
Depth to Bedrock	: 17.0 feet
Depth Drilled Into Rock	: 0.2 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.16	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	649		CL		CLAY; some silt; trace gravel; moist; firm; medium to high plasticity; 2.5Y4/2 Dark Grayish Brown.	
1	648					
2	647					
3	646					
4	645					
5	644				hard; slightly moist; medium plasticity.	
6	643					
7	642					
8	641					Core Recovery Not Recorded.
9	640					
10	639		CL		CLAY; some silt; 10-20% sand, fine gravel; moist; cohesive; dense; 2.5Y4/1 Dark Gray.	
11	638					
12	637					
13	636		SM		SAND, fine to very fine; some silt; trace medium to coarse sand and fine gravel; wet; loose.	
14	635		ML		SILT; some clay; some sand; moist; dense; stiff.	
15	634					
16	633		ML		SILT and GRAVEL, fine to coarse; moist.	
17	632		DO		Dolomite.	Bedrock @ 17.0' bgs
18	631				Bottom of Boring at 17.2 ft bgs	
19	630					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: MW-04 (S)
Elev.: 651.53 TOC



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Well MW-05 (I)

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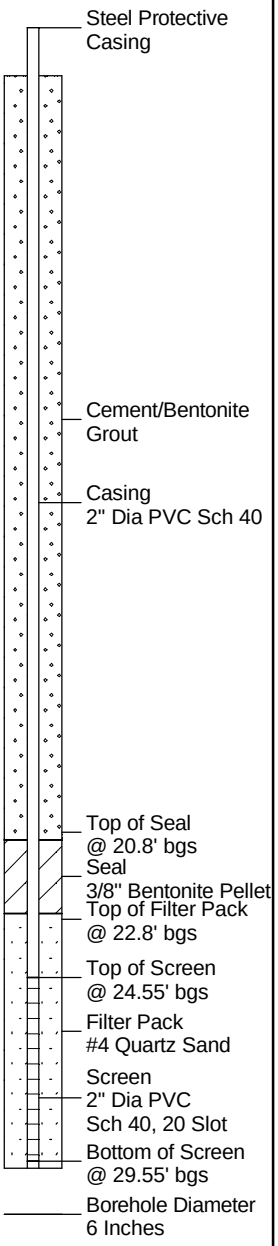
Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/27/98
End Date	: 06/27/98
Northing Coord.	: 654307.0059
Easting Coord.	: 1698187.9392 OH83/N ft.
Total Depth of Boring	: 30.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.68	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		CL		CLAY; some silt; 10-20% sand; roots; moist; soft; low plasticity; 10YR4/2 Dark Grayish Brown. (top soil).	Rad 0.0-0.5' Beta 756 alpha 19
1	649		CL		CLAY; little silt; <5% sand; firm; medium to high plasticity; 2.5Y5/3 Light Olive Brown.	Rad 1.5-2.0' Beta 700 alpha 21
2	648		CL			
3	647		CL			Sample 0-7' bgs. Recovery 57% 4'. Rad Beta 231 alpha 14
4	646		CL			
5	645		CL			
6	644		CL			
7	643		CL		very stiff to hard.	
8	642		CL			
9	641		CL			
10	640		CL			
11	639		CL			Rad @ 11.0' Beta 634 alpha 22
12	638		CL		CLAY; 20-25% sand and gravel, angular to subangular.	
13	637		CL			Sample 8-18' bgs. Recovery 100% 10'.
14	636		CL			
15	635		CL			
16	634		CL			
17	633		CL		CLAY; 40-50% sand and gravel.	
18	632		SW		SAND; 20-40% gravel; 10% fines; wet; loose.	Rad @ 18.0' Beta 602 alpha 13
19	631		GC		GRAVEL; some sand; some clay; moist-wet; firm; cohesive; 2.5Y4/2 Grayish Brown.	Sample 18-20' bgs. Recovery 100% 2'.
20	630		DO		Dolomite, fossiliferrous; abundant vugs.	Bedrock @ 20.0' bgs
21	629		DO			
22	628		DO			Rad @ 22.0' Beta 622 alpha 11
23	627		DO			
24	626		DO			
25	625		DO			Sample 20-30' bgs. Recovery 100% 10'.
26	624		DO			Rad @ 26.0' Beta 488 alpha 8
27	623		DO			
28	622		DO			Total Core Recovery 26'/30' 87%
29	621		DO			
30	620				Bottom of Boring at 30.0 ft bgs	
31	619					All colors from Munsell Soil Color Chart 1992 Revised Edition
32	618					
33	617					
34	616					
35						

Well1: MW-05 (I)
Elev.: 653.26 TOC



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Well MW-06 (S)

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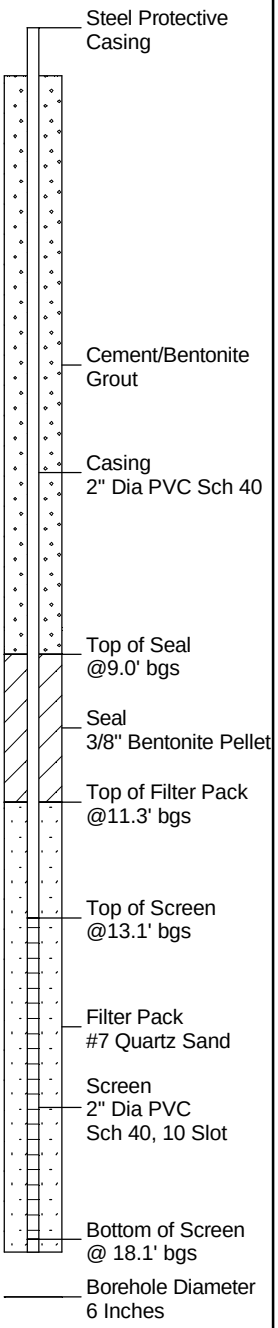
Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/28/98
End Date	: 06/28/98
Northing Coord.	: 654322.5568
Easting Coord.	: 1698186.9530 OH83/N ft.
Total Depth of Boring	: 18.3 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.3 feet
Depth Drilled Into Rock	: 0.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.46	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		CL		CLAY; some silt; 10-20% fine sand; roots; moist; low plasticity; 2.5Y5/3 Light Olive Brown.	
1	649		CL		CLAY; little silt; firm; medium to high plasticity; 2.5Y5/3 Light Olive Brown.	Sample 0-4' bgs. Recovery 100% 4'. Rad: Beta 809 alpha 15
2	648					
3	647					
4	646		CL		CLAY; some silt; (Silty Clay); 15-20% fine gravel-sand; stiff; 2.5Y5/1 Gray with reddish brown mottling.	
5	645					
6	644					Sample 4-8' bgs. Recovery 100% 4'.
7	643					
8	642					
9	641					
10	640					
11	639					
12	638		CL		CLAY; 25-35% gravel; 2.5Y4/1 Dark Gray, no mottling.	
13	637					Sample 8-18' bgs. Recovery 100% 10'.
14	636					
15	635					
16	634					Rad bkg: Beta 944 alpha 9
17	633		SW		SAND (medium to coarse) and GRAVEL, angular; wet.	Total Core Recovery 18'/18' 100%
18	632				Bottom of Boring at 18.3 ft bgs Bedrock	Bedrock is @ 18.3' bgs
19	631					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: MW-06 (S)
Elev.: 652.49 TOC



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Well MW-07 (I)

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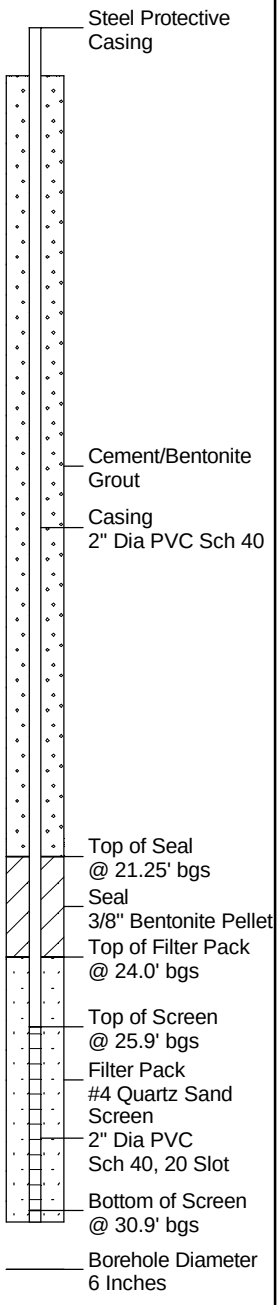
Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/29/98
End Date	: 06/30/98
Northing Coord.	: 654675.1072
Easting Coord.	: 1698131.9964 OH83/N ft.
Total Depth of Boring	: 31.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: 18.0 feet
Depth to Bedrock	: 21.0 feet
Depth Drilled Into Rock	: 10.2 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 648.60	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	648		ML		SILT; little clay; moist; soft; 10YR4/2 Dark Grayish Brown.	
1	647		CL		CLAY; some silt; 10% sand-fine gravel; moist; firm; medium plasticity; 10YR5/1 Gray with reddish brown mottling.	Sample 0-4' bgs. Recovery 100% 4'.
2	646					
3	645					
4	644					
5	643					
6	642		CL		CLAY; little silt; 5-10% sand; moist; very stiff; medium plasticity; 10YR4/3 Brown.	Sample 4-8' bgs. Recovery 100% 4'.
7	641					
8	640					
9	639					
10	638				color change to 10YR4/1 Dark Gray.	
11	637					
12	636					
13	635					Sample 8-18' bgs. Recovery 100% 10'.
14	634				increasing silt content	
15	633		ML		SILT; some clay; 20-30% sand-gravel to 3"; slightly moist-almost dry; 10YR4/1 Dark Gray.	
16	632					
17	631		ML		SILT; some sand (20-40%), fine to very fine; trace gravel (10%); moist; 10YR4/1 Dark Gray. Very moist to wet @ 18.0' bgs.	
18	630					
19	629				gravel 20-30%, 19-21' bgs.	Sample 18-21' bgs. Recovery 100% 3'.
20	628					
21	627		DO		Dolomite; fossiliferous and vuggy.	Bedrock @ 21.0' bgs
22	626					
23	625					
24	624					
25	623					
26	622					Sample 21-31' bgs. Recovery 100% 10'.
27	621					
28	620					
29	619					
30	618					Total Core Recovery 31'/31' 100%
31	617				Bottom of Boring at 31.2 ft bgs	
32	616					All colors from Munsell Soil Color Chart 1992 Revised Edition
33	615					
34	614					
35						

Well1: MW-07 (I)
Elev.: 650.21 TOC



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Well MW-08 (S)

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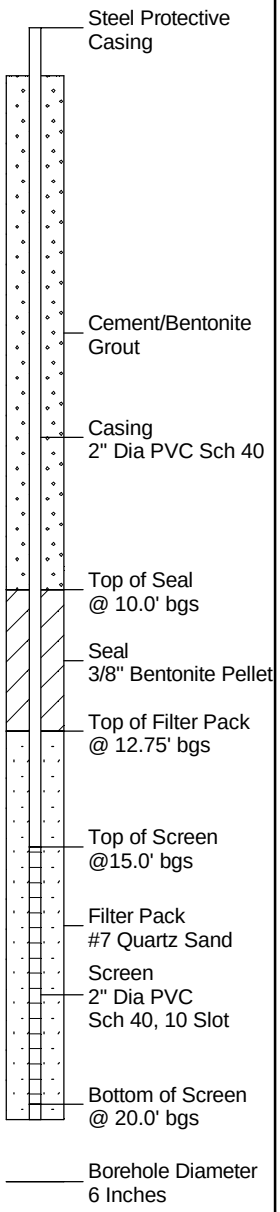
Investigative Area 01	: Landfill/Spoils Area
Start Date	: 06/30/98 0830 07/11/98 0955
End Date	: 06/30/98 0950 07/11/98 1130
Northing Coord.	: 654662.0068
Easting Coord.	: 1698138.9275 OH83/N ft.
Total Depth of Boring	: 20.3 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.8 feet
Depth Drilled Into Rock	: 1.5 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 648.66	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–1	648		ML		SILT; some sand, fine; organic matter; moist; 2.5Y4/2 Dark Grayish Brown.	
1–8	647–641		CL		CLAY; some silt; trace fine sand; moist; firm; medium plasticity; 10YR4/3 Brown. stiff	Sample 0-8' bgs. Recovery 75% 6'.
8–12	640–637		ML		SILT; some clay; 10-20% sand-fine gravel; moist; stiff; 10YR4/1 Dark Gray.	
12–13	637–636		SP		SAND, fine to very fine; trace silt; wet; loose; 10YR4/1 Dark Gray.	
13–18	636–631		ML		SILT; some gravel to 3"; moist; stiff; 10YR4/1 Dark Gray.	Sample 8-18' bgs. Recovery 100% 10'.
18–19	631–630		SM / ML		SAND, very fine-fine; some silt (20-25%); wet; loose; seam 0.4' thick.	At bottom of 18' run a little wet sand.
19–20	630–629		DO		Same as Silt above. Dolomite.	Bedrock @ 18.8' bgs. Sample 18-20.3' bgs. Recovery 100% 2.3'.
20–25	628–624				Bottom of Boring at 20.3 ft bgs	Original well was abandoned. Replacement well drilled and installed on 7/11/98. All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: MW-08 (S)
Elev.: 650.77 TOC



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Well BMW-09 (I)

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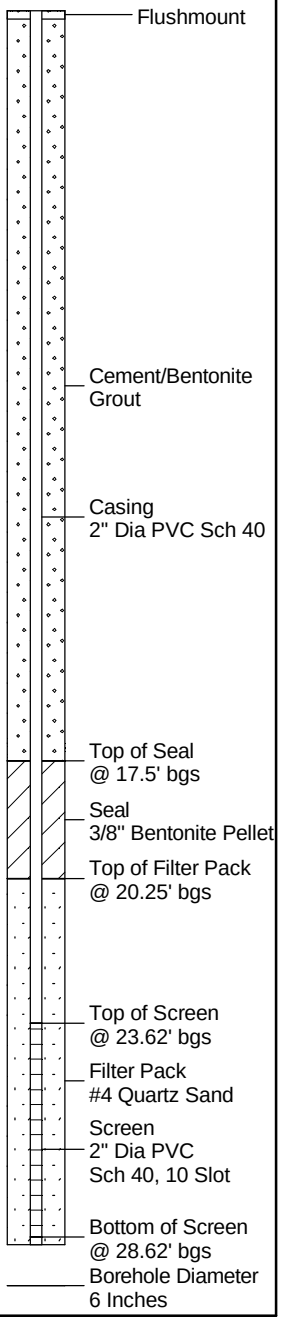
Investigative Area BKG	: Meier Property
Start Date	: 07/23/98
End Date	: 07/23/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 29.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 19.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		ML		SILT; some clay; trace sand; moist; firm; 10YR3/2 Very Dark Grayish Brown.	
1	-1					
2	-2		CL		CLAY; some silt; some gravel (20%); slightly moist; hard; 10YR4/6 Dark Yellowish Brown with grayish brown mottling.	
3	-3					
4	-4				3'-5' Dry, crumbling clay.	Sample 0-7.5' bgs. Recovery 100% 7.5'.
5	-5					
6	-6				less gravel; trace fine sand (10%); 10YR4/3 Brown with 10YR5/1 Gray mottling.	
7	-7		CL		CLAY; some silt; trace fine to coarse sand (10-15%) and fine gravel; moist; very stiff; medium plasticitiy; 10YR4/1 Dark Gray.	
8	-8					
9	-9					
10	-10					
11	-11					
12	-12					
13	-13					Sample 7.5'-18' bgs. Recovery 100% 10.5'.
14	-14					
15	-15					
16	-16		ML		SILT; some very fine to fine sand; fine to coarse gravel (20%); moist; cohesive; firm to stiff; 10YR4/1 Dark Gray.	
17	-17					
18	-18					Sample 18-19' bgs. Recovery 100% 1'. Bedrock @ 19.0' bgs. Switch to thick-walled core barrel.
19	-19		DO		Dolomite.	
20	-20				Dolostone; light grayish tan; massive bedding; some vugs though not as abundant as on-site wells.	
21	-21					
22	-22					
23	-23					
24	-24					Sample 19-29' bgs. Recovery 100% 10'
25	-25					
26	-26					
27	-27					Total Core Recovery 29'/29' 100%
28	-28		DO		gray colored Limestone with vugs.	All colors from Munsell Soil Color Chart 1992 Revised Edition
29	-29				Bottom of Boring at 29.0 ft bgs	
30						

Well1: BMW-09 (I)
Elev.: Not Surveyed



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Well BMW-10 (S)

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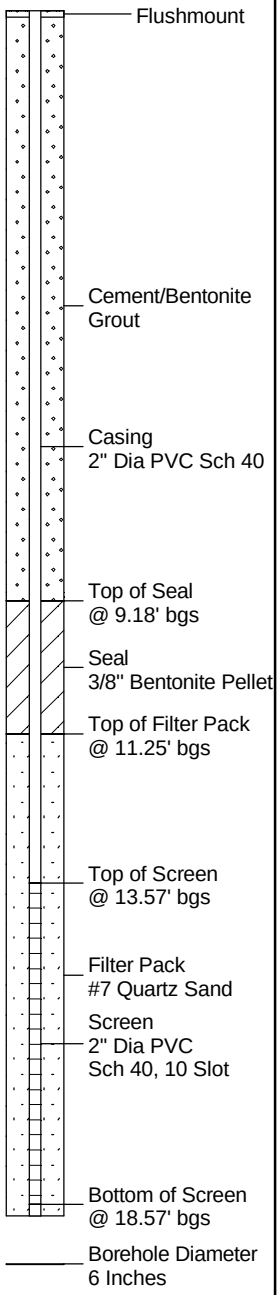
Investigative Area BKG	: Meier Property
Start Date	: 07/24/98
End Date	: 07/24/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 18.8 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		ML		SILT and CLAY; trace fine sand; moist; firm; medium plasticity; 10YR3/2 Very Dark Grayish Brown.	
2	-2		CL		CLAY; some silt; trace sand and gravel; moist; stiff; 10YR4/6 Dark Yellowish Brown with grayish brown mottling.	
4	-4		CL		CLAY; dry; crumbly; blocky; hard; 10YR4/3 Brown with 10YR4/1 Dark Gray mottling; vertical Fe staining; black mineral staining.	Sample 0-8' bgs. Recovery 100% 8'.
8	-8		CL		CLAY; some silt; 15% sand and gravel; moist; very stiff; medium plasticity; 10YR4/1 Dark Gray. Gravel has striations from glacial groving.	Sample 8-18' bgs. Recovery 100% 10'.
15	-15		ML		SILT; some gravel to 4"; 10YR4/1 Dark Gray.	
17	-17		SM		SAND, fine to coarse sand; silt and 25% gravel; wet; loose; 10YR4/1 Dark Gray.	
19	-19				Bottom of Boring at 18.8 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: BMW-10 (S)
Elev.: Not Surveyed



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Well BMW-11 (I)

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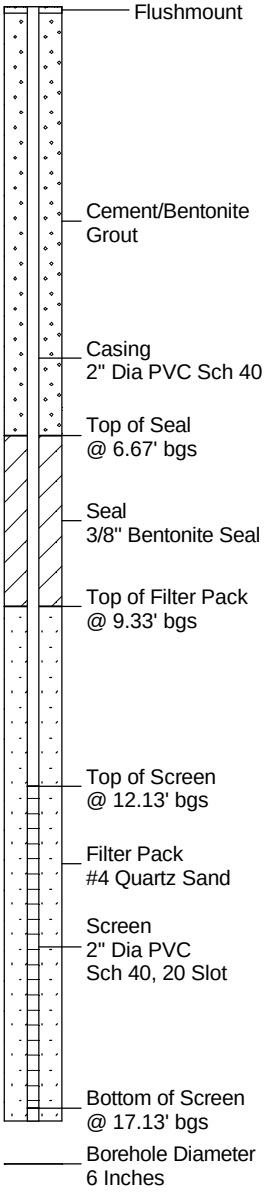
Investigative Area BKG	: Eastwood High School
Start Date	: 07/24/98
End Date	: 07/25/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 17.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: 4.0 feet
Depth to Bedrock	: 6.0 feet
Depth Drilled Into Rock	: 11.5 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		ML		SILT; some very fine to fine sand; some clay; moist; firm; low plasticity; 10YR5/6 Yellowish Brown.	
1	-1		SP		SAND, fine; some gravel to 4"; moist; loose; 10YR5/4 Brownish Yellow. 70% fine sand and 30% coarse sand and gravel.	
2	-2					
3	-3		GW		GRAVEL and SAND; moist; loose; 10YR5/4 Yellowish Brown. 50% pea gravel, 20% coarse gravel to 4", and 30% fine sand.	Sample 0-8' bgs. Recovery 88% 7'.
4	-4					
5	-5					Wet at approximately 5.5' bgs. Muddy.
6	-6		DO		Fractured Dolomite	
7	-7		DO		Dolomite. Tannish gray to gray color; abundant vugs.	
8	-8					
9	-9					
10	-10					
11	-11					
12	-12					
13	-13					Sample 8-17.5' bgs. Recovery 100% 9.5'.
14	-14					
15	-15					
16	-16					
17	-17					Total Core Recovery 16.5'/17.5' 94%
18	-18				Bottom of Boring at 17.5 ft bgs	
19	-19					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: BMW-11 (I)
Elev.: Not Surveyed



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Well BMW-12 (S)

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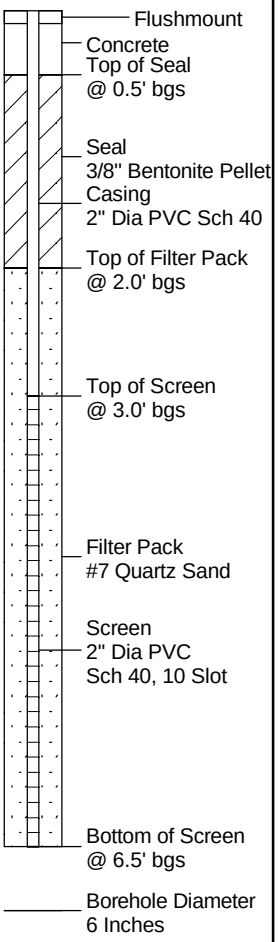
Investigative Area BKG	: Eastwood High School
Start Date	: 07/25/98
End Date	: 07/25/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 6.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 5.5 feet
Depth Drilled Into Rock	: 1.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		SM		SAND, fine, and SILT; moist; soft; 10YR3/2 Very Dark Grayish Brown.	
1	-1		SP		SAND and GRAVEL; trace fines; 10YR5/4 Yellowish Brown. Predominitely fine sand and fine to coarse gravel, subangular with trace fines. Gravel is dolostone.	Sample 0-6.5' bgs Recovery 100% 6.5'.
2	-2					
3	-3					
4	-4					
5	-5					
6	-6		DO		Dolomite.	
7	-7				Bottom of Boring at 6.5 ft bgs	
8	-8					All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9					
10						

Well1: BMW-12 (S)
Elev.: Not Surveyed



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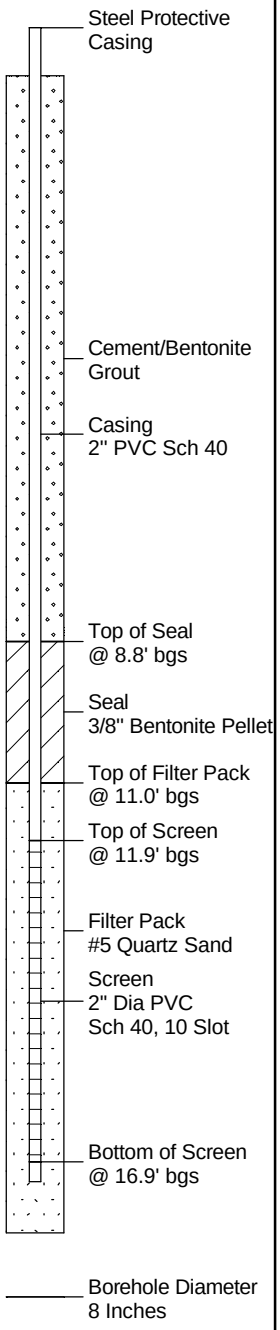
Well MW-13 (S)

Investigative Area 01	: Landfill/Spoils Area
Start Date	: 07/26/98
End Date	: 07/26/98
Northing Coord.	: 654810.3484
Easting Coord.	: 1697939.9605 OH83/N ft.
Total Depth of Boring	: 18.0 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Jeff DeVaughn
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.0 feet
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 41/4" Augers

Depth in feet	Surf. Elev. 648.75	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			CL		CLAY; some silt; trace fine gravel; damp; 10YR4/3 Brown.	Boring logged from cuttings.
1	648					
2	647					
3	646					
4	645					
5	644					
6	643					
7	642					
8	641					
9	640					
10	639					
11	638					
12	637					
13	636					
14	635					
15	634		ML		SILT; some sand; trace gravel; moist; soft; 10YR4/3 Brown.	
16	633					
17	632					
18	631				Bottom of Boring at 18.0 ft bgs. Bedrock @ 18.0' bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630					
20	629					

Well1: MW-13 (S)
Elev.: 651.03 TOC



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Well MW-14 (S)

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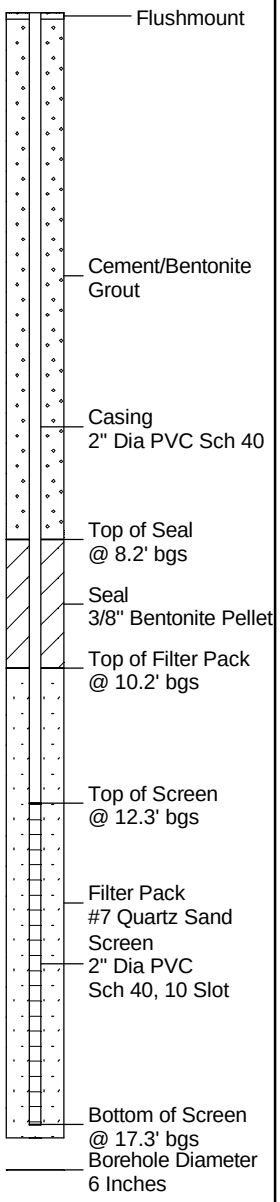
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 07/26/98
End Date	: 07/26/98
Northing Coord.	: 654000.0365
Easting Coord.	: 1697028.5031 OH83/N ft.
Total Depth of Boring	: 17.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 17.5 feet
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.51	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	649				Asphalt.	
			GC		Gravel base for asphalt.	Sample 0-1' bgs. Recovery 100% 1'.
1	648		CL		CLAY; trace sand; firm; high plasticity; 10YR3/2 Very Dark Grayish Brown and 10YR2/1 Black.	
2	647					
3	646		CL		CLAY; some silt; trace sand; trace gravel, subrounded; moist; firm; medium plasticity; 10YR4/6 Dark Yellowish Brown and 10YR4/1 Dark Gray.	
4	645					Sample 1-8' bgs. Recovery 100% 7'.
5	644					
6	643				slightly moist; stiff; 10YR4/3 Brown.	
7	642					
8	641					
9	640		CL		CLAY and SILT; trace sand and fine gravel; moist; firm; 10YR4/1 Dark Gray.	
10	639					
11	638					
12	637					Sample 8-17' bgs. Recovery 100% 9'.
13	636					
14	635				increased sand and gravel content to 20-25%.	
15	634					
16	633		SP		SAND, fine; some (20-30%) gravel to 3", subrounded to subangular; trace fines; moist; 10YR4/1 Dark Gray.	
17	632				Bottom of Boring at 17.5 ft bgs Bedrock	Total Core Recovery 17'/17' 100%
18	631					All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630					
20						

Well1: MW-14 (S)
Elev.: 649.05 TOC



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Well BMW-15 (I)

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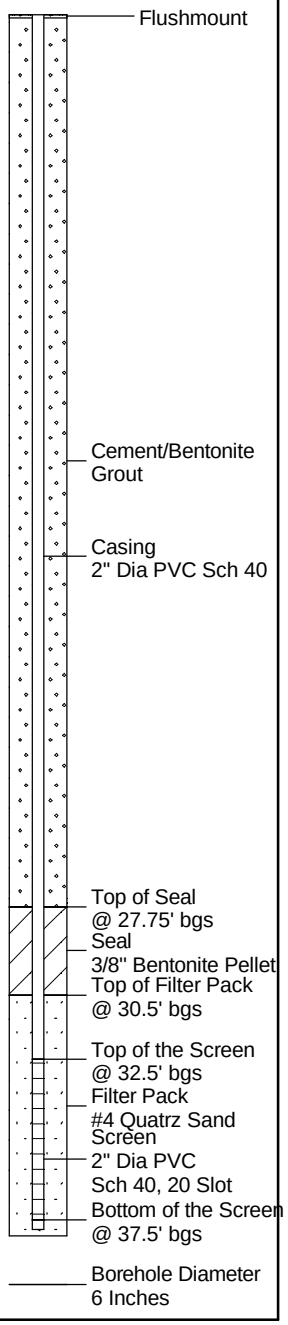
Investigative Area BKG	: Botsdorff Property
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 38.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 28.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		ML		SILT; some clay; trace fine sand; roots; moist; soft; 10YR3/2 Very Dark Grayish Brown.	
1	-1					
2	-2		CL		CLAY; trace silt; trace sand; trace fine gravel; moist; stiff; 10YR4/2 Dark Grayish Brown.	
3	-3					
4	-4				Dry Gravely, Sandy, SILT zone 3.0-3.4' bgs.	Sample 0-8' bgs. Recovery 100% 8'.
5	-5		CL		CLAY; some silt; trace sand and gravel; moist; stiff; 10YR4/3 Brown.	
6	-6					
7	-7				Blocky, heavy Fe staining, almost dry, from 6-7' bgs.	
8	-8		CL		CLAY and SILT; trace sand; trace gravel to 2"; moist; stiff to very stiff; 10YR4/1 Dark Gray. (Till)	
9	-9					
10	-10					
11	-11					
12	-12					
13	-13					Sample 8-18' bgs. Recovery 100% 10'.
14	-14					
15	-15					
16	-16					
17	-17					
18	-18					
19	-19					
20	-20					
21	-21					
22	-22					
23	-23					Sample 18-28' bgs Recovery 100% 10'
24	-24					
25	-25		SW		SAND; some silt; some (25-30%) gravel to 4"; wet; loose to semi-cohesive; sand is fine to coarse gradient; 10YR4/1 Dark Gray.	
26	-26					
27	-27					
28	-28		DO		Dolomite; light tannish gray and dark gray; abundant vugs; some minerialization; fossils in limestone.	
29	-29					
30	-30					30'-32' void, soft area in rock.
31	-31					
32	-32					
33	-33					Sample 28-38' bgs Recovery 100% 10'
34	-34					
35	-35					
36	-36					Total Core Recovery 38'/38' 100%
37	-37					
38	-38				Bottom of Boring at 38.00 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition
39	-39					
40						

Well1: BMW-15 (I)
Elev.: Not Surveyed



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Well BMW-16 (S)

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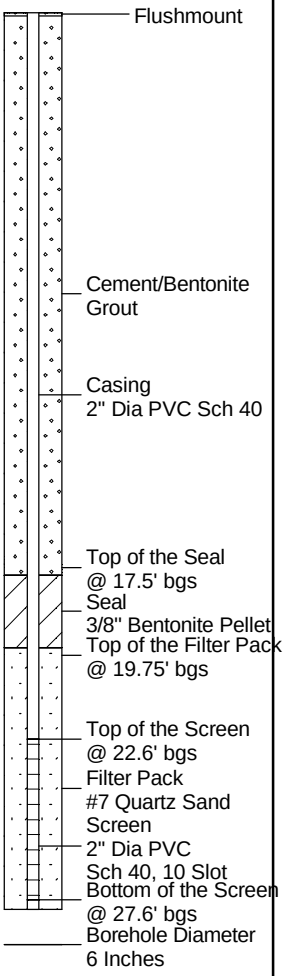
Investigative Area BKG	: Botsdorff Property
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: Not Surveyed
Easting Coord.	: Not Surveyed
Total Depth of Boring	: 38.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 28.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. NS	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	0		ML		SILT; some clay; trace fine sand; roots; moist; soft; 10YR3/2 Very Dark Grayish Brown.	
1	-1					
2	-2		CL		CLAY; trace silt; trace sand; trace fine gravel; moist; stiff; 10YR4/2 Dark Grayish Brown.	Boring logged during the installation of MW-15 (I).
3	-3					
4	-4		CL		Dry Gravely, Sandy, SILT zone 3.0-3.4' bgs.	
5	-5				CLAY; some silt; trace sand and gravel; moist; stiff; 10YR4/3 Brown.	
6	-6					
7	-7				Blocky, heavy Fe staining, almost dry, from 6-7' bgs.	
8	-8		CL		CLAY and SILT; trace sand; trace gravel to 2"; moist; stiff to very stiff; 10YR4/1 Dark Gray. (Till)	
9	-9					
10	-10					
11	-11					
12	-12					
13	-13					
14	-14					
15	-15					
16	-16					
17	-17					
18	-18					
19	-19					
20	-20					
21	-21					
22	-22					
23	-23					
24	-24					
25	-25		SW		SAND; trace silt; trace gravel to 4"; wet; loose, semi-cohesive; 10YR4/1 Dark Gray.	
26	-26					
27	-27					
28	-28		DO		Dolomite	
29	-29					
30	-30					
31	-31					
32	-32					
33	-33					
34	-34					
35	-35					
36	-36					
37	-37					
38	-38				Bottom of Boring at 38.00 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition
39	-39					
40						

Well1: BMW-16 (S)
Elev.: Not Surveyed



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Well MW-17 (S)

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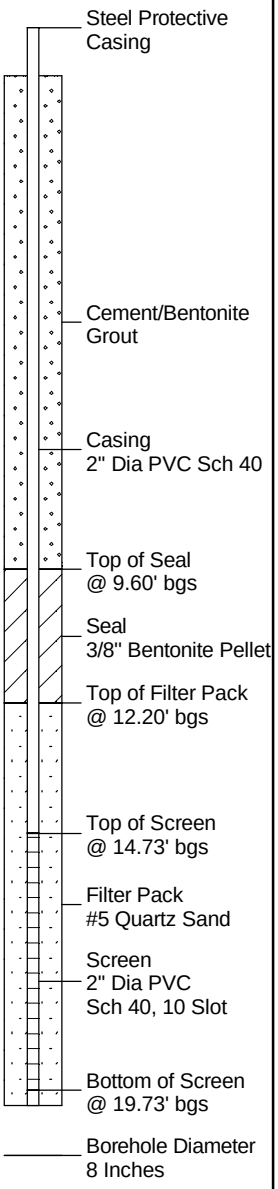
Investigative Area 03	: Lagoon D including Railroad
Start Date	: 08/03/98
End Date	: 08/04/98
Northing Coord.	: 654341.4245
Easting Coord.	: 1698017.9264 OH83/N ft.
Total Depth of Boring	: 20.03 feet

Drilling Company	: Alliance Environmental
Driller	: Scott Morrow
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Water	: Not Recorded
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 649.82	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	649		ML		SILT; trace very fine sand; dry; soft; 10YR5/3 Brown.	
			CL		CLAY; some silt; trace sand; trace fine gravel, subrounded to rounded; damp; stiff; 10YR3/2 Very Dark Grayish Brown.	
2	648					Split Spoon Sample 1-3' bgs. Recovery 55% 1.1'. PID=0.0 Rad Beta 449
3	647				CLAY; some silt; trace sand and gravel; moist; stiff; 10YR5/1 Gray and 10YR5/3 Yellowish Brown mottling.	
4	646					Split Spoon Sample 3-5' bgs. Recovery 73% 1.45'. PID=0.0 Rad Beta 431
5	645					
6	644					Split Spoon Sample 5-7' bgs. Recovery 78% 1.55'. PID=0.0 Rad Beta 459
7	643					
8	642					Split Spoon Sample 7-8.5' bgs. Recovery 92% 1.38'. PID=0.0 Rad Beta 447
9	641		CL			
10	640					Split Spoon Sample 8.5-10.5' bgs. Recovery 80% 1.6'. PID=0.0 Rad Beta 451
11	639					
12	638					Split Spoon Sample 11-13' bgs. Recovery 88% 1.75'. PID=0.0 Rad Beta 443
13	637					
14	636					Split Spoon Sample 13-15' bgs. Recovery 80% 1.6'. PID=0.0 Rad Beta 394
15	635					
16	634				SAND; trace clay; trace medium to coarse gravel, subangular to subrounded; saturated; soft; 10YR4/1 Dark Gray.	Split Spoon Sample 15-17' bgs. Recovery 75% 1.5'. PID=0.0 Rad Beta 415
17	633		SP			
18	632					Split Spoon Sample 17-18' bgs. Recovery 100% 1.1'. PID=0.0 Rad Beta 376
19	631					Split Spoon Sample 18.5-19.2' bgs. Recovery 29% 0.2'. PID=0.0 Rad NA
					No Description Available	
20	630				Bottom of Boring at 20.03 ft bgs	Spoon refusal at 19.2' bgs.
21	629					Total Core Recovery 13.23'/17.2' 77%.
22	628					
23	627					All colors from Munsell Soil Color Chart 1992 Revised Edition
24	626					
25	625					

Well1: MW-17 (S)
Elev.: 652.23 TOC



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Well MW-18 (I)

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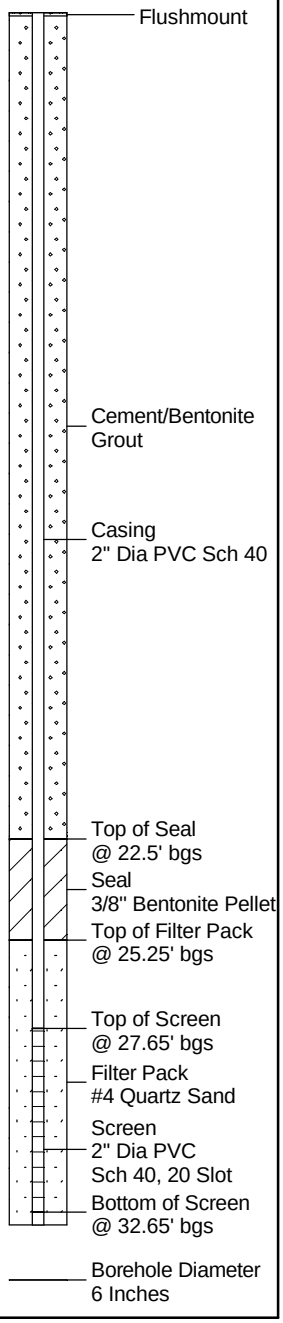
Investigative Area 08	: Plant Area West
Start Date	: 08/03/98
End Date	: 08/03/98
Northing Coord.	: 654599.3093
Easting Coord.	: 1696732.3454 OH83/N ft.
Total Depth of Boring	: 33.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 23.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.88	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0					Asphalt. Sandy clay base; black	
1	647		CL		CLAY; some silt; trace fine to coarse sand; moist; firm; low plasticity; 10YR4/1 Dark Gray with 10YR4/6 Dark Yellowish Brown mottling.	
2	646					
3	645					
4	644					Sample 0-8' bgs. Recovery 100% 8.0'. PID=0.0
5	643					
6	642					
7	641		CL		CLAY; some silt; trace sand; trace fine gravel, subangular; slightly moist; stiff; 10YR4/3 Brown.	
8	640				very stiff; vertical Fe staining; black mineral staining; 10YR4/2 Dark Grayish Brown.	
9	639					
10	638					
11	637					Sample 8-13' bgs. Recovery 100% 5.0'.
12	636					
13	635					Switch to thin-walled bit; clay is too hard, tight.
14	634					
15	633					
16	632				very moist; soft zone 15-16.8' bgs	Sample 13-18' bgs. Recovery 100% 5.0'.
17	631					
18	630					
19	629		SM		SAND, fine to coarse; some fine to coarse gravel, subangular; some silt; moist to wet; dense; 10YR3/2 Very Dark Grayish Brown.	
20	628					
21	627					Sample 18-23' bgs. Recovery 100% 5.0'.
22	626					
23	625					
24	624		DO		Dolomite, fossiliferous and vuggy. Light gray; some mineralization in vug cavities.	
25	623					
26	622					
27	621					
28	620					Sample 23-33' bgs. Recovery 100% 10.0'
29	619					
30	618					
31	617					Total Core Recovery 33'/33' 100%.
32	616					
33	615				Bottom of Boring at 33.00 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition
34	614					
35	613					

Well1: MW-18 (I)
Elev.: 647.54 TOC



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Well MW-19 (I)

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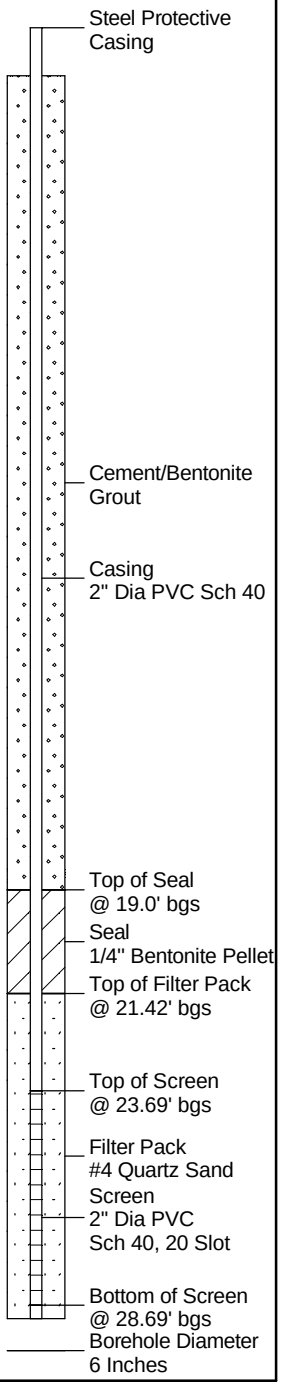
Investigative Area 01	: Landfill/Spoils Area
Start Date	: 08/04/98
End Date	: 08/04/98
Northing Coord.	: 654806.2630
Easting Coord.	: 1697954.5469 OH83/N ft.
Total Depth of Boring	: 29.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.5 feet
Depth Drilled Into Rock	: 10.5 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 648.62	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–1	648–647		CL		CLAY and SILT; trace fine sand; roots; 10YR3/2 Very Dark Grayish Brown.	
1–9	647–640		CL		CLAY; some silt; trace fine sand; trace fine gravel; moist; very stiff; medium plasticity; 10YR4/3 Brown with 10YR4/6 Dark Yellowish Brown and Gray mottling.	Sample 0-8' bgs. Recovery 75% 6.0'.
9–14	639–635		CL		CLAY and SILT; trace sand; trace fine gravel; slightly moist; firm to stiff; medium plasticity; 10YR4/1 Dark Gray.	Sample 8-18' bgs. Recovery 100% 10.0'.
14–16	634–633		ML		SILT; moist to wet; firm; 10YR4/1 Dark Gray.	
16–17	632		GW		GRAVEL, coarse; some fine to coarse sand and silt; wet; loose; 10YR4/1 Dark Gray.	
17–18	631		ML		SILT; 30-35% fine gravel, subangular; trace fine sand; moist; stiff; 10YR4/1 Dark Gray.	
18–29	630–620		DO		Dolomite; abundant vugs; fossiliferous; gray.	Switches to rock core barrel. Sample 18-28' bgs. Recovery 100% 10.0'. Total Core Recovery 26'/28' 93%. All colors from Munsell Soil Color Chart 1992 Revised Edition
29–30	619				Bottom of Boring at 29.00 ft bgs	

Well1: MW-19 (I)
Elev.: 651.03 TOC



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Well MW-20 (S)

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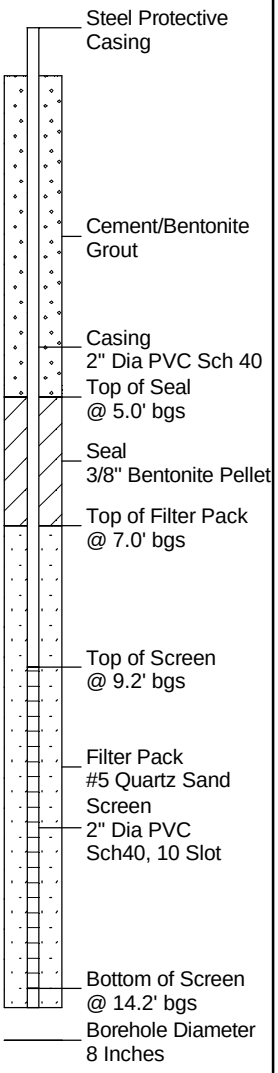
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 08/04/98
End Date	: 08/04/98
Northing Coord.	: 654096.0461
Easting Coord.	: 1697854.2583 OH83/N ft.
Total Depth of Boring	: 14.5 feet

Drilling Company	: Alliance Environmental
Driller	: Scott Morrow
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Water	: Not Recorded
Depth to Bedrock	: 14.5 feet
Depth Drilled Into Rock	: 0 feet
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 650.54	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		ML		SILT; trace very fine to fine sand; dry; 10YR5/3 Brown.	
1						
2	649		CL		CLAY; trace silt; trace fine-coarse sand; trace fine gravel, subrounded; moist; soft; medium plasticity; 10YR5/1 Gray.	Split Spoon Sample 1-3' bgs. Recovery 70% 1.4'. PID=3.8 bkg Rad Beta 441.
3	648					
4	647				10YR5/6 Yellowish Brown and 10YR6/1 Gray.	Split Spoon Sample 3-5' bgs. Recovery 95% 1.9'. PID=0.0 Rad Beta 468.
5	646					
6	645					Split Spoon Sample 5-7' bgs. Recovery 88% 1.75'. PID=0.0 Rad Beta 434.
7	644				Blocky; hard; 10YR5/3 Brown and 10YR6/1 Gray.	
8	643					Split Spoon Sample 7-9' bgs. Recovery 80% 1.6'. PID=0.0 Rad Beta 399.
9	642					
10	641				moist; soft; medium plasticity; Dark Gray 10YR4/1.	Split Spoon Sample 9-11' bgs. Recovery 68% 1.35'. PID=0.0 Rad Beta 454.
11	640					
12	639					Split Spoon Sample 11-13' bgs. Recovery 85% 1.7'. PID=0.0 Rad Beta 369.
13	638					
14	637					Split Spoon Sample 13-14.5' bgs. Recovery 97% 1.45'. PID=0.0 Rad Beta 370.
15	636				Bottom of Boring at 14.5 ft bgs	Auger refusal at 14.5' bgs.
16	635					Total Core Recovery 11.15'/14.5' 78%.
17	634					
18	633					All colors from Munsell Soil Color Chart 1992 Revised Edition
19	632					
20	631					

Well1: MW-20 (S)
Elev.: 653.71 TOC



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Well MW-21 (I)

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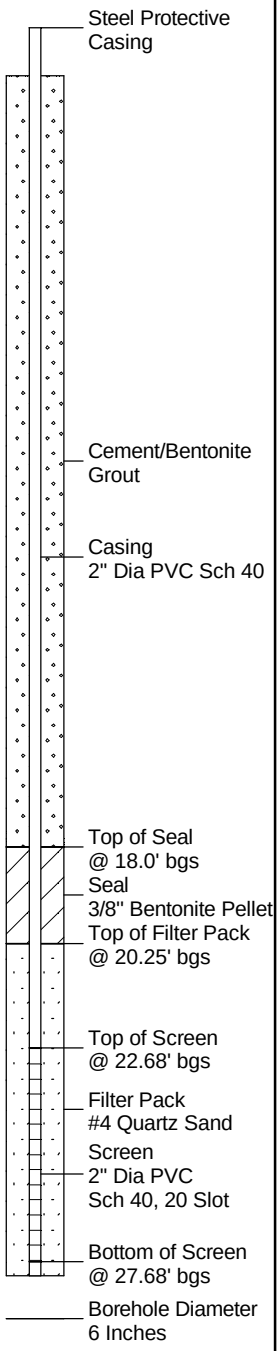
Investigative Area 07	: Northwest Portion of Site
Start Date	: 08/06/98
End Date	: 08/06/98
Northing Coord.	: 654513.2678
Easting Coord.	: 1697394.6347 OH83/N ft.
Total Depth of Boring	: 29.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 18.5 feet
Depth Drilled Into Rock	: 10.5 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.25	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	649		ML		SILT; some (20-25%) gravel to 3", subangular; trace very fine sand; trace clay; 10YR4/2 Dark Grayish Brown.	
1	648		CL		CLAY; some silt; moist; firm to stiff; medium to high plasticity; 10YR3/2 Very Dark Grayish Brown.	
2	647		CL		CLAY; some silt; trace fine gravel, subangular; 10YR4/6 Dark Yellowish Brown.	Sample 0-8' bgs. Recovery 50% 4'. 4-8' zone not recovered.
3	646					
4	645					
5	644					
6	643					
7	642					
8	641				slightly moist; hard; 10YR4/3 Brown.	8'-9' material appears similar to 2'-4' soil.
9	640		CL		CLAY and SILT; varying amounts of silt and clay; trace sand; moist; firm; 10YR4/1 Dark Gray. 9-11' Mostly Silt. 11-13' Clay; medium to high plasticity.	
10	639					
11	638					
12	637					
13	636		ML		SILT; some sand and gravel (40-50%), subangular to rounded; poorly sorted; 10YR4/1 Dark Gray.	Sample 8-18' bgs. Recovery 100% 10'.
14	635					
15	634					
16	633					
17	632					
18	631		DO		Dolomite; vuggy; fossiliferous; calcite precipitation; gray.	
19	630					
20	629					
21	628					
22	627					
23	626					
24	625					
25	624					
26	623					
27	622					Total Core Recovery 24'/28' 86%. All colors from Munsell Soil Color Chart 1992 Revised Edition
28	621				Bottom of Boring at 28.0 ft bgs	
29	620					
30						

Well1: MW-21 (I)
Elev.: 651.45 TOC



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Well MW-22 (I)

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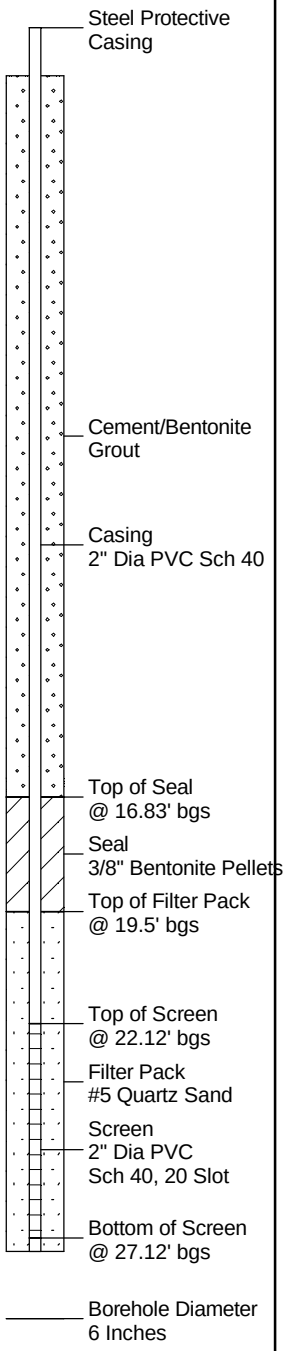
Investigative Area 07	: Northwest Portion of Site
Start Date	: 08/07/98
End Date	: 08/07/98
Northing Coord.	: 654798.4369
Easting Coord.	: 1697743.1427 OH83/N ft.
Total Depth of Boring	: 27.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.2 feet
Depth Drilled Into Rock	: 11.3 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.82	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–1	647		ML		SILT; some clay; trace fine sand; roots; soft; 10YR4/2 Dark Grayish Brown.	
1–8	647–640		CL		CLAY; some silt; trace sand and fine gravel; firm to stiff; medium plasticity; 10YR4/6 Very Dark Yellowish Brown with gray mottling.	Sample 0-8' bgs. Recovery 75% 6.0'.
8–11	640–637		ML		SILT; some very fine sand; little clay; moist to wet; soft; 10YR3/2 Very Dark Grayish Brown.	
11–14	637–634		SW		SAND, fine to coarse; 30% fine gravel, subangular to angular; wet; loose; 10YR4/3 Brown.	Sample 8-17' bgs. Recovery 100% 9.0'.
14–16	634–632		ML		SILT; 50% sand and gravel, subangular, poorly sorted; very stiff; 10YR4/1 Dark Gray.	
16–27	632–621		DO		Dolomite; vuggy; fossiliferous.	Sample 17-27' bgs. Recovery 100% 10.0'. Total Core Recovery 25'/27' 93%.
27–30	621–618				Bottom of Boring at 27.5 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: MW-22 (I)
Elev.: 650.09 TOC



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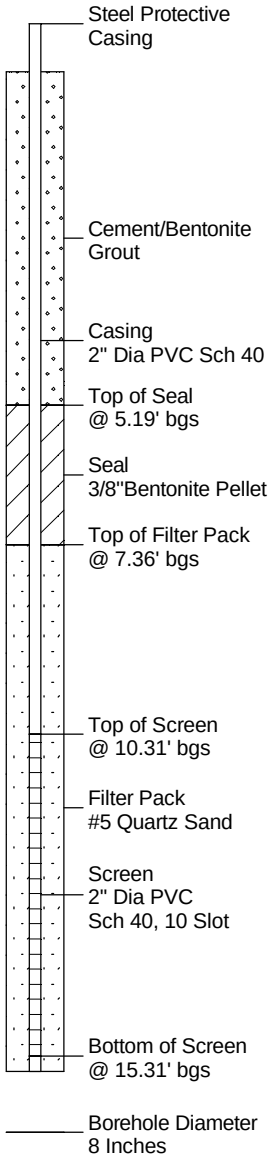
Well MW-23 (S)

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 08/06/98
End Date	: 08/06/98
Northing Coord.	: 653840.7699
Easting Coord.	: 1697755.8406 OH83/N ft.
Total Depth of Boring	: 15.55 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Water	: Not Recorded
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: 0 feet
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 650.06	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		ML		SILT; some very fine sand; Brown.	
1	649		CL		CLAY; trace fine-coarse sand; trace fine gravel, rounded to angular; moist; 10YR5/6, 6/6, 4/4 Yellowish Brown and Gray.	
2	648					Split Spoon Sample 1-3' bgs. Recovery 78% 1.55'. PID=0.0 Rad Beta NA
3	647					
4	646					Split Spoon Sample 3-5' bgs. Recvoery 100% 2.0'. PID=NA
5	645					
6	644				Dry	Split Spoon Sample 5-6' bgs. Recovery 100% 1.0'. PID=1.5 bkg
7	643					Split Spoon Sample 7-7.2' bgs. Recovery 50% 0.1'. PID=0.0
8	642		GP		Gravel, fine to coarse, angular to rounded; some fine sand; trace clay; dry; 10YR4/1 Dark Gray.	Soil logged from cuttings below 8' bgs.
9	641					
10	640				coarser gravel.	Rad Beta bkg
11	639					
12	638				fine to coarse GRAVEL, subrounded to angular; fine sand.	Rad Beta 349
13	637					
14	636					Rad Beta 347
15	635				damp to moist.	Auger refusal at 15' bgs.
16	634				Bottom of Boring at 15.55 ft bgs	
17	633					
18	632					All colors from Munsell Soil Color Chart 1992 Revised Edition
19	631					
20						

Well1: MW-23 (S)
Elev.: 652.58 TOC



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Well MW-24 (S)

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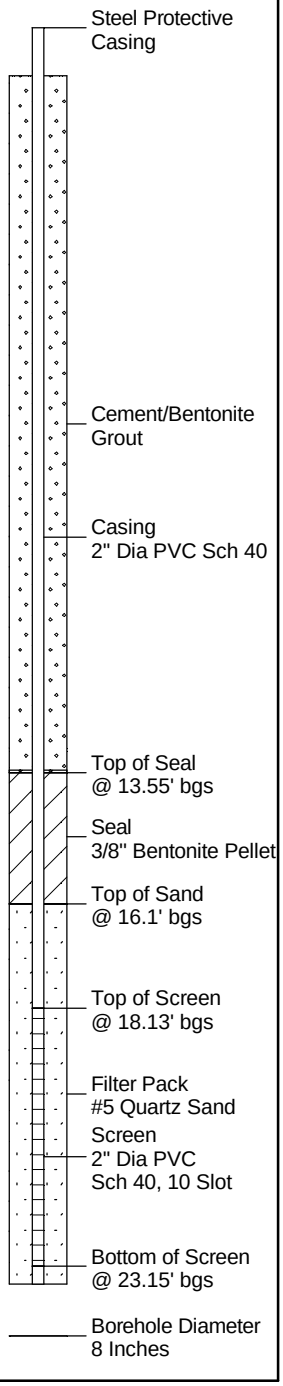
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 08/06/98
End Date	: 08/09/98
Northing Coord.	: 654031.3995
Easting Coord.	: 1697302.9030 OH83/N ft.
Total Depth of Boring	: 23.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 3.5 feet
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 650.91	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			ML		SILT; Topsoil.	
1	650		CL		CLAY; little silt; trace fine gravel; moist; 10YR5/2 Grayish Brown and 10YR4/1 Dark Gray.	Split Spoon Sample 1-3' bgs. Recovery 65% 1.3'. PID=0.0 Rad Beta 403
2	649					
3	648					
4	647					Split Spoon Sample 3-5' bgs. Recovery 90% 1.8'. PID=0.0 Rad Beta 432
5	646				Hard; 10YR5/1 Gray and 10YR5/4 Yellowish Brown.	
6	645					Split Spoon Sample 5-7' bgs. Recovery 80% 1.6'. PID=0.0 Rad Beta 453
7	644					
8	643					Split Spoon Sample 7-8.5' bgs. Recovery 100% 1.5'. PID=0.0 Rad Beta 414
9	642				Hard; damp; 10YR4/3 Brown.	
10	641					Split Spoon Sample 9-10' bgs. Recovery 90% 0.9'. PID=0.0 Rad Beta 402
11	640				No Description Available too hard to collect a split spoon sample.	
12	639					
13	638		CL		CLAY; trace coarse gravel; moist to wet; soft; 10YR4/1 dark Gray.	Split Spoon Sample 13-14' bgs. Recovery 100% 1.0'. PID=NA Rad Beta 406
14	637					
15	636				soft @ 15'	
16	635					Split Spoon Sample 15-16.5' bgs. Recovery 100% 1.55'. PID=0.0 Rad Beta 457
17	634					
18	633				Increased sand and gravel content downward.	
19	632					
20	631		DO		Weathered Bedrock, DOLOMITE. Difficult augering.	1st boring auger refusal @ 23'.
21	630					
22	629					
23	628					All colors from Munsell Soil Color Chart 1992 Revised Edition
24	627				Bottom of Boring at 23.5 ft bgs	
25	626					

Well1: MW-24 (S)
Elev.: 653.26 TOC



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Remedial Investigation
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Well MW-25 (I)

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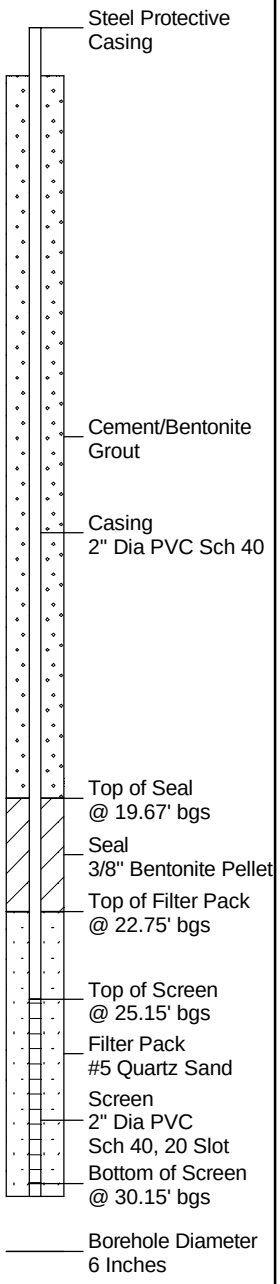
Investigative Area 07	: Northwest Portion of Site
Start Date	: 08/08/98
End Date	: 08/08/98
Northing Coord.	: 654796.8919
Easting Coord.	: 1697030.2803 OH83/N ft.
Total Depth of Boring	: 30.5 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill 150
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 10.5 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.25	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	647		CL		CLAY; some silt; trace fine sand; rootlets; moist; soft; 10YR4/2 Dark Grayish Brown.	
1	646		CL		CLAY; some silt; trace fine to coarse sand and fine gravel; moist; firm; medium plasticity; 10YR4/6 Dark Yellowish Brown with gray mottling.	
2	645					
3	644					
4	643				stiff @ 3' bgs.	Sample 0-8' bgs. Recovery 100% 8.0'.
5	642					
6	641				trace coarse gravel; very stiff; 10YR4/3 Brown @ 4' bgs.	
7	640					
8	639				hard; blocky @ 6' bgs.	8'-18' Hard drilling casing; slow.
9	638					
10	637		CL		CLAY and SILT; trace sand and fine gravel; moist; very stiff; 10YR4/1 Dark Gray.	
11	636					
12	635				soft.	
13	634					Sample 8-18' bgs. Recovery 100% 10.0'.
14	633					
15	632					
16	631		SM		SAND; silty sand to sandy silt; trace fine to coarse gravel, poorly sorted, subangular; moist to wet; dense to stiff; 10YR4/1 Gray.	
17	630					
18	629					
19	628					Sample 18-20' bgs. Recovery 100% 2.0'
20	627		DO		Dolomite; vuggy; fossiliferous.	
21	626					
22	625					
23	624					
24	623					
25	622					Sample 20-30' bgs. Recovery 100% 10.0'.
26	621					
27	620					
28	619					
29	618					
30	617					
31	616				Bottom of Boring at 30.5 ft bgs	
32	615					
33	614					All colors from Munsell Soil Color Chart 1992 Revised Edition
34	613					
35						

Well1: MW-25 (I)
Elev.: 649.31 TOC



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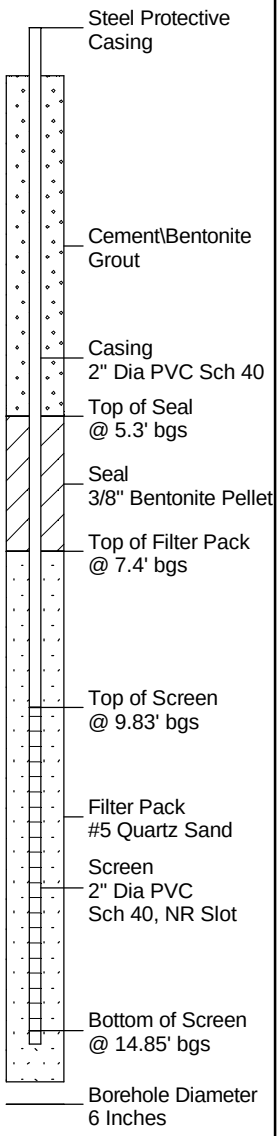
Well MW-26 (S)

Investigative Area 02	: Lagoons A, B, and C
Start Date	: 08/10/98
End Date	: 08/10/98
Northing Coord.	: 654801.7912
Easting Coord.	: 1697694.9635 OH83/N ft.
Total Depth of Boring	: 15.6 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Water	: Not Recorded
Depth to Bedrock	: 15.6 feet
Depth Drilled Into Rock	: 0 feet
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long

Depth in feet	Surf. Elev. 647.78	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0					No Description Available	
1	647					
2	646					Core recovery not recorded.
3	645					PID 0.0 ppm for the entire boring.
4	644					Rad Bkg Beta 300 alpha 8
5	643					
6	642					
7	641					
8	640					
9	639		CL		CLAY; moderately hard; dry; Dark Brown. 8.5' water intercepted.	
10	638					
11	637		CL		CLAY; little silt and fine sand; trace fine to medium gravel; Dark Gray.	
12	636					
13	635		CL		CLAY; increase in medium to coarse gravel (increasing sand and gravel content with depth).	
14	634					
15	633					
16	632				Bottom of Boring at 15.6 ft bgs Auger refusal.	
17	631					
18	630					
19	629					
20	628					

Well1: MW-26 (S)
Elev.: 650.44 TOC



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Well OMW-27 (I)

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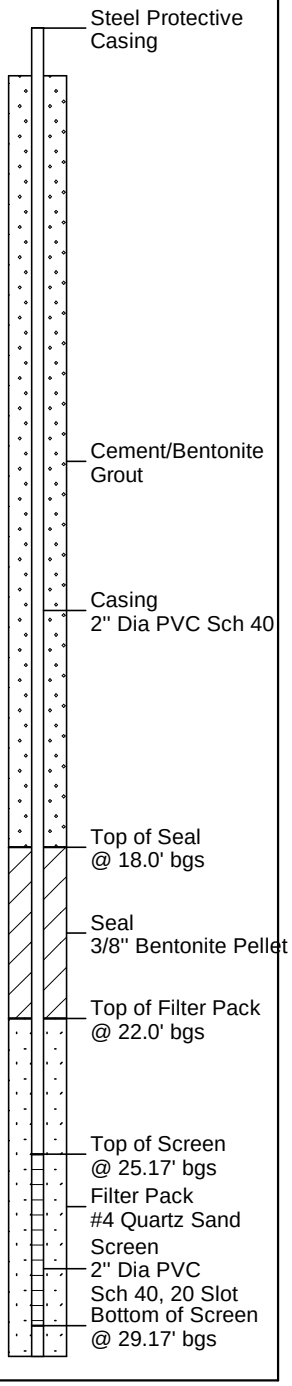
Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/29/98
End Date	: 10/29/98
Northing Coord.	: 654832.8454
Easting Coord.	: 1697272.7700 OH83/N ft.
Total Depth of Boring	: 30.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 36.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.70	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–7	647–641		CL		Silty CLAY; 10% fine sand and gravel; moist; stiff; medium plasticity; 10YR4/3 brown with light gray mottling (gleying).	Sample 0-6' bgs. Recovery 100% 6.0'.
7–12	640–636		CL		Silty CLAY; trace sand; stiff; dense; medium plasticity; 10YR4/1 dark gray.	Sample 6-16' bgs. Recovery 100% 10.0'.
12–20	635–628		ML SM		Sandy SILT to Silty SAND; silt and very fine to fine sand; 15-25% coarse sand and fine gravel; gravel to boulder to 4'.	Sample 16-20' bgs. Recovery 100% 4.0'
20–30	627–618		DO		Dolostone; abundant fossils; vugs; rock core is very fractured; light gray. Crumbled and Fractured Rock. Bottom of Boring at 30.0 ft bgs	Diameter of borehole changes to 4.75", using smaller bit. Sample 20-26' bgs. Recovery 50% 3.0'. All colors from Munsell Soil Color Chart 1992 Revised Edition. Description of boring from MW28 (B).

Well1: OMW-27 (I)
Elev.: 649.97 TOC



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Well OMW-28 (B)

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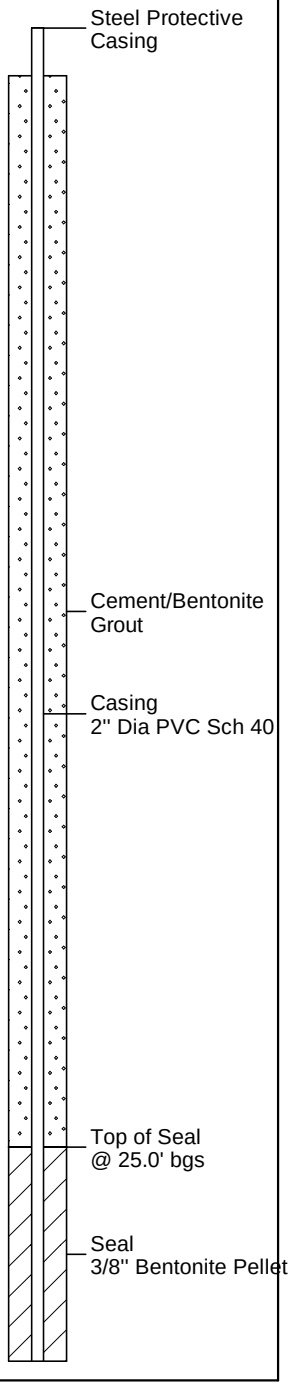
Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/28/98
End Date	: 10/28/98
Northing Coord.	: 654832.8824
Easting Coord.	: 1697264.1500 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 36.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.67	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–7	647–641		CL		Silty CLAY; 10% fine sand and gravel; moist; stiff; medium plasticity; 10YR4/3 brown with light gray mottling (gleying).	Sample 0-6' bgs. Recovery 100% 6.0'.
7–12	640–636		CL		Silty CLAY; trace sand; stiff; dense; medium plasticity; 10YR4/1 dark gray.	Sample 6-16' bgs. Recovery 100% 10.0'.
12–20	635–628		ML SM		Sandy SILT to Silty SAND; silt and very fine to fine sand; 15-25% coarse sand and fine gravel; gravel to boulder to 4'.	Sample 16-20' bgs. Recovery 100% 4.0'
20–30	627–618		DO		Dolostone; abundant fossils; vugs; rock core is very fractured; light gray. Crumbled and Fractured Rock.	Sample 20-26' bgs. Recovery 50% 3.0'.

Well1: OMW-28 (B)
Elev.: 649.99 TOC



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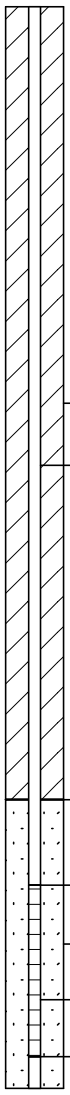
Well OMW-28 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/28/98
End Date	: 10/28/98
Northing Coord.	: 654832.8824
Easting Coord.	: 1697264.1500 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 36.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.67	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30						
31	617					Sample 26-36' bgs. Recovery 80% 8.0'.
32	616					
33	615					
34	614		DO			
35	613					
36	612					
37	611					
38	610					
39	609				Rock becomes more competant, less fractured.	
40	608					
41	607					Sample 36-46' bgs. Recovery 80% 8.0'.
42	606					
43	605		DO			
44	604					
45	603					
46	602					
47	601					
48	600					
49	599				Fossiliferous Dolostone (Dolomitic Limestone)	
50	598					
51	597					Sample 46-55' bgs. Recovery 100% 9.0'
52	596		DO			
53	595					
54	594					
55	593					
56	592				Bottom of Boring at 55.0 ft bgs	
57	591					
58	590					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	589					
60	588					

Well1: OMW-28 (B)
Elev.: 649.99 TOC



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Well OMW-29 (I)

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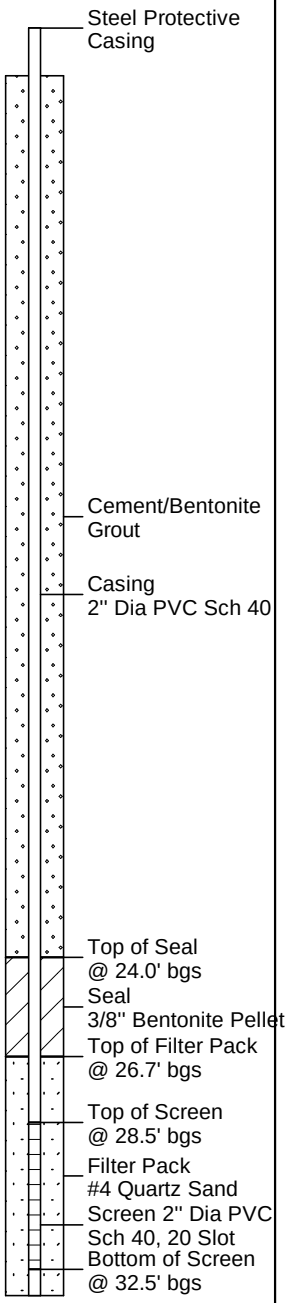
Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/22/98
End Date	: 10/22/98
Northing Coord.	: 655130.6620
Easting Coord.	: 1696546.9202 OH83/N ft.
Total Depth of Boring	: 34.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 24.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.85	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	646		CL		Silty CLAY; 10% gravel to 2" and 10% fine to coarse sand; moist; firm to stiff; medium plasticity; 10YR4/3 brown with light gray mottling (gleying).	Sample 0-6' bgs. Recovery 100% 6.0'.
2	645					
3	644					
4	643					
5	642					
6	641		CL		Silty CLAY; 10-15% sand and gravel, subangular; slightly moist; hard; dense; 10YR3/1 very dark gray.	
7	640					
8	639					
9	638					
10	637					
11	636					Sample 6-16' bgs. Recovery 100% 10.0'.
12	635				very moist; firm.	
13	634					
14	633					
15	632					
16	631					
17	630					
18	629		ML		Sandy SILT; silt and fine to coarse sand; 15-25% fine gravel, subangular to subrounded, poorly sorted; little clay; wet.	
19	628					
20	627					
21	626					Sample 16-26' bgs. Recovery NR
22	625					
23	624		CL		CLAY; moist; hard; on top of bedrock.	
24	623		DO		Lockport undifferentiated; dolomitized Limestone; fossiliferous; vuggy; light gray.	
25	622					Diameter of borehole changes to 4.75", using smaller bit.
26	621					
27	620					
28	619					
29	618					
30	617					Sample 26-34' bgs. Recovery 94% 7.5'.
31	616					
32	615					
33	614					All colors from Munsell Soil Color Chart 1992 Revised Edition
34	613				Bottom of Boring at 34.0 ft bgs	
35	612					

Well1: OMW-29 (I)
Elev.: 648.80 TOC



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Well OMW-30 (B)

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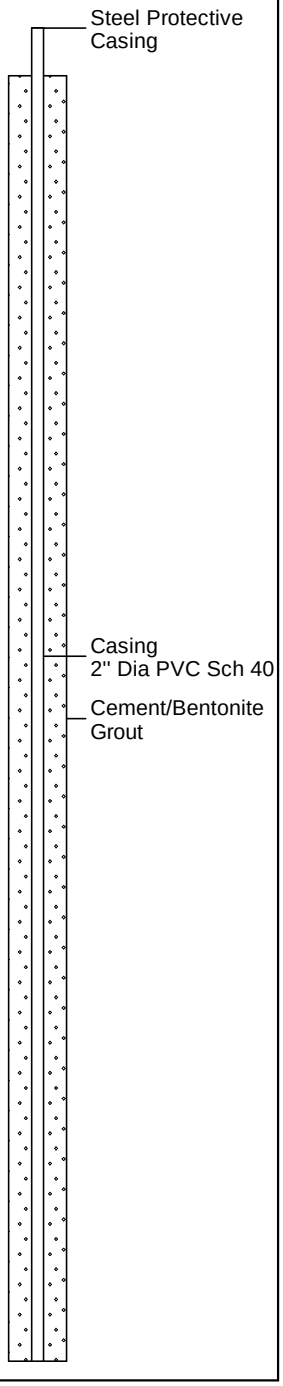
Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/22/98
End Date	: 10/22/98
Northing Coord.	: 655139.7640
Easting Coord.	: 1696547.0502 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 24.0 feet
Depth Drilled Into Rock	: 31.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.73	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	646		CL		Silty CLAY; 10% gravel to 2" and 10% fine to coarse sand; moist; firm to stiff; medium plasticity; 10YR4/3 brown with light gray mottling (gleying).	
2	645					
3	644					Sample 0-6' bgs. Recovery 100% 6.0'.
4	643					
5	642					
6	641		CL		Silty CLAY; 10-15% sand and gravel, subangular; slightly moist; hard; dense; 10YR3/1 very dark gray.	
7	640					
8	639					
9	638					
10	637					
11	636					Sample 6-16' bgs. Recovery 100% 10.0'.
12	635				very moist; firm.	
13	634					
14	633					
15	632					
16	631					
17	630					
18	629		ML		Sandy SILT; silt and fine to coarse sand; 15-25% fine gravel, subangular to subrounded, poorly sorted; little clay; wet.	
19	628					
20	627					
21	626					Sample 16-26' bgs. Recovery 100% 10.0'.
22	625					
23	624		CL		CLAY; moist; hard; on top of bedrock.	
24	623					
25	622		DO		Lockport undifferentiated; dolomitized Limestone; fossiliferous; vuggy; light gray.	Diameter of borehole changes to 4.75", using smaller bit.
26	621					
27	620					
28	619					
29	618					
30	617					

Well1: OMW-30 (B)
Elev.: 648.77 TOC



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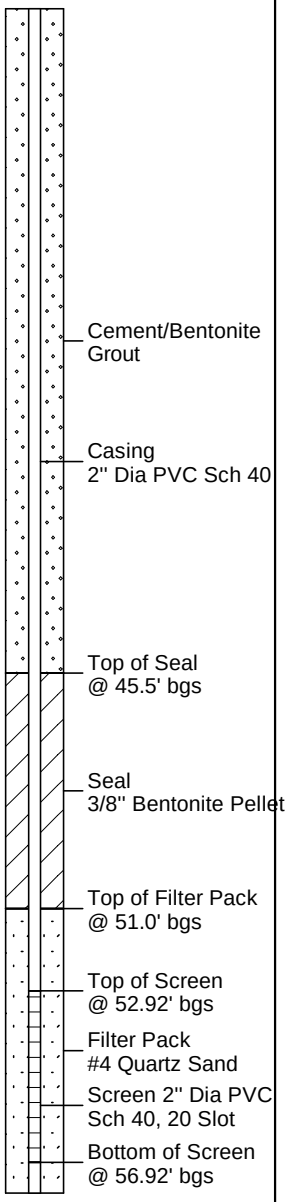
Well OMW-30 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/22/98
End Date	: 10/22/98
Northing Coord.	: 655139.7640
Easting Coord.	: 1696547.0502 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 24.0 feet
Depth Drilled Into Rock	: 31.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.73	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30						
31	616					Sample 26-36' bgs. Recovery 100% 10.0'.
32	615					
33	614					
34	613					
35	612					
36	611					
37	610					
38	609					
39	608					
40	607					
41	606					Sample 36-46' bgs. Recovery 100% 10.0'
42	605					
43	604		DO			
44	603					
45	602					
46	601					
47	600					
48	599					
49	598					
50	597					
51	596					Sample 46-55' bgs. Recovery NR.
52	595					
53	594					
54	593					
55	592					
56	591				Bottom of Boring at 55.0 ft bgs	
57	590					
58	589					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	588					
60	587					

Well1: OMW-30 (B)
Elev.: 648.77 TOC



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Well OMW-31 (I)

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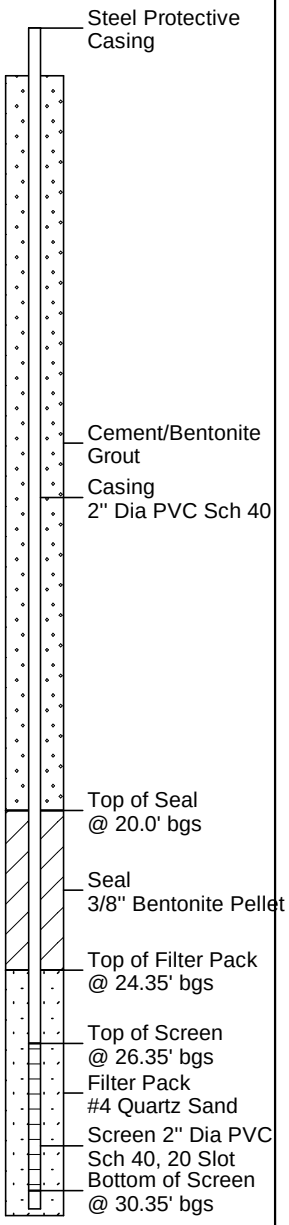
Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/20/98
End Date	: 10/20/98
Northing Coord.	: 655223.1144
Easting Coord.	: 1697191.3503 OH83/N ft.
Total Depth of Boring	: 31.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 11.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.47	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	646				No description provided.	
1	645		CL		Silty CLAY; with 10% fine to coarse sand; trace gravel; slightly moist; stiff; 10YR4/3 brown with light gray mottling (gleying).	LUSB1080 collected 2.0-2.5' bgs.
2	644					
3	643					
4	642					Sample 0-6' bgs. Recovery 100% 6.0'.
5	641					
6	640				CLAY and SILT; slightly moist; hard; hihg plasticity; 10YR3/1 very dark gray.	
7	639					
8	638					
9	637					
10	636					
11	635					Sample 6-16' bgs. Recovery 100% 10.0'.
12	634					
13	633				CLAY continued; more silt; moist; firm.	
14	632					
15	631					
16	630		ML SM		Sandy SILT to Silty SAND; silt and very fine to fine sand with 20-25% medium to coarse sand and gravel to 3"; cohesive.	
17	629					
18	628					Sample 16-26' bgs. Recovery 100% 10.0'.
19	627					
20	626		DO		Lockport undifferentiated; Limestone; fossiliferous; vuggy; light gray.	Diameter of borehole changes to 4.75", using smaller bit.
21	625					
22	624					
23	623					
24	622					
25	621					
26	620					
27	619					
28	618					Sample 26-31' bgs. Recovery 100% 5.0'.
29	617					
30	616					
31	615				Bottom of Boring at 31.0 ft bgs	
32	614					
33	613					All colors from Munsell Soil Color Chart 1992 Revised Edition
34	612					
35						

Well1: OMW-31 (I)
Elev.: 648.68 TOC



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Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

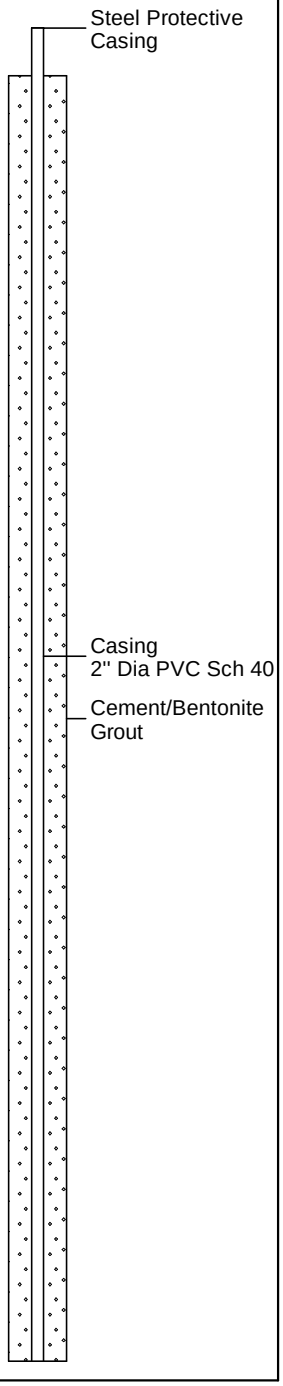
Well OMW-32 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/19/98
End Date	: 10/19/98
Northing Coord.	: 655222.8654
Easting Coord.	: 1697200.0603 OH83/N ft.
Total Depth of Boring	: 56.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 19.0 feet
Depth Drilled Into Rock	: 37.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.52	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	646		ML		Clayey SILT; 10% fine sand; moist; firm; 10YR3/2 very dark grayish brown.	
1	645		CL		Silty CLAY; with 10% fine to coarse sand; trace gravel; slightly moist; stiff; 10YR4/3 brown with light gray mottling (gleying).	LUSB1081 collected 2.5-3.0' bgs.
2	644					
3	643					
4	642					Sample 0-6' bgs. Recovery 67% 4.0'.
5	641					
6	640				CLAY with silt; slightly moist; hard; hihg plasticity; 10YR3/1 very dark gray uniform color.	
7	639					
8	638					
9	637					
10	636					
11	635					Sample 6-16' bgs. Recovery 100% 10.0'.
12	634				very moist; firm.	
13	633					
14	632		SM		Sandy SILT; predominately very fine to fine sand and silt; with 15-25% medium to coarse sand and fine gravel, subangular to subrounded; wet; loose to cohesive; 10YR3/1 very dark gray.	
15	631					
16	630					
17	629					
18	628					Sample 16-26' bgs. Recovery 100% 10.0'.
19	627		DO		Lockport undifferentiated; Limestone; fossiliferous; vuggy; light gray.	
20	626					
21	625					
22	624					Diameter of borehole changes to 4.75", using smaller bit.
23	623					
24	622					
25	621					
26	620					
27	619					
28	618					
29	617					
30						

Well1: OMW-32 (B)
Elev.: 648.74 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-32 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/19/98
End Date	: 10/19/98
Northing Coord.	: 655222.8654
Easting Coord.	: 1697200.0603 OH83/N ft.
Total Depth of Boring	: 56.0 feet

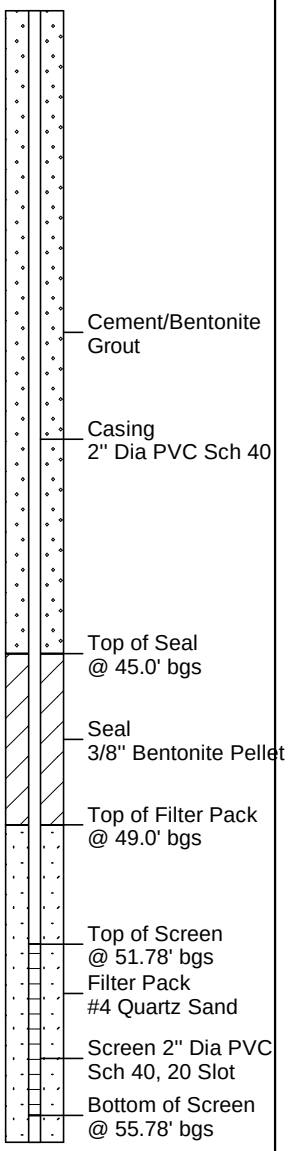
Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 19.0 feet
Depth Drilled Into Rock	: 37.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Surf. Elev. 646.52

Depth in feet	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30–56		DO		Pyritization/Remineralization with 1" calcite crystals visible in small cavities.	Sample 26-36' bgs. Recovery 100% 10.0'. Sample 36-46' bgs. Recovery 100% 10.0'. Sample 46-56' bgs. Recovery 100% 10.0'.
56				Bottom of Boring at 56.0 ft bgs	

All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: OMW-32 (B)
Elev.: 648.74 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-33 (I)

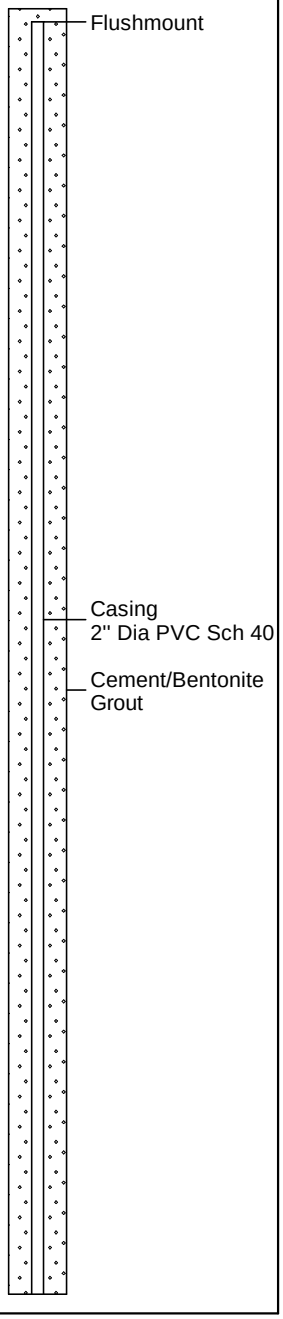
(Page 1 of 2)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/28/98
End Date	: 10/29/98
Northing Coord.	: 655512.8327
Easting Coord.	: 1696857.1905 OH83/N ft.
Total Depth of Boring	: 58.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 26.0 feet
Depth Drilled Into Rock	: 29.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 645.99	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	645		CL		Silty CLAY; trace fine sand and gravel; moist; firm (top 1') to very stiff; medium plastic; 10YR4/3 brown..	
2	644					
3	643					Sample 0-6' bgs. Recovery 100% 6.0'.
4	642					
5	641				slightly moist; blocky.	
6	640					
7	639		CL		CLAY; silt with 10% sand and gravel, poorly sorted; moist; hard; medium to high plasticity; 10YR3/1 very dark gray.	
8	638					
9	637					
10	636					
11	635					Sample 6-16' bgs. Recovery NR.
12	634					
13	633					
14	632				moist; firm.	
15	631					
16	630					
17	629					
18	628					Sample 16-26' bgs. Recovery NR.
19	627					
20	626		ML		Sandy SILT; silt with predominately fine to very fine sand and 15-20% poorly sorted coarse sand to fine gravel to 3"; moist; cohesive; 10YR3/1 very dark gray.	
21	625					
22	624					
23	623					
24	622					
25	621				more sand; wet.	Diameter of borehole changes to 4.75", using smaller bit.
26	620					
27	619		DO		Dolomitic LIMESTONE, fossiliferous and vuggy;	
28	618					
29	617					
30	616					

Well1: OMW-33 (I)
Elev.: 645.69 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-33 (I)

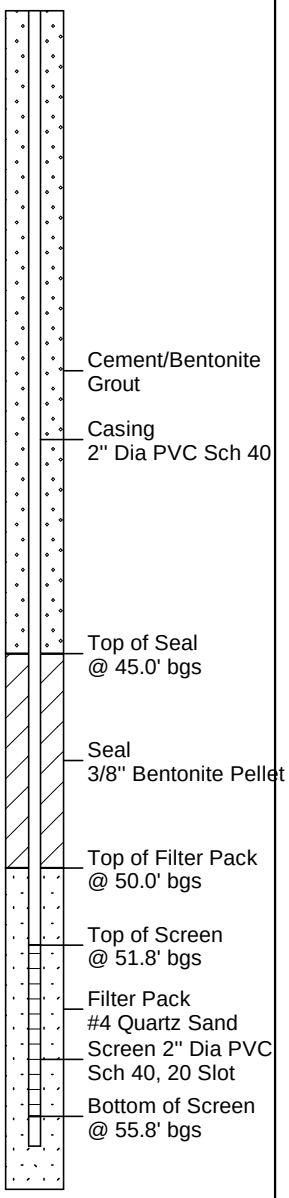
(Page 2 of 2)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/28/98
End Date	: 10/29/98
Northing Coord.	: 655512.8327
Easting Coord.	: 1696857.1905 OH83/N ft.
Total Depth of Boring	: 58.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 26.0 feet
Depth Drilled Into Rock	: 29.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 645.99	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30						
31	615				Highly fractured bedrock 30-40' bgs. Soft drilling, core comes up like coarse gravel. Water loss in this zone.	Sample 26-36' bgs. Recovery 100% 10.0'.
32	614					
33	613					
34	612					
35	611					
36	610					
37	609					
38	608					
39	607					
40	606					
41	605					Sample 36-46' bgs. Recovery 100% 10.0'.
42	604					
43	603					
44	602		DO			
45	601					
46	600					
47	599					
48	598					
49	597					
50	596					
51	595					Sample 46-56' bgs. Recovery 100% 10.0'.
52	594					
53	593					
54	592					
55	591					
56	590					Cored to 58' bgs, caved in to 57.5'.
57	589					
58	588				Bottom of Boring at 55.0 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition
59	587					
60	586					

Well1: OMW-33 (I)
Elev.: 645.69 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

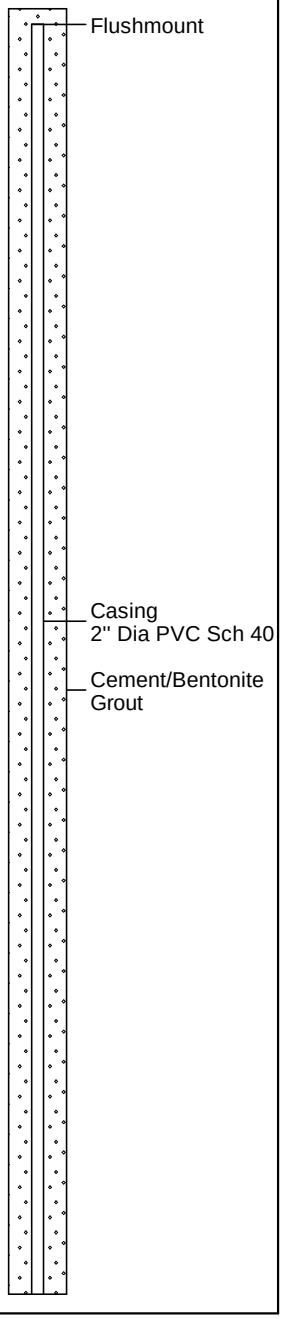
Well OMW-34 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/26/98
End Date	: 10/28/98
Northing Coord.	: 655512.4257
Easting Coord.	: 1696865.5605 OH83/N ft.
Total Depth of Boring	: 96.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 26.5 feet
Depth Drilled Into Rock	: 69.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 645.98	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0						
1	645		CL		Silty CLAY; trace fine sand and gravel; moist; firm (top 1') to very stiff; medium plastic; 10YR4/3 brown..	
2	644					
3	643					Sample 0-6' bgs. Recovery 100% 6.0'.
4	642					
5	641				slightly moist; blocky.	
6	640					
7	639		CL		CLAY; silt with 10% sand and gravel, poorly sorted; moist; hard; medium to high plasticity; 10YR3/1 very dark gray.	
8	638					
9	637					
10	636					
11	635					Sample 6-16' bgs. Recovery 100% 10.0'.
12	634					
13	633					
14	632				moist; firm.	
15	631					
16	630					
17	629					
18	628					Sample 16-26' bgs. Recovery 100% 10.0'.
19	627					
20	626		ML		Sandy SILT; silt with predominately fine to very fine sand and 15-20% poorly sorted coarse sand to fine gravel to 3"; moist; cohesive; 10YR3/1 very dark gray.	
21	625					
22	624					
23	623					
24	622					
25	621				more sand; wet.	
26	620					
27	619		DO		Dolomitic LIMESTONE, fossiliferous and vuggy; fractured; Lockport undiffereatiated; light gray to gray.	Diameter of borehole changes to 4.75", using smaller bit.
28	618					
29	617					
30	616					
31	615					Sample 26-36' bgs. Recovery 80% 8.0'.
32	614					
33	613					

Well1: OMW-34 (B)
Elev.: 645.58 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

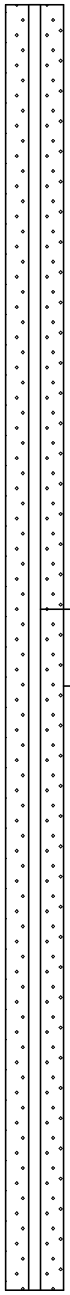
Well OMW-34 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/26/98
End Date	: 10/28/98
Northing Coord.	: 655512.4257
Easting Coord.	: 1696865.5605 OH83/N ft.
Total Depth of Boring	: 96.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 26.5 feet
Depth Drilled Into Rock	: 69.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 645.98	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
33					Dolomitic LIMESTONE, fossiliferous and vuggy; fractured; Lockport undiffereatiated; light gray to gray.	
34	612					
35	611					
36	610					
37	609					
38	608					
39	607					
40	606					
41	605					Sample 36-46' bgs. Recovery 80% 8.0'.
42	604					
43	603					
44	602					
45	601					
46	600					
47	599					
48	598					
49	597					
50	596		DO			
51	595					Sample 46-56' bgs. Recovery 100% 10.0'.
52	594					
53	593					
54	592					
55	591					
56	590					
57	589					
58	588					
59	587					
60	586					
61	585					Sample 56-66' bgs. Recovery 100% 10.0'.
62	584					
63	583					
64	582					
65	581					
66	580					

Well1: OMW-34 (B)
Elev.: 645.58 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

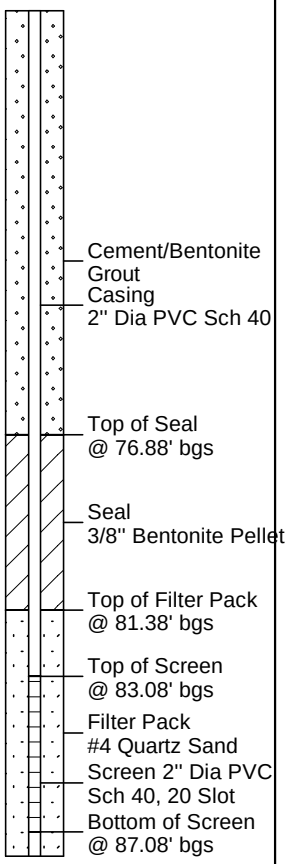
Well OMW-34 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/26/98
End Date	: 10/28/98
Northing Coord.	: 655512.4257
Easting Coord.	: 1696865.5605 OH83/N ft.
Total Depth of Boring	: 96.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 26.5 feet
Depth Drilled Into Rock	: 69.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 645.98	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
66					66-77' run; fewer vugs and fractures; rock core coming out in big chunks 6-8"; dense; light gray.	
67	579					
68	578				very light gray DOLOSTONE; dense; continued with dark gray lenses with gray rock (limestone?)	
69	577					
70	576					
71	575					Sample 66-76' bgs. Recovery 100% 10.0'.
72	574					
73	573					
74	572					
75	571					
76	570					
77	569					
78	568					
79	567					
80	566					
81	565		DO			Sample 76-86' bgs. Recovery 100% 10.0'.
82	564					
83	563					
84	562					
85	561					
86	560					
87	559					
88	558					
89	557					
90	556					
91	555					Sample 86-96' bgs. Recovery 100% 10.0'.
92	554					
93	553					
94	552					
95	551					
96	550				Bottom of Boring at 96.0 ft bgs	
97	549					All colors from Munsell Soil Color Chart 1992 Revised Edition
98	548					
99	547					

Well1: OMW-34 (B)
Elev.: 645.58 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-35 (I)

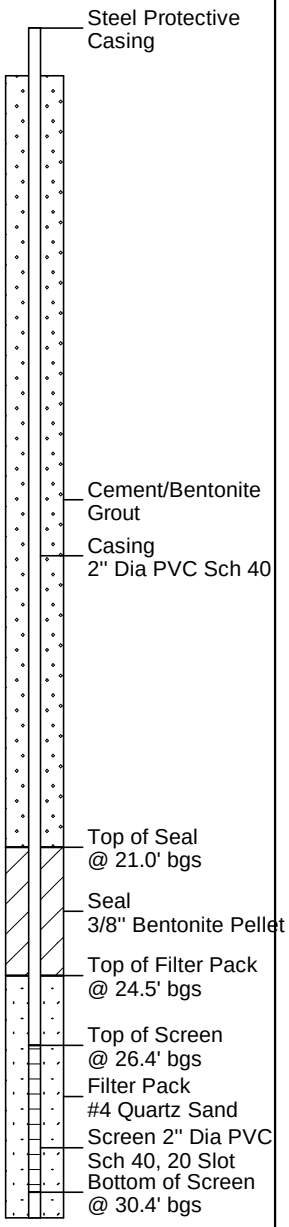
(Page 1 of 1)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/21/98
End Date	: 10/21/98
Northing Coord.	: 655497.0959
Easting Coord.	: 1697852.2105 OH83/N ft.
Total Depth of Boring	: 31.4 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.38	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0–6	646–641		CL		Silty CLAY; 10% fine to coarse sand; moist; firm; 10YR4/3 brown.	LUSB1084 collected 1.8-2.0' bgs. Sample 0-6' bgs. Recovery 100% 6.0'.
6–16	640–631		CL		Silty CLAY; trace sand and fine gravel; slightly moist hard; dense; 10YR3/1 very dark gray. moist; high plasticity.	Sample 6-16' bgs. Recovery 100% 10.0'.
16–20	630–627		ML		Sandy SILT; silt and fine to very fine sand and 20-30% medium to coarse sand and gravel to 3"; wet; cohesive; 10YR3/1 very dark gray.	Sample 16-20' bgs. Recovery 100% 4.0'.
20–31	626–616		DO		Dolomitic LIMESTONE, fossiliferous, lots of vugs; some solution cavities; Lockport undiffereatiated; light gray.	Diameter of borehole changes to 4.75", using smaller bit. Sample 20-31' bgs. Recovery 100% 11.0'.
31	615				Bottom of Boring at 31.4 ft bgs	All colors from Munsell Soil Color Chart 1992 Revised Edition

Well1: OMW-35 (I)
Elev.: 648.88 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-36 (B)

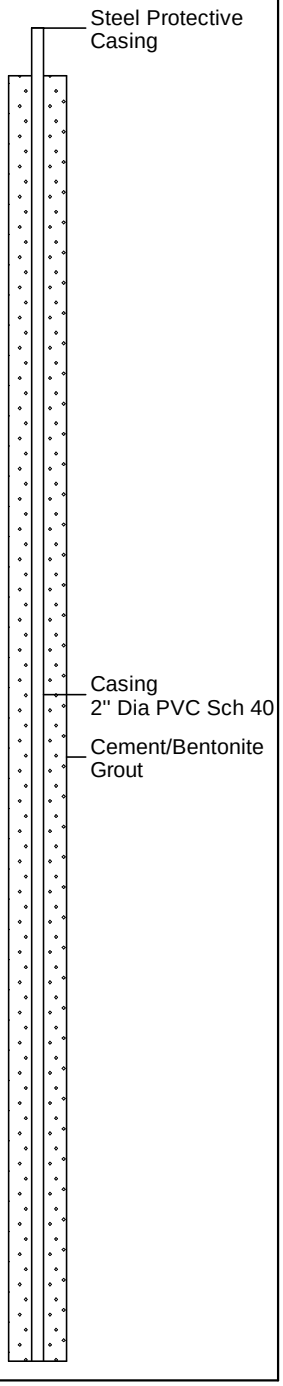
(Page 1 of 2)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/20/98
End Date	: 10/21/98
Northing Coord.	: 655506.3229
Easting Coord.	: 1697852.1905 OH83/N ft.
Total Depth of Boring	: 55.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 35.2 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.42	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	646		CL		Silty CLAY; 10% fine to coarse sand; moist; firm; 10YR4/3 brown.	
1	645					
2	644					LUSB1085 collected 2.3-2.4' bgs.
3	643					
4	642					
5	641					Sample 0-6' bgs. Recovery 100% 6.0'.
6	640		CL		Silty CLAY; trace sand and fine gravel; slightly moist hard; dense; 10YR3/1 very dark gray.	
7	639					
8	638					
9	637					
10	636					
11	635					Sample 6-16' bgs. Recovery 100% 10.0'.
12	634				moist; high plasticity.	
13	633					
14	632					
15	631					
16	630		ML		Sandy SILT; silt and fine to very fine sand and 20-30% medium to coarse sand and gravel to 3"; wet; cohesive; 10YR3/1 very dark gray.	
17	629					
18	628					Sample 16-26' bgs. Recovery 100% 10.0'.
19	627					
20	626		DO		Dolomitic LIMESTONE, fossiliferous, lots of vugs; some solution cavities; Lockport undiffereatiated; light gray.	Diameter of borehole changes to 4.75", using smaller bit.
21	625					
22	624					
23	623					
24	622					
25	621					
26	620					
27	619					
28	618					
29	617					
30						

Well1: OMW-36 (B)
Elev.: 648.93 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

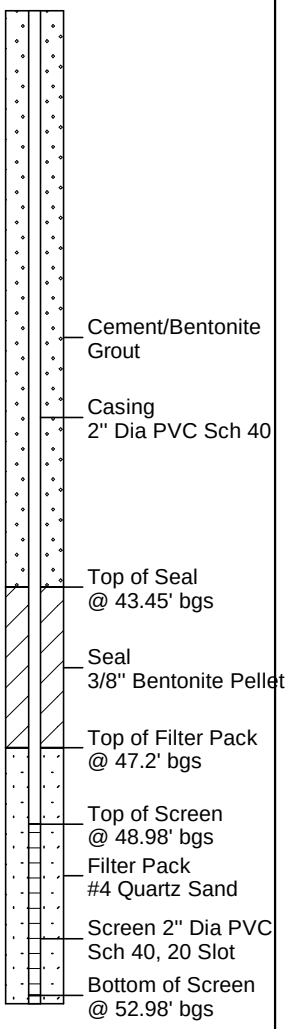
Well OMW-36 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/20/98
End Date	: 10/21/98
Northing Coord.	: 655506.3229
Easting Coord.	: 1697852.1905 OH83/N ft.
Total Depth of Boring	: 55.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 20.0 feet
Depth Drilled Into Rock	: 35.2 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 646.42	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30	616					
31	615					Sample 26-36' bgs. Recovery 100% 10.0'.
32	614					
33	613					
34	612					
35	611					
36	610				Pyritization/remineralization along edges of cavities.	
37	609					
38	608					
39	607					
40	606					
41	605					Sample 36-46' bgs. Recovery 100% 10.0'.
42	604					
43	603		DO			
44	602					
45	601					
46	600					
47	599					
48	598					
49	597					
50	596					
51	595					Sample 46-56' bgs. Recovery 100% 10.0'.
52	594					
53	593					
54	592					
55	591				Bottom of Boring at 55.2 ft bgs	
56	590					
57	589					
58	588					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	587					
60						

Well1: OMW-36 (B)
Elev.: 648.93 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well OMW-37 (I)

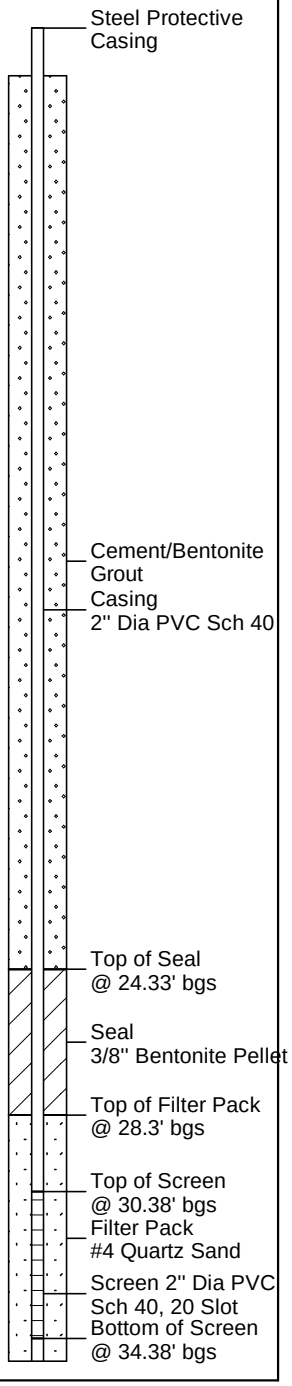
(Page 1 of 1)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/26/98
End Date	: 10/26/98
Northing Coord.	: 655884.6858
Easting Coord.	: 1696779.3508 OH83/N ft.
Total Depth of Boring	: 35.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 23.5 feet
Depth Drilled Into Rock	: 11.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 641.34	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	641		CL		Silty CLAY; 10-20% fine sand; moist; soft to firm; 10YR4/3 brown.	
1	640					
2	639		CL		Silty CLAY; trace sand and gravel; slightly moist; hard; 10YR4/3 brown and 10YR3/1 very dark gray.	Sample 0-6' bgs. Recovery 100% 6.0'.
3	638					
4	637					
5	636					
6	635					
7	634					
8	633					
9	632					
10	631					
11	630					Sample 6-16' bgs. Recovery 100% 10.0'.
12	629					
13	628					
14	627				2" sand seam (SP), fine sand.	
15	626					
16	625					
17	624					
18	623					Sample 16-23.5' bgs. Recovery 100% 7.5'.
19	622					
20	621		SM ML		Silty SAND to Sandy SILT; with 10-15% gravel; sand is predominately fine; wet; loose to cohesive; 10YR3/1 very dark gray. 22-22.5' bgs sand seam (SW) fine sand; wet; well sorted.	
21	620					
22	619					
23	618					Diameter of borehole changes to 4.75", using smaller bit.
24	617		DO		Dolomitic LIMESTONE, fossiliferous, abundant bivalves and corals, abundant vugs; Lockport undiffereatiated; light gray.	
25	616					
26	615					Sample 23.5-26' bgs. Recovery 100% 2.5'.
27	614					
28	613					
29	612					
30	611					
31	610					Sample 26-36' bgs. Recovery 100% 10.0'.
32	609					
33	608					All colors from Munsell Soil Color Chart 1992 Revised Edition
34	607				Bottom of Boring at 35.0 ft bgs	
35						

Well1: OMW-37 (I)
Elev.: 643.57 TOC



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Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
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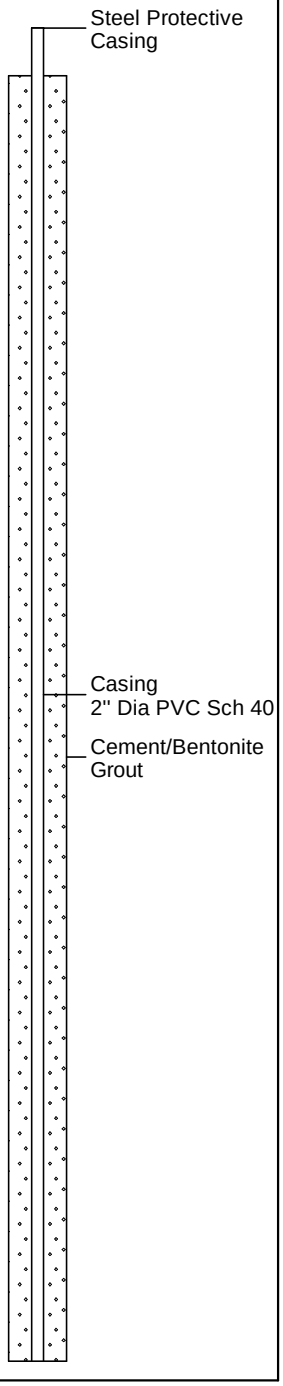
Well OMW-38 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/22/98
End Date	: 10/23/98
Northing Coord.	: 655886.9478
Easting Coord.	: 1696786.3308 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 23.5 feet
Depth Drilled Into Rock	: 31.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 641.37	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	641		CL		Silty CLAY; 10-20% fine sand; moist; soft to firm; 10YR4/3 brown.	
1	640					
2	639		CL		Silty CLAY; trace sand and gravel; slightly moist; hard; 10YR4/3 brown and 10YR3/1 very dark gray.	Sample 0-6' bgs. Recovery 100% 6.0'.
3	638					
4	637					
5	636					
6	635					
7	634					
8	633					
9	632					
10	631					
11	630					Sample 6-16' bgs. Recovery 100% 10.0'.
12	629					
13	628					
14	627				2" sand seam (SP), fine sand.	
15	626					
16	625					
17	624					
18	623					Sample 16-23.5' bgs. Recovery 100% 7.5'.
19	622					
20	621		SM ML		Silty SAND to Sandy SILT; with 10-15% gravel; sand is predominately fine; wet; loose to cohesive; 10YR3/1 very dark gray. 22-22.5' bgs sand seam (SW) fine sand; wet; well sorted.	
21	620					
22	619					
23	618					
24	617		DO		Dolomitic LIMESTONE, fossiliferous, abundant bivalves and corals, abundant vugs; Lockport undiffereatiated; light gray.	
25	616					
26	615					Diameter of borehole changes to 4.75", using smaller bit. Sample 23.5-26' bgs. Recovery 100% 2.5'.
27	614					
28	613					
29	612					
30						

Well1: OMW-38 (B)
Elev.: 643.41 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

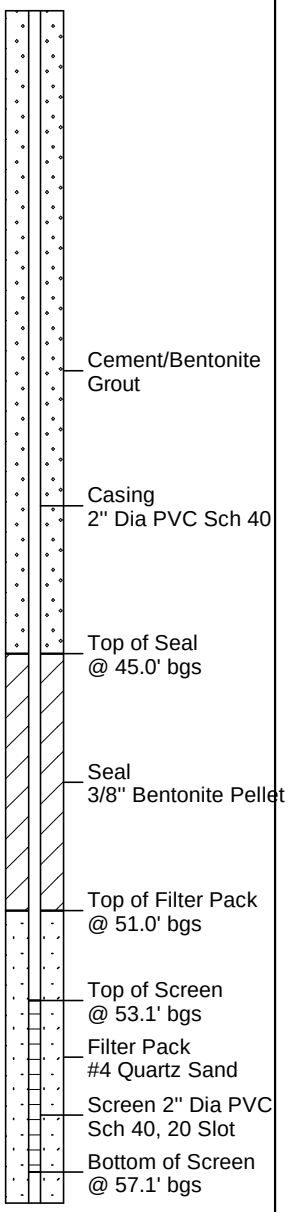
Well OMW-38 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/22/98
End Date	: 10/23/98
Northing Coord.	: 655886.9478
Easting Coord.	: 1696786.3308 OH83/N ft.
Total Depth of Boring	: 55.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 23.5 feet
Depth Drilled Into Rock	: 31.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 641.37	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30	611				Dolomitic LIMESTONE, fossiliferous, abundant bivalves and corals, abundant vugs; Lockport undiffereatiated; light gray.	Sample 26-36' bgs. Recovery 100% 10.0'.
31	610					
32	609					
33	608					
34	607					
35	606					
36	605					
37	604					
38	603					
39	602					
40	601					
41	600					
42	599		DO			
43	598					Core Recovery below 36' NR.
44	597					
45	596					
46	595					
47	594					
48	593					
49	592					
50	591					
51	590					
52	589					
53	588					
54	587					
55	586				Bottom of Boring at 55.0 ft bgs	
56	585					
57	584					
58	583					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	582					
60						

Well1: OMW-38 (B)
Elev.: 643.41 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Buffalo District
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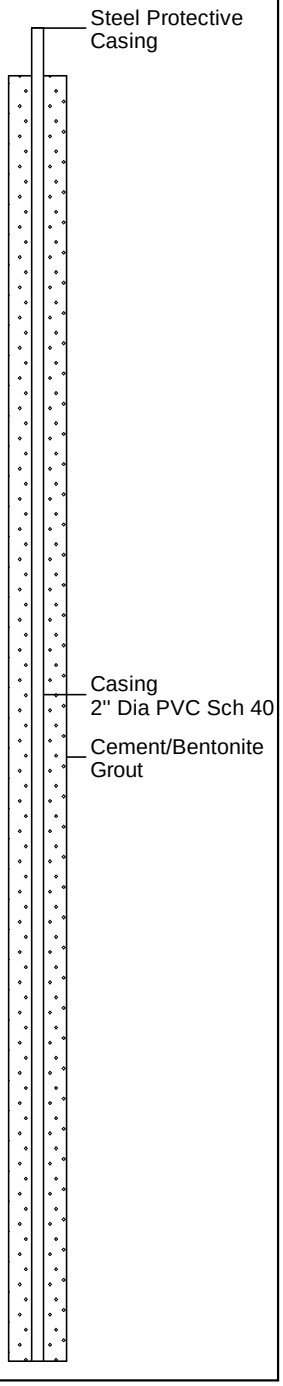
Well MW-39 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/30/98
End Date	: 11/02/98
Northing Coord.	: 654812.2982
Easting Coord.	: 1697509.2499 OH83/N ft.
Total Depth of Boring	: 92.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: A Brad Richardson/Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: 75.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.87	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			ML		SILT; with sand; grass/roots; saturated; soft; 10YR4/3 brown.	
1	647		CL		Silty CLAY; with trace coarse sand and gravel (to 10mm); moist; soft; very plastic; 10YR3/4 dark yellowish brown.	
2	646					
3	645		CL		Same as above except 10YR5/1 gray.	Sample 0-6' bgs. Recovery 100% 6.0'.
4	644		SM		Silty SAND, very fine; moist; loose.	
5	643		CL		Silty CLAY; with trace sand and gravel (to 10mm); slightly moist; firm; slightly plastic; 10YR4/4 dark yellowish brown.	
6	642				Same as above.	
7	641					
8	640					
9	639		ML		Sandy SILT; with trace clay; trace gravel (to 15mm); moist to slighly moist; moderately firm; slightly plastic; 10YR5/1 gray.	
10	638					
11	637					Sample 6-16' bgs. Recovery 100% 10.0'.
12	636		ML		Same as above except gravel (to 40mm) zone.	
13	635		ML		Same as 9-12' except more clay; moderately plastic.	
14	634					
15	633					
16	632					
17	631		DO		Dolomitic LIMESTONE, very fossiliferous; very vuggy, vugs 1/4-1/2"; fractures; some solution cavities; light gray.	
18	630					
19	629					
20	628					
21	627					Sample 16-26' bgs. Recovery 80% 8.0'.
22	626		DO		Same as above except more crumbled (fracturing?).	
23	625					
24	624					
25	623					
26	622		DO		Dolomitic LIMESTONE, light gray with tan mottling next to vugs and fractures; 45 Degree fractures; vugs .25-.5".	Diameter of borehole changes to 4.75", using smaller bit.
27	621					
28	620					
29	619					
30	618		DO		Same as above except crumbled to gravel; light greening mineralization.	
31	617					Sample 26-36' bgs. Recovery 70% 7.0'.
32	616					
33	615					

Well1: MW-39 (B)
Elev.: 650.28 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Well MW-39 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/30/98
End Date	: 11/02/98
Northing Coord.	: 654812.2982
Easting Coord.	: 1697509.2499 OH83/N ft.
Total Depth of Boring	: 92.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: A Brad Richardson/Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: 75.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Well1: MW-39 (B)
Elev.: 650.28 TOC

Depth in feet	Surf. Elev. 647.87	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
33						
34	614		DO			
35	613				Same as 20-30' bgs.	
36	612					
37	611		DO			
38	610					
39	609					
40	608				Dolomitic LIMESTONE; fractured to gravel sized particles; slightly darker gray.	Sample 36-46' bgs. Recovery 60% 6.0'.
41	607					
42	606		DO			
43	605					
44	604				Dolomitic LIMESTONE; vuggy (vugs 1/4-1/2"); 30% vertical fractures; fossiliferous (corals, bivalves); light and medium gray horizontal striations.	
45	603					
46	602		DO			
47	601					
48	600					
49	599				Dolomitic LIMESTONE; no fractures; vuggy, except vugs are much smaller (1/16-1/8"); massive; light to medium gray with 1/4-1/2" dark gray striations.	
50	598					
51	597					Sample 46-56' bgs. Recovery 100% 10.0'.
52	596					
53	595					
54	594					
55	593					
56	592					
57	591		DO		Massive; dense Dolostone with dark gray lenses continued.	
58	590					
59	589					
60	588					
61	587					Sample 56-66' bgs. Recovery 100% 10.0'.
62	586					
63	585					
64	584					
65	583					
66	582					

Remedial Investigation
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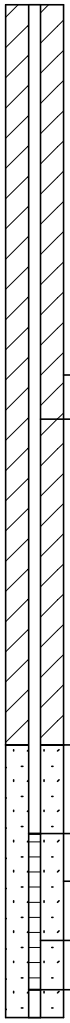
Well MW-39 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 10/30/98
End Date	: 11/02/98
Northing Coord.	: 654812.2982
Easting Coord.	: 1697509.2499 OH83/N ft.
Total Depth of Boring	: 92.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: A Brad Richardson/Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: 75.5 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.87	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
66					Continued massive Dolostone (Dolomitic Limestone); with dark gray lenses; vugs present, but small; no fractures.	
67	581					
68	580					
69	579					
70	578					
71	577					Sample 66-76' bgs. Recovery 100% 10.0'.
72	576					
73	575					
74	574					
75	573					
76	572					
77	571					
78	570					
79	569		DO			
80	568					
81	567				darker gray color; more vugs and bigger.	Sample 76-86' bgs. Recovery 100% 10.0'
82	566					
83	565					
84	564					
85	563					
86	562					
87	561					
88	560					
89	559					
90	558					Sample 86-94' bgs. Recovery 100% 10.0'
91	557					
92	556				Bottom of Boring at 92.0 ft bgs	
93	555					
94	554					
95	553					
96	552					
97	551					All colors from Munsell Soil Color Chart 1992 Revised Edition
98	550					
99	549					

Well1: MW-39 (B)
Elev.: 650.28 TOC



Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
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Well MW-40 (B)

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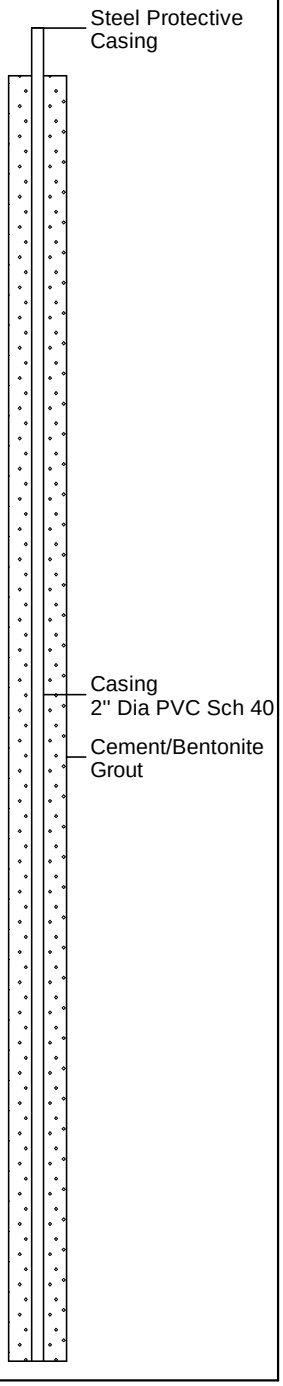
Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/02/98
End Date	: 11/03/98
Northing Coord.	: 654812.5412
Easting Coord.	: 1697500.4799 OH83/N ft.
Total Depth of Boring	: 56.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: 39.7 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.85	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			ML		SILT; with sand; grass/roots; saturated; soft; 10YR4/3 brown.	
1	647		CL		Silty CLAY; with trace coarse sand and gravel (to 10mm); moist; soft; very plastic; 10YR3/4 dark yellowish brown.	
2	646					
3	645		CL		Same as above except 10YR5/1 gray.	Sample 0-6' bgs. Recovery 100% 6.0'.
4	644		SM		Silty SAND, very fine; moist; loose.	
5	643		CL		Silty CLAY; with trace sand and gravel (to 10mm); slightly moist; firm; slightly plastic; 10YR4/4 dark yellowish brown.	
6	642					
7	641				Same as above.	
8	640					
9	639		ML		Sandy SILT; with trace clay; trace gravel (to 15mm); moist to slighly moist; moderately firm; slightly plastic; 10YR5/1 gray.	
10	638					
11	637					Sample 6-16' bgs. Recovery 100% 10.0'.
12	636		ML		Same as above except gravel (to 40mm) zone.	
13	635		ML		Same as 9-12' except more clay; moderately plastic.	
14	634					
15	633					
16	632					
17	631		DO		Dolomitic LIMESTONE, very fossiliferous; very vuggy, vugs 1/4-1/2"; fractures; some solution cavities; light gray.	
18	630					
19	629					
20	628					
21	627					Sample 16-26' bgs. Recovery 100% 10.0'.
22	626					
23	625		DO		Same as above except more crumbled (fracturing?).	
24	624					
25	623					
26	622					
27	621		DO		Dolomitic LIMESTONE, light gray with tan mottling next to vugs and fractures; 45 Degree fractures; vugs .25-.5".	
28	620					
29	619					
30	618					

Well1: MW-40 (B)
Elev.: 650.27 TOC



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Remedial Investigation
Feasibility Action Program
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Action Program (FUSRAP)

U.S. Army Corp of Engineers
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1776 Niagara Street
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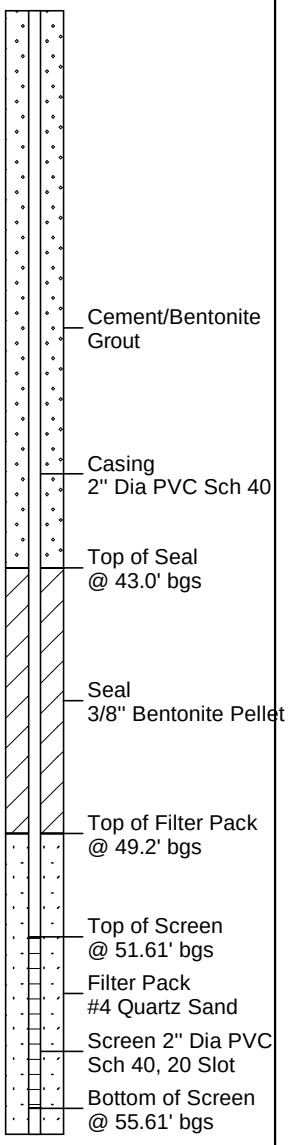
Well MW-40 (B)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/02/98
End Date	: 11/03/98
Northing Coord.	: 654812.5412
Easting Coord.	: 1697500.4799 OH83/N ft.
Total Depth of Boring	: 56.2 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 16.5 feet
Depth Drilled Into Rock	: 39.7 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 647.85	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30						
31	617					Sample 26-36' bgs. Recovery 100% 10.0'.
32	616		DO			
33	615					
34	614				Same as 20-30' bgs.	
35	613					
36	612					
37	611		DO			
38	610					
39	609					
40	608				Dolomitic LIMESTONE; fratured to gravel sized particals; slightly darker gray.	Diameter of borehole changes to 4.75", using smaller bit.
41	607					
42	606		DO			
43	605					Sample 36-46' bgs. Recovery 100% 10.0'.
44	604				Dolomitic LIMESTONE; vuggy (vugs 1/4-1/2"); 30% vertical fractures; fossiliferous (corals, bivalves); light and medium gray horizontal striations.	
45	603					
46	602		DO			
47	601					
48	600					
49	599				Dolomitic LIMESTONE; no fractures; vuggy, except vugs are much smaller (1/16-1/8"); massive; light to medium gray with 1/4-1/2" dark gray striations.	
50	598					
51	597					Sample 46-56' bgs. Recovery 100% 10.0'.
52	596					
53	595		DO			
54	594					
55	593					
56	592					
57	591				Bottom of Boring at 56.2 ft bgs	
58	590					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	589					
60	588					

Well1: MW-40 (B)
Elev.: 650.27 TOC



Remedial Investigation
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U.S. Army Corp of Engineers
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1776 Niagara Street
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Well MW-41 (B)

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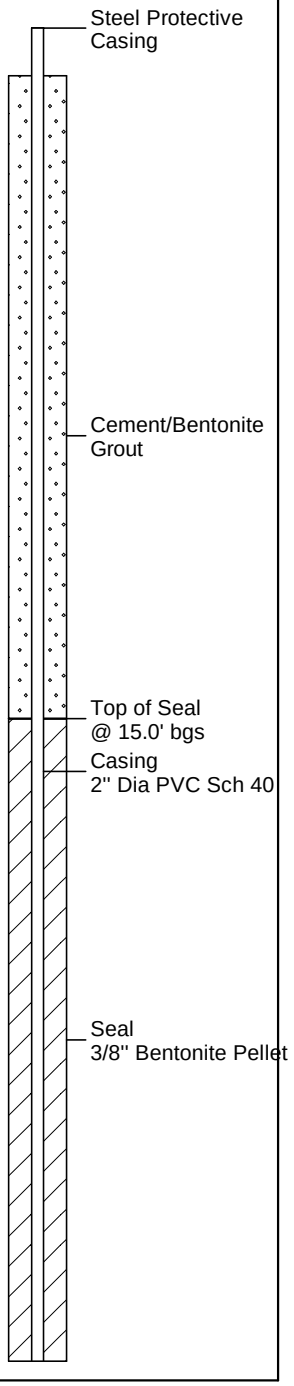
Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/03/98
End Date	: 11/03/98
Northing Coord.	: 653846.6120
Easting Coord.	: 1697371.8800 OH83/N ft.
Total Depth of Boring	: 56.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 15.0 feet
Depth Drilled Into Rock	: 41.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.33	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		ML		Clayey SILT; with 20-25% sand, poorly sorted; abundant roots; loose; 10YR4/3 brown.	
1	649					
2	648				Silty CLAY; with 10% sand and fine gravel; moist; firm to stiff; moderately plastic; 10YR4/3 brown with dark gray and yellowish brown mottling.	
3	647		CL			Sample 0-6' bgs. Recovery 100% 6.0'.
4	646					
5	645					
6	644				Silty CLAY; with trace gravel; slightly moist; stiff; moderately plastic; 10YR3/1 dark gray.	
7	643					
8	642					
9	641		CL			
10	640					
11	639					Sample 6-15' bgs. Recovery 100% 9.0'.
12	638				Silty SAND to Sandy SILT; with 20% fine to coarse gravel; fine sand; wet; cohesive to loose; 10YR4/1 dark gray.	
13	637		SM ML			
14	636					
15	635				Dolomitic LIMESTONE; very vuggy; abundant fossils and solution cavities; gray.	Diameter of borehole changes to 4.75", using smaller bit.
16	634					
17	633					
18	632					
19	631					
20	630					Sample 15-25' bgs. Recovery 100% 10.0'.
21	629					
22	628		DO			
23	627					
24	626					
25	625					
26	624					
27	623					
28	622					
29	621					
30						

Well1: MW-41 (B)
Elev.: 653.00 TOC



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Remedial Investigation
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Well MW-41 (B)

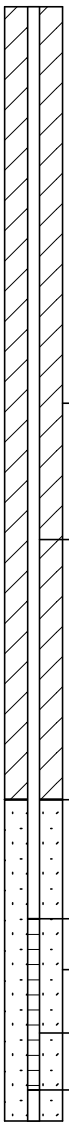
(Page 2 of 2)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/03/98
End Date	: 11/03/98
Northing Coord.	: 653846.6120
Easting Coord.	: 1697371.8800 OH83/N ft.
Total Depth of Boring	: 56.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: 15.0 feet
Depth Drilled Into Rock	: 41.0 feet
Borehole Diameter	: 6 inches/4.75 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 650.33	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
30	620					
31	619					Sample 26-36' bgs. Recovery 100% 10.0'.
32	618					
33	617					
34	616					
35	615					
36	614					
37	613					
38	612					
39	611					
40	610					
41	609					
42	608					
43	607		DO			Sample 36-45' bgs. Recovery NR.
44	606					
45	605					
46	604					
47	603					
48	602					
49	601					
50	600					
51	599					Sample 45-55' bgs. Recovery 100% 11.0'.
52	598					
53	597					
54	596					
55	595					
56	594				Bottom of Boring at 56.0 ft bgs	
57	593					
58	592					All colors from Munsell Soil Color Chart 1992 Revised Edition
59	591					
60						

Well1: MW-41 (B)
Elev.: 653.00 TOC



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Well TW-42

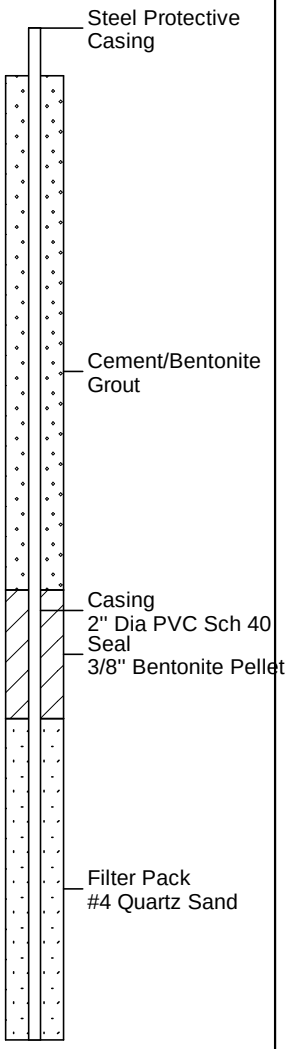
(Page 1 of 1)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/04/98
End Date	: 11/04/98
Northing Coord.	: 653859.6880
Easting Coord.	: 1697071.0300 OH83/N ft.
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.30	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	649		CL		Silty CLAY; with 10% fine to coarse sand and fine gravel; moist; firm to stiff; 10YR4/3 brown.	Sample 0-6' bgs. Recovery 100% 6.0'.
1	648					
2	647					
3	646					
4	645					
5	644					
6	643		CL		Silty CLAY; with trace gravel; slightly moist; stiff; moderately plastic; 10YR3/1 dark gray.	Sample 6-15' bgs. Recovery 100% 9.0'.
7	642					
8	641					
9	640					
10	639					
11	638					
12	637					
13	636					
14	635					
15	634				Bottom of Boring at 15.0 ft bgs	
16	633					
17	632					
18	631					All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630					
20						

Well1: TW-42
Elev.: 651.97 TOC



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Well TW-43

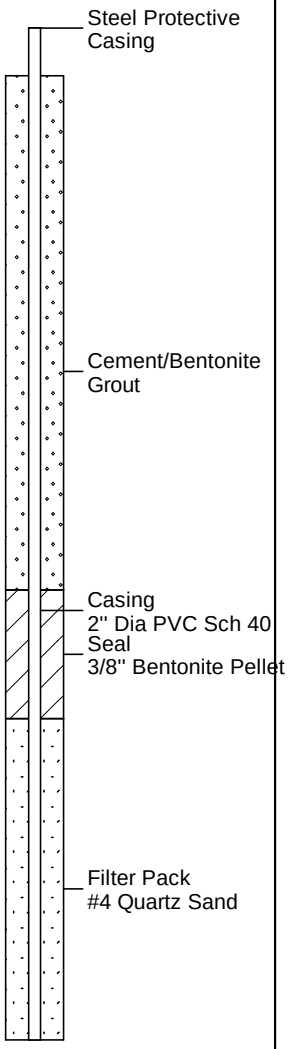
(Page 1 of 1)

Investigative Area 09	: Sitewide Groundwater
Start Date	: 11/04/98
End Date	: 11/04/98
Northing Coord.	: 653848.8410
Easting Coord.	: 1696694.7500
Total Depth of Boring	: 15.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ron Ball
Designation of Drill	: Nodwell Track Rotosonic
Type of Drill Rig	: Rotosonic
Geologist	: Matt Obloy
Depth to Water	: Not Recorded
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' Long

Depth in feet	Surf. Elev. 649.35	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	649		CL		Silty CLAY; with 10% sand and gravel; moist; firm; 10YR4/3 brown.	Sample 0-6' bgs. Recovery 100% 6.0'.
1	648					
2	647					
3	646					
4	645					
5	644					
6	643		CL		Silty CLAY; with trace sand and gravel; slightly moist; stiff; moderately plastic; 10YR3/1 dark gray.	Sample 6-15' bgs. Recovery 100% 9.0'.
7	642					
8	641					
9	640					
10	639					
11	638					
12	637					
13	636				moist; firm; highly plastic	
14	635					
15	634				Bottom of Boring at 15.0 ft bgs	
16	633					
17	632					
18	631					All colors from Munsell Soil Color Chart 1992 Revised Edition
19	630					
20						

Well1: TW-43
Elev.: 651.73 TOC



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Well PZ-01

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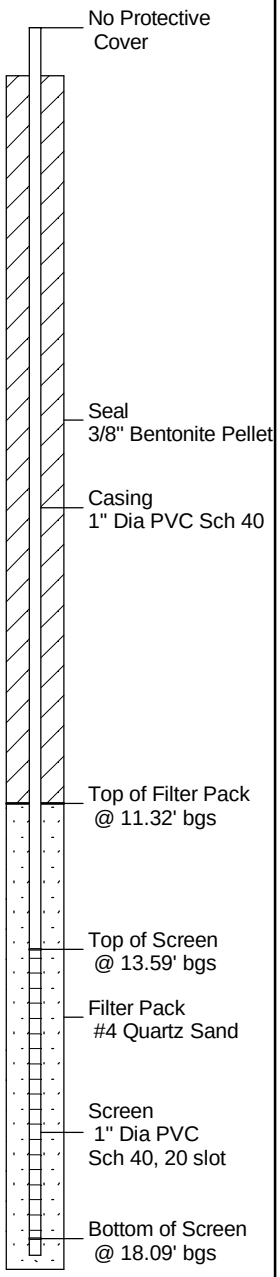
Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/18/98
End Date	: 06/19/98
Northing Coord.	: 654485.1270
Easting Coord.	: 1696809.9180 OH83/N ft.
Total Depth of Boring	: 18.57 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Bedrock	: 18.50 ft
Depth Drilled Into Rock	: 0.07 ft
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' long

Depth in feet	Surf. Elev. 647.68	USCS	DESCRIPTION	REMARKS
0		ML	SILT; some clay; roots; moist; slightly plastic; 10YR4/2 Dark Grayish Brown.	
1	647	ML	LIME; 1/4" thick, white; chalky.	
2	646		SILT; trace fine to medium sand; trace clay; dry; loose; 10YR3/1 Very Dark Gray.	Sample 0-4' bgs. Recovery 50% 2'. 0 ppm Rad < bkg.
3	645	CL	CLAY; trace fine sand; moist to dry; medium stiff; plastic; 10YR4/1 Dark Gray mottled with 10YR4/4 Dark Yellowish Brown.	
4	644			
5	643	CL	CLAY; trace fine sand; moist; very soft; very plastic; 10YR3/1 Very Dark Gray.	
6	642	CL	CLAY; some fine to medium sand; trace gravel to 20mm, subrounded to rounded; dry; stiff; 10YR4/3 Brown mottled with 10YR4/1 Dark Gray.	Sample 4-8' bgs. Recovery 100% 4'. 0 ppm Rad < bkg.
7	641			
8	640	CL	CLAY; some silt; trace gravel to 8mm; dry; medium stiff; crumbly; 10YR4/2 Dark Grayish Brown. 10YR4/4 Dark Yellowish Brown with black specks color vertically; iron staining. Grades into Gray (horizontally) and hard with depth.	Sample 8-10.5' bgs. Recovery 100% 2.5'. 0 ppm Rad < bkg.
9	639			
10	638			
11	637			
12	636			Sample 10.5-13.5' bgs. Recovery 100% 3'. 0 ppm Rad < bkg.
13	635			
14	634	CL	Limestone cobble in shoe. CLAY; trace fine sand; moist; very soft; very plastic; 10YR4/1 Dark Gray.	
15	633	CL	CLAY; trace fine sand; dry to moist; hard; medium plastic; 10YR4/1 Dark Gray. Grades into some sand; trace gravel to 30mm, subangular to subrounded; moist. 3" seam of gravel.	Sample 13.5-16.0' bgs. Recovery 100% 2.5'. 0 ppm Rad < bkg.
16	632			
17	631			Sample 16.0-18.57' bgs. No Information Recorded.
18	630			
19	629	DO	Bottom of Boring at 18.57 ft bgs Bedrock	All colors from Munsell Soil Color Chart 1992 Revised Edition
20	628			

Well1: PZ-01
Elev.: 651.10 TOC



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Well PZ-02

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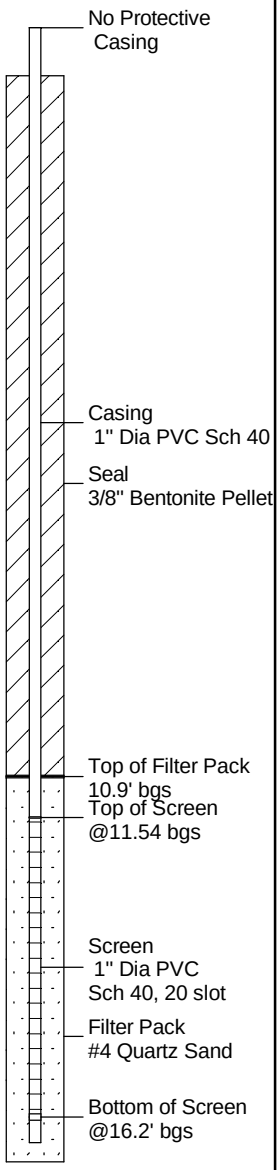
Investigative Area 07	: Northwest Portion of the Site
Start Date	: 06/19/98
End Date	: 06/19/98
Northing Coord.	: 654783.6911
Easting Coord.	: 1697294.1879 OH83/N ft.
Total Depth of Boring	: 16.9 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Water	: Not Encountered
Depth to Bedrock	: 16.8 ft
Depth Drilled Into Rock	: 0.1 ft
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 647.29	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	647		CL		CLAY; trace fine sand; trace silt; roots; dry; loose to soft; non-plastic; 10YR3/2 Very Dark Grayish Brown.	
			CL			
1	646		CL		CLAY; trace silt; trace fine sand; dry; soft; slightly plastic; 10YR3/1 Very Dark Gray.	
2	645				CLAY; trace fine sand; trace gravel to 8mm, subrounded; trace silt; dry; stiff; plastic; 10YR4/4 Dark Yellowish Brown mottled with 10YR4/1 Dark Gray.	Sample 0-4' bgs. Recovery 90% 3.5'. 0 ppm Rad < bkg.
3	644					
4	643					
5	642					
6	641					Sample 4-8' bgs. Recovery 100% 4'. 0 ppm Rad < bkg
7	640		CL		CLAY; trace fine sand; trace silt; dry; stiff; non-plastic; 10YR4/2 Dark Grayish Brown.	
8	639				becoming very stiff with depth	
9	638					
10	637					Sample 8-12' bgs. Recovery 100% 4'. 0 ppm Rad < bkg.
11	636		CL		CLAY; some very fine to medium sand; trace silt; trace gravel to 8mm, subrounded to subangular; dry; very stiff; slightly plastic; 10YR4/1 Dark Gray.	
12	635				Percentage of sand and plasticity increases with depth.	
13	634					
14	633					Sample 12-16' bgs. Recovery 100% 4'. 0 ppm Rad < bkg.
15	632		SW		SAND, fine, well sorted; moist; loose; 10YR4/1 Dark Gray.	
16	631		CL		CLAY; some fine to medium sand; trace gravel to 20mm, subrounded; moist; stiff; non-plastic; 10YR4/1 Dark Gray.	Sample 16-16.9' bgs. Recovery NR. NR ppm Rad NR.
17	630		DO		Bottom of Boring at 16.9 ft bgs Bedrock	
18	629					
19	628					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: PZ-02
Elev.: 650.48 TOC



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Well PZ-03

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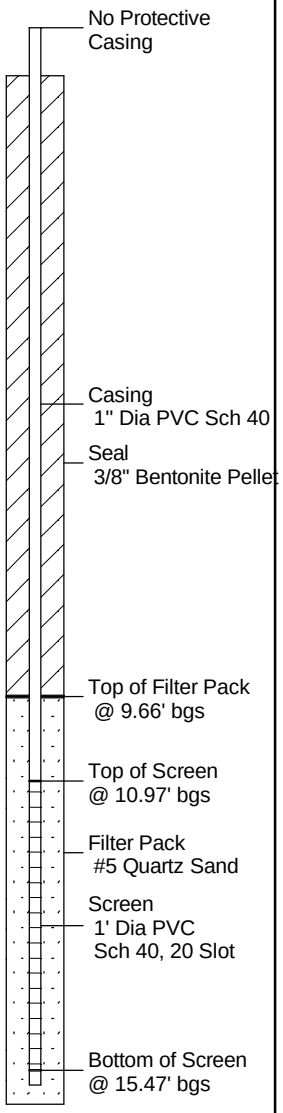
Investigative Area 03	: Lagoon D-Including Railroad
Start Date	: 06/22/98
End Date	: 06/22/98
Northing Coord.	: 654305.8012
Easting Coord.	: 1697651.0027 OH83/N ft.
Total Depth of Boring	: 16.0 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Water	: Not Encountered
Depth to Bedrock	: 16.0 ft
Depth Drilled Into Rock	: <0.1 ft
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.7	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			CL		CLAY; some fine sand; trace glass (fill material); roots; 10YR3/2 Very Dark Grayish Brown.	
1	648		GP		GRAVEL, railbed material.	
2	647		CL		CLAY; trace fine to medium sand; trace gravel to 15mm; dry; stiff; slightly plastic; 10YR5/6 Yellowish Brown mottled with 10YR4/1 Darl Gray.	Sample 0-4' bgs. Recovery 75% 3.0'. 0 ppm Rad < bkg
3	646					
4	645					
5	644					
6	643		CL		CLAY; trace medium to coarse sand; trace gravel to 20mm; dry; medium stiff; slightly plastic; 10YR4/3 Brown.	Sample 4-8' bgs. Recovery 100% 4.0'. 0 ppm Rad < bkg.
7	642					
8	641					
9	640					Sample 8-10' bgs. Recovery 100% 2.0'. 0 ppm Rad < bkg.
10	639		CL		CLAY; trace medium sand; dry; medium stiff; medium plastic; 10YR4/1 Dark Gray. Sand percentage increases with depth.	
11	638					
12	637					Sample 10-14' bgs. Recovery 100% 4.0'. 0 ppm Rad < bkg.
13	636					
14	635		SC		SAND, fine; some clay; trace medium to coarse sand; moist; soft; slightly plastic; 10YR4/1 Dark Gray.	
			SC		Same as above except wet.	
15	634		CL		CLAY; trace fine to medium sand; trace gravel to 15mm, subrounded to subangular; dry; stiff; medium plastic; 10YR4/1 Dark Gray.	Sample 14-16' bgs. Recovery 100% 2.0'. 0 ppm Rad < bkg.
16	633		DO		Bottom of Boring at 16.0 ft bgs Bedrock	
17	632					
18	631					
19	630					All colors from Munsell Soil Color Chart 1992 Revised Edition
20	629					

Well1: PZ-03
Elev.: 652.70 TOC



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Well PZ-04

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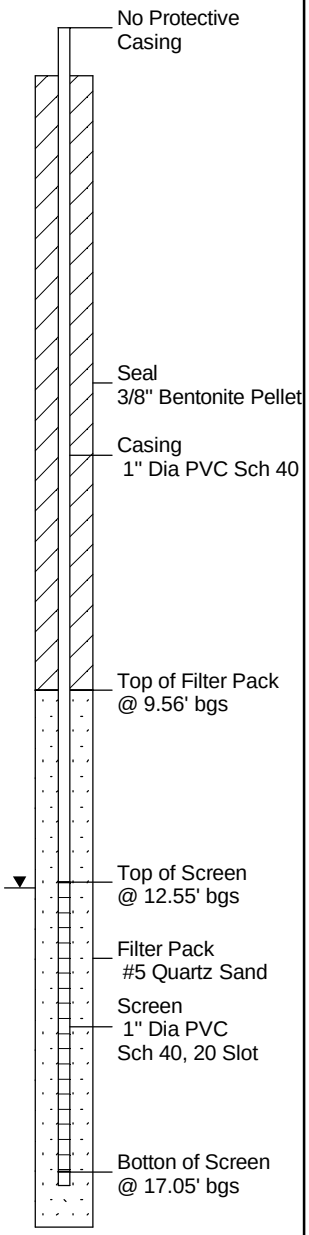
Investigative Area 08	: Plant Area West
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 653841.4304
Easting Coord.	: 1696695.4758 OH83/N ft.
Total Depth of Boring	: 17.91 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Water	: 14.8 ft
Depth to Bedrock	: 17.90 ft
Depth Drilled Into Rock	: 0.01 ft
Borehole Diameter	: 2 inches
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 648.9	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0			ML		SILT; some fine to medium sand; roots; dry; loose; non-plastic; 10YR4/2 Dark Grayish Brown.	
			GP		GRAVEL, angular to 40mm.	
1	648		CL		CLAY; some fine sand; trace silt; dry; medium stiff; medium plastic; 10YR4/2 Dark Grayish Brown.	
2	647		CL		CLAY; some fine sand; dry; very stiff to medium stiff, varies throughout; plastic; 10YR5/2 Grayish Brown mottled with 10YR5/6 Yellowish Brown.	Sample 0-4' bgs. Recovery 83% 3.33'. 1.0 ppm 0-1.5' bgs 0.3 ppm 1.5-3.33' bgs
3	646					
4	645				trace gravel to 15mm, rounded as depth increases.	
5	644					
6	643		ML		SILT; some fine to coarse sand; trace clay; dry; hard; non-plastic; Iron stained vertical seams; 10YR4/3 Brown.	Sample 4-8' bgs. Recovery 100% 4.0'. 0 ppm
7	642					
8	641					
9	640					Sample 8-10' bgs. Recovery 100% 2.0'. 0 ppm
10	639					
11	638					Sample 10-12' bgs. Recovery 100% 2.0'. 0 ppm
12	637	▼				
13	636		CL		CLAY; trace medium sand; trace gravel to 10mm, subrounded to subangular; dry; stiff; very plastic; 10YR4/1 Dark Gray.	Sample 12-14' bgs. Recovery NR. 0 ppm
14	635				becomes softer with depth.	
15	634		ML		SILT; trace clay; moist to wet; loose; slightly plastic; 10YR4/1 Dark Gray.	Sample 14-16' bgs. Recovery 100% 2.0'. 0 ppm
16	633					
17	632		CL		CLAY; dry; hard; non-plastic; 10YR4/1 Dark Gray.	Sample 16-17.9' bgs. Recovery 100% 1.9'. 0 ppm
18	631		SP		SAND and GRAVEL, to 20mm, subrounded to angular; some clay; moist; medium dense; non-plastic.	All Rad for all depths < bkg.
19	630		DO		Bottom of Boring at 17.91 ft bgs Bedrock	All colors from Munsell Soil Color Chart 1992 Revised Edition
20	629					

Well1: PZ-04
Elev.: 651.06 TOC



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Well PZ-05

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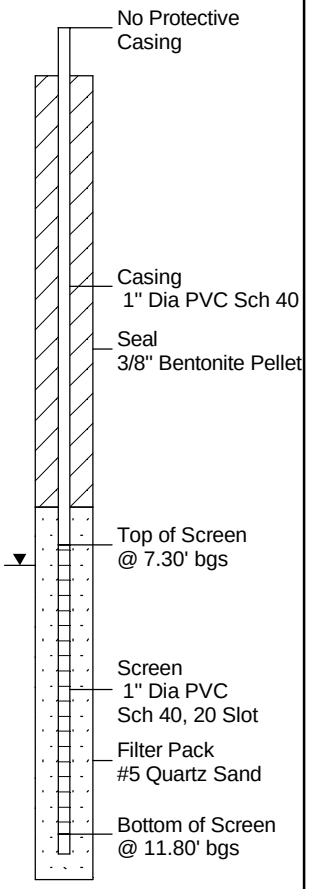
Investigative Area 02	: Lagoons A, B, and C
Start Date	: 06/25/98
End Date	: 06/25/98
Northing Coord.	: 653836.4017
Easting Coord.	: 1698263.5413 OH83/N ft.
Total Depth of Boring	: 12.50 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Water	: 10.4 ft
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 2 inches
Sampling Equipment	: 2' Core Barrel 4' Long

Depth in feet	Surf. Elev. 650.06	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	650		ML		SILT; some fine sand; trace clay; roots; dry; loose; non-plastic; 10YR3/1 Very Dark Gray.	
1	649		CL		CLAY; some fine sand; dry; medium stiff; slightly plastic; 10YR4/2 Dark Grayish Brown mottled with 10YR4/6 Dark Yellowish Brown.	
2	648					Sample 0-4' bgs. Recovery 75% 3.0'. 0 ppm
3	647					
4	646					Sample 4-8' bgs. Recovery 100% 4.0'. 0 ppm
5	645					
6	644		ML		SILT; trace clay; trace fine sand; dry; medium dense; non-plastic; 50mm limestone cobble in shoe; 2.5Y4/4 Olive Brown.	
7	643	▼	ML		SILT; trace fine to very coarse sand; trace clay; trace gravel to 15mm, subrounded to subangular; dry; very dense; non-plastic; 10YR3/3 Dark Brown.	Refusal in 1st boring at 7.0' bgs.
8	642				No Description Available. Water bearing zone present between 8-12' bgs. Unable to get exact depth because liner was stuck in core barrel and unable to retrieve the soil cuttings.	
9	641					
10	640					Sample 8-12' bgs. Recovery 100% 4.0'. 0 ppm
11	639					
12	638		SP		SAND and GRAVEL; some clay; dry; loose; non-plastic; 10YR4/1 Dark Gray.	Refusal in 2nd boring at 12.5' bgs.
13	637				Bottom of Boring at 12.5 ft bgs	
14	636					
15	635					Water level measured after allowing hole to sit open over lunch.
16	634					
17	633					Two borings needed to get to depth.
18	632					
19	631					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: PZ-05
Elev.: 652.84 TOC



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Well PZ-06

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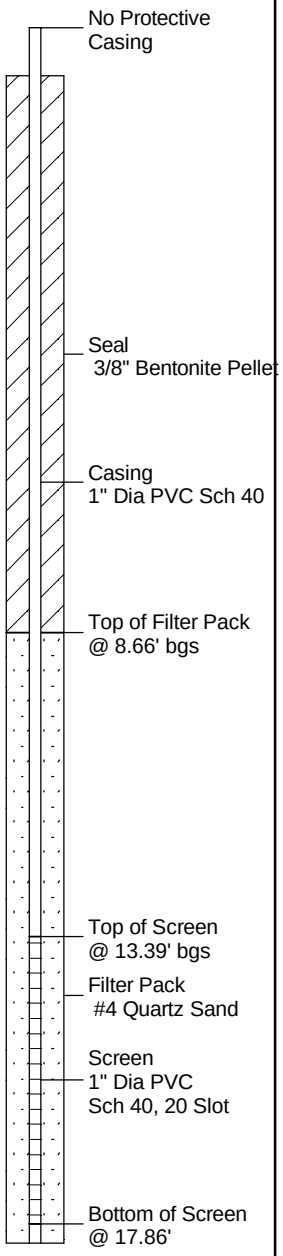
Investigative Area 07	: Northwest Portion of the Site
Start Date	: 07/29/98
End Date	: 07/29/98
Northing Coord.	: 654632.2679
Easting Coord.	: 1697110.8478 OH83/N ft.
Total Depth of Boring	: 18.16 feet

Drilling Company	: SAIC
Driller	: Jim Hewitt
Designation of Drill	: Geoprobe 5400
Type of Drill Rig	: Direct Push Technology
Geologist	: Paul Parrish
Depth to Water	: Not Encountered
Depth to Bedrock	: 18.0 ft
Depth Drilled Into Rock	: 0.16 ft
Sampling Equipment	: 2" Core Barrel 4' Long

Depth in feet	Surf. Elev. 647.41	Water Levels	USCS	GRAPHIC	DESCRIPTION	REMARKS
0	647		ML		SILT; trace fine to coarse sand; roots; dry; loose; non-plastic; 10YR4/2 Dark Grayish Brown.	
			ML		SILT; trace clay; trace fine to medium sand; dry; medium dense; slightly plastic; 10YR3/2 Very Dark Grayish Brown.	
1	646					
2	645				CLAY; trace silt; trace fine to coarse sand; dry; stiff; non-plastic; 10YR4/4 Dark Yellowish Brown with 10YR5/1 Gray mottling.	Sample 0-4' bgs. Recovery 95% 3.8'.
3	644		CL			
4	643					
5	642					
6	641		ML		SILT; trace fine sand; dry; dense; non-plastic; 10YR4/3 Brown.	Sample 4-8' bgs. Recovery 100% 4.0'.
7	640					
8	639					
9	638		ML		SILT; trace fine sand; dry; dense; non-plastic; 10YR4/1 Gray.	Sample 8-10' bgs. Recovery 100% 2.0'.
10	637					
11	636					Sample 10-13' bgs. Recovery 100% 3.0'.
12	635		CL		CLAY; trace silt; trace fine to coarse sand; dry; stiff; plastic; 10YR4/1 Gray.	
13	634					
14	633					
15	632		CL		Same As Above except moist. Gravel stringers (dry) approximately every 6".	
16	631					Sample 15-18.16' bgs. Recovery 100% 3.16'.
17	630					
18	629		DO		Bedrock Bottom of Boring at 18.16 ft bgs	
19	628					All colors from Munsell Soil Color Chart 1992 Revised Edition
20						

Well1: PZ-06
Elev.: 648.96 TOC



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IA10:
Boring Logs

Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
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Soil Boring IA10-SB0006

Investigative Area 10	: Offsite Areas-Gas Company
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 2.3 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some silt; moist; 10YR3/2 very dark grayish brown.	LUSB0776	100%	Sample LUSB0776 collected 0.0-1.0' bgs. ER0083 Rinsate equipment used.
1	-1	CL		CLAY; some silt; some sand, very fine; trace gravel, fine, round to subround; moist; medium plasticity; 10YR5/3 brown.	LUSB0777		Sample LUSB0777 collected 1.0-2.0' bgs.
2	-2				LUSB0827		Sample LUSB0827 collected 2.0-2.3' bgs.
				Bottom of Boring at 2.3 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
Feasibility Action Program
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Action Program (FUSRAP)

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Soil Boring IA10-SB0007

Investigative Area 10	: Offsite Areas-Gas Company
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 2.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some silt; moist; 10YR3/2 very dark grayish brown.	LUSB0778	100%	Sample LUSB07778 collected 0.0-1.0' bgs.
1	-1	CL		CLAY; some silt; some sand, very fine; trace gravel, fine, round to subround; moist; medium plasticity; 10YR5/3 brown.	LUSB0779 LUSB9083		Sample LUSB0779 and duplicate LUSB9083 collected 1.0-2.0' bgs.
2	-2			Bottom of Boring at 2.0 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
Feasibility Action Program
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Soil Boring IA10-SB0008

Investigative Area 10	: Offsite Areas-Gas Company
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 2.6 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some silt; moist; 10YR3/2 very dark grayish brown.	LUSB0780	100%	Sample LUSB0780 collected 0.0-1.0' bgs.
1	-1	SC		Clayey SAND, very fine to fine; little clay; trace gravel, fine, round to subround; moist; 10YR5/3 brown, small patches of 10YR6/8 brownish yellow.	LUSB0781		Sample LUSB0781 collected 1.0-2.0' bgs.
2	-2	SP		SAND, fine; trace clay; trace gravel, fine to medium; 10YR4/6 dark yellowish brown.	LUSB0828 LUSB0771		Sample LUSB0828 and LUSB0771 collected 2.0-2.6' bgs. ER0088 Rinsate equipment used.
				Bottom of Boring at 2.6 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0009

Investigative Area 10	: Offsite Areas-Gas Company
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 4.0 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some silt; moist; 10YR3/2 very dark grayish brown.			
		CL		CLAY; some silt; some sand, very fine; trace gravel, fine, angular; moist; medium to high plasticity; 10YR5/3 brown.	LUSB0782	100%	Sample LUSB0782 collected 0.0-1.0' bgs.
1	-1				LUSB0783		Sample LUSB0783 collected 1.0-2.0' bgs.
2	-2	SM		SAND, fine; some silt; little clay; trace gravel, fine; moist; low plasticity; 10YR5/6 yellowish brown and 10YR5/3 brown.	LUSB0829		
					LUSB9088		Sample LUSB0829 and duplicate LUSB9088 collected 2.0-3.0' bgs.
3	-3			color change to 10YR4/1 dark gray.	LUSB0830		Sample LUSB0830 collected 3.0-4.0' bgs.
4	-4			Bottom of Boring at 4.0 ft bgs. Refusal.			
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

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Soil Boring IA10-SB0010

Investigative Area 10	: Offsite Areas-Gas Company
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 1.9 feet

Drilling Company	: SAIC
Driller	: Not Recorded
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some silt; moist; 10YR3/2 very dark grayish brown.	LUSB0784	100%	Sample LUSB0784 collected 0.0-1.0' bgs.
1	-1				LUSB0785		Sample LUSB0785 collected 1.0-1.9' bgs.
2	-2			Bottom of Boring at 1.9 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0011

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Kevin McGrady/Matt Obloy
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; trace silt; trace sand, fine to medium; damp; soft; medium plasticity; 10YR4/2 dark grayish brown.	LUSB0786		Sample LUSB0786 collected 0.0-1.0' bgs.
1	-1	SC		SAND; some clay; some roots; moist; loose; slightly plastic; 10YR4/2 dark grayish brown.	LUSB0787		Sample LUSB0787 collected 1.0-2.0' bgs.
2	-2						Sample LUSB0832 collected 2.0-3.0' bgs.
		SC		Same as above except wet; 10YR4/1 dark gray.	LUSB0832	100%	Water even with stream level.
		SC		SAND; some clay; organic matter; 10YR2/1 black.			
3	-3	SP		SAND and GRAVEL; trace clay; saturated; loose 10YR4/1 dark gray.	LUSB0833		Sample LUSB0833 collected 3.0-4.0' bgs.
4	-4				LUSB0834		Sample LUSB0834 collected 4.0-5.0' bgs.
5	-5			Bottom of Boring at 5.0 ft bgs.			
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0012

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Larry O'Brien/Beau Williams
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; trace silt; trace sand, fine to medium; damp; soft; medium plasticity; 10YR4/2 dark grayish brown.	LUSB0788	100%	Sample LUSB0788 collected 0.0-1.0' bgs.
1	-1				LUSB0789		Sample LUSB0789 collected 1.0-2.0' bgs.
2	-2	SC		SAND, medium; some clay; moist; loose; 10YR4/4 dark yellowish brown.	LUSB0835		Sample LUSB0835 collected 2.0-3.0' bgs.
3	-3				LUSB0836		Sample LUSB0836 collected 3.0-4.0' bgs.
4	-4	CL		CLAY; some sand; moist; soft; non-plastic; 10YR4/4 dark yellowish brown.	LUSB0837		Sample LUSB0837 collected 4.0-5.0' bgs.
5	-5			Bottom of Boring at 5.0 ft bgs.			
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

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Soil Boring IA10-SB0013

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 3.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; trace silt; trace sand, fine to medium; damp; soft; medium plasticity; 10YR4/2 dark grayish brown.	LUSB0790		Sample LUSB0790 collected 0.0-1.0' bgs.
1	-1				LUSB0791	100%	Sample LUSB0791 collected 1.0-2.0' bgs. ER0085 Rinsate equipment used.
		CL		Same as above except 10YR4/1 dark gray.			
2	-2	CL		Same as above except; wet.	LUSB0838		Sample LUSB0838 collected 2.0-3.0' bgs.
3	-3			Bottom of Boring at 3.0 ft bgs.			
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

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Remedial Investigation
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Soil Boring IA10-SB0014

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Larry O'Brien/Beau Williams
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; some sand, fine; roots; dry; medium stiff; medium plasticity; 10YR3/2 very dark grayish brown.	LUSB0792 LUSB9084		Sample LUSB0792 and duplicate LUSB9084 collected 0.0-1.0' bgs.
1	-1	CL		CLAY; some sand, fine to medium; dry; medium stiff; medium plasticity; 10YR4/2 dark grayish brown.	LUSB0793		Sample LUSB0793 collected 1.0-2.0' bgs. ER0084 Rinsate equipment used.
2	-2						
				increasing percentage of sand with depth to 4.0' bgs.	LUSB0839	100%	Sample LUSB0839 collected 2.0-3.0' bgs.
3	-3						
					LUSB0840		Sample LUSB0840 collected 3.0-4.0' bgs. ER0089 Rinsate equipment used.
4	-4						
					LUSB0841		Sample LUSB0841 collected 4.0-5.0' bgs.
5	-5			Bottom of Boring at 5.0 ft bgs.			
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0015

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 4.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	CL		CLAY; trace sand, fine to medium; roots; dry; medium stiff; medium plasticity; 10YR4/2 dark grayish brown.	LUSB0772		Sample LUSB0772 collected 0.0-1.0' bgs.
1	-1	SC		(Sandy CLAY) SAND, medium; some clay; some roots; moist; loose; slightly plastic; 10YR4/4 dark yellowish brown.	LUSB0794		Sample LUSB0794 collected 1.0-2.0' bgs.
2	-2				LUSB0842	100%	Sample LUSB0842 collected 2.0-3.0' bgs.
3	-3	CL		CLAY; some sand, fine to medium; moist; soft; medium plasticity; 10YR4/1 dark gray.			
		CL		Same as above except wet.	LUSB0843		Sample LUSB0843 collected 3.0-4.0' bgs.
4	-4			Bottom of Boring at 4.0 ft bgs. Refusal.			
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

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Remedial Investigation
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Soil Boring IA10-SB0016

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 2.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace sand, fine to medium; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0796	100%	Sample LUSB0796 collected 0.0-1.0' bgs.
1	-1	ML		Same as above except 10YR4/2 dark grayish brown.	LUSB0797		Sample LUSB0797 collected 1.0-2.0' bgs.
2	-2			Bottom of Boring at 2.0 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0017

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 3.0 feet

Drilling Company	: SAIC
Driller	: Larry O'Brien/Beau Williams
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace sand, fine to medium; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0798	100%	Sample LUSB0798 collected 0.0-1.0' bgs.
1	-1	ML		Same as above except 10YR4/2 dark grayish brown.	LUSB0801		Sample LUSB0801 collected 1.0-2.0' bgs.
2	-2				LUSB0844 LUSB9089		Sample LUSB0844 and duplicate LUSB9089 collected 2.0-3.0' bgs.
3	-3			Bottom of Boring at 3.0 ft bgs. Refusal.			
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Soil Boring IA10-SB0018

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 3.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace sand, fine to medium; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0799 LUSB9085		Sample LUSB0799 and duplicate LUSB9085 collected 0.0-1.0' bgs.
1	-1	ML		Same as above except 10YR4/2 dark grayish brown.	LUSB0800	100%	Sample LUSB0800 collected 1.0-2.0' bgs.
2	-2	ML		SILT; some sand, fine; moist; medium dense; slightly plastic; 10YR4/4 dark yellowish brown with 10YR4/1 dark gray.	LUSB0845 LUSB9090		Sample LUSB0845 and duplicate LUSB9090 collected 2.0-3.0' bgs.
3	-3			Bottom of Boring at 3.0 ft bgs. Refusal.			
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

Remedial Investigation
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Buffalo, NY 14207-3199

Soil Boring IA10-SB0019

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 2.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace sand, fine to medium; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0802	100%	Sample LUSB0802 collected 0.0-1.0' bgs.
1	-1				LUSB0803		Sample LUSB0803 collected 1.0-2.0' bgs.
2	-2			Bottom of Boring at 2.0 ft bgs. Refusal.			
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition
9	-9						
10							

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Soil Boring IA10-SB0020

Investigative Area 10	: Offsite Area-Meander Bends
Start Date	: 08/21/98
End Date	: 08/21/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 1.0 feet

Drilling Company	: SAIC
Driller	: Matt Obloy/Kevin McGrady
Designation of Drill	: Stainless Steel Hand Auger
Type of Drill Rig	: Hand Auger
Geologist	: Paul Parrish
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" SS Bucket Auger

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; trace sand, fine to medium; roots; dry; loose; non-plastic; 10YR3/2 very dark grayish brown.	LUSB0773	100%	Sample LUSB0773 collected 0.0-1.0' bgs.
1	-1			Bottom of Boring at 1.0 ft bgs. Refusal.			
2	-2						
3	-3						
4	-4						
5	-5						
6	-6						
7	-7						
8	-8						All colors from Munsell Soil Color Chart 1992 Revised Edition.
9	-9						
10							

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Soil Boring IA10-SB0023

Investigative Area 10	: Offsite Area-Wairse Property
Start Date	: 07/28/98
End Date	: 07/28/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 5.0 feet

Drilling Company	: SAIC
Driller	: Larry O'Brien
Designation of Drill	: Stainless Steel Bucket Auger
Type of Drill Rig	: Hand Auger
Geologist	: Bruce Wappman
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 3 inches
Sampling Equipment	: 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0				Topsoil with roots, other organic matter.			
1	-1		CL		CLAY; some sand and silt; moist; medium plasticity; 2.5Y5/3 light olive brown.		100%	
2	-2							
3	-3		CL		CLAY; trace gravel; slightly moist; stiff; low to medium plasticity; blockey; 2.5Y5/2 grayish brown with yellowish borwn mottles.	LUSB0861		Sample LUSB0861 collected 3.0-4.0' bgs.
4	-4				increasing gravel (<1") content.	LUSB0862		Sample LUSB0862 collected 4.0-5.0' bgs.
5	-5				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings.
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Soil Boring IA10-SB0027

Investigative Area 10	: Offsite Areas-Luckey Dump
Start Date	: 08/11/98
End Date	: 08/11/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 33.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill
Type of Drill Rig	: Rotosonic
Geologist	: Paul Parrish
Depth to Bedrock	: 23.0 feet
Depth Drilled Into Rock	: 10.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' long

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	SC		SAND and GRAVEL, angular, poorly sorted; some clay; damp; loose; non-plastic; 10YR4/2 dark grayish brown.			
1	-1				LUSB0880		Sample LUSB0880 collected 1.0-2.0' bgs. 0 ppm.
2	-2	CL		CLAY; some sand, fine to very coarse; trace gravel to 50mm, subrounded to subangular; dry; medium stiff; slightly plastic; 10YR4/4 dark yellowish brown. Clay tile, asphalt, drinking straw in the bottom 4".			
3	-3				LUSB0825		Sample LUSB0825 collected 3.0-4.0' bgs. ER0030 Rinsate equipment used. High Rad.
4	-4	GC		GRAVEL, subrounded to subangular; some sand, medium to coarse; trace clay; loose; non-plastic; 10YR6/1 gray.	LUSB0881	0-8' 79% 5.5'	Sample LUSB0881 collected 5.0-5.5' bgs.
5	-5	GC					
6	-6	GC		Same as above except 2.5Y6/6 olive yellow.			
7	-7			Same as above except 10YR6/1 gray and 10YR6/2 light brownish gray.			
8	-8			No recovery, no description available.			
9	-9	SC		SAND (70% coarse 30% medium to fine); some gravel to 50mm, subangular to angular; Rock Flour/Quarry Tailings; trace clay; damp; loose.			
10	-10				LUSB0882		Sample LUSB0882 and duplicate LUSB9094 collected 9.0-10.0' bgs.
11	-11						
12	-12			Ammonia Smell.	LUSB0826	8-18' 100% 10.0'	Sample LUSB0826 collected 11.0-12.0' bgs. Ammonia smell.
13	-13						
14	-14				LUSB0883		Sample LUSB0883 collected 13.0-14.0' bgs. ER0094 Rinsate equipment used.
15	-15						
16	-16				LUSB1074		Sample LUSB1074 collected 15.0-16.0' bgs.
17	-17						
18	-18				LUSB0884		Sample LUSB0884 collected 17.0-18.0' bgs.
19	-19						
20	-20					18-23' 100% 5.0'	
21	-21				LUSB0885		Sample LUSB0885 collected 20.0-21.0' bgs.
22	-22						
23	-23				LUSB1075		Sample LUSB1075 collected 22.0-23.0' bgs.
24	-24	DO		Dolomite, weathered, Bedrock			Begin Rock Coring
25	-25						
26	-26						
27	-27						
28	-28					23-33' 100% 10.0'	
29	-29						
30	-30						
31	-31						
32	-32						
33	-33			Bottom of Boring at 33.0 ft bgs.			All colors from Munsell Soil Color Chart 1992 Revised Edition.
34	-34						
35							

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Soil Boring IA10-SB0030

Investigative Area 10	: Offsite Areas-Luckey Dump
Start Date	: 08/12/98
End Date	: 08/12/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 16.0 feet

Drilling Company	: Alliance Environmental
Driller	: Ben Grim
Designation of Drill	: Canada Superdrill
Type of Drill Rig	: Rotosonic
Geologist	: Paul Parrish
Depth to Bedrock	: 12.0 feet
Depth Drilled Into Rock	: 4.0 feet
Borehole Diameter	: 6 inches
Sampling Equipment	: 4" Core Barrel 10' long

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; some sand, fine to medium; roots; damp; medium dense; 10YR4/2 dark grayish brown.			
1	-1	ML		SILT; some gravel; trace clay; dry; medium dense; slightly plastic; 10YR4/3 brown.			
2	-2	CL		CLAY; trace sand, medium; trace gravel to 20mm; dry; medium stiff; plastic; 10YR4/1 dark gray.			
3	-3	CL		CLAY; trace gravel to 20mm; dry; stiff; slightly plastic; 10YR4/4 dark yellowish brown with 10YR4/1 dark gray mottling.	LUSB0897		Sample LUSB0897 and duplicate collected 3.0-4.0' bgs. 25 ppm Beta 304 alpha 8.
4	-4			No recovery, no description available.		0-8' 50% 4.0'	
5	-5						
6	-6						
7	-7						
8	-8	CL		CLAY; trace sand, medium; trace gravel to 30mm, subrounded to subangular; dry; very stiff; medium plastic; 10YR4/2 dark grayish brown.	LUSB0898		Sample LUSB0898 collected 8.0-9.0' bgs. 0 ppm Beta 274 alpha 10.
9	-9						
10	-10						
11	-11					8-16' 100% 8.0'	
12	-12	DO		Dolomite Bedrock			
13	-13						
14	-14						
15	-15						
16	-16			Bottom of Boring at 16.0 ft bgs.			
17	-17						
18	-18						All colors from Munsell Soil Color Chart 1992 Revised Edition.
19	-19						
20							

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Soil Boring IA10-SB0087

Investigative Area 10	: Offsite Areas-Luckey Dump
Start Date	: 08/12/98
End Date	: 08/12/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 10.25 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; little sand, very fine; trace coarse gravel (2"X1.5"), angular; trace fine gravel; 10YR5/6 yellowish brown patches in 10YR3/1 very dark gray.		0-2' 75%	Rad Background Beta 277 alpha 7 Split Spoon 0-2' bgs
1	-1	CL		CLAY; little silt; 10YR4/2 dark grayish brown.		1.5'	
2	-2	CL		CLAY; trace sand, coarse and gravel, fine (mixed shale and limestone); 10YR5/6 yellowish brown and 10YR6/1 gray.	LUSB1026	2-4' 80%	Split Spoon 2-4' bgs Sample LUSB1027 collected 2.0-3.0' bgs. 0 ppm Beta NR alpha NR.
3	-3				LUSB1027	1.6'	Sample LUSB1028 collected 3.0-4.0' bgs. 0 ppm Beta NR alpha NR.
4	-4	CL		CLAY; trace sand, coarse, angular; moist-wet; soft; medium plasticity; 10YR4/3 brown, 10YR5/6 yellowish brown, and 10YR6/1 gray.		4-6' 100% 2.0'	Split Spoon 4-6' bgs 0 ppm Beta NR alpha NR.
5	-5						
6	-6	CL		CLAY; some silt; some sand, very fine; trace gravel, fine-medium, angular; dry; moderately hard; blocky; 10YR5/8 yellowish brown and 10YR5/2 grayish brown.		6-7.5' 93% 1.4'	Split Spoon 6-7.5' bgs 0 ppm Beta NR alpha NR.
7	-7						
8	-8			Augered through this interval. Continued to auger due to gravel.			Driller said getting harder to spoon. Very hard at 8.33' bgs.
9	-9						
10	-10						
11	-11			Bottom of Boring at 10.25 ft bgs. Auger Refusal.			
12	-12						
13	-13						
14	-14						
15	-15						
16	-16						
17	-17						
18	-18						All colors from Munsell Soil Color Chart 1992 Revised Edition.
19	-19						
20							

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Soil Boring IA10-SB0088

Investigative Area 10	: Offsite Areas-Luckey Dump
Start Date	: 08/12/98
End Date	: 08/12/98
Northing Coord.	: No Survey
Easting Coord.	: Information
Total Depth of Boring	: 12.5 feet

Drilling Company	: Alliance Environmental
Driller	: Noah Armstrong
Designation of Drill	: CME 550 ATV
Type of Drill Rig	: Hollow Stem Auger
Geologist	: Larry Smith
Depth to Bedrock	: Not Encountered
Depth Drilled Into Rock	: NA
Borehole Diameter	: 8 inches
Sampling Equipment	: 2" Split Spoon 2' Long
	: 140lb Hammer w/ 30" Drop

Depth in feet	Surf. Elev. NS	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0	ML		SILT; trace clay; little to some sand, very fine; trace to little gravel, fine to coarse, limestone, fractured; dry; 10YR2/2 very dark brown.		0-2'	Rad 0-1' bgs Beta 246
1	-1					45%	Split Spoon 0-2' bgs
		FL		Limestone cobbles silty and sand; 10YR2/2 very dark brown. No recovery augered through interval.		0.9'	Rad 1-2' bgs Beta NA
2	-2			Augered to 4' due to cobbles. Water from > 4'.			Rad 2-3' bgs Beta NA
3	-3						Rad 3-4' bgs Beta NA
4	-4	FL		GRAVEL; some sand; glass fragments; wet; very loose. No recovery due to sloppy conditions.		4-6'	
5	-5					5%	Split Spoon 4-6' bgs
						0.1'	Rad 5-6' bgs Beta NA
6	-6	CL		CLAY; trace gravel, fine to medium; little to some silt; moist; moderately soft; 5Y5/3 olive brown and 10YR5/6 yellowish brown.	LUSB1028	6-8'	Sample LUSB1028 collected 6-7' bgs. Rad 6-7' bgs Beta 351 0 ppm
7	-7	CL				100%	Split Spoon 6-8' bgs
				CLAY; trace gravel, fine to medium; little to some silt; moist; moderately soft; 10YR5/6 yellowish brown and 10YR6/1 gray.	LUSB1029	2.0	Sample LUSB1029 collected 7-8' bgs. Rad 7-8' bgs Beta 338 0 ppm
8	-8	CL		CLAY; some silt; trace gravel, fine; little to some sand, fine; moderately hard; 10YR4/4 dark yellowish brown and 10YR5/1 gray. Glacially striated, angular, flat gravel (5/16"X9/16"X1/16").		8-10'	Rad 8-9' bgs Beta 331
9	-9					80%	Split Spoon 8-10' bgs
						1.6'	Rad 9-10' bgs Beta 330
10	-10	SP		SAND, fine; some gravel, fine, angular; trace gravel, medium (3/4"X9/16"X9/16"); 10YR4/2 dark grayish brown.		10-12'	Rad 10-11' bgs Beta 333
11	-11			Water >10'		75%	
						1.5'	Rad 11-12' bgs Beta 298
12	-12			Hard augering 12-12.5'			
13	-13			Bottom of Boring at 12.5 ft bgs. Auger Refusal.			
14	-14						
15	-15						
16	-16						
17	-17						
18	-18						All colors from Munsell Soil Color Chart 1992 Revised Edition.
19	-19						
20							

BACKGROUND:
Boring Logs

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Soil Boring IABK-SB0001

Investigative Area BKG : Meier Property
Start Date : 07/24/98
End Date : 07/24/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Paul Parrish
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Jeff DeVaughn
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		SILT/SAND, fine; trace small gravel; roots; dry; loose; 10YR2/2 very dark brown.	LUSB0983	100%	Sample LUSB0983 collected 0.0-0.5' bgs.
1	-1		ML		Same as above; some clay; damp; slightly plastic.	LUSB0984		Sample LUSB0984 collected 1.0-1.5' bgs.
2	-2		CL		Silty CLAY; trace fine gravel; damp; slightly plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0985		Sample LUSB0985 collected 1.5-2.5' bgs.
					Bottom of Boring at 2.5 ft bgs.			
3	-3							
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Soil Boring IABK-SB0002

Investigative Area BKG : Meier Property
Start Date : 07/24/98
End Date : 07/24/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Paul Parrish
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Jeff DeVaughn
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML SM		SILT/SAND, fine; trace small gravel; roots; damp; soft; 10YR2/2 very dark brown.	LUSB0983	100%	Sample LUSB0986 collected 0.0-0.5' bgs.
					Same as above; damp.			
1	-1		CL		Silty CLAY; trace fine gravel; damp; slightly plastic; 10YR5/8 yellowish brown and 10YR5/1 gray.	LUSB0984		Sample LUSB0987 collected 0.5-1.5' bgs.
2	-2				Same as above; also some sand and rock fragments at bottom; overall damp.	LUSB0985		Sample LUSB0988 collected 1.5-2.5' bgs.
					Bottom of Boring at 2.5 ft bgs.			
3	-3							
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Soil Boring IABK-SB0003

Investigative Area BKG : Meier Property
Start Date : 07/24/98
End Date : 07/24/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Paul Parrish
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Jeff DeVaughn
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML SM		SILT/SAND, fine; trace fine gravel; roots; soft; non-plastic; 10YR2/2 very dark brown.	LUSB0989		Sample LUSB0989 collected 0.0-0.5' bgs.
1	-1		CL		Silty CLAY; trace fine gravel; damp; slightly plastic; 10YR5/8 yellowish brown and 10YR5/1gray.	LUSB0990	100%	Sample LUSB0990 collected 0.5-1.5' bgs.
2	-2				Same as above.	LUSB0991		Sample LUSB0991 collected 1.5-2.5' bgs.
3	-3				Bottom of Boring at 2.5 ft bgs.			
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Soil Boring IABK-SB0004

Investigative Area BKG : Meier Property
Start Date : 07/27/98
End Date : 07/27/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Larry O'brien
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Matt Obloy
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Sandy SILT; sand, very fine to fine; roots; moist; loose; 10YR3/2 very dark grayish brown.	LUSB0992		Sample LUSB0992 collected 0.0-0.5' bgs.
1	-1		CL		CLAY; trace gravel; firm; medium plasticity; 10YR4/4 dark yellowish brown with light gray mottling.	LUSB0993	100%	Sample LUSB0993 collected 0.5-1.5' bgs.
2	-2					LUSB0994		Sample LUSB0994 collected 1.5-2.5' bgs.
					Bottom of Boring at 2.5 ft bgs.			
3	-3							
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Soil Boring IABK-SB0005

Investigative Area BKG : Meier Property
Start Date : 07/27/98
End Date : 07/27/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Larry O'brien
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Matt Obloy
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Sandy SILT; sand, very fine to fine; roots; moist; loose; 10YR3/2 very dark grayish brown.	LUSB0995		Sample LUSB0995 collected 0.0-0.5' bgs.
1	-1		CL		CLAY; trace gravel; firm; medium plasticity; 10YR4/4 dark yellowish brown with light gray mottling.	LUSB0996	100%	Sample LUSB0996 collected 0.5-1.5' bgs.
2	-2					LUSB0997		Sample LUSB0997 collected 1.5-2.5' bgs.
					Bottom of Boring at 2.5 ft bgs.			
3	-3							
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0006

Investigative Area BKG : Meier Property
Start Date : 07/27/98
End Date : 07/27/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 2.5 feet

Drilling Company : SAIC
Driller : Larry O'brien
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Matt Obloy
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Sandy SILT; sand, very fine to fine; roots; moist; loose; 10YR3/2 very dark grayish brown.	LUSB0998		Sample LUSB0998 collected 0.0-0.5' bgs.
1	-1		CL		CLAY; trace gravel; firm; medium plasticity; 10YR4/4 dark yellowish brown with light gray mottling.	LUSB0999	100%	Sample LUSB0999 collected 0.5-1.5' bgs.
2	-2					LUSB1000		Sample LUSB1000 collected 1.5-2.5' bgs.
					Bottom of Boring at 2.5 ft bgs.			
3	-3							
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0008

Investigative Area BKG : Eastwood High School
Start Date : 07/28/98
End Date : 07/28/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 3.0 feet

Drilling Company : SAIC
Driller : Bruce Wappman
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Bruce Wappman
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Clayey SILT; trace sand and gravel; roots to 1"; stiff; medium plasticity; 10YR5/4 yellowish brown.	LUSB1004		Sample LUSB1004 collected 0.0-1.0' bgs. Rinsate equipment used.
1	-1					LUSB1005	100%	Sample LUSB1005 collected 1.0-2.0' bgs.
2	-2		CL		CLAY; some gravel <1"; moist; medium plasticity; 2.5Y5/3 light brownish gray with some 10YR5/8 yellowish brown.	LUSB1006		Sample LUSB1006 collected 2.0-3.0' bgs.
3	-3				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings and topped with potting soil.
4	-4							Boring located at Eastwood High School.
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Remedial Investigation
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Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0009

Investigative Area BKG : Eastwood High School
Start Date : 07/28/98
End Date : 07/28/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 3.0 feet

Drilling Company : SAIC
Driller : Bruce Wappman
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Bruce Wappman
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Clayey SILT; trace sand and gravel; roots to 1'; stiff; medium plasticity; 10YR5/4 yellowish brown.	LUSB1007 LUSB9104	100%	Sample LUSB1007 and duplicate LUSB9104 collected 0.0-1.0' bgs.
1	-1							
			CL		CLAY; some gravel <1"; medium plasticity; 2.5Y5/3 light brownish gray with some 10YR5/8 yellowish brown.	LUSB1008 LUSB1009		Sample LUSB1008 collected 1.0-2.0' bgs. Sample LUSB1009 collected 2.0-3.0' bgs.
2	-2							
3	-3				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings and topped with potting soil.
4	-4							Boring located at Eastwood High School.
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0010

Investigative Area BKG : Bostdorff Property
Start Date : 07/28/98
End Date : 07/28/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 3.0 feet

Drilling Company : SAIC
Driller : Bruce Wappman
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Bruce Wappman
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Silty CLAY; roots; woods; moist; medium plasticity; 2.5Y4/2 dark grayish brown.	LUSB1010		Sample LUSB1010 collected 0.0-1.0' bgs.
1	-1		CL		Silty CLAY; trace gravel and roots; stiff; low plasticity; 2.5Y6/4 light yellowish brown with some 10YR5/6 yellowish brown mottles.	LUSB1011	100%	Sample LUSB1011 collected 1.0-2.0' bgs.
2	-2					LUSB1012		Sample LUSB1012 collected 2.0-3.0' bgs.
3	-3				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings and topped with potting soil.
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

Remedial Investigation
Feasibility Action Program
Luckey, Ohio Site
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0011

Investigative Area BKG : Bostdorff Property
Start Date : 07/28/98
End Date : 07/28/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 3.0 feet

Drilling Company : SAIC
Driller : Bruce Wappman
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Bruce Wappman
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Silty CLAY; trace sand; roots and other organic matter; moist; medium plasticity; 2.5Y4/2 dark grayish brown.	LUSB1013		Sample LUSB1013 collected 0.0-1.0' bgs.
1	-1		CL		Silty CLAY; trace sand and roots; stiff; low plasticity; 2.5Y6/4 light yellowish brown with some 10YR5/6 yellowish brown mottles.	LUSB1014	100%	Sample LUSB1014 and duplicate collected 1.0-2.0' bgs.
2	-2					LUSB1015		Sample LUSB1015 collected 2.0-3.0' bgs. Rinsate equipment used.
3	-3				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings and topped with potting soil.
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
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Remedial Investigation
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Luckey, Ohio Site
Formerly Utilized Sites Remedial
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U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Soil Boring IABK-SB0012

Investigative Area BKG : Bostdorff Property
Start Date : 07/28/98
End Date : 07/28/98
Northing Coord. : Not
Easting Coord. : Surveyed
Total Depth of Boring : 3.0 feet

Drilling Company : SAIC
Driller : Bruce Wappman
Designation of Drill : Stainless Steel Bucket Auger
Type of Drill Rig : Hand Auger
Geologist : Bruce Wappman
Depth to Bedrock : Not Encountered
Depth Drilled Into Rock : NA
Borehole Diameter : 3 inches
Sampling Equipment : 3" Bucket Auger

Depth in feet	Surf. Elev. NA	Water Levels	USCS	GRAPHIC	DESCRIPTION	Sample Number	% Recovery	REMARKS
0	0		ML		Silty CLAY; trace sand; roots/organic matter; slightly moist; low plasticity; 2.5Y3/2 very dark grayish brown.	LUSB1016		Sample LUSB1016 collected 0.0-1.0' bgs.
1	-1					LUSB1017	100%	Sample LUSB1017 collected 1.0-2.0' bgs.
2	-2		CL		Silty CLAY; trace sand; trace roots; low plasticity; 2.5Y5/2 grayish brown.	LUSB1018		Sample LUSB1018 collected 2.0-3.0' bgs.
3	-3				Bottom of Boring at 3.0 ft bgs.			3" hand auger backfilled with cuttings and topped with potting soil.
4	-4							
5	-5							
6	-6							
7	-7							
8	-8							
9	-9							Colors from Munsell Soil Color Chart 1992 Revised Edition
10								

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APPENDIX 3B:
Water Quality Parameters

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
ON-SITE MONITORING WELLS									
MW-01(I)	30-Jun-98	12.6	5.24		0.6			Light Brown	Development
MW-01(I)	14-Jul-98	11.97	7	177		1047	5.3		Purge
MW-01(I)	23-Jul-98	12.41	6.93	163.3		807	13.5	2	Purge
MW-01(I)	19-Nov-98	12.93	8.03			3368	1.25	Slightly Turbid	Purge
MW-01(I)	19-Nov-98	13.04	7.97			3610	0.8		Post Sample
MW-01(I)	07-Apr-99	11.41	7.53	-118.5		956	6.4	Clear	Purge
MW-01(I)	07-Apr-99	11.76	7.49	-123.7		960	9.46	Clear	Post Sample
MW-02(S)	30-Jun-98	12	7.18		0.6			Light Brown	Development
MW-02(S)	14-Jul-98	12.48	6.98	82.9		1204	10.8		Purge
MW-02(S)	23-Jul-98	12.3	6.91	105.6		983	14.5	0	Purge
MW-02(S)	23-Jul-98	12.33	6.92	109.4		991	14.5	1	Post Sample
MW-02(S)	19-Nov-98	13.77	7.89			2106	1.1		Purge
MW-02(S)	19-Nov-98	13.87	7.86			2123	1.04		Post Sample
MW-02(S)	07-Apr-99	13.87	7.48	-119.3		1006	7.91	Clear	Purge
MW-02(S)	08-Apr-99	12.55	6.82	-123.4		1033	12.13	Clear	Post Sample
MW-03(I)	15-Jul-98	15.77	7.34	158.1		702	5.1		Purge
MW-03(I)	13-Apr-99	10.88	7.18	-162.5		683	6.01	Slightly Turbid	Purge
MW-03(I)	13-Apr-99	10.75	7.15	-164.5		699	5.68	Slightly Turbid	Post Sample
MW-04(S)	16-Jul-98	18.29	7.02	114.4		1993	15.2	10	Purge
MW-04(S)	16-Jul-98	18.27	7.01	115.8		1917	15.5	10	Post Sample
MW-04(S)	08-Apr-99	10.78	7.11			1411	8.56	Clear	Purge
MW-04(S)	08-Apr-99	15.4	7.14	-161.6		1773	9.87	Clear	Post Sample
MW-05(I)	09-Jul-98	13.6	7.57		1.48		3.9	>999	Development
MW-05(I)	15-Jul-98	17.45	7.08	32.5		1441	13.9		Purge
MW-05(I)	14-Apr-99	12.05	7.55	-72.4		1295	7.36	Clear	Purge
MW-05(I)	14-Apr-99	12.83	7.58	-67		1289	5.59	Clear	Post Sample
MW-06(S)	09-Jul-98	12.9	7.29		1.53		2.5	>999	Development
MW-06(S)	15-Jul-98	14.99	6.97	136.3		1446	17.6		Purge
MW-06(S)	14-Apr-99	10.8	6.54	-168.9		1282	4.49	Clear	Purge
MW-06(S)	14-Apr-99	11.02	6.26	-166.3		1285	16.78	Clear	Post Sample
MW-07(I)	10-Jul-98	11.9	7.35		0.981		1.5	>999	Development
MW-07(I)	20-Jul-98	12.25	7.11	-493		700	5.3		Purge
MW-07(I)	20-Jul-98	12.31	7.11	-484		696	7		Post Sample
MW-07(I)	14-Apr-99	11.38	7.24	-29.3		817	23.12	Clear	Purge
MW-07(I)	14-Apr-99	11.78	7.25	-38.7		814	17.05	Clear	Post Sample
MW-08(S)	10-Jul-98	13.3	7.86		0.99		7.4	>999	Development
MW-08(S)	21-Jul-98	12.94	6.9	-409.1		1065	20.6	14	Purge
MW-08(S)	21-Jul-98	13.41	6.94	-335		1083	31.8	2	Post Sample

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
ON-SITE MONITORING WELLS (CONT.)									
MW-08(S)	14-Apr-99	15.56	7.21	-78.1		1240	30.8	Clear	Purge
MW-08(S)	14-Apr-99	15.62	7.3	-89.2		1256	24.73	Clear	Post Sample
MW-13(S)	11-Aug-98	14.3	7.31		0.95			276	Development
MW-13(S)	18-Aug-98	13.7	7.25		1.19			>999	Initial
MW-13(S)	13-Apr-99	14.3	7.04		1.9		12.72	Slightly Turbid	Purge
MW-14(S)	07-Aug-98	16.5	7.04		1.13			209	Development
MW-14(S)	18-Aug-98	16.5	7.07		4.78			>999	Purge
MW-14(S)	21-Aug-98	15.8	7		4.94			649	Post Sample
MW-14(S)	09-Apr-99	11.9	6.87			4960		5	Purge
MW-14(S)	09-Apr-99	11.3	7.03			4910		>999	Post Sample
MW-17(S)	09-Aug-98	13.5	7.13		1.59			>999	Development
MW-17(S)	19-Aug-98	19.13	7.37			1572	27.7	0	Purge
MW-17(S)	20-Aug-98	14.66	7.29			1582	34.9		Post Sample
MW-17-(S)	14-Apr-99	10.79	6.49	-144.6		1668	8.5	Clear	Purge
MW-17-(S)	14-Apr-99	12.47	6.46	-132.4		1516	16.32	Clear	Post Sample
MW-18(I)	12-Aug-98	14	7.28		0.94			215	Development
MW-18(I)	20-Aug-98	14.63	7.15			765	10.57	Clear	Purge
MW-18(I)	09-Apr-99	10	7.34	-24.2		862	20.9	Clear	Purge
MW-18(I)	09-Apr-99	9.2	7.42	-26.7		863	25.2	Clear	Post Sample
MW-19(I)	07-Aug-98	17.7	7.23		1.08			18	Development
MW-19(I)	19-Aug-98	12.36	6.82			1037	8.52		Purge
MW-19(I)	19-Aug-98	12.42	6.82			1032	8.64		Post Sample
MW-19(I)	14-Apr-99	11.03	7.02	38.5		943	36.04	Clear	Purge
MW-19(I)	14-Apr-99	11.56	6.96	41.9		955	32.3	Clear	Post Sample
MW-21(I)	09-Aug-98	13.9	7.03		2.95			89	Development
MW-21(I)	20-Aug-98	12.14	6.93			2296	11.61		Purge
MW-21(I)	20-Aug-98	12.15	6.95			2292	11.54		Post Sample
MW-21(I)	09-Apr-99	11.24	6.68	-162.5		2630	16.02	Clear	Purge
MW-21(I)	09-Apr-99	11.1	6.75	-161		2647	17.18	Clear	Post Sample
MW-22(I)	17-Aug-98	12.33	7.28			951		84	Development
MW-22(I)	20-Aug-98	15.79	7.06			962	29.8	20	Purge
MW-22(I)	20-Aug-98	17.92	7.15			971	33.9	46	Post Sample
MW-22(I)	13-Apr-99	11.48	6.91	-157.8		902	3.58	Clear	Purge
MW-22(I)	13-Apr-99	11.59	6.65	-157.6		889	1.83	Clear	Post Sample
MW-23(S)	11-Aug-98	15.1	7.46		2.06			>999	Development
MW-23(S)	19-Aug-98	14.19	7.33			1644	8.88	Clear	Purge
MW-23(S)	19-Aug-98	14.52	7.45			1650	8.94		Post Sample
MW-23(S)	13-Apr-99	9.35	7.1	-145		1559	9.07	Slightly Cloudly	Purge

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
ON-SITE MONITORING WELLS (CONT.)									
MW-23(S)	13-Apr-99	11.45	7.15	-155		1646	9.95	Clear	Post Sample
MW-24(S)	17-Aug-98	12.93	7.99			2770		95	Development
MW-24(S)	20-Aug-98	12.6	7.93			2795	42	0	Purge
MW-24(S)	20-Aug-98	12.69	7.98			2836	43.1	1	Post Sample
MW-24(S)	09-Apr-99	11.63	7.43	-180.6		3230	25.33	Clear	Purge
MW-24(S)	09-Apr-99	11.65	7.44	-182.5		3260	24.05	Clear	Post Sample
MW-25(I)	17-Aug-98	12.46	6.68			992		22	Development
MW-25(I)	19-Aug-98	15.49	7.22			891	27.7	1	Purge
MW-25(I)	19-Aug-98	17.39	7.34			892	22.6	1	Post Sample
MW-25(I)	13-Apr-99	11.91	7.11	-143.3		787	7.94	Clear	Purge
MW-25(I)	13-Apr-99	12.09	7.08	-152.9		789	6.73	Clear	Post Sample
MW-39(B)	04-Nov-98	11.6	7.61		0.41			151	Development
MW-39(B)	20-Nov-98	10.52	7.53	254		350	1.68	Slightly Cloudly	Purge
MW-39(B)	20-Nov-98	10.05	7.51	250		350	2.65	Slightly Cloudly	Post Sample
MW-39(B)	12-Apr-99	10.86	6.93	-166.5		525	10.01	Clear	Purge
MW-39(B)	12-Apr-99	11.14	6.76	-166		529	7.83	Clear	Post Sample
MW-40(B)	04-Nov-98	11.8	6.85		1.49			22	Development
MW-40(B)	20-Nov-98	10.82	7	675		926	10.68		Purge
MW-40(B)	20-Nov-98	10.6	7	674		930	12.93		Post Sample
MW-40(B)	12-Apr-99	11.74	6.48	-141.2		1300	13.12	Clear	Purge
MW-40(B)	12-Apr-99	14.42	6.48	-151.2		1301	14.41	Clear	Post Sample
MW-41(B)	04-Nov-98	11.2	7.71		0.474			327	Development
MW-41(B)	20-Nov-98	11.72	6.54			2891	1		Purge
MW-41(B)	20-Nov-98	11.26	6.66			2974	0.47		Post Sample
MW-41(B)	14-Apr-99	10.94	6.98	-192.6		636	0.89	Clear	Purge
MW-41(B)	14-Apr-99	11.16	6.92	-194.6		638	2.07	Clear	Post Sample

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
OFF-SITE MONITORING WELLS									
OMW-27(I)	02-Nov-98	11.2	7.21		0.731			143	Development
OMW-27(I)	19-Nov-98	13.09	7.38			1596	4.36	7. Slightly Cloud	Purge
OMW-27(I)	19-Nov-98	13.29	7.73			1621	4.9	Clear	Post Sample
OMW-27(I)	08-Apr-99	11.95	7.01	-8.8		954	13.38	Clear	Purge
OMW-27(I)	08-Apr-99	12.05	7.13	-29.1		958	15.77	Clear	Post Sample
OMW-28(B)	02-Nov-98	11.1	7.28		1.07			55	Development
OMW-28(B)	19-Nov-98	13.08	7.95			3509	0.58		Purge
OMW-28(B)	19-Nov-98	13.55	7.99			3403	0.54		Post Sample
OMW-28(B)	08-Apr-99	17.6	7.31	-102.6		1008	29.3	Slightly Turbid	Purge
OMW-28(B)	08-Apr-99	13.85	7.21	-112.6		1055	10.78	Clear	Post Sample
OMW-29(I)	29-Oct-98	11.2	7.38		0.416			92	Development
OMW-29(I)	18-Nov-98	11.62	7.74	266		347	0.45		Purge
OMW-29(I)	18-Nov-98	11.6	7.64	261		350	0.77		Post Sample
OMW-29(I)	12-Apr-99	11.7	8.12	-100		490	12.7	Clear	Purge
OMW-29(I)	12-Apr-99	10.6	7.96	-97.5		506	14.1	Clear	Post Sample
OMW-30(B)	28-Oct-98	12.1	8.59		0.422			23	Development
OMW-30(B)	12-Apr-99	12.4	9.01	-83.3		388	10.2	Clear	Purge
OMW-30(B)	12-Apr-99	12.5	8.83	-162.9		425	5.19	Clear	Post Sample
OMW-31(I)	28-Oct-98	11.9	7.75		0.477			99	Development
OMW-31(I)	17-Nov-98	11.36	7.45			499	3.71	Clear	Purge
OMW-31(I)	17-Nov-98	11.36	7.46			497	403	Clear	Post Sample
OMW-31(I)	06-Apr-99	11.31	9.25			530	0.65	Clear	Purge
OMW-31(I)	06-Apr-99	11.49	8.67			555	0.74	Clear	Post Sample
OMW-32(B)	28-Oct-98	11.4	7.83		0.456			92	Development
OMW-32(B)	17-Nov-98	10.89	7.6			448	1.46		Purge
OMW-32(B)	07-Apr-99	10.95	7.89	-136.1		563	1.15	Clear	Purge
OMW-32(B)	07-Apr-99	11.03	7.9	-136.7		561	2.03	Clear	Post Sample
OMW-33(I)	29-Oct-98	11.4	7.39		0.429			0	Development
OMW-33(I)	19-Nov-98	12.35	8.59			15473	0.52	Clear	Purge
OMW-33(I)	19-Nov-98	12.56	8.59			11161	0.75	Clear	Post Sample
OMW-33(I)	13-Apr-99	11.87	8.05	-140.2		583	21.1	Clear	Purge
OMW-33(I)	13-Apr-99	12.47	7.88	-78.5		584	26.6	Clear	Post Sample
OMW-34(B)	19-Nov-98	12.64	12.59	5140		6734	24	Clear	Purge
OMW-34(B)	08-Dec-98	10.5	11.88		3.58			4	Development
OMW-34(B)	13-Apr-99	10.46	12.28	19.2		5040	16.5	Clear	Purge
OMW-34(B)	13-Apr-99	12.5	12.11	-55.2		4333	21.2	Clear	Post Sample
OMW-35(I)	28-Oct-98	12.6	8.78		0.492			34	Development
OMW-35(I)	18-Nov-98	11.58	8.88	271		363	1.55		Purge

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
OFF-SITE MONITORING WELLS (CONT.)									
OMW-35(I)	18-Nov-98	11.57	8.48	302		408	1.57		Post Sample
OMW-35(I)	07-Apr-99	11.31	7.89	-135.1		628	2.38	Clear	Purge
OMW-35(I)	07-Apr-99	11.34	7.81			637	2.19	Clear	Post Sample
OMW-36(B)	30-Oct-98	12.1	12.67		3.87			32	Development
OMW-36(B)	19-Nov-98	12.07	12.15	1575		2093	1.68	Clear	Purge
OMW-36(B)	19-Nov-98	12.62	11.98	1175		1533	1.73	Clear	Post Sample
OMW-36(B)	08-Dec-98	10.4	11.64		1.23			23	Development
OMW-36(B)	06-Apr-99	13.45	12.25	54.5		971	13.37	Clear	Purge
OMW-36(B)	06-Apr-99	12.04	12.26	35.3		811	20.25	Clear	Post Sample
OMW-37(I)	29-Oct-98	11.9	7.62		0.417			148	Development
OMW-37(I)	18-Nov-98	12.87	8.68			1529	1	Milky	Purge
OMW-37(I)	18-Nov-98	12.55	8.59			1490	1.46		Post Sample
OMW-37(I)	06-Apr-99	11.2	8.16	-115		534	1.32	Clear	Purge
OMW-37(I)	06-Apr-99	11.27	8.15	-117		535	1.24	Clear	Post Sample
OMW-38(B)	29-Oct-98	11.6	7.49		0.425			23	Development
OMW-38(B)	18-Nov-98	12.17	8.79			1365	1.1	Clear	Purge
OMW-38(B)	18-Nov-98	12.18	8.83			1290	1.03	Clear	Post Sample
OMW-38(B)	06-Apr-99	11.1	8.33	-118.7		561	1.14	Clear	Purge
OMW-38(B)	06-Apr-99	11.25	8.3	-123		554	3.67	Clear	Post Sample

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
BACKGROUND MONITORING WELLS									
BMW-09(I)	07-Aug-98	13.7	8.47		0.685			121	Development
BMW-09(I)	18-Aug-98	11.68	7.47			850	65.5	4	Purge
BMW-09(I)	18-Aug-98	11.68	7.47			845	52.3	14	Post Sample
BMW-09(I)	18-Nov-98	11.74	7.76			1568	3.5	Clear	Purge
BMW-09(I)	18-Nov-98	11.74	7.98			1759	3.32	Clear	Post Sample
BMW-09(I)	06-Apr-99	10.9	9.55			777	10.3	Clear	Purge
BMW-10(S)	08-Aug-98	12.4	7.48		0.94			315	Development
BMW-10(S)	18-Aug-98	11.94	7.33			858	42	4	Purge
BMW-10(S)	18-Aug-98	12.19	7.35			856	40	3	Post Sample
BMW-10(S)	18-Nov-98	12.99	8.06			1933	7.86	Clear	Purge
BMW-10(S)	18-Nov-98	11.87	8.15			1985	3.13	Clear	Post Sample
BMW-10(S)	06-Apr-99	10.5	8.01	-70.1		805	30.8	Clear	Purge
BMW-10(S)	06-Apr-99	11.23	7.92	-79.6		809	25.7	Clear	Post Sample
BMW-11(I)	09-Aug-98	15.7	7.3		0.503			22	Development
BMW-11(I)	18-Aug-98	15.28	7.38			499	33.9	7	Purge
BMW-11(I)	18-Aug-98	15.61	7.37			500	34.9	13	Post Sample
BMW-11(I)	18-Nov-98	14.06	8.27			2564	6.4	Clear	Purge
BMW-11(I)	18-Nov-98	13.87	8.29			2727	6.87	Clear	Post Sample
BMW-11(I)	06-Apr-99	9.35	7.45	169.5		442	10.74	Clear	Purge
BMW-11(I)	06-Apr-99	9.4	7.42	189.2		441	13.6	Clear	Post Sample
BMW-12(S)	10-Aug-98	19	7.74		0.669			650	Development
BMW-12(S)	18-Aug-98	18.64	7.47			676	40	722	Purge
BMW-12(S)	18-Nov-98	12.85	8.21			2497	13.51	Turbid	Initial
BMW-12(S)	07-Apr-99	9.3	6.35			544	13.83	Mod. Turbid	Purge
BMW-12(S)	07-Apr-99	8.6	6.34			415	13.72	Slightly Turbid	Post Sample
BMW-15(I)	09-Aug-98	12.5	7.67		0.514			10	Development
BMW-15(I)	18-Aug-98	12.36	7.95			431	4.68		Purge
BMW-15(I)	18-Aug-98	12.65	7.88			424	3.9		Post Sample
BMW-15(I)	17-Nov-98	11.61	7.92			419	0.9	Clear	Purge
BMW-15(I)	17-Nov-98	11.53	7.82			410	1.64		Post Sample
BMW-15(I)	06-Apr-99	11.63	8.58	-126.5		518	2.17	Very Clear	Purge
BMW-15(I)	06-Apr-99	11.69	8.48	-121.6		518	5.09	Very Clear	Post Sample
BMW-16(S)	08-Aug-98	13.4	7.69		0.562			231	Development
BMW-16(S)	18-Aug-98	11.83	7.42			421	4.39	Clear	Purge
BMW-16(S)	18-Aug-98	11.92	7.41			421	4.35		Post Sample
BMW-16(S)	17-Nov-98	12.02	7.58			416	0.97	Slightly Turbid	Purge
BMW-16(S)	17-Nov-98	12.08	7.59			418	1.13		Post Sample
BMW-16(S)	06-Apr-99	11.56	8.24	-100.8		508	3.48	Clear	Purge
BMW-16(S)	06-Apr-99	11.75	8.19	-122.7		508	2.88	Clear	Post Sample

Table 3B.1. Water Quality Parameters Measured in Groundwater Monitoring Wells at the Luckey Site

Well ID	Date	Temperature (°C)	(pH)	Eh (mv)	Specific Conductivity (mS/cm)	(umho/cm)	DO (mg/L)	Turbidity (NTU)	Field Activity
RESIDENTIAL WELLS									
GW001	08-Apr-99	14.5	7.35			1260	11.2		Purge
GW001	21-Jul-99	17	6.81			1270	10.8	10	Purge
GW001	14-Oct-99	16.7	7.27		1.18			8	Purge
GW001	14-Oct-99	16.7	7.25		1.16			7	Post Sample
GW002	07-Apr-99	11.4	6.67		0.588		11.04	25	Purge
GW002	07-Apr-99	11.7	7.05		0.585		11.41	7	Post Sample
GW002	21-Jul-99	14.2	6.53			586	11.05	81	Purge
GW002	14-Oct-99	13.5	7.55		0.519		10.95	3	Purge
GW002	14-Oct-99	13.4	7.55		0.518			0	Post Sample
GW003	07-Apr-99	12.3	7.7			535	14.29	Clear	Purge
GW003	07-Apr-99	12	7.48			536	7.85	Clear	Post Sample
GW003	21-Jul-99	14.9	6.86			541	11.91	4	Purge
GW003	14-Oct-99	12.6	7.51		0.506		10.93	0	Purge
GW004	07-Apr-99	13	7.62			748	14.04	Clear	Purge
GW004	07-Apr-99	12.3	7.5			758	12.93	Clear	Post Sample
PRODUCTION WELLS									
PW(E)	08-Apr-99	13	7.46			1240	12.29	Clear	Purge
PW(E)	08-Apr-99	12.9	7.48			1200	13.81	Clear	Post Sample
PW(W)	08-Apr-99	13.3	7.1			1470	12.13	Clear	Purge
PW(W)	08-Apr-99	12.9	7.25			1470	11.75	Clear	Post Sample
PWE	21-Jul-99	13.4	6.91			1250	13.38	10	Purge
PWE	14-Oct-99	10.5	6.96		1.15		10.34	2	Purge
PWE	14-Oct-99	10.4	6.95		1.14			4	Post Sample

APPENDIX 3C:
Building Sampling Activities

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ACRONYMS

AHU	air handler unit
cm	centimeter
FA	functional area
HEPA	High Efficiency Particulate Air
HVAC	heating, ventilating, and air conditioning
MCE	mixed cellulose ester
m	meter
mm	millimeter
NE	northeast
NIOSH	National Institute for Occupational Safety and Health
NW	northwest
OA	outdoor air
OSHA	Occupation Safety and Health Administration
PACM	presumed asbestos-containing material
RI	remedial investigation
SE	southeast
SW	southwest
USACE	United States Army Corps of Engineers
VAT	vinyl asbestos tile
VFT	vinyl floor tile

3C.0 PHASE IV BERYLLIUM SURVEY AND DUST COLLECTION IN ON-SITE BUILDINGS

As part of the Phase IV RI at the Luckey site, beryllium and radiological scoping surveys were conducted in the on-site buildings. As a result of those surveys, dust samples were collected from these buildings. This appendix details the grid layout in each building to facilitate the radiological and beryllium scoping surveys. The procedures pertinent to wipe sampling for beryllium analysis are outlined. The procedures followed to collect dust samples also are presented and include the rationale of the functional areas (FAs).

The surveys consisted of an 80% radiological and beryllium scoping survey of the Annex building and a cursory 5% radiological and beryllium survey of the following remaining buildings:

- Production Building;
- Main Office;
- Employee Activity Building (10% coverage);
- Former Melting, Alloying, and Shipping Building;
- Former Laboratory Building;
- Maintenance Building;
- Bulk Storage Building;
- Guard House;
- Building Housing West Production Well;
- Building Housing Water Pump and Tank;
- Building Housing East Production Well;
- Sewage Disposal System Pump House; and
- Shack.

An extensive survey was performed in the Annex, where 80% of 1-m grids established on accessible surfaces of the floor, the bottom meter of all walls, and overhead structures were surveyed for fixed and removable contamination. The Employee Activities Building received 10% coverage because this building was considered to be representative of background conditions.

In order to complete the surveys, the buildings were individually measured and sectioned off in a manner to locate sampling points within a 1 square meter (m^2) area. Each square meter was labeled in x-axis and y-axis coordinates for horizontal surfaces. Z-axis coordinates were provided when elevated structures in building were sampled. For example, Grid A-1 would refer to the x-axis (Grid A) and y-axis (Grid 1); any elevated structure in that grid would have been given an elevation from the floor (zero elevation point of the z-axis). Due to the layout and placement of tenant equipment and products, not all of the grids started in the same directional coordinates of each building. The establishment of these grids is presented below as each building is discussed (Sections 3C.2 through 3C.15).

3C.1 SAMPLING PROCEDURES

3C.1.1 Beryllium Scoping Surveys

Wipe samples were collected from surfaces where high levels of visible debris were present or areas where dust had settled due to other factors. Other factors (influencing the settling of dust particles) considered during this investigation were static forces, mechanical forces, natural forces, and building settling. A static charge may accumulate due to electrical current, creating a small magnetic field that attracts a slightly charged dust particle of the opposite polarity of the magnet, resulting in a static force attraction and the gathering of dust on this surface. Friction, another cause of static build-up resulting in a higher dust collection area, includes such examples as a door or window that is frequently opened or

closed. Mechanical forces such as those generated by ventilation system fans and motors have a direct effect on the ultimate settling location of airborne dust particles. Natural forces such as the wind blowing through open doors and windows or holes in the roof or walls (which are quite numerous throughout the facility) will influence primarily where dust is not permitted to settle. Structural settling forces, such as foundation cracks in floor or walls, and the expansion/contraction of metal due to thermal variations, provide for an area where excess dust could become trapped due to a combination of any of the forces discussed. Due to the structure, age, and use of this facility, areas of high visible dust were readily identified. All of the surfaces inspected show elevated levels of visible dust, specifically on horizontal surfaces 8 ft or greater above floor level.

3C.1.1.1 Sampling Procedure for Beryllium Wipes

After an area of high dust was observed, specific sampling procedures were followed to collect dust particulate using a wipe. The specific procedures are guidelines provided in the OSHA Technical Manual, Section I-Chapter 2 (Sampling for Surface Contamination), and are outlined below.

1) All wipe samples were collected on Whatman Type 41 mixed cellulose ester (MCE) filters. These filters are 41 millimeters (mm) in diameter, circular, and, as a paper type material, are generally considered the most effective means of wipe sampling for metals.
2) Filters were preloaded into clean 4-ounce amber glass containers (amber) prior to wipe sampling for each new work shift. The person loading the amber would don clean disposable latex gloves prior to handling the filters. Filters were stored in boxes of 100 and were sealed in plastic for shipping purposes. One filter was loaded per amber, and the lid was sealed after loading the filter.
3) At the specific sampling location, the sampler would don a new pair of disposable latex gloves and place a clean plastic template over the surface to be wiped.
4) The sampling media was extracted from the pre-stocked amber and placed in the desired hand to conduct the wipe.
5) The filter paper was moistened with isopropyl alcohol to enhance dust adherence on the sampling media.
6) The free hand secured the 100 cm^2 template, and the hand containing the wet wipe would begin the wipe action, applying maximum pressure to capture contaminants without damaging the filter. Starting at a corner of the template, the sampler pushed the filter toward the center by wiping in concentric squares of decreasing size to ensure a thorough coverage of the 100 cm^2 sampling area.
7) The filter was then folded in half twice and deposited in the amber. The lid was replaced on the amber, and the contaminated latex gloves were removed for disposal.
8) The template was then rinsed with isopropyl alcohol for field decontamination and placed back into the sampling case for air drying prior to the next sample.
9) Amber lids/labels were marked with details including sample location, time of sample, sampler's initials, and air temperature.

3C.1.1.2 Statistical Verification of Sampling Frequency

The sampling frequency in the Annex building was conducted in a manner to gather the top 10% of dust levels with a 95% confidence level. The NIOSH Occupational Exposure Sampling Strategy Manual details a sampling strategy that can be used to find the maximum risk subgroup from a homogenous high risk group. The strategy was originally designed to identify the workers with the highest exposure based on a group of workers with unknown exposures but sharing common work tasks. In other words, NIOSH devised a sampling method to identify how many workers would need to be sampled to determine with 95% confidence that the highest 10% of all exposures were identified.

Hypothetically, this strategy can be applied to common areas where unknown levels of contamination may exist. For example, the grid system in the Annex building divided the floor and ceiling into common homogenous areas measuring approximately 1m by 1m. The individual grids created a total of 1700 homogenous floor and ceiling areas where contamination could exist. By applying the NIOSH method, it was determined that a minimum of 29 samples would need to be selected from various grids in each the floor and ceiling locations. By selecting every 40th grid for wipe sampling on the floor and biasing the sampling for cracks within the selected grid, the highest 10% of all contamination for the Annex floor should have been identified with a 95% confidence level. This logic appeared to be rational since the dust distribution on the floor was visually indistinguishable and assumed to be even.

However, the same logic was not applied to the metal ceiling trusses, even though the total sampling area was actually much smaller than the floor area. The sampled area on each beam was only 4 inches wide by 47 ft long per "I" beam side; with each beam having an east and west side. It was determined that more samples should be collected because dust distribution was not considered to be equal. This strategy was supported by the fact that there were irregular levels of visible dust throughout the facility on the main beams in the Annex ceiling. Thus, the hypothesis that random distribution of dust was even (as on the Annex floor) could not be applied to the strategy for the ceiling level sampling.

As for the remaining buildings, a 5% cursory survey was conducted following the pattern outlined below:

- Floors-biasing toward foundation cracks; and
- Elevated structures-biasing toward high dust areas and horizontal surfaces on different structures (i.e.-beams, ductwork, lights, etc.).

The objective of the 5% survey was to identify if beryllium was present in the structures and to determine if contamination seems to be prevalent throughout the structure.

3C.1.2 Bulk Dust Collection

3C.1.2.1 <u>Sampling Procedure</u>

Each building was divided into sections designated as FAs for composite sampling purposes. The composition of each of FA was generated by the USACE based on the operational function of each area, scheduling requirements of Uretech based on discussions with management, logistics of sampling an active manufacturing facility, and professional judgement. Within each FA, one composite sample was collected from zero to 2 m of elevation, and a second composite sample was collected above 2 m of elevation. Sampling within each FA was conducted from the bottom up to avoid possible bias of the zero to 2 m samples from material inadvertently knocked to the floor during the sampling of elevated areas. In elevated sampling, the sampler wore a full-face respirator with HEPA cartridges because of the intrusive nature of sampling with a vacuum attachment and the proximity of the sampler's breathing zone directly under dusty surfaces. Initially, all zero to 2 m sampling was conducted in similar respiratory protection, but results of breathing zone samples indicated no level of beryllium exposure to the sampler or assistant, and this practice was discontinued.

Bulk dust samples were collected using a HEPA vacuum equipped with lightweight, non-conductive tubular extensions and various tube attachments, depending upon specific sampling location requirements. The dust collection device was a fibrous bag filter fitted between the vacuum extension tube and attachment. This bag filter consisted of an all-natural, chemically inert fibrous material generally used for sampling biological spores and allergens, having an approximate pore size of 0.22

microns. The effective collection area of the bag was 4 inches, and 1-1/4 inches in diameter when fully expanded by the suction of the HEPA vacuum.

A single bag, if undamaged throughout sample collection, was used to collect each composite dust sample. Prior to filter bag installation, the sampler would don a clean pair of latex gloves to avoid possible cross-contamination between samples. Bag installation was accomplished by sliding the bag inside the narrow end of the tube and folding back the upper portion of the bag over the outer section of the tube. Finally, sliding the required attachment over the exposed portion of the filter bag secured the bag for sampling. As discussed earlier, the specific attachment was based on the sampling surface. The zero to 2 m areas were normally completed using the floor brush attachment, as much of the sampling was conducted on flat surfaces such as concrete floors, cinder block walls, storage shelves, or machinery/machinery foundations. Elevated samples, because of the presence of piping systems, irregular-shaped light fixtures or beams, and tight corners, were completed using either a crevice tool attachment or a brush attachment.

Decontamination of sampling equipment was conducted before the collection of each composite sample. The equipment decontamination station consisted of a one-stage portable chamber with airlock. A second one-stage station was constructed to serve as a personnel decontamination station for the removal and disposal of overboots and dirty disposable coveralls. In the equipment decontamination station, extension tubes and attachment pieces were scrubbed inside and out with scrub brushes in a solution of Alconox/water in a 5-gallon plastic bucket. Excess soap was rinsed into a second 5-gallon plastic bucket with a hand-held spray bottle of deionized water, and the pieces were left in the rinse bucket for air-drying. Spare attachments and tubes were available to avoid delays in the sampling process, and when excess water was found on the equipment, it was soaked up with a clean dry paper towel prior to being used for sampling.

The equipment decontamination chamber also served as a sample transfer station. The full filter bag was removed from the vacuum extension and taken to the chamber where the contents were removed by gently shaking and tapping the filter bag until the contents dropped into the sealable bag. This transfer was required from 1 to 4 times within each FA, depending on the size of the FA and the amount/density of the dust being collected. Upon completion of sampling in each FA, the contents were shaken in the sealable bag for thorough mixing of the composite sample material, and removed from the bag into an 8 oz amber. A minimum of 4 grams of sample was required for each composite; in the event that excess sample (resulting in overfill of the 8 oz. amber) was accumulated, the amber was filled to capacity and capped. Items such as bird feathers, insects, and small wood chips were removed from the sealable bag prior to transferring the sample to the amber to avoid any negative bias in the sample analysis.

3C.2 ANNEX BUILDING (WAREHOUSE)

The Annex is attached to the south wall of the Production Building and can be accessed via several large doors on the interior wall separating the Annex and Production Building and via roll doors on the south and west walls of the Annex. The Annex is comprised of approximately 19,000 square ft (407 ft long from east to west, 47 ft wide from south to north) of floor space and is characterized by a high slanted ceiling level supported by 23 main beams/trusses which run north-south. The east portion of the Annex contains a padded concrete floor equipped with an automotive brake-painting machine, along with some pallet storage. This east section is about 150 ft in length from the east wall, and there is a down ramp for forklift/foot traffic along the south wall to the west portion of the Annex. The west portion has a concrete floor level 4 ft lower than the east, and serves as a palletized parts storage and tractor-trailer loading area. It stretches about 257 ft from the 4 ft wall at the ramp center to the west wall. Walls are cinderblock supported by steel I-beams, and the roof /ceiling appears to be corrugated metal. The height from the floor to the lower lip of the main beam ranged from 27 to 32 ft. Overhead horizontal

items included main and secondary beams, a supply duct on the north wall, mercury vapor drop lighting, natural gas lines for overhead space heaters, and other piping such as drain lines and fire sprinkler lines. Some structural damage was observed, specifically to the garage roll doors in the east portion of the building.

3C.2.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square grid (40x40 inches) was used as the reference system for both the radiological survey and sampling locations. The grid was marked on the floor with the southeast corner of the Annex serving as Grid A-1. Grids A-N covered the width from south to north, and grids numbers 1-122 covered the length from east to west. In addition, the grid was marked from floor level up the wall in 1m intervals for radiological survey purposes. This grid system provided reference in three coordinates (x-, y-, and z-axis), with the z-axis referenced in elevation from the floor level.

The initial objective of the Phase IV RI for the Annex was to perform a 100% radiological survey of the accessible areas of the floor including 1m up the wall from floor, level, and all 23 main beams. In order to include a 5% cursory survey of other fixed horizontal surfaces from the overhead such as lights and pipes, a 1-meter (m) (40 inch) vertical band the width of the Annex was created to encompass all horizontal surfaces within the band. Every 20th numbered (east to west) grid was selected for survey, and included Bands (Grid Numbers) 20, 40, 60, 80, 100, and 120.

To ensure thorough coverage of the Annex overhead, eight beryllium wipe samples were collected on each beam, which correlates to approximately one sample every other grid for horizontal beam surfaces in the z-axis. This was adjusted according to the percentage of accessible grids on each specific beam. A building material paint scrape was collected on each of the 23 beams to test for fixed beryllium that may have been absorbed through porous paint material or painted over as layers were added. The paint was scraped to expose the bare metal surface of the beam. One beryllium wipe was collected in each of the six bands at the area of highest dust collection. Floor sampling locations were chosen at every 40th floor grid, which based on a total of 1708 grids in the Annex, provided 42 uniformly distributed locations of the entire Annex floor. A total of 210 beryllium dust wipe samples were collected from the floor and elevated structures (Figure 3C.1).

In addition to the 23 paint samples collected from the beams, 10 bulk materials were collected from various building substrates. The substrates considered included the cinder block walls and concrete floor. Materials were selected from areas where previous damage was already present or in areas where foundation settling cracks were observed (Figure 3C.1).

3C.2.2 Bulk Dust Collection and Sampling

FA1 is in the northwest quadrant of Annex, a large product staging area in the lower section (bottom of ramp) of the building (Figure 3C.2). It encompasses an area from the west wall to the west Versatrim equipment foundation at column C-26, and from the north wall of the Annex to the yellow boundary indicating the aisle area. This 4,400 ft^2 area also includes the main aisle access to the Production Building, an aisle used frequently by forklift operators for product transfer to the truck loading area. There is very limited access to collect the zero to 2 m sample, mainly on the south perimeter of the FA near the aisle and in the Production Building forklift aisle. Product storage is extensive and tightly packed, thus sampling could not even be conducted between rows of pallets. Sampling was therefore limited to about 10 to 15% of the total floor area and lower walls of FA1. Elevated (>2 m) sampling was conducted with the hydraulic lift because of the high ceiling level in the Annex. Surfaces specifically sampled at the five elevated locations include the top of lights, I-beams/trusses, conduit, and outside the air duct.

A separate sample also was collected from the inside of the supply air duct, which enters the Annex in the northwest upper wall area, continuing east while getting progressively smaller until the terminal point in the brake painting area. The HVAC is located on a stand on the south wall of the Production Building second floor between columns C-11 and C-12. Access to the duct interior was achieved by removing six Phillips head screws on the diffuser and reaching as far as feasible into the duct with a double extension tube. The specific section of the interior duct from which the sample was collected is located in FA1 between columns C-16 and C-17.

FA2 is basically a mirror image of FA1, located in the southwest quadrant of the Annex, and slightly smaller because the main aisle trims the east side of FA2 for ramp access. Once again, this approximately 4,000 ft^2-area is cordoned by the west wall near the truck loading dock, the south wall of the building, column line 25, and the main aisle (FA3) to the north as identified by the yellow boundary line. It has the same function as FA1, serving as product storage and transfer area, and also a high traffic (forklift) area because of the proximity to the tractor-trailer loading dock. Floor and lower wall sampling was extremely limited with concise storage of palletized material, and total sampling at zero to 2 m is estimated at 15 to 20%. Four locations were sampled in the >2 m range using the hydraulic lift for access to the 30 to 32 ft ceiling elevations. Sampling surfaces include I-beams/trusses, light fixtures, upper walls, and horizontal surfaces of the cinder block wall at the roof intersection.

FA3 is the Annex aisle. It starts at the west wall (truck loading dock), continues between FA1 and FA2 in an easterly direction, turns south beyond the east end of FA2 to the south Annex wall, and extends east along the south wall up the ramp beyond brake painting to the column 36 line. Assuming a 10 ft average width for the aisle, the total area of FA3 is approximately 4,100 ft^2. Functioning primarily as a forklift passageway and secondarily as a pedestrian walkway, this FA was completely cleared for sampling purposes. As a result, 100% coverage of the zero to 2 m sample (floor and lower walls) was completed in this open, albeit busy, aisle. Elevated (>2 m) sampling was conducted at five locations chosen by proximity to the 23 main trusses (north-south) to ensure adequate sample material was available from the limited horizontal surfaces of the narrow FA. These five locations are uniformly spread across the length of FA3, giving thorough coverage from beams/trusses, lights, conduit, and piping.

FA4 consists of the Annex extension warehouse, an area not previously sampled in the earlier phase of the RI. This extension warehouse is accessible through the east wall of the Annex from the brake painting/storage (FA5) and continues about 160 ft east of the main Annex. It also has a large access door open to the weather on the north center wall due south of the Old Mattress Factory. Approximately 3,200 ft^2, this FA serves as a metal bin storage and drum storage area for Uretech. The foundation is a poured concrete floor level with the upper Annex floor. The walls and roof appear to be corrugated metal supported by steel I-beams and rafters. Except for bin storage in the northwest corner of the FA and drum storage in the southeast corner of the FA, most areas were fairly accessible for sampling. The zero to 2 m sampling included lower walls, ledges, and floor area with approximately 80% of the FA4 covered successfully. A low ceiling allowed for >2 m sampling to be completed using an 8 ft ladder. Nine locations were sampled from available horizontal surfaces of the FA, with the majority of sample material collected from the east half, which had a greater accumulation of visible dust.

FA5 is the brake painting area and adjacent pallet storage east of brake painting. This area is entirely on the upper Annex area and is bound by the aisle (FA3) to the south, the Annex/Production Building wall to the north, column line 29 to the west, and column 36/exterior wall to the east. FA5 is a 3,500 ft^2 area accessible via the concrete ramp from the lower Annex, wooden stairs north of the concrete pad from the Production Building, or via an equipment lift/large open access into the Production Building second floor FA19. The west half of the FA is dominated by the installed brake painting machinery, and

the east half is dominated by the presence of pallet storage. Brake painting is a 24-hour operation, and to avoid possible exposure for Uretech employees and disturbance of the production activities, the sampling period was coordinated to coincide with a plant shutdown. Although the brake painting machinery is installed between columns 30 and 31, and pallet storage is between column 33 and 35, open floor space was available for sampling. The zero to 2 m sample was collected from the floor, ledges, and under/on top of the brake painting equipment, and included about 75% of the floor area. Elevated sampling using the hydraulic lift included four locations from the horizontal surfaces of pipes, ductwork, beams/trusses, and lights. The lift was maneuvered for a random distribution of sampling locations, including one west of brake painting, two in the open floor space between brake painting and pallet storage, and one east of pallet storage between columns 35 and 36.

FA6 is the smallest of the FAs in the Annex. It is between FA1 (west), FA5 (east), FA3/ramp (south), and the Production Building wall (north). The 1,800 ft^2 FA is contained between columns 26-29. The west portion on the lower level (columns 26 and 27) of the Annex is the Versatrim, a large piece of installed machinery vital to the lifeblood of the polyurethane wheel cover manufacturing industry. The east portion of FA6 is on the upper Annex floor between columns 27 and 29 and serves as pallet storage. Because the Versatrim is elevated above floor level by stanchions, and pallet storage is limited to the west perimeter along the column 27 line, floor sampling was completed on about 90% of the floor surface in FA6. All elevated sampling in FA6 was conducted with the hydraulic lift on the upper Annex only. The size and proximity of the Versatrim made elevated sampling on the lower Annex in FA6 virtually impossible. Four locations were selected at random in the upper storage area, and surfaces sampled included ductwork, beams/trusses, light fixtures, and conduit.

3C.3 PRODUCTION BUILDING

This two story manufacturing warehouse is located in the center of the property, and is the main area where the current tenant (Uretech, Inc.) employees conduct business. During the summer of 1998, Uretech was in full production for first and second shifts, and had a skeleton crew for the 3rd shift. During the daytime as many as 100 employees supported activities essential to operating concern. Each floor has 64,000 square feet of floor space, and houses Uretech's machinery, which support assembly line production operations. Structurally, there are three rows of 40 main reinforced concrete columns lengthwise (east to west), with columns separated by 16 ft from column center, and 50 ft from column center between rows (north to south). The first floor has a concrete ceiling with numerous pipe systems distributed at or just below the 10 ft ceiling level of the entire floor. The second floor has a main north-south truss at each column, or 40 main trusses. The pitched roof/ceiling is constructed of corrugated metal, and the overhead systems are limited to secondary support beams, gas line, inactive sprinkler piping, and some ventilation ductwork. The foundation is level with the Annex building and constructed of poured concrete. Most of the employee operations are in separate locations (workstations) throughout the first and second floors of the building.

3C.3.1 Scoping Survey and Building Materials Sampling

The grid was created using the main columns as reference to establish blocks of 1-meter square grids. There is 50 ft between rows of columns from north to south; Row A is along the north wall of the Production Building, Row B down the center, and Row C is at the wall separation between the Production Building and the Annex. Grid was set at 15 grid boxes between column rows (or about 3.3' per grid) for a total of 30 grids from north to south. With 16 ft between east-west columns, five grids between columns were set from east to west (or about 3.2 ft per grid). This totaled 75 grids in each column bay, or 6000 grids per floor of the Production Building. In order to conduct a 5% cursory survey of the floor/overhead, 300 grids per floor should have been surveyed. However, due to space limitation with installed equipment, heavy forklift traffic, and long-term pallet storage, the entire building was estimated

to be only 50% accessible. This reduced the total grid survey requirements to 150 grid per floor (on both overhead horizontal surfaces and the floor). Grid was marked in open spaces of the floor and projected to the ceiling level for survey of all horizontal surfaces within the established floor grid.

Because of the limited access, grid sections were blocked off in areas of 5 to 20 grids to assist in maneuvering of the hydraulic lift for ceiling level surveying. The blocks were distributed throughout the entire Production Building from east-to-west and north-to-south for a visually random, yet thorough selection of locations. It should be noted that biasing the sampling locations toward areas where the hydraulic lifts could be stationed did skew the "randomness" of the investigation. A minimum of one wipe sample (Be) was collected in each block of grids, for a random distribution of sample locations in support of site characterization.

A total of 88 beryllium wipe samples were collected from the first and second floors of the Production building. Also a total of 17 bulk building materials were sampled. The materials sampled included cinder block walls, brick walls, concrete floors, beam paint, and gray dust-like material (Figures 3C.3 and 3C.4).

3C.3.2 Bulk Dust Collection and Sampling

3C.3.2.1 <u>Production Building ~ First floor</u>

The first floor of the Production Building is comprised of FA1 through FA13 (Figure 3C.5). Much of this floor is a common plenum (air space), and migrating dust is likely to distribute randomly and evenly between the relatively open FAs. Of the 13 FAs, only FA1 (Managers' Offices), FA2 (Above Ground Tank Storage), FA4 (Paint Room), FA6 (Electrical Vault), FA7 (Shipping/Receiving), and FA10 (Compressor Room) have physical barriers such as walls or doors which isolate them from the large open machinery and storage areas. There are no air handler units associated with the first floor, so much of the airflow is natural ventilation by open roll doors and windows. Exhaust fans are installed in the Compressor Room and the Paint Room. Central air conditioning is provided in the Managers' Offices.

FA1, the Production Building Managers' Offices, a 4,400 ft^2 brick structure north of the Production Building, is connected to the Production Building via an enclosed walkway. The floor is vinyl floor tile (VFT) over concrete and is clean and in excellent condition. The zero to 2 m sample covered approximately 95% of the floor and lower walls as surfaces were generally accessible except for the locked office in the northwest corner of the building. From >2 m, the sampling was focused above the 2 ft x 4 ft ceiling tiles, and nine random tiles representing each area (office, passageway, coffee room, conference room) were removed for access to light fixtures, pipes, and top of ceiling tiles. This area appears to serve as common plenum except for the conference room, which is isolated by block-to-block cinder block interior walls. No sampling could be conducted over the restroom or enclosed walkway ceilings as they are constructed of sheetrock.

FA2 is referred to on the drawings as Above Ground Storage Tanks for Bulk Chemical Storage. The area covers approximately 4,000 ft^2 in the northwest corner of the Production Building, with eight large chemical storage tanks longitudinally located from east to west. As noted, the tanks are above ground, but are in a tank reservoir below grade of the concrete foundation to serve as a dike in the event of a spill. Because of a misinterpretation of the drawings while sampling in FA11, FA2 has been expanded to include the aisle west of Column 4 to the northwest exit door. Sampling at the zero to 2 m level was fairly limited, about 10% coverage of the floor space. This was due to lack of access under the storage tanks and heavy oil/chemical residue precluding sampling of the walkway south of the tanks per USACE. The floor west of Column 4 received 100% coverage. Using an 8 ft ladder at 10 random and

fairly evenly distributed points allowed for representative coverage at the >2 m level. Items sampled included a sweep of pipes, light fixtures, and the top of several tanks.

FA3 is due south of the storage tanks and FA2, opposite a cinder block wall separating the areas. The west half of FA3 is the soap line, and the east half serves primarily as pallet storage next to the main aisle. FA3 is entirely north of the main aisle, a small section of FA11, and is approximately 2,000 ft^2. A combination of the installed soap line equipment and palletized storage limited sampling of the floors, behind pallets, top of electrical boxes, and lower walls (zero to 2 m) to less than 20% surface vacuuming. Nine elevated points were selected at random for the >2 m sample, and this gave thorough coverage of the tops of pipes, equipment, light fixtures, and upper walls.

FA4 is the Paint Room in the southwest corner of the Production Building. This 1,500 ft^2 area is two rooms, a paint (drum) storage area and a paint mixing room. Access to the paint mix area is through a swinging door on the east wall of the Paint Room from FA5. There is also a roll door on the north wall from FA5 to access the drum storage area, and an internal swinging door between the paint mixing area and drum storage area. The external wall of the Paint Room is block-to-block cinder block, physically separating FA4 from the rest of the plant. There are two large exhaust fans servicing the area, both located about 15 feet above ground level. Although there is a lot of equipment and drum storage, by carefully maneuvering around equipment foundations and sliding drums as necessary, about 75% coverage was achieved in the zero to 2 m range. Items of interest included the floor, lower walls, equipment/small tanks, and window ledges. An 8-foot ladder was used to collect the >2 m sample at 10 different elevated spots in the two rooms. Specific items included an air duct in paint storage, top of pipes and lights, upper wall, top of roll door, and the exhaust fan in paint mixing.

FA5 is a large expanse of an area, covering over 12,000 ft^2 and dominating the southwest quadrant of the Production Building first floor. At least 60% of FA5, mainly in the east portion, appears to serve only as palletized product storage/transfer with high turnover rate based on the heavy forklift traffic observed in the area. The west central section of FA5 is an active portion of the manufacturing plant, part of the production line with the wheel cover conveyer traversing this area. West of production line operations nearing FA4 is additional palletized product storage. Sampling was conducted when the production line was shut down to avoid interfering with Uretech operations. Maneuvering around and between the numerous stacks of pallets resulted in at least 60% coverage of the zero to 2 m sample level including the floor, under equipment, between pallets, top of lockers, and under the production line. The low 10-foot ceiling on the first floor, and limited access for the hydraulic lift to many tight areas made the 8-foot ladder the tool of choice for sampling in the >2 m range. Thirteen locations were chosen based on availability for ladder use, and random distribution pattern across the FA. Specific sampling areas included the top of lights, top of installed equipment, and numerous pipes routed throughout the FA.

FA6 is one of the smaller areas, approximately 900 ft^2 high-voltage electrical vault room and "CMM" office area. This small area is in located in the south center section side of the Production Building, immediately west of the forklift passageway into the Annex Building. There are several entrances, a swinging door on the northwest side, and a roll door on the southeast side. The finished ceiling is a suspended metal grid ceiling with 2' x 4' tiles installed, and the entire external wall is cinder block. The fenced high-voltage panel is on the north center side of the room, and is about 8' x 20' area deemed inaccessible for safety considerations. Excluding the caged area, over 90% of the floor (zero to 2 m) area was sampled. The elevated sample was collected from the top of shelves and lockers, above ceiling tiles on top of lights, and small sections of the cinder block wall ledge where possible.

FA7 is the enclosed shipping/receiving offices and adjacent supply storage cage. Also included in this 2,000 ft^2 area are the restrooms and locker rooms. Located directly east of FA6 across the forklift passageway to the Annex Building, shipping/receiving is on the west perimeter, fenced-in storage covers

the southeast quadrant and more, and the locker rooms/restrooms are on the north perimeter of the FA. The shipping/receiving office has two swinging entrance doors on the west wall, and a rear door on the east wall to access the caged storage area. There is a main office as you enter, and a supervisor's office in the northeast portion. VFT over concrete is the floor covering, and the finished ceiling is a suspended metal grid ceiling with lay-in 2' x 4' ceiling tile. As discussed previously, the storage cage is accessed via a swinging door at the rear of the shipping/receiving office, through an open walkway from the Annex passageway at the southwest corner of FA7, or by unlocking the cage door on the southeast side of FA7. Locker rooms and restrooms have swinging door entrances on the north end of the FA. The locker rooms have VFT over concrete and low plywood ceilings; the restrooms have painted concrete and no finished ceilings. The zero to 2 m sample included sampling of floors, lower walls, under shelves, and behind product storage, while the >2 m sample was inclusive for pipes, light fixtures, ducts, horizontal wall ledges, and upper walls.

FA8 is approximately 5,000 ft^2, and the main function is the Versatrim, along with some palletized product storage. It is on the south side of the Production Building, south of main east-west aisle and runs from Column B/C-25 to Column B/C-32, and split with FA9 from Columns 30-32. Within the FA are two fenced-in transformers totaling about 350 ft^2 of floor space not accessible by the sampling team. The area is open with a cinder block wall in the east-west direction separating the south third portion of FA8 from the rest, although accessible by a door in the middle of the wall. The floor is concrete, and the ceiling is open throughout the FA. Except for the transformer cages and some product storage, the zero to 2 m sample was collected from the floor and lower walls with better than 80% coverage of the surface area. Because of the low 10-foot ceilings and difficult access for the hydraulic lift, elevated (>2 m) sampling was accomplished with an 8-foot ladder at 11 specific locations spread across the entire FA. Those surfaces sampled included the top of pipes, light fixtures, and steel beams.

FA9, a relatively large area of about 5,500 ft^2, is comprised of product storage on the north half, and brake painting on the south half. The remainder of brake painting is located in the Annex on the platform section of the building. FA9 is also entirely south of the main east-west aisle, east of FA8, and west of the Compressor Room (also known as FA10). It basically encompasses the section from Columns B/C-30 to B/C-38, although split with FA8 from Columns 30-32. Once again, it is an open area, common plenum to the entire floor, and has a similar layout to FA8. The zero to 2 m sample was collected from the floor, low ledges, walls up to 2 meters, and top of installed equipment, and included about 60% coverage due to the presence of equipment and palletized product storage hindering access. An 8-foot ladder was used for the >2 m sampling, and 10 locations were sampled on the surfaces of pipes, light fixtures, conduit, and upper walls.

FA10 is the Compressor Room located in the southeast corner of the Production Building due east of FA9. This room is enclosed by cinder block wall and measures approximately 1,200 ft^2. The main entrance is through a large canvas curtain or tarpaulin on the north wall next to the east door entrance to the Production Building. There is extensive installed machinery, five air compressors covering much of the floor area, but accessible for sampling nonetheless. A soiled exhaust fan is on the east wall, and the concrete floor is somewhat grimy due to a mixture of dirt, grease, and oil. Coverage for the zero to 2 m sample was extensive, nearly 100%, with a variety of surfaces sampled including the floor, lower walls, around columns, top of equipment, top of electrical boxes/conduit, and the interior portion of the tarpaulin. The >2 m sample was collected using an 8-foot ladder, sampling at 5 locations in FA10 including the top of pipes and compressors, upper walls, and the exhaust fan/fan housing.

FA11 includes the entire network of walkways designated as aisles. The main east-west aisle stretches down the length of the building's mid-section, and has a number of secondary or tertiary branches providing access to areas such as the Annex and the Managers' Offices. Assuming an average aisle width of 8 feet, FA11 encompasses approximately 8,000 ft^2 into the far reaches of all sections of the

Production Building. The secondary branches in the heart of the building at the freight elevator area provide access north (towards the Managers' Offices) and south (towards the Annex). The north extension continues west past the enclosed walkway to the Managers' Offices on the north side of the above-ground storage tanks (FA2) to the swinging door at Column A-4. This secondary aisle is parallel to the main aisle and is about 190 feet long from the freight elevator area. The south extension goes between FA6 and FA7 providing forklift access to the Annex. Tertiary aisles are located between FA7/FA8, and FA9/FA10, providing walking access to the Versatrim and brake painting areas of the Annex. Because the aisle is directly adjoining several other open FAs, the area between painted yellow lines was designated as FA11 boundary for sampling purposes. The yellow boundary lines are in place to mark product storage limits for clear passage of the constant and rapid forklift traffic. Because FA11 floor remains, for the most part, a clear space, coverage of the zero to 2 m sample was in the 95% range, including floor surface and available lower wall surfaces in the secondary aisle. For the >2 m sample, the hydraulic lift was used in the main aisle, and the 8-foot ladder was used in the secondary aisle. No sampling was conducted in elevated areas of the tertiary aisles because of the close proximity of FA7-FA9, which were sampled thoroughly. Elevated sampling was conducted at 19 locations of FA11, focusing on the tops of pipes and light fixtures only because of limited width of the aisles. There was also an air handling system over the roof of FA7 included in the FA11 sampling scheme per USACE.

FA12 is entirely north of the main aisle and is located in the northeast corner of the Production Building. The east half of FA12 is palletized product storage, and the west half is normally manned with the service packaging crew. The east wall of the Production Building, the yellow painted line at FA11, and Column A-29 on the north wall, binds the 3,600 ft^2 area. It is an open area with no physical boundaries separating it from adjacent FAs. At zero to 2 m, sampling consisted of the floor, lower walls and columns, and under pallets with about 60% accessible space. Working around the stacks of pallets to maneuver the 8-foot ladder proved challenging, and 10 elevated locations were sampled across the FA, mainly on pipes, ceiling, light fixtures, and upper walls. The elevated sampling was conducted when the service packaging crew was not in the immediate vicinity to avoid possible exposure to the Uretech employees.

FA13 is a multi-faceted storage area extending from Column A-29 west to approximately Column A-18, and includes palletized product storage, some equipment storage, and a large drum storage warehouse. It is estimated at 5,400 ft^2 floor surface. The section east of the freight elevator loading area, about Column A-22 out to Column A-29 is extensively palletized product storage. There is limited equipment and drum storage in the immediate vicinity of the freight elevator/stairwell, and the drum storage warehouse extends about 50 feet north of the Production Building's north wall with 40-foot width. Floor (zero to 2 m) sampling included the floor surface, window sills, top of stored equipment, and up to 2 meters on walls and posts with total coverage estimated at 60% accounting for product and drum storage. Elevated (>2 m) sampling was conducted at 12 locations throughout the FA using the 8-foot ladder. Surfaces sampled included pipes, ducts, lights, and window ledges.

3C.3.2.2 <u>Production Building ~ Second floor</u>

The Production Building, Second floor has been divided into 10 FAs, designated as FA14-FA23, each of which will be individually addressed in the following paragraphs (Figure 3C.6). Access to the Second floor is via one of the four stairwells spread across the floor. The east and west stairwells are external covered stairwell, and must be accessed from outside the Production Building. There is a freight elevator located at the north center side of the building used by the sampling crew to move the hydraulic lift, decontamination station, and associated sampling equipment. A large door with a guardrail/safety rail is at the east end of the building in FA19. This door was previously used for the loading of rail cars during the beryllium production period, but is now used for material discard into a large dumpster positioned below the opening on the ground level. A second large wall opening exists on the south wall

(FA19), which has an installed hydraulic lift for large material transport between the Production Building and the Annex. There are a number of heating, ventilating, and air conditioning (HVAC) stands located on platforms throughout the floor in addition to central air conditioning systems servicing the canteen area and adjacent offices. These items were sampled separately from the FAs, and will be addressed at the end of this section following the descriptions of FA14-FA23.

FA14, a large FA in the northwest quadrant of the Production Building, houses large installed machinery known as the East Unit and the West Unit, and also includes a "Compounding" Area on the east portion of the FA. The outer boundaries of this approximately 11,200 ft^2 area are the west and north load-bearing walls for the Production Building, the chemical analysis laboratory to the east, and the aisle boundary line to the south. Vacuuming the floor, under equipment supports, lower walls, equipment horizontal surfaces below 2 meters, and window sills allowed for 30% coverage of the zero to 2 m sampling area. The large fixed units take up much of the floor space in FA14, and an effort was made to cover at least a portion of all sides and corners of the FA. A high ceiling in this area mandated the use of the hydraulic lift for the >2 m sample. The lift was limited mainly to perimeters of the FA, a total of 7 locations, and included horizontal surfaces of lights, conduit, trusses, and outer ductwork. FA14 sampling was conducted during the Uretech plant shutdown as the one of the two Units operate round-the-clock during full production and would not be accessible during plant operations due to moving machinery parts and potential personnel exposure.

FA15 is the second floor version of the main aisle, although not nearly as extensive as the first floor aisle (FA11). The aisle is marked with a yellow boundary, and with an estimated aisle width of 10 feet, FA15 encompasses an area of approximately 4,500 ft^2. The eastern boundary is at Column 29 row, where the large green tarpaulin separates the rubber-matted flooring (west) from the red brick flooring (east). At the zero to 2 m level, the FA was extended outside the yellow lines to the south wall of FA22 (canteen) and FA23 (production offices/lab) to ensure complete coverage of the floor while separating FAs by a physical barrier. Surfaces sampled at this level included the floor, guardrail, window sills, lower walls (office partition), and coverage was 100% with the open spaces. Elevated sampling was maintained between the yellow lines by extending the z-axis to the level of sampling. Although the width of the area is small, sampled surfaces were quite dusty such I-beams/trusses, lights, and conduits.

FA16 is located in the southwest corner of the second floor of the Production Building. Specific functions within the FA include the enclosed spray painting room on the west edge of the FA, the Paint Line area, a Production Data Center booth, and some general storage on the east side of the FA. Except for spray painting room (access door to the north side), this area of approximately 7,200 ft^2 is open to the entire floor. It is bound by exterior plant walls on the west and south, the aisle (FA15) to the north, and ends between columns C-11/C-12 to the east. Limitations for the zero to 2 m sample were encountered with installed Paint Line and spray painting equipment, along with some storage and standing water. Sampling was conducted on the floor, lower walls, top of lockers, and under equipment, and coverage is estimated at 40-50%. The elevated sampling was collected with both an 8-foot ladder and the hydraulic lift. The ladder was required in the Paint Line area (compact because of equipment) and the spray painting room (low ceiling), while the lift was utilized in the east portion for sampling of higher surfaces. Eight locations at >2 m were sampled in FA16 which included lights, trusses, conduit, and top of painting/pre-painting cleaning tanks.

FA17 is a 2,800 ft^2 dual storage space located south of FA15 (aisle) and between columns C-11/12 and C-17. The east half of FA17 is storage (parts to be painted) and the west half of FA17 is storage (cage enclosure) with the entire FA open as common air space. The presence of metal shelf storage in the cage enclosure, and extensive palletized storage in the paint pending section limited the zero to 2m sampling to about 30% coverage which included the floor, lower walls, and shelves. Access to the cage enclosure with the hydraulic lift was not feasible, and the ceiling surfaces were out of reach

with an 8-foot ladder, so the limited elevated sampling was conducted at two locations in the west portion using the hydraulic lift. Surfaces sampled included lights, conduit, trusses, and the top of the air handler unit (AHU) traversing FA17 and FA16.

Column C-17 (FA17 line) to the west, the aisle (FA15) to the north, and the large green tarpaulin at columns B/C-29 bind FA18 to the east. This relatively large FA of approximately 9,500 ft^2 contains such areas as Polymeric, Polymer Storage, Maintenance, and Steel Case Trim. Vacuuming was conducted randomly across all areas of the FA, but pallet storage and installed equipment limited the zero to 2 m sample to about 35% coverage. Those areas sampled were the floor, under pallets, along the lower south wall, on lower shelves, pedestal fans, and top of small equipment. Elevated (zero to 2 m) sampling was completed with the hydraulic lift because of the high ceiling level. Maneuverability was a challenge with the cluttered floor, and nine locations were sampled providing excellent coverage of the FA. The bulk of sampling was from the horizontal surfaces of lights, top of pipes, and trusses/beams.

FA19 is the most spacious of the FAs on the second floor, comprising 25% of the entire floor area and located in the east half of the building. Bound by exterior walls to the north, east, and south, and the tarpaulin at columns A/C-29 to the east, the total area is about 16,000 ft^2. The northeast corner of the building is excluded from FA19, a 1,500 ft^2 section called Degreasing/Mold Preparation (FA20). Although no walls isolate the area, there is a tarpaulin draped from the trusses to the floor providing a partial barrier between the two areas. FA19 has no installed equipment, and appears to serve as long-term storage for bins and pallets of defective parts. The entire floor of the main east-west aisle is brick, and with the many cracks and crevices, sampling was concentrated in this natural settling area for dust and debris. The majority of floor on the north and south sides of the aisle is concrete. Another dust settling area is the metal rail running the length of the FA. All accessible sections of the floor and lower walls were vacuumed, and accounting for bin/pallet storage north and south of the main brick aisle, coverage at zero to 2 m is estimated at 25%. Seven random locations based on accessibility and uniformity were selected for >2 m sampling using the hydraulic lift on the high ceiling. Specific surfaces included beams, trusses, ceiling, light fixtures, and HVAC support platform area.

FA20 is located in the northeast corner of the floor, separated from FA19 by a large tarpaulin. This 1,500 ft^2 FA houses the Mold Preparation equipment including several kilns or ovens, and is used sporadically during the production process. Material was sampled at zero to 2 m from the floor, lower walls, and window sills. Although some areas were not accessible because of installed equipment or standing water on the floor, an 80% coverage rate was achieved. Elevated sampling was conducted using the hydraulic lift, and the size and proximity of the Mold Preparation equipment limited lift access to the south and east perimeters only. Two locations were selected for sampling at >2 m with the surfaces including light fixtures, trusses and upper wall ledges.

FA21 is approximately 1,800 ft^2 and includes the Development Lab and associated offices. The boundary to the south is the main aisle (FA15), to the north is the exterior wall, to the east is the tarpaulin (opposite FA19), and to the west is a small aisle extension leading into the canteen, which is part of FA22. A partition wall separates the Development Lab from the aisle, with access into the lab via double swinging door. There is no ceiling over the lab, although the attached office is enclosed with a wood ceiling over a suspended drop ceiling. The office is entered through swinging doors on the west (from aisle) or the east (from lab). The Development Lab has fixed equipment, installed cabinets/benches, paint spray booth, and test product storage hindering access to portions of the floor. Sampling at the zero to 2 m range on the floor and lower walls provided about 75% coverage, mainly because the entire office was accessible to sampling. There is only about 4”-6” gap between the suspended ceiling and the wood support ceiling in the office, precluding the office from >2 m sampling. Use of the hydraulic lift was mandatory in the Development Lab because of the high ceiling. Two locations were selected based on accessibility issues, and sample was collected from light fixtures, beams/trusses, and vents.

FA22 is comprised of the canteen, first aid office area, men's restroom/locker room, women's restroom/locker room, and upper level offices above the canteen. The canteen and upper level offices are on the south segment of the FA. One can access the canteen via double swinging doors on the east and west walls of the canteen; the stairs to the upper offices are east of the canteen adjacent to the Development Lab office. Entrance to the men's restroom/locker room is via swinging doors in the northeast corner of the canteen. The women's restroom/locker room and first aid offices ingress is a passageway between the freight elevator holding area and the west wall of the canteen. All of the rooms have a finished suspended metal grid ceiling with 2' x 4' lay-in ceiling tiles and all of FA22 has central air conditioning. The Uretech janitorial crew cleans the FA22 rooms on a daily basis. The only exception is the upper level offices, which are ordinarily locked. A combination of the easy accessibility in the zero to 2 m range, and the relative cleanliness of the floors made 100% coverage a necessity. Sampling at >2 m level included such surfaces above ceiling tiles such as beams, light fixtures, and vents. All samples at the six locations chosen were collected using an 8-foot ladder and were distributed among the upper level offices (2), men's locker room (1), canteen (1), first aid office (1), and women's locker area (1).

FA14 (East/West Unit) to the west, FA22 (canteen) to the east, exterior wall to the north, and FA15 (aisle) surround FA23 to the south. This approximately 1,400 ft^2 area consists of a Production Office(s), Chemical Analysis Laboratory, and three other offices attached to the laboratory. All areas are enclosed and provided with central air conditioning. The Production Office area can be accessed only from the main aisle and a wall separates this office from the remainder of FA23. A swinging door is east of the Chemical Analysis Laboratory for access from FA14 (Compounding); the laboratory is in the northwest quadrant of FA23. The laboratory is interconnected with the other three offices, all south of the laboratory. Entrance to the offices may be achieved via a swinging door on the east wall of the southeast office. A finished suspended metal grid ceiling with 2' x 4' lay-in ceiling tile adorns FA23. Accessibility was 100% except for the office in the southwest corner, which was occupied and unavailable for sampling. Specific coverage included the floor, lower walls, and window ledges in the zero to 2 m level. Elevated (>2 m) sampling was completed on above the ceiling tile on ductwork and light fixtures, and below the ceiling tile on supply diffusers and air exchanger grates. Seven locations were identified for >2 m sampling. It should be noted again that no sampling at any level was conducted in the southwest office due to employee occupancy.

HVAC System Sampling

As discussed at the beginning of this section, there are six HVAC platforms or stands to provide mechanical supply ventilation for the second floor employees. The HVACs can best be described as constant volume, single zone systems, which are strategically located to distribute outdoor air (OA) across the plant. This cannot be technically defined as a central air handling system as a central system generally refers to a unit that serves several zones and employs a distribution system of ductwork to transport the supply air to the zones. Four of the six HVACs have no duct system, and two HVACs have minimal ductwork. Specifically, the HVAC on the west wall of the Production Building has a 10'-15' section of ductwork directing air toward the aisle to the east. There is also a second smaller branch, probably 50-100 feet which transports air into the vicinity of the East Unit and West Unit. The HVAC on the south wall between Columns C-11 and C-12 has the most "complex" duct design, with the ductwork directed through the south wall into the Annex, where supply air is provided through a series of diffusers along the upper north wall of the Annex.

The HVAC stands are approximately 15'-20' above floor level, and the simple design consists of an OA intake, preheat coils, filters and dampers, axial supply air fan, and 2-3 supply diffusers per unit. Bulk dust sampling was conducted on all accessible HVAC units, or five of the seven units. Sampling was extensive and involved entry inside the unit via access doors which allowed thorough vacuuming of

the OA screen, interior unit walls and floors, dampers, and piping for the preheat coil. In addition, all accessible supply diffusers were vacuumed from the external side of the HVAC, concentrating on areas of higher dust like fins or horizontal surfaces. Fans could be energized locally at an electrical switch station, and for safety purposes the fan was secured prior to entry through the access door, and the power switch was guarded and controlled by the USACE representative. The following table provides a detailed breakdown of the HVACs.

Table 3C.1. HVAC System Production Building - Second Floor

HVAC Location	Accessible/Sampled?	Ductwork?
FA15 West Wall	Yes	Yes
Paint Line Area Columns C-3/C-4		
FA16/FA17 South Wall Columns C-11/C-12	Yes	Yes
FA18 South Wall Columns C-23/C-24		
FA23 North Wall Columns A-18/A-19	Yes	No
FA19 South Wall Columns C-36/C-37	Yes	No
FA21 Development Lab	Yes	??
FA22 canteen and upper offices	Yes	Yes

Additionally, the canteen and upper offices of FA22 are equipped with individual dedicated central air conditioning. Sampling was conducted on each of these specific systems by removing air diffusers to access the interior duct system. The supply duct system for the canteen was accessible from both the canteen ceiling level diffusers, and the floor vent system in the upper offices. The air conditioner for the upper offices is located above the drop ceiling, and the sample was collected from what is believed to be a return duct and from the unit itself outside the east wall of the upper offices.

3C.4 MAIN OFFICE

This is a 4,400 square foot brick building which houses a number of offices and a display area/conference room. It is attached to the north side of the Production Building via an enclosed walkway. Interior walls are constructed of cinder block or drywall, and there is a finished suspended ceiling with 2'x4' acoustical tiles on metal grid. The floor surface consists of 9"x9" vinyl asbestos tile (VAT) over a poured concrete foundation. The main entrance/reception area is on the north side, with an additional entrance on the west directly into the office areas.

3C.4.1 Scoping Survey and Bulk Materials Sampling

Grid was established in 3.2' x 3.2' blocks, with Grid A-1 at the northeast corner of the building. Grids A-K are from north to south, and Grids 1-39 from east to west.

There are a total of 429 grids for the building, with approximately 10% of the structure deemed inaccessible for survey purposes. A 5% cursory survey is required, and with 386 grids available, 19 grids (17 on the floor, and 2 on the wall) were designated to be scanned for radiological activity. Because of the drop ceiling, no surveying was conducted in the overhead. No building material samples were taken because of the destructive nature of intrusive sampling, and all building materials here were in excellent condition. Beryllium wipe samples were collected at each of the two-floor grid sampling blocks designated for the radiological survey (Figure 3C.7).

3C.4.2 Bulk Dust Collection and Sampling

The Main Office was included in the dust sampling activities that occurred on the first floor of the Production Building and is referred to as FA1 (Section 3C.3.2.1, Figures 3C.5 and 3C.6).

3C.5 EMPLOYEE ACTIVITY BUILDING

The Employee Activity Building is considered to be representative of background activity for the site, and received 10% coverage for radiological and beryllium swipe sampling purposes. Reference grid A-1 is positioned at the southwest corner of the building, and the grid system is constructed out from that point in consecutive 1-m (40” x 40”) squares designated as grid boxes. Grids A-L run in the west-to-east direction, and Grids 1-30 run in the south-to-north direction. All grid boxes are 40” x 40” squares with the exception of the two terminal grid rows. Grid row L is 28” wide to the east wall of the building, and grid row 30 is 30” wide to the north wall of the building. Because of potential asbestos exposure concerns, all swipes were collected from the floor level only, ceiling tiles were not removed.

3C.5.1 Scoping Survey and Bulk Materials Sampling

There are 360 grid boxes in the Employee Activity Building, and 36 wipe samples were collected from the floor at random locations with bias toward any floor cracks or areas of high dust. To further define the location of the 100-cm^2-swipe sample, each grid box was segmented into four quadrants designated as the northwest (NW), northeast (NE), southwest (SW), and southeast (SE). The junction for the quadrants is the center of each grid box effectively dividing the grid box into four 20” x 20” squares for future sample replication. The following table is provided with a breakdown of the sample identification, grid number sampled, and quadrant location (Figure 3C.8).

TABLE 3C.2. Employee Activity Building Sampling Locations

Sample ID	Grid Number	Quadrant w/in Grid Box	Sample ID	Grid Number	Quadrant w/in Grid Box
LUWP0825	A-1	NW	LUWP0843	K-17	SE
LUWP0826	E-4	SE	LUWP0844	H-16	SW
LUWP0827	G-2	NE	LUWP0845	K-20	NE
LUWP0828	I-3	SW	LUWP0846	H-22	SE
LUWP0829	L-6	SW	LUWP0847	J-24	NE
LUWP0830	I-9	NW	LUWP0848	H-26	NW
LUWP0831	L-9	NE	LUWP0849	J-29	NW
LUWP0832	A-10	SE	LUWP0850	L-29	SW
LUWP0833	D-11	SW	LUWP0851	A-16	NW
LUWP0834	G-9	NE	LUWP0852	C-18	SW
LUWP0835	K-11	SE	LUWP0853	E-21	NW
LUWP0836	J-13	SW	LUWP0854	A-20	SW
LUWP0837	E-12	NW	LUWP0855	F-25	SW
LUWP0838	G-14	SE	LUWP0856	G-29	SE
LUWP0839	J-15	SE	LUWP0857	E-29	SE
LUWP0840	K-13	NE	LUWP0858	C-30	SE
LUWP0841	C-12	NE	LUWP0859	A-26	NW
LUWP0842	A-15	NW	LUWP0860	B-28	SW

3C.5.2 Bulk Dust Collection and Sampling

The Employee Activity Building is approximately 39' x 99', and appears to be utilized as a conference hall and social area. It has been chosen as the background building for the Uretech compound since it was not involved in the beryllium processing and can be considered representative of background conditions. External load-bearing walls are constructed of cinder block supporting a sloped roof with wood rafters. The main entrance is on the north side of the building, and there is a second entrance door on the south side which appears to be permanently padlocked. The floor, in excellent condition, is VFT over concrete foundation throughout the building, with the exception of the mop room, where there is no VFT. A finished ceiling also covers the entire building (except the mop room) which consists of a metal grid lay-in ceiling with 2' x 4' ceiling tiles. The top of the ceiling tile is insulated with layers of fiberglass batt. As you enter through the north entrance via a swinging door into the foyer, you will find a large conference room comprising the entire northwest quadrant of the building. In the northeast quadrant, there is an interconnected exercise room and social room. The south half of the building has several interior offices separated by sheetrock walls and includes four storage offices, a break room, men and women's restrooms, and a mop room. There is a vault on the southwest side not accessible by the sampling team. The only observed activity during the sampling period was the use of the restroom facilities by employees coming from the nearby Production Building.

The Employee Activity Building has been divided into 3 FAs (Figure 3C.9). The breakdown is based on the construction of interior walls, and the relational proximity of the offices or rooms for ease of sampling.

FA1 is the entrance foyer and conference room in the northwest quadrant. For the zero to 2 m sample, there is a large installed space heater, and the fan blades, motor, fan housing were specifically targeted by USACE for extensive sampling. Thorough coverage of the area also included the vacuuming of the floor, window sills/ledges, top of electrical outlets, conduit, lower wall, and doorways. While attempting to sample above the drop ceiling in FA1, damaged aircell pipe insulation was observed, a presumed asbestos-containing material (PACM). The PACM was in poor condition in localized areas, and to avoid possible contact with the damaged insulation and contamination of the Employee Activity Building, no sampling was conducted above the drop ceiling throughout the entire building (common plenum area). It does appear that there was a sheetrock ceiling in this building that has since been removed. USACE informed Mr. Bates, President of Uretech, of the existence and condition of the PACM. The >2 m sample was still collected in FA1 below the finished ceiling, concentrating on the top of the space heater, ceiling tile grid, bottom of fluorescent lights, top of doorways, and ceiling/wall intersection.

FA2 comprises the south half of the building. The west side of FA2 includes three storage offices and a vault. The vault remained locked and was not sampled. The northern storage area is accessible directly from the conference room, and is separated from the conference room by 7-foot partition walls, below the drop ceiling level of 8 feet. The conference room area allows access to the remainder of the offices via a swinging door connecting to the rear passageway. All remaining offices in FA2 are accessed via the passageway door. East offices in FA2 are a break room and a storage room. The zero to 2 m sample was comprehensive from the floor, window sills, lower wall, shelves in passageway, and under desks. Because of extensive box storage throughout the offices, only about 40% of the surface area of the floor was accessible. Sampling for the >2 m composite was once again limited to areas below the drop ceiling because of the presence of damaged asbestos insulation above the drop ceiling. Areas sampled included the top ledge of partition walls, top of doors, ceiling tile/grid, and upper walls.

FA3 is the northeast quadrant of the building and includes the social room, exercise room, women's restroom, mop room, and men's restroom. Each room can be accessed via swinging doors from

FA1, and the social room and exercise room have a connecting interior doorway. The restrooms and mop room do not interconnect and can be accessed only from FA1. The mop room has a concrete floor (no VFT) and no finished ceiling. Sampling at the zero to 2 m level included the floor (nearly 100% accessible), top of electrical outlets/conduit, pipes, window ledges, and window venetian blinds. For the >2 m level sampling, areas included the suspended ceiling tile/grid, upper walls, window sills, transoms, tops of electrical boxes/conduit, and the underside of light covers. In the men's restroom, there is a missing ceiling tile and visible aircell (PACM) pipe insulation above the drop ceiling, once again damaged in localized areas.

3C.6 FORMER MELTING, ALLOYING, AND SHIPPING BUILDING (Old Mattress Factory)

The Former Melting, Alloying and Shipping Building is located in the eastern portion of the site. The building itself appears to have suffered years of neglect. The dilapidated building is not used by Uretech except for long-term storage of unused parts. The 11,700 square foot (ft^2) brick building has multiple holes in the roof and floors and there is no electricity servicing even minimal lighting. The roof has a large hole, and most of the doors are open to the weather. There is a second floor of 6,000ft^2, and the floor is heavily coated with dirt, debris, and pigeon manure. In addition, there are several 14" diameter core holes in the concrete between the second floor/first floor overhead. The entire second floor is accessible (although covered with dirt and pigeon manure) for survey and sampling purposes, but much of the first floor is scattered with used parts, pallets, or fixed equipment which limits the accessibility of floor space for surveying to approximately 60%. The brick walls and concrete floor and ceiling show extensive pre-existing water damage and some concrete displacement due to expanding (rusting) structural support steel (rebar) in the poured concrete. Because of limited overhead access on the first floor (only along the west wall) due to storage issues, and the inability to transport the lift to the second floor on the inoperable (no electricity) freight elevator, it was determined that overhead structures would not be surveyed.

3C.6.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square grid (40 x 40 inches) was used as the reference system for both the radiological survey and sampling locations. The grid was marked on the floor with the northwest corner of the building serving as Grid A-1. Grids A-S covered the width from west to east, and grids numbers 1-70 covered the length from north to south. In addition, grid was marked from floor level up the wall 40 inches for survey purposes in several areas. This grid system provided reference in three coordinates (x-, y-, and z-axis) with the z-axis referenced in elevation from the floor level up the wall 40 inches.

The sampling grid on the second floor of the building was established in a manner similar to the first floor with grid numbered A-29 representing the northwest corner. Grids A – S covered the width of the floor from west to east and grids numbered 29 – 60 covered the length from north to south. In addition, grid was marked from floor level up the wall 40 inches for survey purposes in several areas.

A total of 1,957 sampling grids were established for the building. In order to complete a 5% survey of the building 98 grids would have needed to be surveyed. Approximately 40% of the first floor remain inaccessible because of tenant product and equipment. A total of 90 floor and 15 wall grids were surveyed for radiological activity.

A total of 20 beryllium wipe samples were collected along with 10 building materials. Building materials were collected based on the building component substrate. In this structure samples of paint, brick, concrete, and foam were collected (Figure 3C.10 and Figure 3C.11).

3C.6.2 Bulk Dust Collection and Sampling

The 11,700 ft^2 building is fragmented into six FAs (Figures 3C.12 and 3C.13. FAs 1-4 are on the lower level, and are separated by open entrance doors. FA5 is bi-level, the interior stairwell adjacent to FA3 and leading to small upstairs offices/bathroom (part of FA5) and ingress to FA6. FA6 is the approximately 6,000 ft2 upper level, which is the open concrete floor located above FA3. There are several core holes in the concrete floor of FA6 open to FA3, so the physical barriers separating each FA is limited.

FA1 comprises the northern-most portion of the building, and appears to be the newest addition to the building. There is a garage door on the north wall to egress through, and the other entrance from the interior is the large door opening (10' wide x 8' high) from FA2. The walls and roof of FA1 appear to be constructed of corrugated sheet metal, and the floor is a raised concrete foundation. Storage of large boxes reduced sample collection of the zero to 2 m sample to the northern perimeter and western third of the space, between the garage door exit and the FA2 access door. Specific sampling included the floor and lower walls. Overhead (>2 m) sampling was also limited to the western third of the area because of hydraulic lift access limitations, and collection areas included the ceiling, top of beams, top of garage door track, and top of lights.

FA2 is the north center portion of the lower level, is also on a raised concrete foundation (as in FA1), and can be accessed through the garage loading dock door on the west wall of FA2, or via the concrete ramp from FA3. In addition to being utilized for product storage in the open floor, this FA includes a restroom and the freight elevator which is closed, inoperable, and inaccessible. The zero to 2 m sample was collected from the floor, bathroom fixtures, and lower walls, and is estimated to be about 65% coverage of the entire FA. At >2 m, the sample was collected mainly from the center of the FA, and the northwest/southwest corners, and included the ceiling, beams, top of lights, inside an old air handler system, top of pipes, and foundation wall/roof overhang intersection.

FA3 is the south center area of the lower level of the building. It can be accessed via a garage door on the west wall, or a swinging metal door on the east wall. The east door is not in normal usage as that side of the building is somewhat lacking in landscape architecture with a field of high grass and a culvert to traverse to reach this door. There is a concrete ramp connecting to FA2; the entire ramp is within FA3. This area has a ground-level concrete foundation floor, much of which is used for what appears to scrap machinery parts. There is a small metal storage shack north of the west garage door which is included as part of FA3. Accessibility limited the zero to 2 m sample to less than 50% coverage including the ramp, floor, lower walls and top of electrical boxes. Elevated coverage was 30-40% using the hydraulic lift, concentrated mainly in the vicinity of the west garage door, and the northeast quadrant. Items sampled included the ceiling, beams, top of lights, inside an air duct, top of pipes, and at the roof/foundation wall intersection.

FA4 is the south side of the lower level, and is separated from FA3 by a swinging door, and may be accessed from the outside via a swinging door on the west wall. There is a large storage tank on the east side of FA4 comprising over half of the FA. A large piece of installed machinery is in the west half of FA, and zero to 2 m sampling was completed on the floor around the tank perimeter, open sections of floor along the south wall, equipment foundations, and lower walls. FA4 could not be accessed by the hydraulic lift as there are no garage doors, and the >2 m sample was collected with the aid of a 12-foot ladder. Specific items sampled from include the beams, pipes, top of doorframes, tank, and installed equipment. Coverage was close to 50% mainly concentrated on the north side perimeter, center area near the tank, and the west half.

FA5 is a small functional area, which includes the interior stairwell adjacent to FA3, and the small office/bathroom on the upper level adjacent to FA6. Because it is a small interior FA protected from the elements and sealed off by swinging exit doors at both levels, dust collection was minimal. As a result, the zero to 2 m sample and the >2 m sample were composited as one sample to ensure that adequate sample material is provided to the laboratory for analysis. The collection came from all surfaces of the FA, such as floors, walls, stairs, cabinet shelves, ceiling, and even the bathroom sink.

FA6 is approximately 6,000 ft^2 of open floor space, but, because of a large hole in the roof, and open access via exterior stairwells on the east and west walls, the floor is heavily coated with dirt, grass debris, pigeon guano, and animal bones. This debris was thick and difficult to penetrate when sampling with a HEPA vacuum, often resulting in filling the bag quickly with large pieces of grass or straw rather than the desired dirt/dust mixture. For this reason, sampling at the zero to 2 m level was concentrated on "cleaner" sections of the floor, windowsills, and the top of electrical boxes. Access to the >2 m sample area was conducted using a 12-foot ladder (not available for lift use due to inoperable freight elevator). The ceiling level is at least 25 feet above the FA6 floor, so sampling was concentrated around the FA perimeter, which allowed access to ledges, upper window framing, and elevated sections of the wall. There is an HVAC platform about 20 feet above ground with a large horizontal surface for possible dust settling, but it was agreed by USACE that this platform could not be accessed by the SAIC crew for sampling purpose.

3C.7 FORMER LABORATORY BUILDING

The Former Laboratory Building is located at the southwest corner of the Luckey site and lies due west of the tractor trailer entrance to the Annex building. The building itself was historically used as a laboratory for the various tenants at the site. The building is approximately 87 feet in length and 47 feet wide and is two stories high. It is divided into two distinct sections of which one was a testing area and the other served as an office of some sort. A small office is also located at the front (north) side of the building. The building components consist of a concrete foundation supporting brick walls. The pitched roof appeared to be constructed of wood supported by a series of metal beams. The inside offices consist of several rooms with VFT over concrete on the first floor, and VFT over wood on the second floor. The ceilings are lay-in 2'x 4' ceiling tile. Most of the doors and windows around the building are damaged and not functioning. On the north side of the building a large garage door is functioning and this is where investigative teams entered the structure.

The open space inside of the building is coated with multiple layers of pigeon guano, and several pigeon families (nesting sites) reside in the building. Uretech utilizes portions of the open space for product storage, although no activity was observed in the building during the on-site investigation. The building also appears to have no utility service.

3C.7.1 Scoping Survey and Bulk Materials Sampling

A 1- meter square grid (40x40 inches) was used as the reference system for both the radiological and survey and sampling locations. The grid was marked on the floor with the north east corner of the building serving as Grid A-1. The smaller northeast side office and the second floor were not included in the survey or sampling because of accessibility issues. Product stored in the building also prevented the inspection of almost half of the floor and ceiling space in the main room. Fourteen grids labeled A through N covered the width of the structure from north to south, and twenty-six grids numbered 1 through 26 covered the length from east to west. In addition, grid was marked from the floor level up the wall 40 inches in several locations. This grid system provided references in three coordinates (x-, y-, and z-axis) with the z-axis referenced in elevation from the floor level.

An estimated total of 364 grids were calculated for the structure. In order to conduct a 5% survey of the structure at least 18 grids were analyzed. The grids were selected based on accessibility of the hydraulic manlift and type and number of elevated structures. Since only two type types of floor materials were present (concrete and floor tile), the floor grids were divided in a manner to sample the materials according to proportions present in the structure. Therefore, some grid locations were used for overhead surveying only and did not project to the floor. The ceiling structures included light fixtures, metal beams, wooded beams, brick, and metal ventilation equipment.

A total of 11 beryllium wipe samples were collected from the building; three from the floor and eight from other ceiling structures.

In addition to the wipe samples, 3 building samples were collected for beryllium analysis. The materials were selected on the basis of age and location. The three materials sampled included paint from a wall, brick from a wall and concrete along a crack in the floor.

3C.7.2 Bulk Dust Collection and Sampling

This brick building of approximately 4,100 ft^2 is divided into three FAs. There is no electrical utility available, and much of the floor in each FA is heavily laden with dirt and debris. Access to the building is through a garage door on the north wall, which permitted access by the hydraulic lift into FA2.

FA1 is comprised of the lower-level offices on the west side of the building. This is approximately 1,000 ft^2 of floor space, VFT over concrete and a metal grid drop ceiling with 2’ x 4’ ceiling tiles. There are four distinct offices within the FA, separated by wooden partition walls approximately 7’ high, below the level of the drop ceiling. The area is accessible via swinging doors from FA2, and a swinging ingress door from outside at the northwest corner of the building. There is a single wooden stairwell also in the northwest corner of the FA, which provides access to FA3. The zero to 2 m sample was collected from the floors, lower walls and top of pipes. An 8-foot ladder was used in the collection of the >2 m sample, and included the ceiling, upper walls, top of partition walls, top of doors, top of lights, and floor joist below FA3.

FA2 is the largest FA, appeared to serve previously as the laboratory testing area, and also includes the small office in the northeast corner of the building. Uretech uses approximately 50% of the large area for product storage with large stacks of metal racks and pallets, often 20’ or higher stacks. The zero to 2 m sample included 100% coverage of the northeast office, and thorough coverage of the open area concentrated mainly around product storage where most of the visible dust and debris had accumulated. There is very little dust in the open aisle areas probably because of forklift traffic when moving the product to the storage areas. For the overhead sample, the hydraulic lift was used because of the height (30’ or more) of the sloped roof/ceiling. Five elevated areas were sampled, and included the ceiling, pipes, lights, wall/window ledges, beams, and the top of a large duct. Attempts to sample the interior of the duct were unsuccessful due to the proximity of the diffusers in relation to product storage.

FA3 is the upper level offices directly above FA1, and is accessible only by the wooden stairwell in the northwest corner of the building. This area is also approximately 1,000 ft^2 of VFT over wood sub-flooring, and there is a drop ceiling (2’ x 4’ tile) which is badly water-damaged, sagging in several areas, in very poor condition. The FA is divided into two offices and a closet near the stairwell landing. The floor and the lower panel wood walls represented the zero to 2 m sample. It should be noted that much of the floor is covered with 1” or more of debris such as straw, dirt, and feathers in most sections. For the elevated sample, access above the ceiling tiles allowed sampling of the top of tiles, top of lights, and upper wall. The main ceiling and joists provided the sampler with limited access because of the height above the drop ceiling, and limitations of an 8-foot ladder.

3C.8 MAINTENANCE OFFICE BUILDING

The Maintenance Building is located at the northwest corner of the Luckey site, and resides due west of the Bulk Storage Building and north of the Production Building. The building itself was historically used as a maintenance and repair shop for activities in the Production Building. The building is approximately 196 feet in length and 50 feet wide and consists of one floor. It is divided into two distinct sections separated by a brick wall. The west area with a concrete floor appears to be the newer of the two sections. A small office area is located in the northeast section of the structure. The building components consist of a concrete foundation supporting brick walls. The floor in the west section is concrete while the floor in the east section is covered with treated wooden brick approximately 5 x 9 x 4 inches in size. Over 10,000 of these bricks were present in the east section of the building. The bricks rest on a concrete sub-floor. The pitched roof appeared to be constructed of wood supported by a series of metal beams. The inside offices consist of several rooms with VFT over what is believed to be concrete. The ceilings of the office areas appear to be constructed of plywood and drywall. Most of the doors and windows around the building are damaged but functioning. The two garage doors on the south side of the building were used to enter the structure.

The open space inside of the building is spotted with bird guano and some dirt. Uretech utilizes portions of the open space for product and machinery storage. There is also a boat stored in the west section. Some employee activity was observed in the building during the on-site investigation. The building appears to have limited utility service, electrical only.

3C.8.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square grid (40x40 inches) was used as the reference system for both the radiological survey and sampling locations. The grid was marked on the floor with the northwest corner of the building serving as Grid A-1. Product stored in the building prevented the inspection of almost half of the floor and ceiling space in the building. Fifteen grids labeled A through O covered the width of the structure from north to south, and fifty-nine grids numbered 1 through 59 covered the length of the structure from west to east. In addition, grid was marked from the floor level up the wall 40 inches in several locations. This grid system provided references in three coordinates (x-, y-, and z-axis) with the z-axis referenced in elevation from the floor level.

An estimated total of 885 grids were calculated for the structure. In order to conduct a 5% survey of the structure, at least 45 grids were analyzed. The grids were selected based on accessibility of the hydraulic manlift and type and number of elevated structures. Since only two type types of floor materials were present (concrete and wooden floor bricks), the floor grids were divided in a manner to sample the materials according to proportions present in the structure. The ceiling structures included light fixtures, metal beams, wooded beams, brick, metal ventilation equipment, and overhead doors.

A total of 26 beryllium wipe samples were collected from the building: 10 from the floor and 16 from other ceiling structures (Figure 3C.15).

In addition to the wipe samples, six building material samples were collected for beryllium analysis. The materials were selected on the basis of age and location. The three types of materials sampled included paint from a wall/overhead beams, wall and floor brick, and concrete along a floor crack.

3C.8.2 Bulk Dust Collection and Sampling

This 9,800 ft^2 building is divided into four FAs (Figure 3C.10). The breakdown of each FA is patterned on existing interior wall construction, although the unsecured condition of most doors would allow airborne dust to migrate fairly easily through openings or damaged physical barriers. FA1 and FA2 comprise the smaller west end of the Maintenance Building, and the concrete floor serves as a pallet and equipment storage area. The zero to 2 m sample in each FA was fairly comprehensive and included the floor, walls, window ledges, and horizontal surfaces of stored material. The >2 m samples of FA1 and FA2, because of the amount of material stored and necessity to use a hydraulic lift on the relatively high ceiling, resulted in approximately 50% accessibility in each area. Sampling was limited to the horizontal lips of beams, top of garage doors and lighting fixtures due to the limited amount of overhead systems in these areas.

FA3 is the largest of the 4 FAs, and includes the east half of the building where the concrete foundation is covered with treated wooden brick. Once again, there is a large amount of equipment stored throughout this FA, limiting overhead access with the hydraulic lift to approximately 25% of the entire floor area. The entire north half of FA3 was deemed inaccessible for overhead sampling. Elevated (overhead) samples were collected from I-beam surfaces, top of light fixtures, the center peak of the pitched roof, bottom of the roof, and pipes. The zero to 2 m sample also had access issues involved due to the close proximity of the palletized material. Extensive vacuuming was conducted in nine selected areas, and included lower walls, under equipment where possible, and open floor areas concentrated on sections where the treated brick had worked loose. The distribution of the nine areas gave credible coverage of FA3 with only the southwest corner not sampled.

FA4, the smallest of the four FAs, contains the offices in the northeast corner of the building. The offices, although not used for storage and fully accessible, have fallen into disrepair from lack of service. The zero to 2 m sample was collected from the floor (vinyl floor tile), lower walls, windowsills, and cabinet shelves. The >2 m sample included the top of beams, top of lights, stairs to upper level, floor of the office roof, and crevices between the roof/exterior wall intersection. There is a small air handling unit no longer in service on the west side of FA4 upper level (office roof), and a separate composite sample was collected from the interior of this unit only.

3C.9 BULK STORAGE BUILDING (Tank Building)

The Bulk Storage Building is located at the north side of the Luckey site and lies due east of the Maintenance Building, and north of the center of the Production Building. The building itself was historically used as a bulk material storage for the various tenants at the site. The building is approximately 30 feet in length and 50 feet wide and is single-level. It is divided into two distinct sections, one of which is used for tank storage, and the other which serves as scrap storage. The building components consist of a concrete foundation supporting brick walls. The pitched roof appeared to be constructed of wood supported by a series of metal beams. A cinder block wall measuring 3 feet high is located in the middle of the building. This wall presumably forms a dike to contain chemical spills. Most of the doors and windows around the building are damaged and not functioning.

The open space inside of the building is coated with dirt and debris. Uretech is utilizing almost all portions of the open space for scrap storage. No activity in the building was observed during the on-site investigation. The building appears to have some utility service.

3C.9.1 Scoping Survey and Bulk Materials Sampling

A 1- meter square grid (40x40 inches) was used as the reference system for both the radiological and survey and sampling locations. The grid was marked on the floor with the northeast corner of the building serving as Grid A-1. Excessive storage and the chemical tanks stored in the building prevented the inspection of almost 90 percent of the floor space in the building. No elevated work could be completed in the building because we could not find an area to bring in the manlifts. Fifteen grids labeled A through O covered the width of the structure from north to south, and ten grids numbered 1 through 10 covered the length from east to west. In addition, grid was marked from the floor level up the wall 40 inches in two locations. This grid system provided references in three coordinates (x-, y-, and z-axis) with the z-axis referenced in elevation from the floor level.

An estimated total of 150 grids were calculated for the structure. In order to conduct a 5% survey of the structure, at least 8 grids needed to be scanned. Five floor grids and three wall locations were selected for survey.

A total of 4 wipe samples for beryllium were collected from the building, one from a tank ledge, one from the top of the dike wall, and two from the floor (Figure 3C.16).

In addition to the wipe samples, one building material sample was collected for beryllium analysis. The material was selected on the basis of age and location. The composite material sample included paint from a wall, wall brick, and concrete along a crack in the floor at the base of the wall.

3C.9.2 Bulk Dust Collection and Sampling

This 1,500 ft^2 building consists of one FA as it has no interior wall construction (Figure 3C.16). There is a 3-foot high cinder block wall in the east-west direction separating the two tanks in the south half of the building from the north half of the building. This wall is presumably in place to serve as a dike in the event of a chemical spill from the tanks. The wall limited access by the hydraulic lift to much of the south side of the building, thus much of the >2 m sample was collected on the north side. The lift base was extended to maximum length, which allowed some sampling on the top of the east tank. Overhead sample collection areas included the top of beams, top of lights, roof/beam intersection crevices, ceiling surface, top of roll-up garage door/tracking, and the top of one tank. Sampling at the zero to 2 m level was extensive, resulting in approximately 80% random coverage on such surfaces as the floor, lower wall, under both tanks, and on piping systems.

3C.10 GUARD HOUSE

The guard house building is located at the western side of the Luckey site on the main entrance drive into the facility. The building is used as the office for the security guards and is the sign in point for all visitors to Uretech. The building is approximately 14 feet wide by 20 feet long and is a single level with a drop tile ceiling. Security officers are on site only on weekends, and their duties include gate operation, and visitor/delivery truck registration. Main entrance to the Guard House (outside the gate) is a swinging door on the north side of the building, and it is a 1-room facility with a small closet at the southwest corner of the building. A second exit door is on the east wall, and allows the officer access to the compound inside the sliding gate. The floor is 12” x 12” VFT over concrete, walls are panel wood, and the finished ceiling is 1’ x 1’ cellulose ceiling tiles. The ceiling is 87” above floor level in the east quarter over the guard desk, and the remainder of the ceiling (about 75%) to the west is 100” above floor level. There is a 2’ x 2’ wooden access hatch at each level of the finished ceiling, and most of the area above the ceiling is insulated with fiberglass/mineral wool.

3C.10.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square grid (40” x 40”) was established as the reference for both the radiological survey and wipe sampling locations. The A-1 reference grid box was initiated in the southwest corner of the 14’ x 20’ wooden building. A small closet in the southwest corner behind a locked swinging door was not included in the grid system for accessibility reasons. Grids A-F are in the west-to-east direction, and Grids 1-5 are in the south-to-north direction. The grid row 5 is only 8” wide to the north wall of the structure. Each of the ceiling sections has access hatches, and the hatches are quadripartite by the junction of four grid boxes: West hatch-Grid boxes B-2, B-3, C-2, C-3; East hatch-Grid boxes E-2, E-3, F-2, F-3.

There are a total of 30 grid boxes in the guardhouse. The 5% cursory swipe sampling required at least 2 samples collected from the building, however, because of the two separate and isolated sections of the house (above and below the ceiling) it was determined that two samples would be collected from both the floor and ceiling level. Specific locations are as follows: floor (Grid B-3), floor (Grid E-1), above 100” ceiling (Grids B-3/C-3), above 87” ceiling (Grids E/F-2/3) (Figure 3C.17).

3C.10.2 Bulk Dust Collection and Sampling

This 280 ft^2 building is comprised of one FA (Figure 3C.17). Sampling in the zero to 2 m area included thorough coverage of the floor, lifting the weathered rubber mats, under the guard desk and on shelves, lower walls, and window sills. Most of the dust had gathered in corners and around walls, although sampling was also conducted on the cleaner middle section of the floor. The >2 m sample was collected from the bottom of ceiling tiles, upper walls, and above the finished ceiling by lifting each of the two hatches. Lifting the hatches still provided limited coverage because reach was limited by roof construction, and other than the top of the hatch, much of the upper ceiling was insulated with layers of fiberglass batt.

3C.11 BUILDING HOUSING WEST PRODUCTION WELL

The size of this building is approximately 11’ x 26’, and it has an attached chemical storage shack on the east size which extends out 7’ x 8’. Entrance to the building is at a swinging door on the southeast side. As you enter, there is a concrete floor foundation which steps up to a raised water pump area, a step of about 8”. To the east of the raised pump area is the chemical storage shed housing several plastic carboys of water treatment chemicals. Directly west of the front entrance is a sump area about 15’ below the concrete floor, which is protected by a guardrail and accessible via an installed metal ladder. The cistern opening extends out from the west wall about 4’ to the ladder and guardrail. In the north half of the building is a large cylindrical storage tank, 10’-12’ from bottom to top, with a wooden ladder and platform to access the top of the tank, presumably for routine maintenance. Sloping from north to south, the plywood roof is supported by brick walls.

3C.11.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square grid (40” x 40”) was used as the reference for both the radiological survey and wipe sample locations. The A-1 grid box was initiated in the southwest corner of the building and is positioned entirely in the sump. The grid lettering is from A to E (west to east), and the grid numbering is from 1 to 5 (south to north). Grid 5 row is a fractional grid row, about a 7” portion only south of the tank area of the building. Because of the size of the tank and accessibility issues to collect wipe samples, the tank area was not included in the grid system for the Building Housing West Production Well. The A-grid boxes (floor level) are in the sump area and not accessible because of confined space entry requirements. The sump area extends 48” from the west wall to the raised concrete floor, so 8” of the B-

grid boxes also fall into the sump pit. Chemical storage east of the main pump area includes grids D/E-2/3/4, although the only full grid in this area is E-3.

There is a total of 23 grids (whole or fractional) within the building structure. Based on a 5% survey in all secondary smaller buildings for the site, and assuming that all of the 23 grids are physically accessible to the sampler (including the sump floor, only precluded due to time constraints of confined space entry), a total of two grid boxes were sampled. This included a wipe sample from the concrete floor (Grid C-2) and the top of a beam or rafter (Grid A-5) (Figure 3C.18).

3C.11.2 Bulk Dust Collection and Sampling

This 300 ft^2 building has one FA (Figure 3C.18). Although slightly larger than some of the other ancillary buildings on the compound, and having several defined areas, it has been designated as a one FA building because the sampling space is fairly limited in each section (tank, chemical storage, raised pump). The cistern (sump) area was not sampled per the USACE manager because of the safety requirements of confined space entry, which would have delayed sampling progress significantly. At zero to 2 m level, various sampled surfaces included the floor, lower walls, top of tank, top of electrical boxes, top of pipes, water pumps, chemical storage shelves, and window ledges. Elevated areas were somewhat limited to three areas with a ladder such as the ceiling, top of pipes, upper walls, and roof/external wall intersection. Due to the size and positioning of the tank, vacuuming was almost exclusively conducted in the south and east sections of the building.

3C.12 BUILDING HOUSING WATER PUMP AND TANK

This building is located on the north side of the compound, adjacent to the west production well building and due east of the maintenance building. It is 31’ x 18’ and houses the main fire pump, associated piping, an emergency diesel generator, and a small storage tank in the southeast corner. The floor is concrete, and there is a shallow reservoir (4”-6” depth) covered by metal grates under the generator which serves as a catch basin in the event of a fuel spill. Cinder block walls serve as the load-bearing walls, and the roof is sloping, supported by small metal trusses in the ceiling area. The building is accessible through swinging double doors on the east side. There is minimal product storage on the north side, old lighting systems and outdated equipment.

3C.12.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square (40” x 40”) grid was established for this cinder block structure measuring approximately 31’ x 18’. Once again, the reference A-1 grid box is established in the southwest corner, and Grids A-J are in the south-to-north direction, while Grids 1-6 are in the west-to-east direction. Grid row J is about 10” wide to the north wall of the Building Housing Water Pump and Tank, and grid row 6 is about one-half grid (20”) width to the east wall. An emergency diesel generator is installed in the area comprises Grids B/C-2/3/4, and a small storage tank on stanchions is in Grids A/B/C-5/6. The generator has an overflow sump below grade of the concrete floor for the collection of spilled liquids. Water piping is also installed, running parallel to the south and west walls. Double swinging entrance doors are on the east center side of the building.

There are a total of 60 grids in the building, and with a 5% cursory survey, a minimum of 3 wipe samples were to be collected on the various surfaces of the structure. Because of the variety of available sampling surfaces and 100% accessibility of these surfaces, a total of 4 wipe samples were collected. Specific surfaces include the top of the tank (Grid B-6), top of the ceiling –installed heater unit (Grid E-1), in the overflow trench (Grid D-5), and from the concrete floor (Grid G-1). Locations were chosen

randomly to represent different dust-collecting surfaces throughout the building; 100-cm^2 wipe samples within the specific grids were biased toward areas of higher visible dust (Figure 3C.19).

3C.12.2 Bulk Dust Collection and Sampling

This relatively small (560 ft^2) open building consists of only one FA (Figure 3C.19).. The zero to 2 m sample focused on the floor under the tank, in the drainage reservoir, generator foundation, and top of the fire main piping. Because the open floor area was relatively dust-free, and in order to collect adequate material, much of the vacuuming had to be concentrated on the areas of visible dirt and debris. To collect the >2 m sample, an 8-foot ladder was utilized, and six areas were chosen at random and included a sampling of all installed items such as the ceiling, top of pipes, space heater near the west wall, beams/trusses, and upper walls.

3C.13 BUILDING HOUSING EAST PRODUCTION WELL

This 6' x 7' wood structure serves as a weather protection for the east protection well and associated piping. The roof is sloped from east to west and constructed of plywood, and the west exterior wall is no longer in place. The entrance door is at the northeast corner of the structure, and the floor is concrete.

3C.13.1 Scoping Survey and Bulk Materials Sampling

A 1-meter square (40" x 40") grid was established for the Building Housing East Production Well. This square wooden hut is only 87" x 70" in floor area, and the southwest corner is used as the A-1 reference grid. The C-grid row along the north wall perimeter is only a 7" wide grid row from south to north, and Grid row 2 is 30" wide from west to east. The entrance door is at the east wall in the northeast corner of the building. Installed equipment on the concrete floor includes the water pump and associated distribution piping.

Of the 6 total grid boxes in this small structure loosely referred to as a building, only 2 grid boxes are a full 40" x 40". Over 80% of the concrete floor have standing water due to a steady leak from a large water pipe, and only the floor of Grid B-2 is available for sampling purposes. Despite the constraints, the 5% minimum survey requirement was met as one sample is required for structures of 20 or less grid boxes (Figure 3C.20).

3C.13.2 Bulk Dust Collection and Sampling

At the time of the planned sampling, water was leaking steadily from the piping and 80-90% of the floor was covered with water. These problems were demonstrated to the USACE representative, and it was determined that because of water on the floor, minimal visible debris even in elevated horizontal areas, and relatively small size of the structure, that bulk dust sampling would be precluded.

3C.14 SEWAGE DISPOSAL SYSTEM PUMP HOUSE

The Sewage Disposal System Pump House is the northeastern-most building on the compound, located directly north of the Former Melting, Alloying, and Shipping Building. This 8' x 11' below-grade cinder block structure has a confined space entry warning posted at the entrance door, but through discussions with the USACE representatives, it was determined that the confined space was a reference to the below-ground sewage pit as opposed to the main pump house area. The entrance door is at the southwest corner of the structure, with 3-4 concrete steps down to the door. The concrete floor is covered

entirely with sections of metal grate. A 3' x 3' sewage pit access hole is on the north center side, and this access is also covered with an unsteady metal grate. There is a 6-foot folding ladder with a rope attached that appears to serve as the means for access to the pit; no installed ladder is readily apparent. The roof is a sloping wooden roof supported by common wood rafters.

3C.14.1 Scoping Survey and Bulk Materials Sampling

A 1-meter (40" x 40") square grid was established in this relatively small below-grade structure. Reference grid A-1 is at the southwest corner of the 8' x 11' Sewage Disposal System Pump House. Grids A-D are in the west-to-east direction, and grid row D is about 15" in width along the east wall. Grids 1-3 are south-to-north, and grid row 3 is 16" wide to the north wall. Ingress to the sewage pump house is through a swinging door in the southeast portion of the building, at the bottom of several concrete steps serving the below-grade structure.

With a total of 12 grids, only one wipe sample is needed to meet the 5% requirement, however, because of the visible dust at both floor and upper levels, it was determined that two wipe samples would be collected. One sample was collected from the floor (Grid B-2) after removing the section of metal grate to wipe the poured concrete. A second sample was collected from the ledge of the cinder block wall in Grid D-3, an elevation of 9.5' above floor level (Figure 3C.21).

3C.14.2 Bulk Dust Collection and Sampling

A single FA comprises the Sewage Pump House as determined by size and function of the structure (Figure 3C.21). For the zero to 2 m composite sample, metal grating was removed to provide access to the concrete floor, where much of the debris has settled over time. In addition to sampling the floor, lower wall areas, window sills, and installed equipment were all sampled. The >2 m sample was collected from the upper walls, top of window frames, ceiling, top of electrical boxes and associated conduit, and top plate area (intersection of load-bearing cinder block wall and roof.

3C.15 SHACK

This 8' x 10' neglected structure does not appear to have a function other than serving as a collection area for twigs, grasses, dirt, and fecal matter. The shack is located due north of the east side of the production building in an area of unmown grass. It is constructed entirely of wood and the pitched roof slants from north to south. The entrance door on the southeast wall is missing, windows were broken and there is a hole in the west wall, providing a large amount of natural ventilation. The floor has several large holes, and is rickety at best in the sections that have not broken through.

3C.15.1 Scoping Survey and Bulk Materials Sampling

A 1-meter (40" x 40") square grid was established for this small wooden structure unprotected from the elements. Reference grid A-1 is in the southwest corner of the structure referred to only as "The Shack". The total internal floor area is 90" x 124", and it is generally accessible except for several sections where the plywood floor has rotted through exposing the ground. Grids A-C are in a south-to-north alignment, and Grids 1-4 are in an east-to-west alignment. Grid row C is fractional, only about 10" wide to the north wall of the shack; grid row 4 is nearly non-existent, only 4" of grid box to the east wall. Entrance to the Shack is via the doorway on the east wall in the southeast corner.

A total of 12 grids comprise the Shack, and with open windows and doorways, the inadequate floor structure is the major collecting point for much of the wind-blown dirt and debris. Because of the lack of function of this dilapidated wooden structure, it was determined that one wipe sample from the

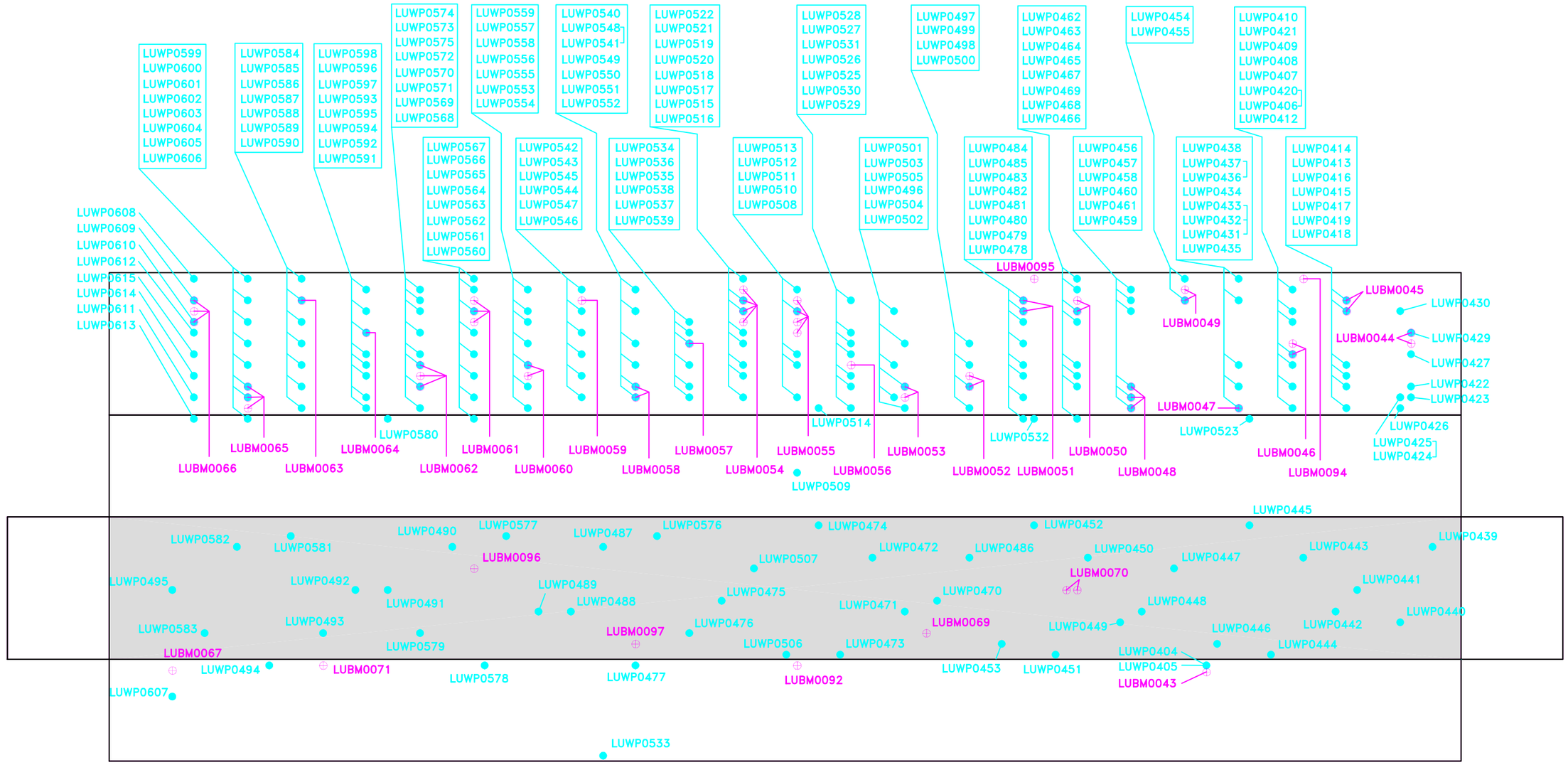
floor is adequate to represent the homogeneity of the building. This sample was collected at a biased area of heavy debris on the floor (Grid B-2) (Figure 3C.22).

3C.15.2 Bulk Dust Collection and Sampling

One composite bulk dust sample was collected from the shack (Figure 3C.22). Most of the sampling was concentrated on the debris-laden floor and horizontal surfaces of the top plate and window ledges. Vacuuming was completed on wall surfaces, which consisted primarily of cobwebs and dead insects, to ensure random sample distribution.

APPENDIX 3C: LIST OF FIGURES

Figure 3C.1. Annex Building Material and Swipe Sample Locations
Figure 3C.2. Annex Building Functional Area Locations
Figure 3C.3. Production Building – First Floor Building Material and Swipe Sample Locations
Figure 3C.4. Production Building – Second Floor Building Material and Swipe Sample Locations
Figure 3C.5. Production Building – First Floor Functional Area Locations
Figure 3C.6. Production Building – Second Floor Functional Area Locations
Figure 3C.7. Main Office Building Swipe Sample Locations
Figure 3C.8. Employee Activity Building Swipe Sample Locations
Figure 3C.9. Employee Activity Functional Area Locations
Figure 3C.10. Former Melting, Alloying, and Shipping Building – First Floor Building Material and Swipe Sample Locations
Figure 3C.11. Former Melting, Alloying, and Shipping Building – Second Floor Building Material and Swipe Sample Locations
Figure 3C.12. Former Melting, Alloying, and Shipping Building – First Floor Functional Area Locations
Figure 3C.13. Former Melting, Alloying, and Shipping Building – Second Floor Functional Area Locations
Figure 3C.14. Former Laboratory Building – Building Material, Swipe Locations, and Functional Areas
Figure 3C.15. Maintenance Office – Building Material, Swipe Locations, and Functional Areas
Figure 3C.16. Bulk Storage Building – Building Material, Swipe Locations, and Functional Areas
Figure 3C.17. Guard House Building – Swipe Sample Locations
Figure 3C.18. West Well Building – Swipe Sample Locations
Figure 3C.19. Water Pump and Tank Building – Swipe Sample Locations and Functional Areas
Figure 3C.20. East Well Building – Swipe Sample Location and Functional Areas
Figure 3C.21. Sewage Disposal System Pump House Building – Swipe Sample Locations
Figure 3C.22. Shack – Swipe Sample Location and Functional Area



BUILDING OUTLINE

FLOOR AREA

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

5 0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Annex Building
Building Material and Swipe Sample Locations

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-12-00	AS SHOWN	04-1748-801	3C.1

NAME: S:\LUCKEY\C041748\801\RIRPT_BUILDING\OUTANNEX_MTR.DWG DATE: APR 10, 2000 TIME: 6:52 PM PCP: S:\PCP\FULLCOLR.PCP

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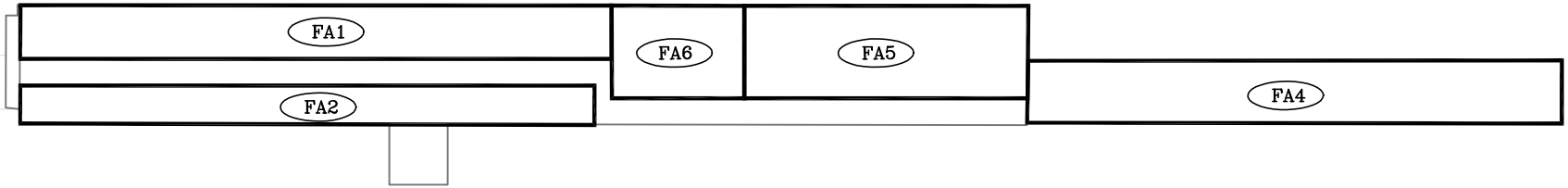

NOTE: FUNCTIONAL AREA 3
CONSISTS OF THE AISLES

BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

N
True
North

11 0 11 22
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Annex Building
Functional Area Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-13-00	AS SHOWN	04-1748-801	3C.2

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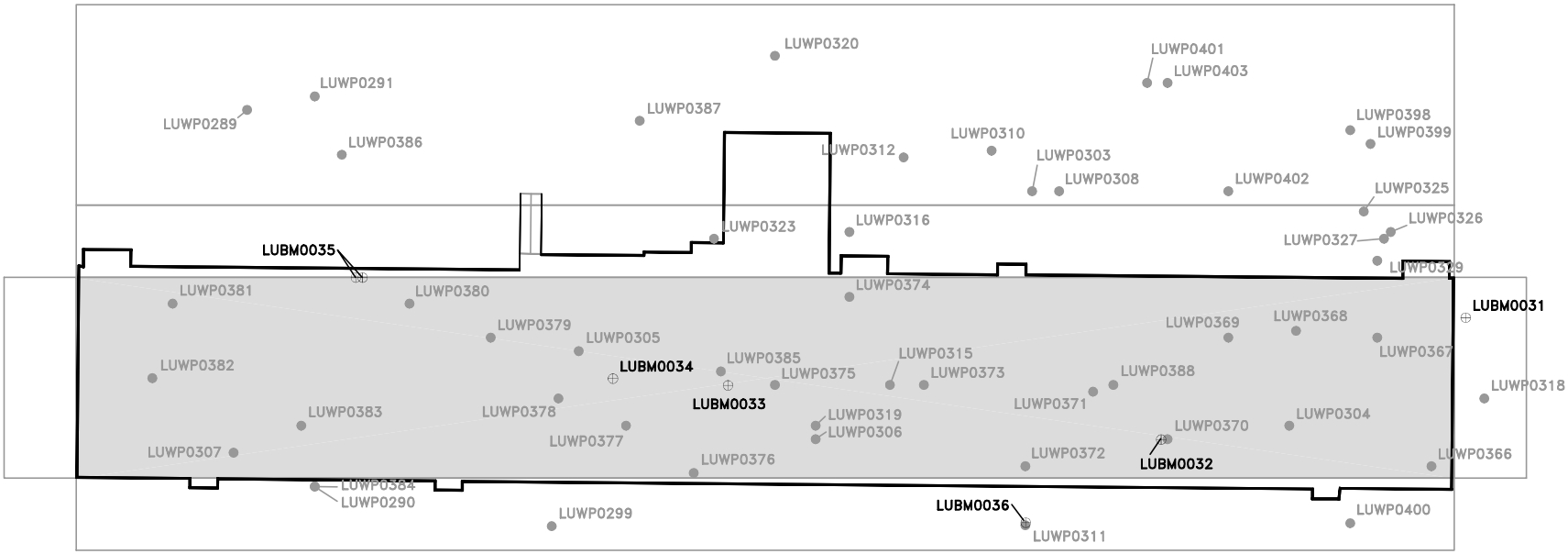

BUILDING OUTLINE

FLOOR AREA

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

13 0 13 26
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Production Building–First Floor
Building Material and Swipe Sample Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-12-00	AS SHOWN	04-1748-801	3C.3

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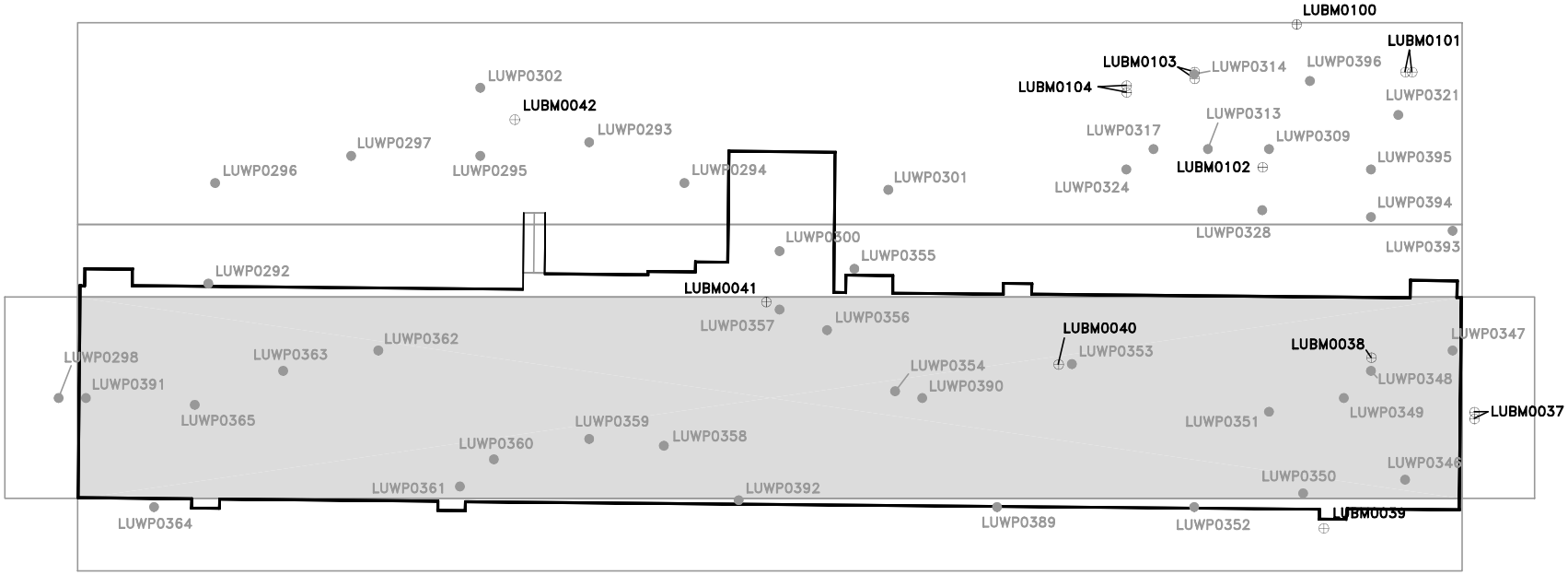

BUILDING OUTLINE

FLOOR AREA

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

13 0 13 26
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Production Building–Second Floor
Building Material and Swipe Sample Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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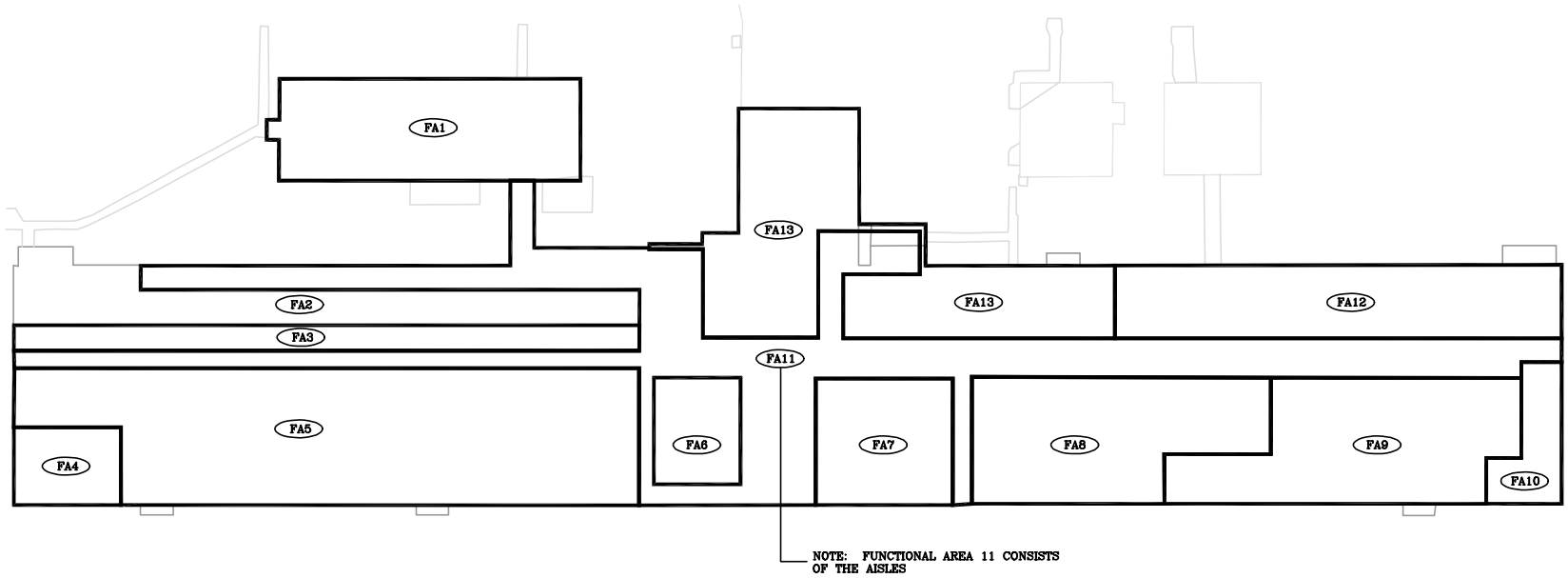

BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

N
True North

12 0 12 24
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Production Building–First Floor
Functional Area Locations

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01–18–00	AS SHOWN	04–1748–801	3C.5

NAME: S:\LUCKEY\C041748\801\RIRPT_BUILD-FUNCTPRDD-UP-MTR.DWG DATE: APR 17, 2000 TIME: 6:13 PM PCP: S:\PCP\GREY1.PCP

NOTE: FUNCTIONAL AREA 15
CONSISTS OF THE AISLES

BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

N
True North

12 0 12 24
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Production Building–Second Floor
Functional Area Locations

SAIC. Science Applications International Corporation Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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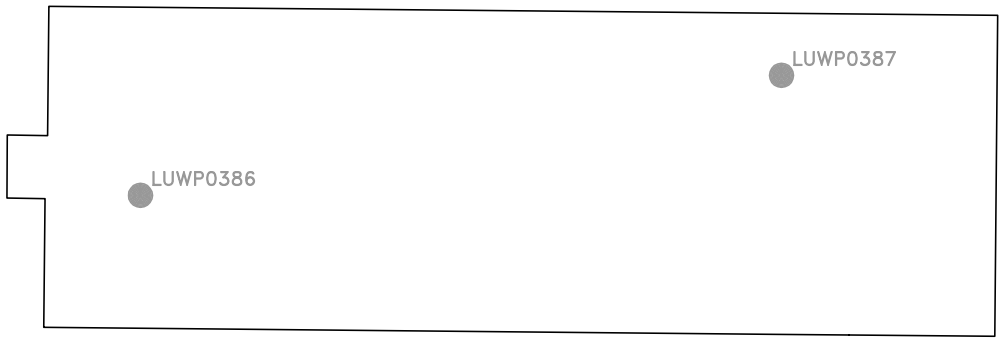

BUILDING OUTLINE

SWIPE SAMPLE

N
True North

4 0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Main Office Building
Swipe Sample Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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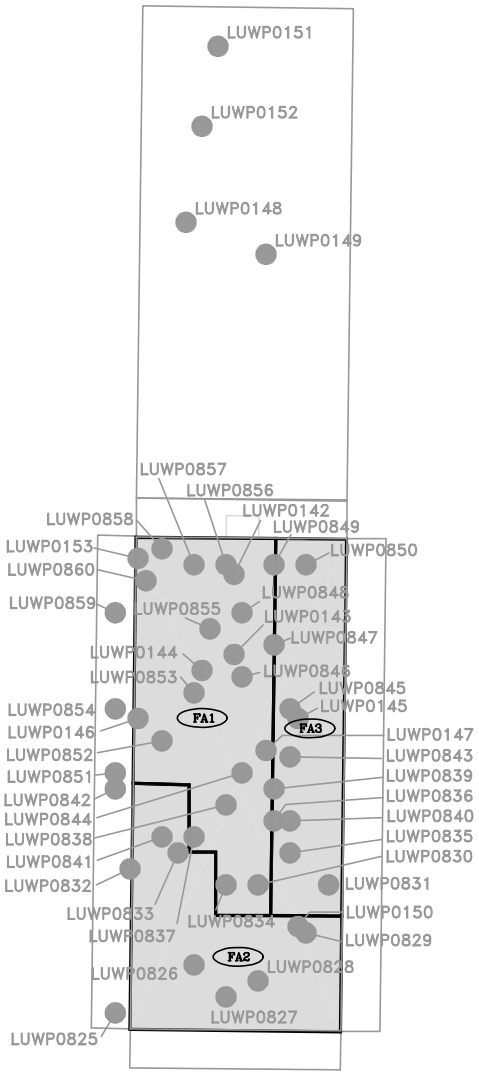

BUILDING OUTLINE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

0 6 12
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Employee Activity Building
Swipe Sample Locations

SAIC. Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-28-00	AS SHOWN	04-1748-801	3C.8

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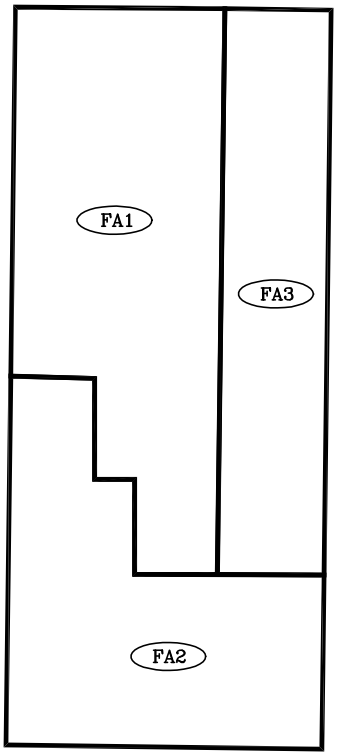

FUNCTIONAL AREA OUTLINE

N
True North

0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Employee Activity Building
Functional Area Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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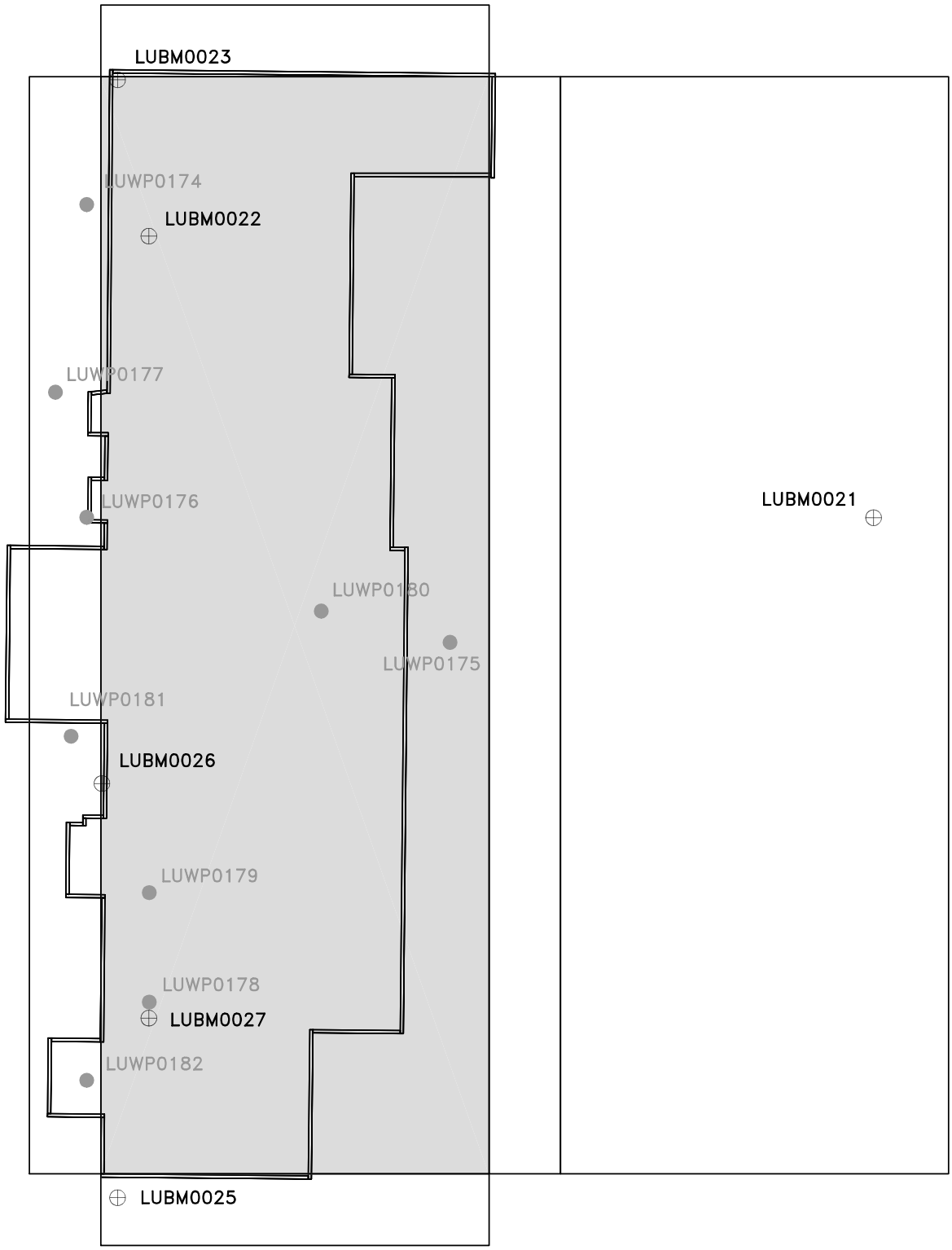

BUILDING OUTLINE

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N True North

0 5 10 METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Former Melting, Alloying, and Shipping Building–First Floor
Building Material and Swipe Sample Locations

SAIC. Science Applications International Corporation Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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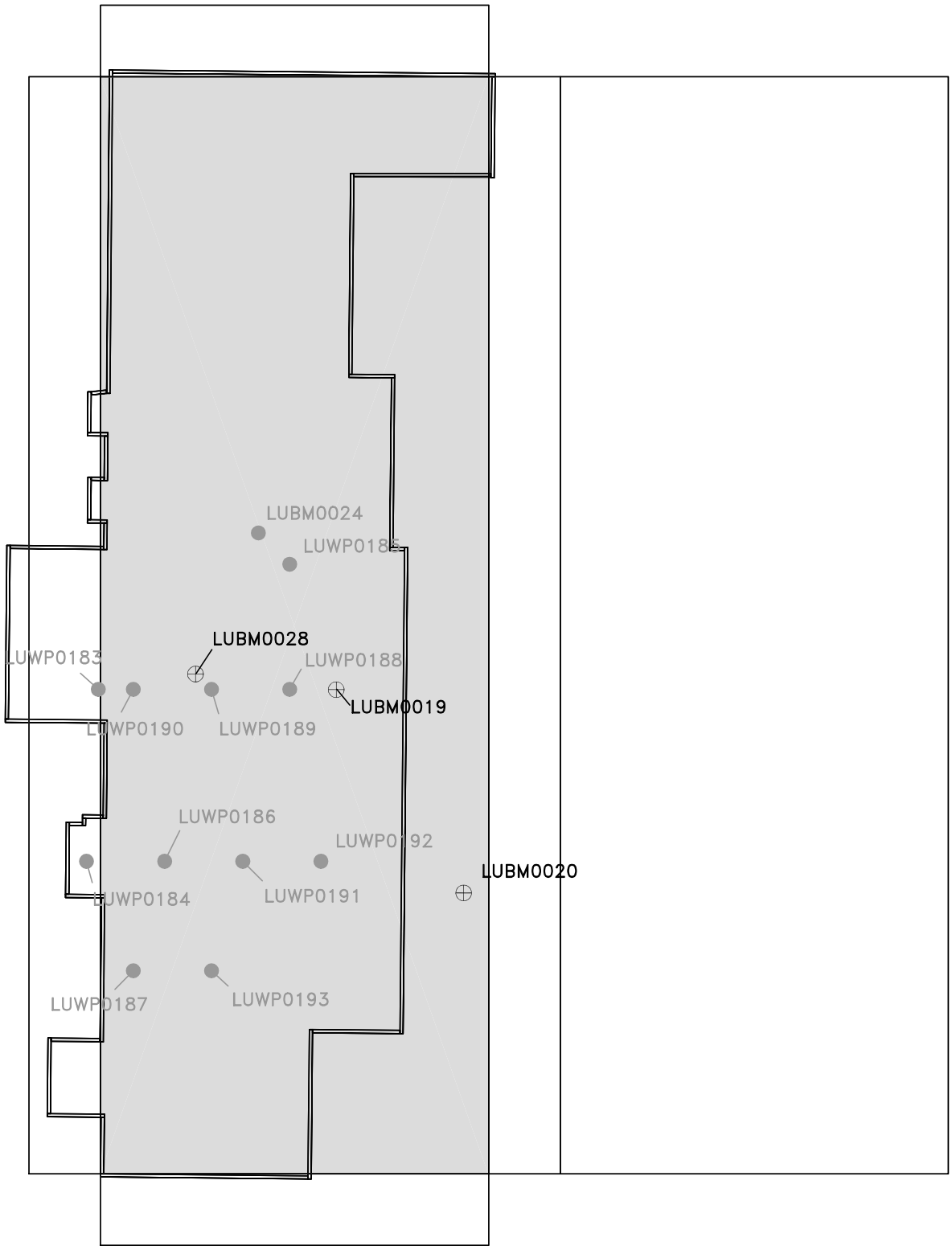


BUILDING OUTLINE

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

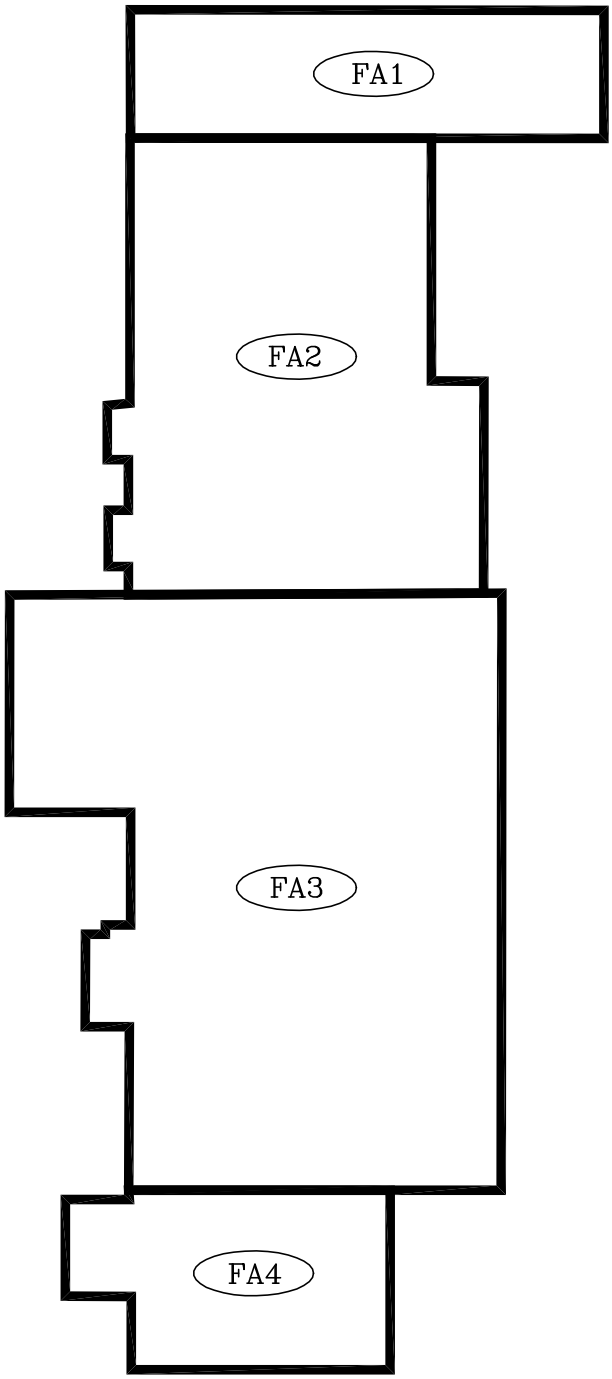
LUCKEY SITE
RI REPORT

Former Melting, Alloying, and Shipping Building—Second Floor Building Material and Swipe Sample Locations

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-12-00	AS SHOWN	04-1748-801	3C.11

NAME: S:\LUCKEY\C041748\801\RIRPT_BUILDBLDWOUTSHIP-REC-UP_MTR.DWG DATE: APR 13, 2000 TIME: 12:31 PM PCP: S:\PCP\GREY1.PCP



BUILDING OUTLINE

FUNCTIONAL AREA

N
True North

0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Former Melting, Alloying, and Shipping Building
First Floor Functional Area Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-13-00	AS SHOWN	04-1748-801	3C.12

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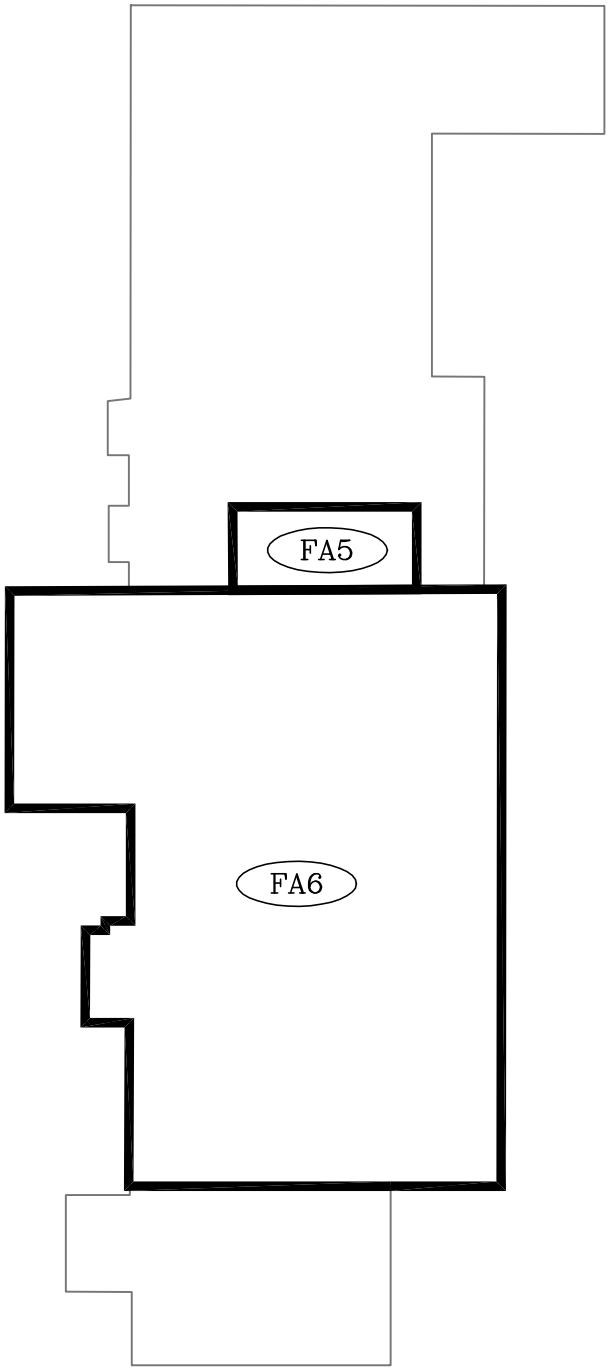

BUILDING OUTLINE

FUNCTIONAL AREA

N
True North

0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Former Melting, Alloying, and Shipping Building
Second Floor Functional Area Locations

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-13-00	AS SHOWN	04-1748-801	3C.13

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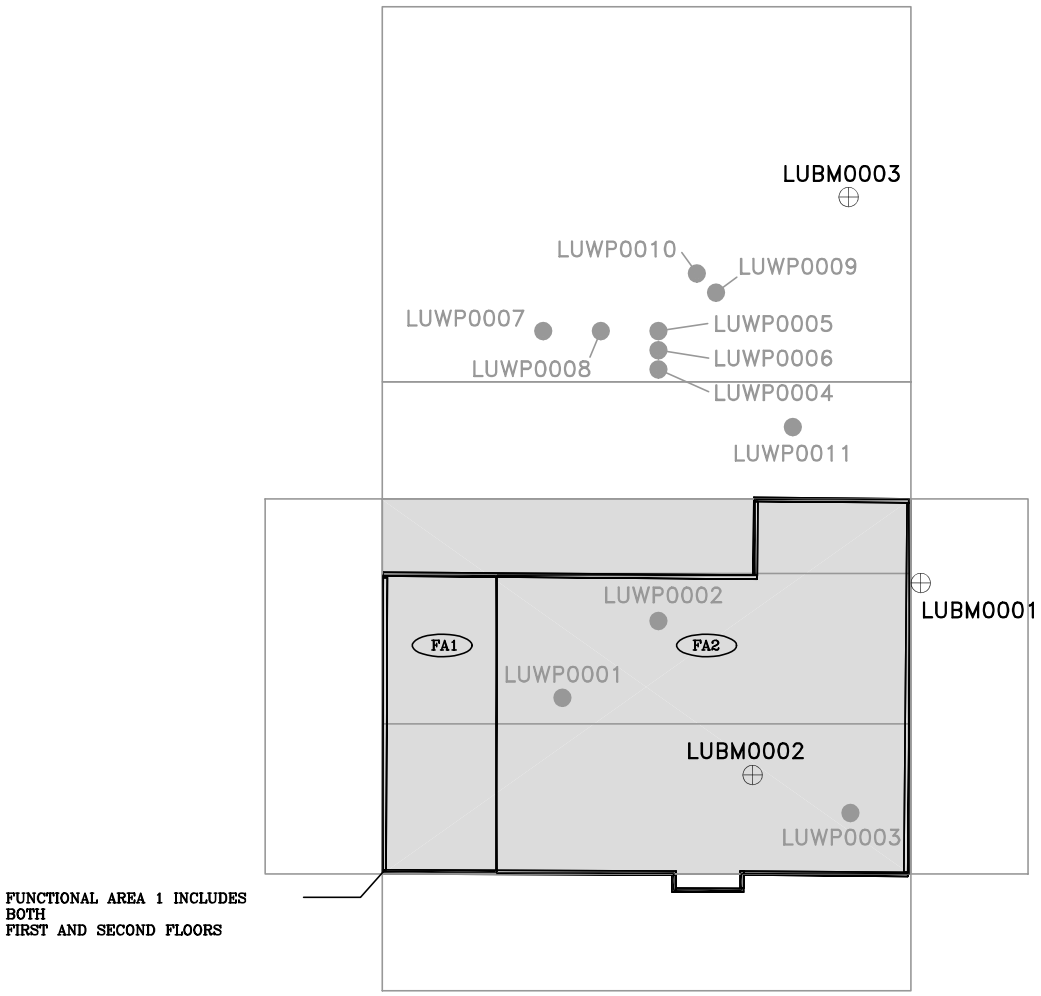

BUILDING OUTLINE

FLOOR AREA

FUNCTIONAL AREA OUTLINE

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Former Laboratory Building
Building Material, Swipe Locations, and Functional Areas

SAIC Science Applications International Corporation Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-11-00	AS SHOWN	04-1748-801	3C.14

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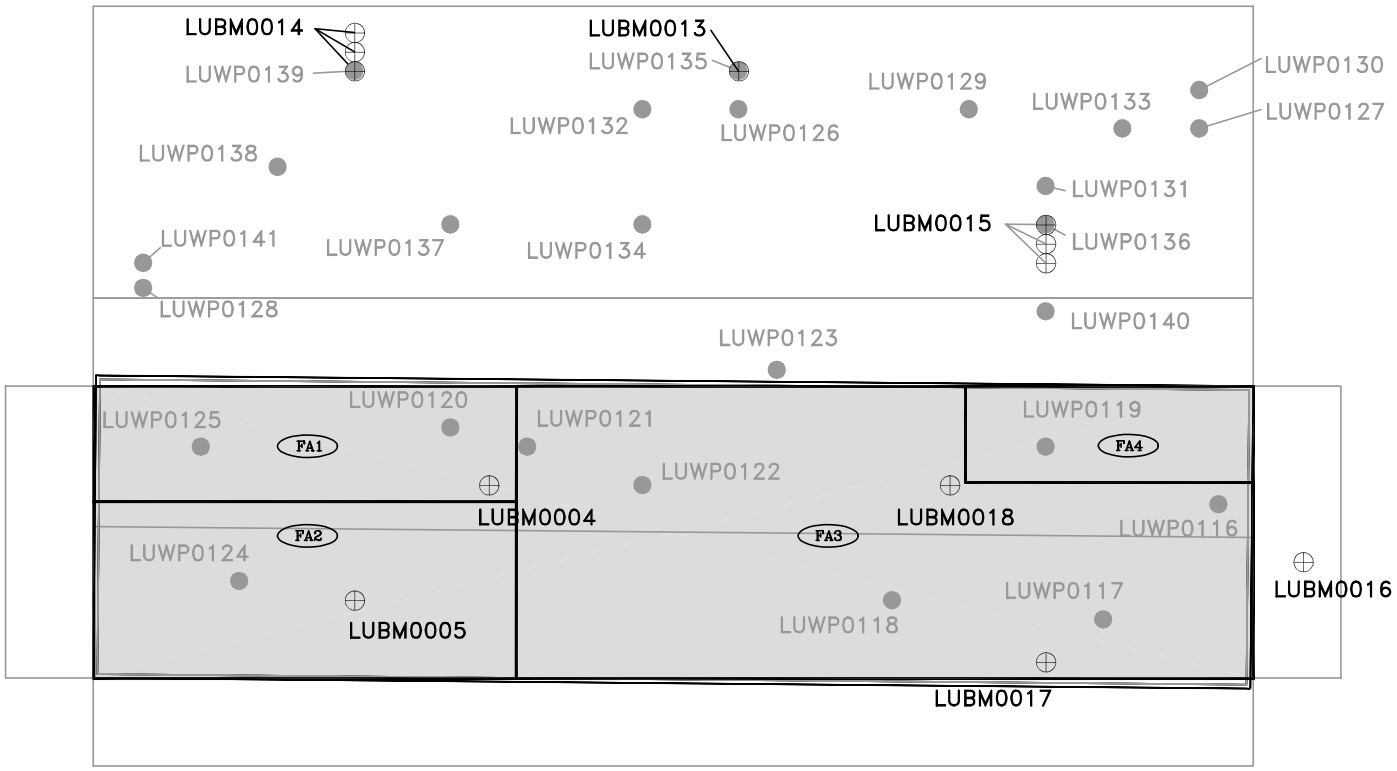

BUILDING OUTLINE

FLOOR AREA

FUNCTIONAL AREA OUTLINE

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

5 0 5 10
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Maintenance Office Building
Building Material, Swipe Locations, and Functional Areas

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-11-00	AS SHOWN	04-1748-801	3C.15

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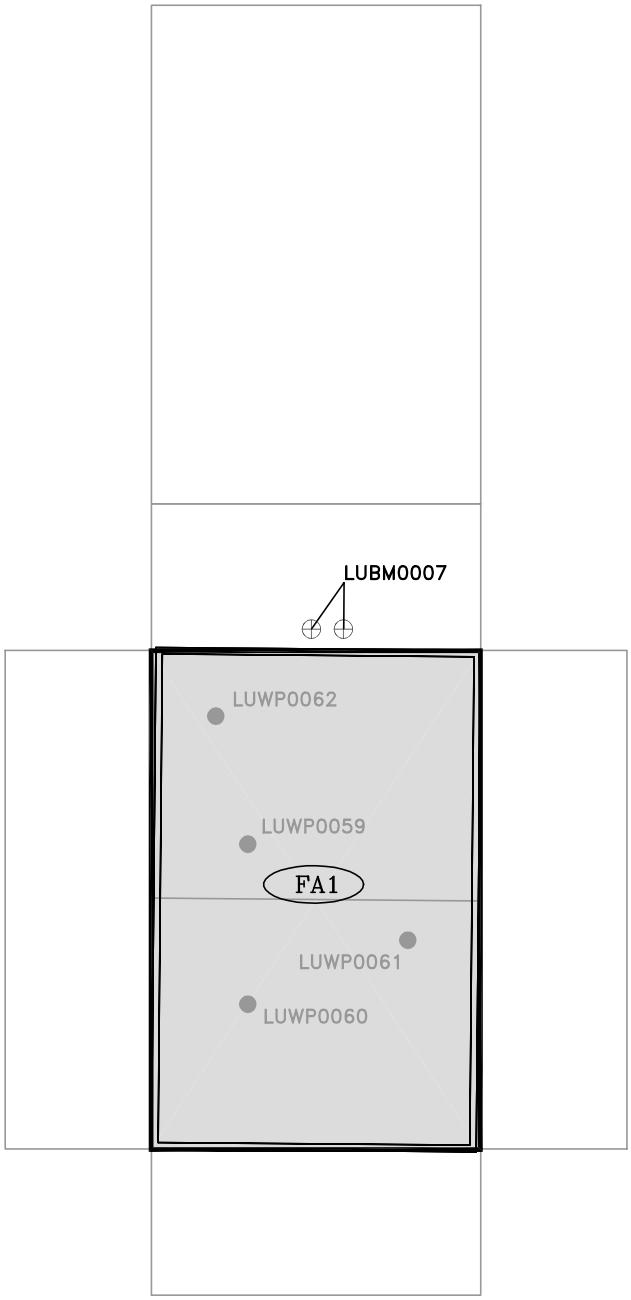

BUILDING OUTLINE

FLOOR AREA

FUNCTIONAL AREA OUTLINE

BUILDING MATERIAL SAMPLE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

0 3 6
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Bulk Storage Building
Building Material, Swipe Locations, and Functional Areas

SAIC Science Applications International Corporation Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	1-10-00	AS SHOWN	04-1748-801	3C.16

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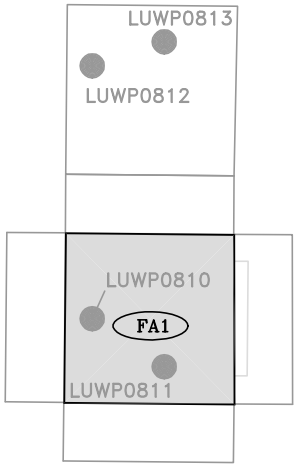


BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

4 0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

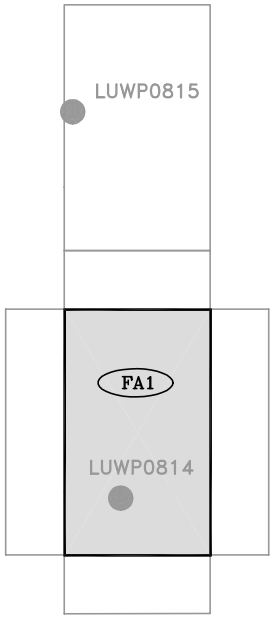
LUCKEY SITE
RI REPORT

Guard House Building
Swipe Sample Locations

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-27-00	AS SHOWN	04-1748-801	3C.17

NAME: S:\LUCKEY\C041748\801\RIRPT_BUILDBLD\OUTW-WELL_MTR.DWG DATE: APR 10, 2000 TIME: 7:54 PM PCP: S:\PCP\GREY1.PCP



BUILDING OUTLINE

FLOOR AREA

FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

4 0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

West Well Building
Swipe Sample Locations

SAIC. Science Applications International Corporation Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-27-00	AS SHOWN	04-1748-801	3C.18

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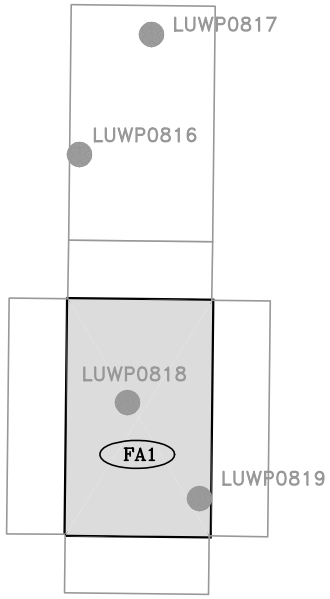


BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

4 0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

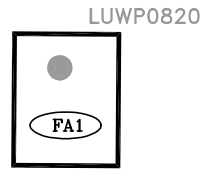
LUCKEY SITE
RI REPORT

Water Pump and Tank Building
Swipe Sample Locations and Functional Areas

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-27-00	AS SHOWN	04-1748-801	3C.19

NAME: S:\LUCKEY\C041748\801\RIRPT_BUILDBLDWOUTE-WELL_MTR.DWG DATE: APR 10, 2000 TIME: 7:57 PM PCP: S:\PCP\GREY1.PCP



BUILDING/FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

FLOOR AREA

N
True North

2 0 2 4
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

East Well Building
Swipe Sample Location and Functional Areas

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-27-00	AS SHOWN	04-1748-801	3C.20

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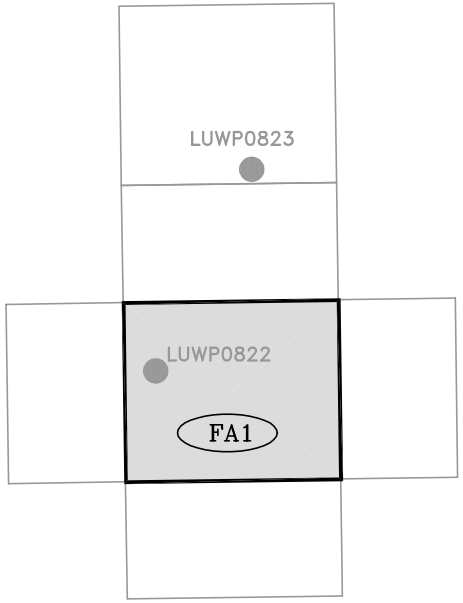

BUILDING OUTLINE

FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

FLOOR AREA

NOTE: BUILDING OUTLINE IS IN PLAN VIEW WITH THE BUILDING LAID FLAT

N
True North

4 0 4 8
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Sewage Disposal System Pump House Building
Swipe Sample Locations

Science Applications International Corporation — Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
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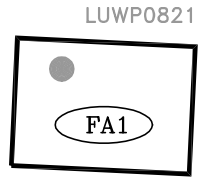
NAME: S:\LUCKEY\C041748\801\RIRPT_BUILDBLOWOUTSHACK_MTR.DWG DATE: APR 10, 2000 TIME: 8:00 PM PCP: S:\PCP\GREY1.PCP



BUILDING/FUNCTIONAL AREA OUTLINE

SWIPE SAMPLE

N
True North

2 0 2 4
METERS

U.S. Army Corps of Engineers
Buffalo District

LUCKEY SITE
RI REPORT

Shack
Swipe Sample Location and Functional Areas

Science Applications International Corporation
Columbus, Ohio

DRAWN	DATE	SCALE	PROJECT NO.	FIGURE NO.
BJW	01-27-00	AS SHOWN	04-1748-801	3C.22

APPENDIX 3D:
Air Monitoring Data

Appendix 3D: Air Monitoring Data

This appendix presents the air monitoring data collected at the Luckey site and at the associated background locations during Phase II and Phase IV sampling activities.

Table 3D.1 contains the gross alpha radiological results for the Phase II air samples. These air samples were taken from eight onsite locations and one offsite (background) location. Please note that all dose equivalents are below 10 mrem.

Table 3D.2 contains the beryllium results for the air samples collected during Phase II. In an effort to determine if the beryllium was present as particles of primarily one size range, six filters of different pore sizes were used. The results for all but one sample were below the detection limit making determination of particle size inconclusive.

Table 3D.3 contains the isotopic air data for sample Composite-3 which is a composite of all air samples collected at the site during Phase II. This sample was analyzed by alpha spectroscopy. Additional single-station and composite samples were collected and analyzed by gamma spectroscopy but the results of those analyses are not reported here due to the qualitative nature of the data.

Table 3D.4 contains the gross alpha radiological results for the ambient air samples collected during Phase IV activities. These air samples were taken from onsite locations picked daily based on location of field activities and wind direction.

Table 3D.5 contains the gross alpha radiological results for the personal breathing zone samples collected during Phase IV activities.

Table 3D.6 contains the isotopic air data for ambient air and breathing zone samples collected during Phase IV activities. Ten percent of all air samples for radiological monitoring were sent offsite for analysis by alpha spectroscopy.

Table 3D.7 contains the beryllium results for the ambient air samples collected during Phase IV activities. The beryllium results are also presented as a time weighted average (TWA).

Table 3D.8 contains the beryllium results for the personal breathing zone collected during Phase IV activities and additional field activities. The beryllium results are also presented as a time weighted average (TWA).

LIST OF TABLES

Table 3D.1. Phase II Ambient Air Monitoring Results – Radiological Analysis
Table 3D.2. Phase II Ambient Air Monitoring Results – Beryllium Analysis
Table 3D.3. Phase II Ambient Air Monitoring Results – Isotopic Radiological Analysis
Table 3D.4. Phase IV Ambient Air Monitoring Results – Radiological Analysis
Table 3D.5. Phase IV Breathing Zone Monitoring Results – Radiological Analysis
Table 3D.6. Phase IV Ambient Air and Breathing Zone Monitoring Results – Isotopic Radiological Analysis
Table 3D.7. Phase IV Ambient Air Monitoring Results – Beryllium Analysis
Table 3D.8. Phase IV Personal Breathing Zone Results – Beryllium Analysis

Table 3D.1. Phase II Ambient Air Monitoring Results - Radiological Analysis
Page 1 of 1

SAMPLE LOCATION	SAMPLE DATE	REFERENCE NUMBER	SAMPLE NUMBER	GROSS CPM (a)	BACKGROUND CPM (a)[1]	ACTIVITY (mCi/mL)	2 s (mCi/mL)	MDA (mCi/mL)	% Effl.[2]
LOCATION 1	9/23/1997	111AE0033-97	1	0.00	0.30	-1.74E-14	6.24E-14	1.48E-13	NA
N 199516.7						(< background)			
E 517322.5									
(Propane tanks, IA-7)									
LOCATION 2	10/6/1997	111AE0015-97	1	0.60	0.60	0.00E+00	5.73E-14	9.63E-14	NA
N 199589.8									
E 517588.8									
(East fenceline, IA-1)									
LOCATION 3	9/25/1997	111AE0004-97	AS-401	0.00	0.30	-1.87E-14	6.71E-14	1.60E-13	NA
N 199589.8						(< background)			
E 517188.5									
(Corner fenceline, IA-7)									
LOCATION 4	10/2/1997	111AE0009-97	2	0.00	0.40	-2.57E-14	7.97E-14	1.89E-13	NA
N 199430.0						(< background)			
E 517214.4									
(Uretech main office, IA-4)									
LOCATION 5	9/24/1997	111AE0015-97	AS-304	0.40	0.60	-1.26E-14	5.52E-14	1.02E-15	NA
N 199321.7						(< background)			
E 517352.6									
(Lagoon B, IA-2)									
LOCATION 6	10/2/1997	111AE0009-97	1	0.00	0.40	-2.32E-14	7.20E-14	1.71E-13	NA
N 199382.2						(< background)			
E 517348.1									
(Uretech Annex Bld., IA-4)									
LOCATION 7	9/29/1997	111AE0002-97	2	0.00	0.30	-1.66E-14	5.94E-14	1.41E-13	NA
N 199287.2						(< background)			
E 517642.0									
(Corner Fenceline, IA-2)									
LOCATION 8	10/1/1997	111AE0015-97	1	0.40	0.60	-1.05E-14	4.61E-14	8.50E-14	NA
N 199375.6						(< background)			
E 517100.4									
(Fenceline, IA-8)									
OFFBKG #3	10/3/1997	111AE0008-97	1	0.00	0.30	-1.65E-14	5.91E-14	1.40E-13	NA
N 200336.4						(< background)			
E 514535.8									

[1] Background taken from unexposed filter (daily) prior to analysis of air filter.

[2] Represents the calculated activities' percentage of the air effluent concentration guideline. The air effluent guideline is specified in 10 CFR 20.1302 App. B, Table 2 Col.1 and was the guideline used to evaluate protection of the public. The guideline for thorium-230 of 2 mCi/ml was selected as the most conservative value of the radionuclides detected at the site.

NA (Not Applicable) - Ratio of activity to air effluent concentration guideline is less than zero.

Reference: Safety and Ecology Corporation Data Package Numbers: SOH970299 and SOH970308.

Table 3D.2. Phase II Ambient Air Monitoring Results - Beryllium Analysis

SITE ID	SAMPLE ID	SAMPLE LOCATION	COLLECTION DATE	MATRIX CODE[1]	SAMPLE TYPE[2]	METHOD CODE[3]	RESULT (mg)	PARTICLE SIZE (mm)	AIR CONCENTRATION (mg/m3)
IA07	LU40074	**LOCATION 1**	22-SEP-97	SOL	REG	6010A-BE	0.51	7.2	7.90E-04
IA07	LU40075	NEXT TO	22-Sep-97	SOL	REG	6010A-BE	0.2	3	<3.1E-4
IA07	LU40076	PROPANE TANKS	22-Sep-97	SOL	REG	6010A-BE	0.2	1.5	<3.1E-4
IA07	LU40077	N 199516.7	22-Sep-97	SOL	REG	6010A-BE	0.2	0.95	<3.1E-4
IA07	LU40078	E 517322.5	22-Sep-97	SOL	REG	6010A-BE	0.2	0.49	<3.1E-4
IA07	LU40079		22-Sep-97	SOL	REG	6010A-BE	0.2	>0.49	<3.1E-4
IA07	LU40080		22-Sep-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.25		Average: 3.9E-4
IA01	LU40214	**LOCATION 2**	06-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<3.5E-4
IA01	LU40215	EAST FENCELINE	06-OCT-97	SOL	REG	6010A-BE	0.2	3	<3.5E-4
IA01	LU40216	N 199589.8	06-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<3.5E-4
IA01	LU40217	E 517588.8	06-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<3.5E-4
IA01	LU40218		06-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<3.5E-4
IA01	LU40219		06-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<3.5E-4
							Average: 0.2		Average: <3.5E-4
IA07	LU40122	**LOCATION 3**	25-SEP-97	SOL	REG	6010A-BE	0.2	7.2	<2.9E-4
IA07	LU40123	NW CORNER	25-SEP-97	SOL	REG	6010A-BE	0.2	3	<2.9E-4
IA07	LU40124	FENCELINE	25-SEP-97	SOL	REG	6010A-BE	0.2	1.5	<2.9E-4
IA07	LU40125	N 199589.8	25-SEP-97	SOL	REG	6010A-BE	0.2	0.95	<2.9E-4
IA07	LU40126	E 517188.5	25-SEP-97	SOL	REG	6010A-BE	0.2	0.49	<2.9E-4
IA07	LU40127		25-SEP-97	SOL	REG	6010A-BE	0.2	>0.49	<2.9E-4
IA07	LU40128		25-SEP-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average: <2.9E-4
IA04	LU40187	**LOCATION 4**	02-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<3.1E-4
IA04	LU40188	URETECH	02-OCT-97	SOL	REG	6010A-BE	0.2	3	<3.1E-4
IA04	LU40189	MAIN OFFICE	02-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<3.1E-4
IA04	LU40190	N 199430.0	02-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<3.1E-4
IA04	LU40191	E 517214.4	02-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<3.1E-4
IA04	LU40192		02-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<3.1E-4
							Average: 0.2		Average: <3.1E-4
IA02	LU40100	**LOCATION 5**	24-SEP-97	SOL	REG	6010A-BE	0.2	7.2	<3.1E-4
IA02	LU40101	LAGOON B	24-SEP-97	SOL	REG	6010A-BE	0.2	3	<3.1E-4
IA02	LU40102	N 199321.7	24-SEP-97	SOL	REG	6010A-BE	0.2	1.5	<3.1E-4
IA02	LU40103	E 517352.6	24-SEP-97	SOL	REG	6010A-BE	0.2	0.95	<3.1E-4
IA02	LU40104		24-SEP-97	SOL	REG	6010A-BE	0.2	0.49	<3.1E-4
IA02	LU40105		24-SEP-97	SOL	REG	6010A-BE	0.2	>0.49	<3.1E-4
IA02	LU40106		24-SEP-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average: <3.1E-4
IA04	LU40193	**LOCATION 6**	02-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<3.4E-4
IA04	LU40194	URETECH	02-OCT-97	SOL	REG	6010A-BE	0.2	3	<3.4E-4
IA04	LU40195	ANNEX BLDG.	02-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<3.4E-4
IA04	LU40196	N 199382.2	02-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<3.4E-4
IA04	LU40197	E 517348.1	02-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<3.4E-4
IA04	LU40198		02-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<3.4E-4
IA04	LU40199		02-OCT-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average: <3.4E-4

Table 3D.2. Phase II Ambient Air Monitoring Results - Beryllium Analysis

SITE ID	SAMPLE ID	SAMPLE LOCATION	COLLECTION DATE	MATRIX CODE[1]	SAMPLE TYPE[2]	METHOD CODE[3]	RESULT (mg)	PARTICLE SIZE (mm)	AIR CONCENTRATION (mg/m3)
IA02	LU40139	**LOCATION 7**	29-SEP-97	SOL	REG	6010A-BE	0.2	7.2	<3.0E-4
IA02	LU40140	SE CORNER	29-SEP-97	SOL	REG	6010A-BE	0.2	3	<3.0E-4
IA02	LU40141	FENCELINE	29-SEP-97	SOL	REG	6010A-BE	0.2	1.5	<3.0E-4
IA02	LU40142	N 199287.2	29-SEP-97	SOL	REG	6010A-BE	0.2	0.95	<3.0E-4
IA02	LU40143	E 517642.0	29-SEP-97	SOL	REG	6010A-BE	0.2	0.49	<3.0E-4
IA02	LU40144		29-SEP-97	SOL	REG	6010A-BE	0.2	>0.49	<3.0E-4
IA02	LU40145		29-SEP-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average: <3.0E-4
IA08	LU40168	**LOCATION 8**	01-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<2.8E-4
IA08	LU40169	FENCELINE	01-OCT-97	SOL	REG	6010A-BE	0.2	3	<2.8E-4
IA08	LU40170	N 199375.6	01-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<2.8E-4
IA08	LU40171	E 517100.4	01-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<2.8E-4
IA08	LU40172		01-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<2.8E-4
IA08	LU40173		01-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<2.8E-4
							Average: 0.2		Average <2.8E-4
OFFBKG1	LU40174	**OFFBKG#1**	01-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<3.4E-4
OFFBKG1	LU40175	BOTSDORFF	01-OCT-97	SOL	REG	6010A-BE	0.2	3	<3.4E-4
OFFBKG1	LU40176	PROPERTY	01-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<3.4E-4
OFFBKG1	LU40177	N 195524.7	01-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<3.4E-4
OFFBKG1	LU40178	E 513534.1	01-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<3.4E-4
OFFBKG1	LU40179		01-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<3.4E-4
OFFBKG1	LU40180		01-OCT-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average <3.4E-4
OFFBKG3	LU40207	**OFFBKG#3**	03-OCT-97	SOL	REG	6010A-BE	0.2	7.2	<3.6E-4
OFFBKG3	LU40208	MEIER PROPERTY	03-OCT-97	SOL	REG	6010A-BE	0.2	3	<3.6E-4
OFFBKG3	LU40209	N 200336.4	03-OCT-97	SOL	REG	6010A-BE	0.2	1.5	<3.6E-4
OFFBKG3	LU40210	E 514535.8	03-OCT-97	SOL	REG	6010A-BE	0.2	0.95	<3.6E-4
OFFBKG3	LU40211		03-OCT-97	SOL	REG	6010A-BE	0.2	0.49	<3.6E-4
OFFBKG3	LU40212		03-OCT-97	SOL	REG	6010A-BE	0.2	>0.49	<3.6E-4
OFFBKG3	LU40213		03-OCT-97	SOL	FDB	6010A-BE	0.2	N/A	N/A
							Average: 0.2		Average: <3.6E-4

[1] Solid (SOL)

[2] Regular (REG), Field Blank (FDB)

[3] EPA Method (SW846)

All samples were unfiltered.
The detection limit for each sample was 0.2 mg.
All samples are validated and verified.

The Time Weighted Average for Be as an air contaminant is : 2 mg/m^3 (OSHA, 29 CFR 1910.1000)
Reference: Document Numbers (from BEIDMS) OIH1-10, OIH1-11, OIH1-17, OIH1-18, OIH1-20.
Reference: Safety and Ecology Corporation data package numbers SOH970310, SOH970311.

Table 3D.3. Phase II Ambient Air Monitoring Results - Isotopic Radiological Analysis

Sample ID	Date Collected	Date Analyzed	Sample Type	Analyte	Result (pCi)	Error	Analytical Method	MDA	Volume of Air (L)	Result (mCi/mL)
Composite - 3	12/16/1997	12/16/1997	Reg	Th-227	1.37	1.49	ALPHASPEC	2.18	330,211.50	4.14886E-15
Composite - 3	12/16/1997	12/16/1997	Reg	Th-228	1.02	0.98	ALPHASPEC	1.4	330,211.50	3.08893E-15
Composite - 3	12/16/1997	12/16/1997	Reg	Th-230	1.02	0.98	ALPHASPEC	1.4	330,211.50	3.08893E-15
Composite - 3	12/16/1997	12/16/1997	Reg	Th-232	1.06	0.89	ALPHASPEC	0.48	330,211.50	3.21006E-15
Composite - 3	12/16/1997	12/16/1997	Repl	Th-227	0.22	1.67	ALPHASPEC	4.41	330,211.50	6.6624E-16
Composite - 3	12/16/1997	12/16/1997	Repl	Th-228	0.84	0.99	ALPHASPEC	1.44	330,211.50	2.54382E-15
Composite - 3	12/16/1997	12/16/1997	Repl	Th-230	2.11	1.51	ALPHASPEC	1.21	330,211.50	6.38984E-15
Composite - 3	12/16/1997	12/16/1997	Repl	Th-232	2.16	1.51	ALPHASPEC	0.65	330,211.50	6.54126E-15
Composite - 3	12/17/1997	12/17/1997	Repl	U-234	2.01	1.68	ALPHASPEC	1.87	330,211.50	6.08701E-15
Composite - 3	12/17/1997	12/17/1997	Repl	U-235	-0.17	0.25	ALPHASPEC	2.05	330,211.50	-5.14822E-16
Composite - 3	12/17/1997	12/17/1997	Repl	U-238	1.1	1.14	ALPHASPEC	0.75	330,211.50	3.3312E-15
Composite - 3	12/17/1997	12/17/1997	Reg	U-234	1.27	1.09	ALPHASPEC	1.18	330,211.50	3.84602E-15
Composite - 3	12/17/1997	12/17/1997	Reg	U-235	0.18	0.5	ALPHASPEC	1.22	330,211.50	5.45105E-16
Composite - 3	12/17/1997	12/17/1997	Reg	U-238	1.51	1.16	ALPHASPEC	0.98	330,211.50	4.57283E-15
Composite - 3	12/19/1997	12/19/1997	Repl	Ra-226	2.58	1.32	ALPHASPEC	1.4	330,211.50	7.81317E-15
Composite - 3	12/19/1997	12/19/1997	Reg	Ra-226	4.52	1.78	ALPHASPEC	1.75	330,211.50	1.36882E-14

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 001	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	43-10
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68225	Serial Number	68222
Date Counted	06/23&27/98	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.40	Efficiency	0.41
DCG	2E-14	BKG CPM	0.2	BKG CPM	0.3	BKG CPM	0.2
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	50
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	50

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
1	Air Location #3	1	06/17/94 10:10	06/17/94 16:25	375	46.0	0.30	<Lc	6.53E-15	1.28E-14	9.63E-15	32.64
2	Air Location #6	1	06/17/94 11:15	06/17/94 16:55	340	45.0	0.30	<Lc	7.36E-15	1.44E-14	1.09E-14	36.80
3	Air Location #3	3	06/18/94 07:50	06/18/94 15:25	455	50.0	0.30	<Lc	4.83E-15	9.47E-15	7.13E-15	24.15
4	Air Location #6	2	06/18/94 08:07	06/18/94 15:35	448	50.0	0.40	<Lc	5.03E-15	1.17E-14	9.09E-15	25.14

Reference Number	LKY AP 002	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	43-10
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68225	Serial Number	68222
Date Counted	06/27/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.40	Efficiency	0.41
DCG	2E-14	BKG CPM	0.2	BKG CPM	0.3	BKG CPM	0.2
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	50
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	50

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
15	Air Location #3	1	06/21/94 08:00	06/21/94 16:40	520	50.0	0.30	<Lc	4.33E-15	8.49E-15	6.39E-15	21.66
16	Air Location #6	2	06/21/94 08:20	06/21/94 16:55	515	50.0	0.10	<Lc	-8.75E-15	7.67E-15	7.90E-15	-43.73

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 003	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	43-10	
WBS Number	Luckey OH	Serial Number	68222	Serial Number	68222	Serial Number	68222	
Date Counted	06/28&29/98	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	
Limiting Isotope	Th 230	Efficiency	0.41	Efficiency	0.41	Efficiency	0.41	
DCG	2E-14	BKG CPM	0.3	BKG CPM	0.2	BKG CPM	0.2	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	50	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	50	

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
29	Air Location #6	1	06/22/94 06:00	06/22/94 14:35	515	50.0	0.30	<Lc	0.00E+00	9.16E-15	7.71E-15	0.00
30	Air Location #14	1	06/22/94 05:45	06/22/94 14:40	535	50.0	0.30	<Lc	0.00E+00	8.82E-15	7.42E-15	0.00
31	Air Location #14	2	06/23/94 05:50	06/23/94 15:25	575	50.0	0.40		7.64E-15	8.20E-15	5.64E-15	38.21
32	Air Location #6	2	06/23/94 07:05	06/23/94 14:55	470	50.0	0.40		9.35E-15	1.00E-14	6.90E-15	46.75
	QC Of Filter #30	1	06/22/94 05:45	06/22/94 14:40	535	50.0	0.40	<Lc	4.11E-15	9.52E-15	7.42E-15	20.54

Reference Number	LKY AP 004	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	43-10	
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68222	Serial Number	68222	
Date Counted	06/29/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.41	Efficiency	0.41	
DCG	2E-14	BKG CPM	0.2	BKG CPM	0.1	BKG CPM	0.2	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	50	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	50	

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
33	Air Location #14	1	06/24/94 06:15	06/24/94 14:45	510	50.0	0.30	<Lc	4.42E-15	8.66E-15	6.52E-15	22.08
34	Air Location #6	2	06/24/94 07:05	06/24/94 14:55	470	50.0	0.40		1.40E-14	9.16E-15	4.88E-15	70.13
35	Air Location #5	1	06/25/94 06:20	06/25/94 14:50	510	50.0	0.20	<Lc	0.00E+00	7.74E-15	6.52E-15	0.00

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 005	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model		Detector Model	43-10
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number	68222
Date Counted	06/22/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	11/5/1994
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency	0.41
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM	0.2
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	50
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	50

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DAC
5	Occ. From Annex Building	1	06/17/94 00:15	06/17/94 05:29	314	100.0	0.30	<Lc	3.58E-15	7.01E-15	5.28E-15	0.12

Reference Number	LKY AP 006	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68222	Serial Number	
Date Counted	07/05/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.41	Efficiency	
DCG	2E-14	BKG CPM	0.2	BKG CPM	0.1	BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
36	Area Air #14	1	06/25/94 05:50	06/25/94 14:15	505	50.0	0.30	<Lc	4.45E-15	8.72E-15	6.57E-15	22.24
37	Area Air #14	1	06/26/94 06:20	06/26/94 14:30	490	50.0	0.40		9.17E-15	9.84E-15	6.77E-15	45.85
38	Area Air #5	2	06/26/94 06:10	06/26/94 15:00	530	50.0	0.20	<Lc	4.15E-15	6.29E-15	4.33E-15	20.73

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 007	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/06/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
39	Area Air #14 / Area Air #5	1	06/27/94 05:50	06/27/94 15:10	560	50.0	0.30	<Lc	4.01E-15	7.86E-15	5.92E-15	20.06
40	Area Air #5 / Area Air #2	1	06/27/94 06:00	06/27/94 15:00	540	50.0	0.20	<Lc	0.00E+00	7.29E-15	6.14E-15	0.00
41	Area Air #14	1	06/28/94 06:30	06/28/94 15:05	515	50.0	0.20	<Lc	0.00E+00	7.65E-15	6.44E-15	0.00
42	Area Air #5	1	06/28/94 06:10	06/28/94 14:50	520	50.0	0.40		8.64E-15	9.28E-15	6.38E-15	43.20

Reference Number	LKY AP 008	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/08/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
43	Area Air #5	1	06/30/94 06:40	06/30/94 13:45	425	50.0	0.30	<Lc	5.29E-15	1.04E-14	7.80E-15	26.43
44	Area Air #14	1	06/30/94 05:40	06/30/94 14:20	520	50.0	0.30	<Lc	4.32E-15	8.47E-15	6.38E-15	21.60

Reference Number	LKY AP 009	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/09/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
45	Area Air #14	1	07/05/94 07:10	07/05/94 16:55	585	50.0	0.40		7.68E-15	8.25E-15	5.67E-15	38.40
46	Area Air #5	1	07/05/94 06:40	07/05/94 17:00	620	50.0	0.40		7.25E-15	7.78E-15	5.35E-15	36.24

Reference Number	LKY AP 010	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68225	Serial Number		
Date Counted	07/10/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.40	Efficiency		
DCG	2E-14	BKG CPM	0.3	BKG CPM	0.2	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Comments: Air Filter #47 was recounted on 07/12/98. Activity decreased from 108% to 21.6% of theDCG. This could be due to insufficient decay time for the Radon daughters prior to the filter being counted the first time

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
47	Area Air #5	1	07/06/94 06:30	07/06/94 15:10	520	50.0	0.80		2.16E-14	1.26E-14	7.81E-15	108.01
48	Area Air #14	1	07/06/94 06:25	07/06/94 15:15	530	50.0	0.50		8.48E-15	1.05E-14	7.66E-15	42.39
	QC Area Air #14	1	07/06/94 06:25	07/06/94 15:15	530	50.0	0.40	<Lc	4.24E-15	9.83E-15	7.66E-15	21.19
	QC Area Air #5	2	07/06/94 06:30	07/06/94 15:10	520	50.0	0.30	<Lc	4.32E-15	8.47E-15	6.38E-15	21.60

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 011	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/13/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
75	Area Air #5	1	07/07/94 10:20	07/07/94 15:30	310	50.0	0.30	<Lc	7.25E-15	1.42E-14	1.07E-14	36.24
76	Area Air #14	1	07/07/94 06:20	07/07/94 16:40	620	50.0	0.50		1.09E-14	8.40E-15	5.35E-15	54.35
	QC of Air #14	1	07/07/94 06:20	07/07/94 16:40	620	50.0	0.50		1.09E-14	8.40E-15	5.35E-15	54.35

Reference Number	LKY AP 012	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/14/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.4	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
77	Area Air #14	1	07/08/94 06:00	07/08/94 15:40	580	50.0	0.30	<Lc	-3.87E-15	8.98E-15	8.08E-15	-19.37
78	Area Air #5	1	07/08/94 07:00	07/08/94 15:30	510	50.0	0.40	<Lc	0.00E+00	1.09E-14	9.19E-15	0.00

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 013	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/19/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.5	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
79	Area Air #14	1	07/09/94 06:05	07/09/94 15:45	580	50.0	0.30	<Lc	-7.75E-15	9.60E-15	9.04E-15	-38.74
80	Area Air #5	1	07/09/94 07:00	07/09/94 15:30	510	50.0	0.40	<Lc	-4.41E-15	1.16E-14	1.03E-14	-22.03

Reference Number	LKY AP 014	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/20/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
108	Area Air #5	1	07/10/94 07:00	07/10/94 16:20	560	50.0	0.10	<Lc	-4.01E-15	6.09E-15	5.92E-15	-20.06
109	Area Air #14	1	07/10/94 06:20	07/10/94 16:20	600	50.0	0.50		1.12E-14	8.68E-15	5.53E-15	56.17

Reference Number	LKY AP 015	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	7/22-24/98	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency	
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Comments: Instrument background for all three days was 0.2 cpm

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
125	Area Air #14	1	07/11/94 06:10	07/11/94 16:10	600	50.0	0.30	<Lc	3.74E-15	7.34E-15	5.53E-15	18.72
126	Area Air #5	1	07/11/94 07:00	07/11/94 15:30	510	50.0	0.20	<Lc	0.00E+00	7.72E-15	6.50E-15	0.00
127	Area Air #14	1	07/12/94 06:30	07/12/94 16:10	580	50.0	0.50		1.16E-14	8.98E-15	5.72E-15	58.10
128	Area Air #5	1	07/12/94 07:00	07/12/94 15:30	510	50.0	0.30	<Lc	4.41E-15	8.63E-15	6.50E-15	22.03
129	Area Air #14	1	07/13/94 07:30	07/13/94 16:15	525	50.0	0.40		8.56E-15	9.19E-15	6.32E-15	42.79
130	Area Air #5	1	07/13/94 06:30	07/13/94 15:30	540	50.0	0.40		8.32E-15	8.93E-15	6.14E-15	41.60

Reference Number	LKY AP 016	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	07/24/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency	
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
136	Area Air #14	1	07/14/94 07:00	07/14/94 13:00	360	50.0	0.40		1.25E-14	1.34E-14	9.23E-15	62.56
137	Area Air #5	1	07/14/94 06:00	07/14/94 13:20	440	50.0	0.40		1.02E-14	1.10E-14	7.55E-15	51.19
138	Area Air #14	1	07/19/94 06:30	07/19/94 15:45	555	50.0	0.20	<Lc	0.00E+00	7.11E-15	5.99E-15	0.00
139	Area Air #5	1	07/19/94 07:30	07/19/94 15:30	480	50.0	0.20	<Lc	0.00E+00	8.23E-15	6.92E-15	0.00

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 017	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/28/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
147	Decon Pad (area BZ)	1	07/21/94 07:30	07/21/94 09:00	90	4.2	0.20	<Lc	0.00E+00	5.22E-13	4.40E-13	0.00
148	Area Air #14	1	07/21/94 06:05	07/21/94 16:35	630	50.0	0.20	<Lc	0.00E+00	6.27E-15	5.28E-15	0.00

Reference Number	LKY AP 018	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/03/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
165	Area Air #14	1	07/22/94 06:20	07/22/94 16:00	580	50.0	0.20	<Lc	0.00E+00	6.81E-15	5.73E-15	0.00
166	Area Air #5	1	07/22/94 07:00	07/22/94 15:45	525	50.0	0.40		8.58E-15	9.21E-15	6.33E-15	42.90

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 019	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/04/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.1	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
167	Area Air #14	1	07/23/94 06:00	07/23/94 16:15	615	50.0	0.30		7.32E-15	6.42E-15	3.82E-15	36.62
168	Area Air #5	1	07/22/94 07:00	07/22/94 15:45	525	50.0	0.40		1.29E-14	8.41E-15	4.48E-15	64.35
	QC of #168	1	07/22/94 07:00	07/22/94 15:45	525	50.0	0.30		8.58E-15	7.52E-15	4.48E-15	42.90

Reference Number	LKY AP 020	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/02/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.3	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments: DCG appears elevated due to lack of run time

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
169	Area Air #5	1	07/21/94 14:30	07/21/94 15:20	50	50.0	0.50		9.01E-14	1.12E-13	8.14E-14	450.45

Reference Number	LKY AP 021	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/06-07/98	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments: Backgrounds for both days were the same on counter #1…therefore instrument is listed only once

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
179	Area Air #14	1	07/24/94 07:10	07/24/94 16:20	550	50.0	0.30	<Lc	4.10E-15	8.03E-15	6.04E-15	20.48
180	Area Air #5	1	07/25/94 06:40	07/25/94 15:40	540	50.0	0.50		1.25E-14	9.67E-15	6.16E-15	62.56
181	Area Air #14	1	07/25/94 06:40	07/25/94 16:10	570	50.0	0.30	<Lc	3.95E-15	7.74E-15	5.83E-15	19.76
182	Area Air #5	1	07/24/94 06:50	07/24/94 15:40	530	50.0	0.50		1.27E-14	9.86E-15	6.27E-15	63.74
183	Area Air #5	1	07/26/94 07:00	07/26/94 15:40	520	50.0	0.40		8.66E-15	9.30E-15	6.39E-15	43.31
	QC of #180	1	07/25/94 06:40	07/25/94 15:40	540	50.0	0.40		8.34E-15	8.96E-15	6.16E-15	41.71

Reference Number	LKY AP 022	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/07/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.3	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
184	Area Air #14	1	07/26/94 06:45	07/26/94 15:30	525	50.0	0.50		8.58E-15	1.06E-14	7.75E-15	42.90
185	Area Air #5	1	07/27/94 08:15	07/27/94 15:15	420	50.0	0.20	<Lc	-5.36E-15	1.05E-14	9.69E-15	-26.81
186	Area Air #14	1	07/27/94 07:00	07/27/94 15:40	520	50.0	0.40	<Lc	4.33E-15	1.00E-14	7.83E-15	21.66

Reference Number	LKY AP 023	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/08/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.3	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
193	Area Air #5	1	07/28/94 06:30	07/28/94 13:30	420	50.0	0.30	<Lc	0.00E+00	1.15E-14	9.69E-15	0.00
194	Area Air #14	1	07/28/94 06:20	07/28/94 13:50	450	50.0	0.20	<Lc	-5.01E-15	9.81E-15	9.05E-15	-25.03

Reference Number	LKY AP 024	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/10-11/98	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments: Backgrounds were the same on both days, therefore the instrument was only listed once

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
195	Area Air #5	1	08/02/94 08:40	08/02/94 16:15	455	50.0	0.40		9.90E-15	1.06E-14	7.31E-15	49.50
196	Area Air #14	1	08/02/94 06:10	08/02/94 16:10	600	50.0	0.50		1.13E-14	8.71E-15	5.54E-15	56.31
197	Area Air #5	1	08/03/94 07:30	08/03/94 14:00	390	50.0	0.20	<Lc	0.00E+00	1.01E-14	8.52E-15	0.00
198	Area Air #14	1	08/03/94 07:30	08/03/94 14:45	435	50.0	0.30	<Lc	5.18E-15	1.01E-14	7.64E-15	25.89
199	Area Air #5	1	08/05/94 08:40	08/05/94 15:40	420	50.0	0.20	<Lc	0.00E+00	9.40E-15	7.91E-15	0.00
	QC of #195	1	08/02/94 08:40	08/02/94 16:15	455	50.0	0.50		1.49E-14	1.15E-14	7.31E-15	74.25

Reference Number	LKY AP 025	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	08/11/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency		Efficiency		
DCG	2E-14	BKG CPM	0.1	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
200	Area Air#14	1	08/05/94 07:20	08/05/94 15:50	510	50.0	0.20	<Lc	4.42E-15	6.70E-15	4.61E-15	22.08
201	Area Air#14	1	08/06/94 07:45	08/06/94 16:45	540	50.0	0.30		8.34E-15	7.31E-15	4.35E-15	41.71

Reference Number	LKY AP 026	Counter #1		Counter #2		Counter #3		V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	08/12/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DCG	2E-14	BKG CPM	0.1	BKG CPM	0.2	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
202	Area Air#5	1	08/06/94 09:00	08/06/94 17:00	480	50.0	0.40		1.41E-14	9.20E-15	4.90E-15	70.38
203	Area Air#14	2	08/07/94 08:00	08/07/94 16:30	510	50.0	0.20	<Lc	0.00E+00	7.55E-15	6.36E-15	0.00
204	Area Air#5	1	08/07/94 08:20	08/07/94 16:20	480	50.0	0.30		9.38E-15	8.23E-15	4.90E-15	46.92
205	Area Air#14	2	08/08/94 07:20	08/08/94 16:40	560	50.0	0.40		7.85E-15	8.42E-15	5.79E-15	39.24
206	Area Air#5	1	08/08/94 07:50	08/08/94 16:50	540	50.0	0.70		2.50E-14	1.03E-14	4.35E-15	125.13
	QC of #206	1	08/08/94 07:50	08/08/94 16:50	540	50.0	0.40		1.25E-14	8.17E-15	4.35E-15	62.56

Table 3D.4. Phase IV Ambient Air Monitoring Results - Radiological Analysis

Reference Number	LKY AP 027	Counter #1		Counter #2		Counter #3	V 1.4
		Detector Model	43-10	Detector Model	43-10	Detector Model	
WBS Number	Luckey OH	Serial Number	68225	Serial Number	68222	Serial Number	
Date Counted	08/13/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	
Limiting Isotope	Th 230	Efficiency	0.40	Efficiency	0.41	Efficiency	
DCG	2E-14	BKG CPM	0.3	BKG CPM	0.4	BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	
Filter Coll. Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	

Comments:

Sample #	Location	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	%DCG
207	Area Air#14	2	08/09/94 07:15	08/09/94 16:45	570	50.0	0.30	<Lc	-3.85E-15	8.94E-15	8.05E-15	-19.27
208	Area Air#5	1	08/09/94 08:00	08/09/94 16:15	495	50.0	0.30	<Lc	0.00E+00	9.77E-15	8.22E-15	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ001	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	06/22/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
6	2	Building Surveys		5.0	50	1	06/17/94 23:42	06/18/94 05:42	360	3.8	0.20	<Lc	0.00E+00	1.44E-13	1.21E-13	0.00
7	1	Geo Probe		2.1	50	1	06/17/94 13:30	06/17/94 15:35	125	4.4	0.30	<Lc	2.05E-13	4.01E-13	3.02E-13	0.00

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ002	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	06/24/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM	0.3	BKG CPM	0.6	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
8	1	Geo Probe		4.9	50	1	06/18/94 08:15	06/18/94 11:30	195	4.5	0.30	<Lc	0.00E+00	2.76E-13	2.32E-13	0.00
9	1	Sonic Drill Rig		4.5	50	1	06/18/94 09:50	06/18/94 11:37	107	4.0	0.30	<Lc	0.00E+00	5.65E-13	4.76E-13	0.00
10	1	Hollow Stem Auger		3.0	50	2	06/18/94 11:20	06/18/94 14:10	170	4.1	0.20	<Lc	-6.31E-13	3.91E-13	4.03E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ003	Detector Model	43-10	Detector Model	43-10	Detector Model	43-10	
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number	68225	
Date Counted	6/26&27/1998	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency	0.40	
DAC	3E-12	BKG CPM	0.3	BKG CPM	0.2	BKG CPM	0.1	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	50	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	50	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
11	1	Hollow Stem Auger		4.8	50	2	06/21/94 09:10	06/21/94 12:40	210	4.0	0.10	<Lc	-1.31E-13	1.99E-13	1.93E-13	0.00
12	1	Sonic Drill Rig			50	2	06/21/94 08:30	06/21/94 13:54	324	4.4	0.20	<Lc	0.00E+00	1.35E-13	1.14E-13	0.00
13	1	GeoProbe		3.9	50	1	06/21/94 10:15	06/21/94 12:40	145	4.3	0.40	<Lc	1.81E-13	4.19E-13	3.26E-13	0.00
14	2	Building Surveys		2.5	50	3	06/21/94 23:25	06/22/94 05:20	355	3.9	0.20	<Lc	8.13E-14	1.23E-13	8.49E-14	0.00

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ004	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	06/27/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM	0.3	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
17	2	Building Surveys		2.5	50	2	06/21/94 01:05	06/21/94 03:16	131	4.4	0.20	<Lc	-1.91E-13	3.74E-13	3.45E-13	0.00
18	1	GeoProbe		5.4	50	1	06/22/94 08:50	06/22/94 10:50	120	4.3	0.20	<Lc	0.00E+00	3.83E-13	3.22E-13	0.00
19	1	Sonic Rig MW002			50	2	06/22/94 07:14	06/22/94 11:17	243	4.4	0.10	<Lc	-2.06E-13	1.80E-13	1.86E-13	0.00
20	1	Hollow Stem Auger			50	1	06/22/94 07:25	06/22/94 10:43	198	4.5	0.30	<Lc	1.26E-13	2.48E-13	1.87E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ005	Detector Model		Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number		Serial Number	68222	Serial Number		
Date Counted	06/28/94	Cal Due Date		Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency		Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM		BKG CPM	0.2	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time		BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time		Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
21	1	GeoProbe		6.3	50	2	06/23/94 09:20	06/23/94 14:10	290	4.3	0.20	<Lc	0.00E+00	1.54E-13	1.30E-13	0.00
22	1	Hollow Stem Auger			50	2	06/23/94 07:45	06/23/94 11:50	245	4.2	0.10	<Lc	-1.07E-13	1.62E-13	1.58E-13	0.00

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ006	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	06/29/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM	0.1	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
23	2	Building Surveys		5.3	50	2	06/22/94 23:20	06/23/94 05:23	363	3.5	0.30		1.73E-13	1.52E-13	9.02E-14	0.01
24	1	Sonic Rig MW004		4.5	50	1	06/23/94 10:05	06/23/94 15:05	300	4.4	0.20	<Lc	0.00E+00	1.50E-13	1.26E-13	0.00
25	1	Hand Auger SB001		1.6	50	1	06/23/94 07:35	06/23/94 09:02	87	4.4	0.10	<Lc	-2.94E-13	4.47E-13	4.34E-13	0.00
26	2	Building Surveys		5.5	50	2	06/23/94 23:15	06/24/94 05:40	385	3.5	0.10	<Lc	0.00E+00	1.01E-13	8.51E-14	0.00
27	1	Hollow Stem Auger			50	1	06/24/94 07:15	06/24/94 11:01	226	4.1	0.30	<Lc	1.22E-13	2.38E-13	1.79E-13	0.00
28	1	Sonic Rig MW004			50	2	06/24/94 06:35	06/24/94 08:14	99	4.5	0.30		4.93E-13	4.32E-13	2.57E-13	0.00
	1	Sonic Rig MW004			50	2	06/24/94 09:56	06/24/94 14:45	289	4.2	0.30		1.81E-13	1.59E-13	9.45E-14	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ007			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68222		Serial Number				Serial Number			
Date Counted		06/29/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.41		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.1		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
49	1	GeoProbe		5.9	50	1	06/24/94 07:05	06/24/94 14:15	430	4.3	0.20	<Lc	5.94E-14	9.02E-14	6.20E-14	0.00

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ008			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68222		Serial Number				Serial Number			
Date Counted		06/30/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.41		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
50	2	Building Surveys		5.5	50	1	06/24/94 23:16	06/25/94 05:24	368	3.5	0.20	<Lc	0.00E+00	1.50E-13	1.26E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ009	Detector Model	43-10	Detector Model	43-10	Detector Model	
WBS Number	Luckey, OH	Serial Number	68222	Serial Number	68225	Serial Number	
Date Counted	07/05/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.41	Efficiency	0.40	Efficiency	
DAC	3E-12	BKG CPM	0.1	BKG CPM	0.2	BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
51	1	GeoProbe		3.1	50	1	06/25/94 11:30	06/25/94 15:00	210	4.3	0.20	<Lc	1.22E-13	1.85E-13	1.27E-13	0.00
52	1	GeoProbe		3.6	50	2	06/26/94 08:45	06/26/94 14:45	360	4.3	0.20	<Lc	0.00E+00	1.28E-13	1.07E-13	0.00
53	1	Sonic Drill Rig		6.1	50	2	06/26/94 07:15	06/26/94 14:30	435	4.2	0.20	<Lc	0.00E+00	1.08E-13	9.10E-14	0.00
54	1	Hollow Stem Auger		5.8	50	2	06/26/94 07:10	06/26/94 11:10	240	4.2	0.10	<Lc	-1.12E-13	1.70E-13	1.65E-13	0.00
55	2	Building Surveys		5.7	50	2	06/25/94 23:10	06/26/94 06:31	441	3.5	0.30	<Lc	7.30E-14	1.43E-13	1.08E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ010	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68222	Serial Number	68225	Serial Number		
Date Counted	07/06/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.41	Efficiency	0.40	Efficiency		
DAC	3E-12	BKG CPM	0.1	BKG CPM	0.2	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
56	2	Building Surveys		6.7	50	2	06/26/94 22:35	06/27/94 05:55	440	3.5	0.10	<Lc	-7.31E-14	1.11E-13	1.08E-13	0.00
57	1	GeoProbe		5.7	50	1	06/27/94 08:50	06/27/94 14:20	330	4.3	0.10	<Lc	0.00E+00	9.60E-14	8.08E-14	0.00
58	1	Sonic Drill Rig		7.7	50	2	06/27/94 09:25	06/27/94 15:15	350	4.1	0.30	<Lc	7.85E-14	1.54E-13	1.16E-13	0.00
59	1	Hollow Stem Auger		4.7	50	1	06/27/94 08:40	06/27/94 11:55	195	4.2	0.20	<Lc	1.34E-13	2.04E-13	1.40E-13	0.00
60	2	Building Surveys		5.8	50	1	06/29/94 23:05	06/30/94 05:45	400	4.0	0.10	<Lc	0.00E+00	8.51E-14	7.17E-14	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ011	Detector Model	43-10	Detector Model	43-10	Detector Model	
WBS Number	Luckey, OH	Serial Number	68222	Serial Number	68225	Serial Number	
Date Counted	07/07/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.41	Efficiency	0.40	Efficiency	
DAC	3E-12	BKG CPM	0.1	BKG CPM	0.1	BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
61	2	Building Surveys		6.2	50	2	06/27/94 22:33	06/28/94 05:03	390	3.4	0.20	<Lc	8.49E-14	1.29E-13	8.86E-14	0.00
62	1	Hollow Stem Auger		6.0	50	2	06/28/94 07:50	06/28/94 10:56	186	4.1	0.30		2.95E-13	2.59E-13	1.54E-13	0.01
63	1	GeoProbe		4.6	50	1	06/28/94 08:30	06/28/94 13:30	300	4.3	0.20	<Lc	8.52E-14	1.29E-13	8.89E-14	0.00
64	1	Hollow Stem Auger		4.8	50	2	06/29/94 08:20	06/29/94 11:07	167	4.2	0.30		3.21E-13	2.81E-13	1.68E-13	0.01
65	2	Building Surveys		5.9	50	2	06/28/94 23:08	06/29/94 05:43	395	3.5	0.20	<Lc	8.15E-14	1.24E-13	8.50E-14	0.00
66	1	Hollow Stem Auger		3.8	50	2	06/30/94 07:20	06/30/94 09:21	121	4.2	0.20	<Lc	2.22E-13	3.36E-13	2.31E-13	0.01
67	1	GeoProbe		4.8	50	2	06/29/94 07:30	06/29/94 14:10	400	4.3	0.30		1.31E-13	1.15E-13	6.83E-14	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ012			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/08/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
68	1	GeoProbe		2.3	50	1	06/30/94 07:00	06/30/94 09:15	135	4.3	0.10	<Lc	-1.94E-13	2.95E-13	2.86E-13	0.00	
69	1	GeoProbe		1.5	1	1	06/30/94 09:15	06/30/94 11:35	140	4.3	0.20	<Lc	0.00E+00	3.28E-13	2.76E-13	0.00	
70	2	Building Surveys		6.4	50	1	07/04/94 22:15	07/05/94 05:13	418	4.0	0.30	<Lc	6.74E-14	1.32E-13	9.94E-14	0.00	

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ013			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/09/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
71	1	Hollow Stem Auger		5.7	1	1	07/05/94 09:10	07/05/94 13:22	252	4.2	0.30	<Lc	1.06E-13	2.09E-13	1.57E-13	0.20	
72	1	GeoProbe		5.1	1	1	07/05/94 09:20	07/05/94 15:50	390	4.3	0.20	<Lc	0.00E+00	1.18E-13	9.91E-14	0.00	
73	1	Sonic Drill Rig		5.3	1	1	07/05/94 11:15	07/05/94 16:00	285	4.2	0.20	<Lc	0.00E+00	1.65E-13	1.39E-13	0.00	
74	1	Sonic Drill Rig		3.0	1	1	07/06/94 07:15	07/06/94 10:15	180	4.3	0.10	<Lc	-1.45E-13	2.21E-13	2.15E-13	0.00	

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ014	Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	07/10/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency	
DAC	3E-12	BKG CPM	0.3	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
81	1	Sonic Drill Rig		6.4	50	1	06/28/94 07:30	06/28/94 14:00	390	3.1	0.30	<Lc	0.00E+00	2.00E-13	1.68E-13	0.00
82	1	GeoProbe		2.9	1	1	07/06/94 09:00	07/06/94 14:35	335	4.2	0.20	<Lc	-8.00E-14	1.57E-13	1.45E-13	0.00

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ015	Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	07/11/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency	
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
83	1	Hollow Stem Auger		4.3	1	1	07/06/94 08:00	07/06/94 11:20	200	4.4	0.20	<Lc	0.00E+00	2.24E-13	1.89E-13	0.00
84	2	Building Surveys		6.8	50	1	07/05/94 23:15	07/06/94 05:40	385	4.0	0.20	<Lc	0.00E+00	1.28E-13	1.08E-13	0.00
85	2	Building Surveys		6.8	50	1	07/05/94 23:15	07/06/94 05:40	385	3.9	0.20	<Lc	0.00E+00	1.31E-13	1.11E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ016			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/12/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
86	1	Sonic Drill Rig		4.3	1	1	07/07/94 07:00	07/07/94 15:30	510	4.4	0.30	<Lc	5.02E-14	9.84E-14	7.41E-14	0.07	
87	2	Building Surveys		6.3	50	1	07/06/94 22:55	07/07/94 05:40	405	3.9	0.10	<Lc	-7.13E-14	1.08E-13	1.05E-13	0.00	
88	2	Building Surveys		6.3	50	1	07/06/94 22:55	07/07/94 05:40	405	4.0	0.20	<Lc	0.00E+00	1.22E-13	1.03E-13	0.00	
89	1	Hollow Stem Auger		5.0	1	1	07/07/94 07:45	07/07/94 12:15	270	4.2	0.10	<Lc	-9.93E-14	1.51E-13	1.47E-13	0.00	
90	1	GeoProbe		5.5	1	1	07/07/94 07:20	07/07/94 15:00	460	4.3	0.10	<Lc	-5.69E-14	8.64E-14	8.40E-14	0.00	

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ017			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/13/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
91	2	Building Surveys		5.6	50	1	07/07/94 23:10	07/08/94 04:40	330	4.0	0.20	<Lc	0.00E+00	1.50E-13	1.26E-13	0.00	
92	2	Building Surveys		4.5	50	1	07/07/94 23:10	07/08/94 04:40	330	3.9	0.30	<Lc	8.75E-14	1.72E-13	1.29E-13	0.00	
93	1	GeoProbe		2.5	1	1	07/08/94 09:00	07/08/94 15:00	360	4.1	0.20	<Lc	0.00E+00	1.34E-13	1.13E-13	0.00	
94	1	Sonic Drill Rig		9.0	50	1	07/08/94 07:00	07/08/94 15:30	510	4.3	0.20	<Lc	0.00E+00	9.00E-14	7.58E-14	0.00	
95	2	Building Surveys		5.9	50	1	07/08/94 23:20	07/09/94 05:40	380	3.9	0.20	<Lc	0.00E+00	1.33E-13	1.12E-13	0.00	

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKY BZ 018			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/14/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
96	1	Sonic Drill Rig		4.8	50	1	07/09/94 07:00	07/09/94 14:00	420	4.3	0.20	<Lc	0.00E+00	1.09E-13	9.20E-14	0.00	
97	2	Building Surveys		5.9	50	1	07/08/94 23:20	07/09/94 05:40	380	4.0	0.30	<Lc	7.41E-14	1.45E-13	1.09E-13	0.00	
98	1	Hand Auger		4.3	50	1	06/30/94 07:20	06/30/94 11:00	220	4.2	0.30	<Lc	1.22E-13	2.39E-13	1.80E-13	0.00	
99	1	GeoProbe		3.5	1	1	07/09/94 07:00	07/09/94 14:00	420	4.2	0.30	<Lc	6.38E-14	1.25E-13	9.42E-14	0.07	
100	1	Hollow Stem Auger		4.9	1	1	07/09/94 07:10	07/09/94 11:29	259	4.2	0.30	<Lc	1.04E-13	2.03E-13	1.53E-13	0.17	

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ019			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		07/19/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.5		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
101	2	Building Surveys		6.2	50	1	07/09/94 23:10	07/10/94 05:36	386	3.9	0.10	<Lc	-2.99E-13	1.61E-13	1.75E-13	0.00	
102	2	Building Surveys		5.2	50	1	07/09/94 23:10	07/10/94 05:36	386	4.0	0.20	<Lc	-2.19E-13	1.69E-13	1.70E-13	0.00	
103	1	GeoProbe		3.3	1	1	07/10/94 08:15	07/10/94 12:30	255	4.3	0.10	<Lc	-4.11E-13	2.21E-13	2.40E-13	0.00	
104	1	Hand Auger		2.3	1	1	07/10/94 10:00	07/10/94 11:00	60	4.2	0.20	<Lc	-1.34E-12	1.04E-12	1.04E-12	0.00	
105	1	Hollow Stem Auger		2.3	1	1	07/10/94 10:05	07/10/94 12:12	127	4.4	0.10	<Lc	-8.06E-13	4.33E-13	4.70E-13	0.00	

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ020	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/20/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
106	1	Sonic Drill Rig		1.8	50	1	07/10/94 07:00	07/10/94 16:00	540	4.2	0.20	<Lc	0.00E+00	8.70E-14	7.33E-14	0.00
107	2	Building Surveys		3.6	50	1	07/10/94 12:15	07/10/94 15:45	210	4.2	0.40		2.55E-13	2.74E-13	1.88E-13	0.01

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ021	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/21/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
110	1	Sonic Drill Rig		2.0	50	1	07/11/94 10:30	07/11/94 14:00	210	4.2	0.30	<Lc	1.28E-13	2.50E-13	1.88E-13	0.00
111	2	Building Surveys		5.8	50	1	07/11/94 22:10	07/12/94 04:55	405	4.0	0.30	<Lc	6.95E-14	1.36E-13	1.03E-13	0.00
112	1	Hollow Stem Auger		5.1	1	1	07/11/94 07:50	07/11/94 12:08	258	4.4	0.30	<Lc	9.92E-14	1.94E-13	1.46E-13	0.17
113	1	GeoProbe		4.8	50	1	07/11/94 07:45	07/11/94 15:15	450	4.2	0.20	<Lc	0.00E+00	1.04E-13	8.79E-14	0.00
114	2	Building Surveys		2.3	50	1	07/11/94 03:30	07/11/94 05:32	122	4.0	0.10	<Lc	-2.31E-13	3.50E-13	3.41E-13	0.00
115	2	Building Surveys		5.2	50	1	07/11/94 07:10	07/11/94 16:10	540	4.3	0.30	<Lc	4.85E-14	9.51E-14	7.16E-14	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ022	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/22/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
116	1	GeoProbe		2.3	50	1	07/13/94 08:40	07/13/94 15:30	410	4.2	0.40		1.31E-13	1.40E-13	9.65E-14	0.00
		QC		3.8	1	1	07/13/94 08:40	07/13/94 15:30	410	4.2	0.20	<Lc	0.00E+00	1.15E-13	9.65E-14	0.00
117	1	Hollow Stem Auger		4.9	1	1	07/12/94 07:25	07/12/94 11:43	258	4.5	0.30	<Lc	9.70E-14	1.90E-13	1.43E-13	0.16
118	2	Building Surveys		5.8	50	1	07/12/94 07:30	07/12/94 15:00	450	3.0	0.20	<Lc	0.00E+00	1.46E-13	1.23E-13	0.00
119	1	GeoProbe		3.3	50	1	07/12/94 07:40	07/12/94 15:10	450	4.1	0.20	<Lc	0.00E+00	1.07E-13	9.01E-14	0.00
120	1	Hollow Stem Auger		4.3	1	1	07/13/94 09:10	07/13/94 11:02	112	4.1	0.20	<Lc	0.00E+00	4.30E-13	3.62E-13	0.00
120	1	Hollow Stem Auger		1.0	50	1	07/13/94 14:20	07/13/94 14:52	32	4.1	0.20	<Lc	0.00E+00	1.50E-12	1.27E-12	0.00

		Counter #1		Counter #2		Counter #3		v1.7
Reference Number	LKYBZ023	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/23/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
121	1	Sonic Drill Rig		7.8	50	1	07/13/94 07:15	07/13/94 15:00	465	4.3	0.30	<Lc	5.63E-14	1.10E-13	8.31E-14	0.00
122	2	Building Surveys		2.0	50	1	07/13/94 09:30	07/13/94 10:40	70	4.4	0.20	<Lc	0.00E+00	6.41E-13	5.40E-13	0.00
123	2	Building Surveys		2.5	50	1	07/14/94 09:30	07/14/94 11:00	90	4.4	0.30	<Lc	2.84E-13	5.57E-13	4.20E-13	0.00
124	1	Sonic Drill Rig		2.5	50	1	07/14/94 08:30	07/14/94 10:30	120	4.3	0.20	<Lc	0.00E+00	3.83E-13	3.22E-13	0.00
131	2	Building Surveys		5.7	50	1	07/13/94 07:35	07/13/94 11:35	240	4.0	0.20	<Lc	0.00E+00	2.06E-13	1.73E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ024	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/24/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
132	2	Building Surveys		6.4	1	1	07/18/94 23:50	07/19/94 06:02	372	4.0	0.20	<Lc	0.00E+00	1.33E-13	1.12E-13	0.00
133	1	GeoProbe		2.1	50	1	07/14/94 07:20	07/14/94 10:00	160	4.3	0.20	<Lc	0.00E+00	2.87E-13	2.42E-13	0.00
134	2	Building Surveys		2.5	50	1	07/19/94 08:00	07/19/94 12:20	260	4.3	0.20	<Lc	0.00E+00	1.77E-13	1.49E-13	0.00
135	1	GeoProbe		4.8	50	1	07/19/94 07:40	07/19/94 14:40	420	4.2	0.20	<Lc	0.00E+00	1.12E-13	9.42E-14	0.00

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ025	Detector Model	43-10	Detector Model		Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number		
Date Counted	07/25/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency		
DAC	3E-12	BKG CPM	0.1	BKG CPM		BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
140	1	Hollow Stem Auger		3.8	50	1	07/19/94 08:10	07/19/94 11:32	202	4.4	0.30		2.53E-13	2.22E-13	1.32E-13	0.01
141	1	Sonic Drill Rig		1.5	50	1	07/19/94 10:00	07/19/94 11:30	90	4.2	0.30		5.96E-13	5.22E-13	3.11E-13	0.01

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ026	Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	07/26/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency	
DAC	3E-12	BKG CPM	0.1	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
143	1	Hollow Stem Auger		1.7	1	1	07/20/94 13:00	07/20/94 14:16	76	4.4	0.20	<Lc	3.37E-13	5.11E-13	3.51E-13	0.20
144	1	Sonic Drill Rig		2.7	50	1	07/20/94 10:30	07/20/94 14:00	210	4.3	0.10	<Lc	0.00E+00	1.55E-13	1.30E-13	0.00
145	2	Building Surveys		6.8	1	1	07/19/94 22:33	07/20/94 05:33	420	4.0	0.20	<Lc	6.70E-14	1.02E-13	7.00E-14	0.15
146	2	Building Surveys		5.8	1	1	07/20/94 23:30	07/21/94 05:13	343	4.0	0.30		1.64E-13	1.44E-13	8.57E-14	0.32

		Counter #1		Counter #2		Counter #3	V1.7
Reference Number	LKYBZ026	Detector Model	43-10	Detector Model		Detector Model	
WBS Number	Luckey, OH	Serial Number	68225	Serial Number		Serial Number	
Date Counted	07/28/94	Cal Due Date	11/5/1994	Cal Due Date		Cal Due Date	
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency		Efficiency	
DAC	3E-12	BKG CPM	0.2	BKG CPM		BKG CPM	
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time		BKG Ct Time	
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time		Sample Ct Time	

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
149	2	Building Surveys		3.3	1	1	07/20/94 08:30	07/20/94 15:30	420	4.2	0.20	<Lc	0.00E+00	1.12E-13	9.42E-14	0.00
150	2	Building Surveys		5.2	50	1	07/21/94 07:30	07/21/94 16:10	520	4.4	0.20	<Lc	0.00E+00	8.63E-14	7.26E-14	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ028			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		07/25/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.3		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
151	1	Hollow Stem Auger		1.8	50	1	07/21/94 13:00	07/21/94 14:40	100	4.3	0.30	<Lc	0.00E+00	5.62E-13	4.73E-13	0.00
152	1	Hollow Stem Auger		1.8	50	1	07/21/94 13:30	07/21/94 14:58	88	4.2	0.30	<Lc	0.00E+00	6.54E-13	5.51E-13	0.00
153	2	Building Surveys		10.2	50	1	07/26/94 06:52	07/26/94 16:45	593	3.7	0.40	<Lc	5.13E-14	1.19E-13	9.28E-14	0.00
154	2	Building Surveys		10.0	50	1	07/25/94 07:25	07/25/94 19:17	712	3.5	0.30	<Lc	0.00E+00	9.70E-14	8.17E-14	0.00
155	1	GeoProbe		4.5	1	1	07/25/94 07:50	07/25/94 13:50	360	4.1	0.40	<Lc	7.63E-14	1.77E-13	1.38E-13	0.11

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ029			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		08/03/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
157	1	GeoProbe		1.5	50	1	07/22/94 13:30	07/22/94 15:00	90	4.1	0.30	<Lc	3.05E-13	5.98E-13	4.50E-13	0.00
158	2	Building Surveys		5.3	1	1	07/22/94 21:55	07/23/94 03:33	338	4.1	0.30	<Lc	8.13E-14	1.59E-13	1.20E-13	0.14
159	2	B uilding Surveys		7.3	1	1	07/21/94 22:00	07/22/94 05:25	445	4.0	0.20	<Lc	0.00E+00	1.11E-13	9.34E-14	0.00
160	1	Trenching		4.8	1	1	07/22/94 11:00	07/22/94 15:45	285	4.3	0.20	<Lc	0.00E+00	1.61E-13	1.36E-13	0.00
161	1	Hollow Stem Auger		5.3	50	1	07/22/94 08:00	07/22/94 12:34	274	4.3	0.20	<Lc	0.00E+00	1.68E-13	1.41E-13	0.00
162	2	Building Surveys		2.5	50	1	07/22/94 13:00	07/22/94 15:30	150	4.3	0.20	<Lc	0.00E+00	3.06E-13	2.58E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ030			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		08/04/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.1		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
163	1	GeoProbe		1.4	50	1	07/23/94 07:50	07/23/94 09:15	85	4.2	0.20	<Lc	3.15E-13	4.79E-13	3.29E-13	0.00
164	2	Building Surveys		2.8	50	1	07/23/94 07:30	07/23/94 09:57	147	4.2	0.20	<Lc	1.82E-13	2.77E-13	1.90E-13	0.00

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ031			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		08/06-07/98			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
170	2	Building Surveys		7.2	50	1	07/24/94 08:12	07/24/94 14:18	366	4.0	0.10	<Lc	-7.69E-14	1.17E-13	1.14E-13	0.00
171	1	Trenching		4.0	1	1	07/24/94 07:45	07/24/94 11:45	240	4.1	0.20	<Lc	0.00E+00	2.01E-13	1.69E-13	0.00
172	1	GeoProbe		1.2	1	1	07/24/94 14:45	07/24/94 16:10	85	4.4	0.20	<Lc	0.00E+00	5.28E-13	4.44E-13	0.00
173	1	Hollow Stem Auger		5.4	50	1	07/24/94 07:30	07/24/94 15:30	480	4.3	0.10	<Lc	-5.46E-14	8.28E-14	8.05E-14	0.00
174	2	Building Surveys		7.2	50	1	07/24/94 08:20	07/24/94 14:40	380	4.1	0.20	<Lc	0.00E+00	1.27E-13	1.07E-13	0.00
	2	Hollow Stem Auger		7.2	50	1	07/24/94 08:20	07/24/94 14:40	380	4.1	0.20	<Lc	0.00E+00	1.27E-13	1.07E-13	0.00
175	1	Hollow Stem Auger		7.7	50	1	07/25/94 08:00	07/25/94 15:00	420	3.9	0.20	<Lc	0.00E+00	1.21E-13	1.01E-13	0.00
176	1	Sonic Drill Rig		7.0	1	1	07/25/94 07:30	07/25/94 14:30	420	3.9	0.20	<Lc	0.00E+00	1.21E-13	1.01E-13	0.00
177	2	Building Surveys		8.7	50	1	07/26/94 07:35	07/26/94 14:01	386	3.5	0.20	<Lc	0.00E+00	1.46E-13	1.23E-13	0.00
178	1	GeoProbe		4.8	50	1	07/26/94 08:45	07/26/94 14:45	360	4.2	0.20	<Lc	0.00E+00	1.31E-13	1.10E-13	0.00

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ032			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		08/08-09/98			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.3		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
187	1	Trenching		1.7	1	1	07/26/94 07:00	07/26/94 08:25	85	4.3	0.20	<Lc	-3.08E-13	6.04E-13	5.57E-13	0.00	
188	1	Hollow Stem Auger		4.8	1	1	07/26/94 08:00	07/26/94 14:00	360	4.1	0.10	<Lc	-1.53E-13	1.34E-13	1.38E-13	0.00	
189	2	Building Surveys		8.3	50	1	07/27/94 07:05	07/27/94 13:50	405	3.9	0.10	<Lc	-1.43E-13	1.25E-13	1.29E-13	0.00	
190	1	GeoProbe		3.1	50	1	07/27/94 07:50	07/27/94 11:45	235	4.3	0.20	<Lc	-1.11E-13	2.18E-13	2.01E-13	0.00	
191	2	Building Surveys		8.5	50	1	07/27/94 06:55	07/27/94 13:27	392	3.7	0.20	<Lc	-7.76E-14	1.52E-13	1.40E-13	0.00	
192	1	Hollow Stem Auger		5.2	1	1	07/27/94 08:00	07/27/94 15:00	420	4.3	0.30	<Lc	0.00E+00	1.34E-13	1.13E-13	0.00	

					Counter #1				Counter #2				Counter #3				V1.7
Reference Number		LKYBZ033			Detector Model		43-10		Detector Model				Detector Model				
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number				
Date Counted		08/09/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date				
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency				
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM				
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time				
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time				
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)	
209	2	Building Surveys		7.8	50	1	07/28/94 07:05	07/28/94 11:45	280	3.5	0.30	<Lc	1.15E-13	2.25E-13	1.70E-13	0.01	
210	2	Building Surveys		7.0	50	1	07/28/94 07:20	07/28/94 13:11	351	3.2	0.20	<Lc	0.00E+00	1.76E-13	1.48E-13	0.00	
211	1	Hollow Stem Auger		5.8	1	1	07/28/94 07:00	07/28/94 12:45	345	4.2	0.30	<Lc	7.77E-14	1.52E-13	1.15E-13	0.15	

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ034			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		08/09/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.2		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
212	1	GeoProbe		1.3	1	1	07/28/94 10:10	07/28/94 11:30	80	4.4	0.20	<Lc	0.00E+00	5.61E-13	4.72E-13	0.00
213	1	Sonic Drill Rig		3.0	1	1	08/02/94 08:30	08/02/94 11:30	180	4.3	0.10	<Lc	-1.45E-13	2.21E-13	2.15E-13	0.00
214	1	Hollow Stem Auger		4.2	1	1	08/02/94 09:40	08/02/94 13:18	218	4.1	0.10	<Lc	-1.26E-13	1.91E-13	1.86E-13	0.00
215	1	Hand Auger		3.0	1	1	08/02/94 09:00	08/02/94 14:10	310	4.3	0.20	<Lc	0.00E+00	1.48E-13	1.25E-13	0.00
216	1	Hollow Stem Auger		2.8	1	1	08/03/94 09:40	08/03/94 11:47	127	4.2	0.20	<Lc	0.00E+00	3.70E-13	3.12E-13	0.00
217	1	Hand Auger		1.3	1	1	08/03/94 09:00	08/03/94 12:00	180	4.3	0.20	<Lc	0.00E+00	2.55E-13	2.15E-13	0.00
218	1	Sonic Drill Rig		3.5	50	1	08/03/94 08:00	08/03/94 11:30	210	4.2	0.30	<Lc	1.28E-13	2.50E-13	1.88E-13	0.00
219	1	Hollow Stem Auger		3.8	1	1	08/05/94 08:45	08/05/94 11:55	190	4.3	0.30	<Lc	1.38E-13	2.70E-13	2.03E-13	0.17

					Counter #1				Counter #2				Counter #3			V1.7
Reference Number		LKYBZ035			Detector Model		43-10		Detector Model				Detector Model			
WBS Number		Luckey, OH			Serial Number		68225		Serial Number				Serial Number			
Date Counted		08/11/94			Cal Due Date		11/5/1994		Cal Due Date				Cal Due Date			
Limiting Isotope		Th-230			Efficiency		0.40		Efficiency				Efficiency			
DAC		3E-12			BKG CPM		0.1		BKG CPM				BKG CPM			
Filter Media		Glass Fiber			BKG Ct Time		50		BKG Ct Time				BKG Ct Time			
Filter Collection Eff.		0.9999			Sample Ct Time		50		Sample Ct Time				Sample Ct Time			
Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
220	1	Sonic Drill Rig		6.5	1	1	08/05/94 08:30	08/05/94 14:30	360	4.2	0.30		1.49E-13	1.31E-13	7.77E-14	0.32
221	1	HandAuger (off-site)		3.6	1	1	08/05/94 08:30	08/05/94 12:05	215	4.2	0.10	<Lc	0.00E+00	1.55E-13	1.30E-13	0.00
222	1	Sonic Drill Rig	531-52-2682	2.0	1	1	08/06/94 10:00	08/06/94 12:00	120	4.3	0.20	<Lc	2.18E-13	3.31E-13	2.28E-13	0.15

Table 3D.5. Phase IV Breathing Zone Monitoring Results - Radiological Analysis

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ036	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	08/12/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM	0.1	BKG CPM	0.2	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
223	1	Hollow Stem Auger		2.0	1	2	08/06/94 08:30	08/06/94 11:15	165	4.5	0.50		4.44E-13	3.43E-13	2.18E-13	0.30
224	1	Sonic Drill Rig		3.0	1	1	08/07/94 09:00	08/07/94 12:00	180	4.6	0.10	<Lc	0.00E+00	1.69E-13	1.42E-13	0.00
225	1	Hollow Stem Auger		2.0	1	1	08/08/94 09:15	08/08/94 11:15	120	4.5	0.20	<Lc	2.09E-13	3.17E-13	2.18E-13	0.14

		Counter #1		Counter #2		Counter #3		V1.7
Reference Number	LKYBZ037	Detector Model	43-10	Detector Model	43-10	Detector Model		
WBS Number	Luckey, OH	Serial Number	68225	Serial Number	68222	Serial Number		
Date Counted	08/13/94	Cal Due Date	11/5/1994	Cal Due Date	11/5/1994	Cal Due Date		
Limiting Isotope	Th-230	Efficiency	0.40	Efficiency	0.41	Efficiency		
DAC	3E-12	BKG CPM	0.3	BKG CPM	0.4	BKG CPM		
Filter Media	Glass Fiber	BKG Ct Time	50	BKG Ct Time	50	BKG Ct Time		
Filter Collection Eff.	0.9999	Sample Ct Time	50	Sample Ct Time	50	Sample Ct Time		

Sample #	HWP #	Activity	SSN #	Hrs in Area	PF	Detect. #	ON Date/Time	OFF Date/Time	TIME (mins)	FLOWRATE (lpm)	GROSS CPM	LC Qual	ACTIVITY (µCi/ml)	STDEV (µCi/ml)	Lc (µCi/ml)	DAC (hrs)
226	1	Sonic Drill Rig		6.5	1	2	08/09/94 08:30	08/09/94 14:30	360	4.3	0.20	<Lc	-1.42E-13	1.52E-13	1.48E-13	0.00
227	1	Hollow Stem Auger		2.5	1	1	08/09/94 08:30	08/09/94 11:05	155	4.2	0.20	<Lc	-1.73E-13	3.39E-13	3.13E-13	0.00
228	1	Sonic Drill Rig		7.5	1	1	08/10/94 08:30	08/10/94 15:00	390	4.6	0.10	<Lc	-1.26E-13	1.10E-13	1.13E-13	0.00
229	1	Sonic Drill Rig		1.0	1	2	08/11/94 08:00	08/11/94 09:00	60	4.3	0.20	<Lc	-8.52E-13	9.14E-13	8.89E-13	0.00
230	1	Hollow Stem Auger		2.4	1	1	08/11/94 08:40	08/11/94 11:02	142	4.4	0.10	<Lc	-3.60E-13	3.16E-13	3.26E-13	0.00

Table 3D.6. Phase IV Ambient Air and Breathing Zone Monitoring Results- Isotopic Radiological Analysis

Station	**ALL-AR0008**	**ALL-AR0011**	**ALL-AR0012**	**ALL-AR0012**	**ALL-AR0012**	**ALL-AR0013**	**ALL-AR0013**	**ALL-AR0013**	**ALL-AR0013**
Sample No	**LUAR0305**	**LUAR0312**	**LUAR0018**	**LUAR0021**	**LUAR0026**	**LUAR0055**	**LUAR0064**	**LUAR0065**	**LUAR0097**
Collection Date	**06/29/98**	**07/07/98**	**06/29/98**	**07/07/98**	**07/29/98**	**06/26/98**	**07/09/98**	**10/28/98**	**08/06/98**
Radiological Parameters									
Radium-226 (pci/s)	0.325 U	0.463 U	0.737 U	1.75 J	5.34	0.999 U	0.997 J	3.45	8.14
Radium-228 (pci/s)								1.8 U	
Radiological Parameters (AlphaSpec)									
Actinium-227 (pci/s)	0.265 U	0.11 U	0.0708 U	0.384 U	-0.069 U	-0.136 U	-0.412 U	0.222 U	-0.0224 U
Thorium-228 (pci/s)	0.91 J	0.565 J	0.42 U	0.493 J	0.0765 U	0.69 J	0.564 J	0.325 U	0.0687 U
Thorium-230 (pci/s)	0.151 U	0.255 U	0.384 J	0.506 J	0.0942 U	0.74 J	0.208 J	0.239 U	-0.0179 U
Thorium-232 (pci/s)	0.0573 U	0.145 U	0 U	0.0563 U	0.0188 U	0.0344 U	0.0444 U	0.0572 U	0.0264 U
Uranium-233/234 (pci/s)	-0.0159 U	0.108 U	0.0689 U	0.117 U	0.0647 U	0.0339 U	0.158 J	0.229 U	0.133 U
Uranium-235 (pci/s)	0 U	-0.0172 U	-0.0562 U	-0.017 U	0.0967 U	-0.0175 U	-0.016 U	0.261 U	0 U
Uranium-238 (pci/s)	0.199 U	-0.0171 U	0.0415 U	0.0335 U	-0.0158 U	0.0518 U	0.0472 U	0 U	0.0443 U
Actinium-228 (pci/s)	7.89 U	5.98 U	0.627 U	-0.76 U	3.37 U	4.94 U	8.3 U	4.04 U	2.29 U
Cesium-137 (pci/s)	-0.72 U	-1.02 U	1.08 U	8.87 J	-1.46 U	1.2 U	0.595 U	0.378 U	-0.225 U
Cobalt-60 (pci/s)	1.56 U	-0.0802 U	0.297 U	0.941 U	0.43 U	0.858 U	0.882 U	0.742 U	0.518 U
Potassium-40 (pci/s)	15.8 U	6.99 U	32.9 U	29.7 U	16.4 U	29.9 U	20.5 U	14.5 U	20 U
Protactinium-231 (pci/s)	-19.4 U	-23.9 U	-36.7 U	-4.54 U	-57.8 U	70.9 U	28.2 U	-32.3 U	-18.2 U
Thorium-234 (pci/s)	69.2 U	26 U	86.5 U	113 U	0 U	123	20 U	0 U	0 U
Uranium-235 (pci/s)	3.28 U	-2.33 U	3.51 U	8.22 U	2.16 U	2.35 U	7.85 U	1.69 U	4.17 U

Table 3D.6. Phase IV Ambient Air and Breathing Zone Monitoring Results- Isotopic Radiological Analysis

Station	**ALL-AR0013**	**ALL-AR0014**	**ALL-AR0014**	**ALL-AR0014**	**ALL-AR0014**	**ALL-AR0015**	**ALL-AR0015**	**ALL-AR0015**	**ALL-AR0015**
Sample No	**LUAR0099**	**LUAR0111**	**LUAR0112**	**LUAR0117**	**LUAR0118**	**LUAR0157**	**LUAR0160**	**LUAR0161**	**LUAR0164**
Collection Date	**07/11/98**	**07/20/98**	**07/06/98**	**10/27/98**	**10/29/98**	**06/28/98**	**07/23/98**	**07/10/98**	**08/07/98**
Radiological Parameters									
Radium-226 (pci/s)	0.387 U	1.32 J	1.37 J			1.27 U	4.3	0.464 U	3.67
Radium-228 (pci/s)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pci/s)	0.0247 U	0.0158 U	-0.0011 U			-0.0022 U	-0.0712 U	-0.38 U	0.0805 U
Thorium-228 (pci/s)	0.791 J	0.069 U	0.549 J			0.448 U	0.181 U	0.573 J	0.134 U
Thorium-230 (pci/s)	0.236 J	0.0887 U	0.317 J			0.636 J	0.0645 U	0.558 J	0.0784 U
Thorium-232 (pci/s)	0.0135 U	0.146 J	0.0577 U			-0.0189 U	-0.0123 U	0.176 J	-0.0073 U
Uranium-233/234 (pci/s)	0.034 U	-0.0092 U	0.0292 U			0.0583 U	0 U	0.109 U	0.241 U
Uranium-235 (pci/s)	0.0341 U	0.0564 U	0.0296 U			-0.0006 U	0 U	-0.0162 U	0 U
Uranium-238 (pci/s)	0.102 U	0.0563 U	0.118 J			0.146 J	0.0324 U	0.156 J	0.146 U
Actinium-228 (pci/s)	7.53 U	4.3 U	3.47 U			5.46 U	3.45 U	3.38 U	4.5 U
Cesium-137 (pci/s)	70.8	1.09 U	-0.171 U			1.71 U	1.18 U	0.92 U	-0.776 U
Cobalt-60 (pci/s)	-0.0694 U	-0.0206 U	-0.893 U			0.745 U	0.251 U	0.234 U	0.834 U
Potassium-40 (pci/s)	22.1 U	6.13 U	10.6 U			13.5 U	0 U	15.5 U	8.83 U
Protactinium-231 (pci/s)	-7.65 U	62.3 U	-18.3 U			-17 U	29.5 U	-14.1 U	-34.3 U
Thorium-234 (pci/s)	14.1 U	6.13 U	34.4 U			15.1 U	0 U	48.9 U	0 U
Uranium-235 (pci/s)	4.96 U	7.25 U	9.77 U			11 U	5.18 U	0.796 U	4 U

Table 3D.6. Phase IV Ambient Air and Breathing Zone Monitoring Results- Isotopic Radiological Analysis

Station	**ALL-AR0015**	**ALL-AR0015**	**ALL-AR0015**	**ALL-AR0016**	**ALL-AR0016**	**ALL-AR0016**	**ALL-AR0016**	**ALL-AR0016**
Sample No	**LUAR0167**	**LUAR0168**	**LUAR0169**	**LUAR0203**	**LUAR0209**	**LUAR0221**	**LUAR0234**	**LUAR0243**
Collection Date	**07/12/98**	**07/14/98**	**08/03/98**	**07/08/98**	**07/11/98**	**07/22/98**	**07/29/98**	**08/07/98**
Radiological Parameters								
Radium-226 (pci/s)	3.69	4.18	5.41	0.526 J	3.54	3.5	5.02	0.891 U
Radium-228 (pci/s)								
Radiological Parameters (AlphaSpec)								
Actinium-227 (pci/s)	0.0496 U	0.0578 U	-0.118 U	0.661 J	0.0167 U	0.064 U	-0.054 U	0.0248 U
Thorium-228 (pci/s)	0.263 U	0.0468 U	0.208 J	0.946 J	0.256 J	0.281 J	0.32 J	0.165 U
Thorium-230 (pci/s)	0.0843 U	0.091 U	0.272 U	0.55 J	0.0468 U	0.12 U	0.214 J	0.153 U
Thorium-232 (pci/s)	0.0305 U	0.0156 U	-0.0076 U	0.0282 U	0.0851 U	0.0637 U	-0.0228 U	0.0244 U
Uranium-233/234 (pci/s)	0.0349 U	0.062 U	0.133 U	0.274 U	0.0606 U	0.0286 U	0.0703 U	0.0939 U
Uranium-235 (pci/s)	0 U	0.0099 U	0.142 U	0.038 U	0.069 U	0 U	0.0146 U	0.0505 U
Uranium-238 (pci/s)	-0.0085 U	0.0268 U	0.0183 U	-0.0175 U	0.0606 U	0.0754 U	-0.0134 U	0.0859 U
Actinium-228 (pci/s)	6.18 U	6.26 U	8.47 U	2.05 U	7.48 U	5.82 U	4.79 U	0.627 U
Cesium-137 (pci/s)	1.45 U	0.63 U	0.799 U	2.55 U	2.89 J	-0.967 U	0.771 U	-0.15 U
Cobalt-60 (pci/s)	0.898 U	0.373 U	1.07 U	1.51 U	-0.134 U	-1.19 U	0.677 U	-0.336 U
Potassium-40 (pci/s)	26.1 U	24.3	0.929 U	14.3 U	4.45 U	26.2	27.9 U	25.6 U
Protactinium-231 (pci/s)	-6.19 U	-13.9 U	6.84 U	15.9 U	7.33 U	58.3 U	-1.95 U	-14.4 U
Thorium-234 (pci/s)	17.7 U	72.7 U	52.3 U	11.2 U	0 U	40.5 U	2.37 U	84.3 U
Uranium-235 (pci/s)	1.95 U	6.96 U	4.83 U	3.64 U	5.22 U	0.121 U	3.72 U	0.692 U

Table 3D.7. Phase IV Ambient Air Monitoring Results - Beryllium Analysis

Sample ID	Date	Air Station	Analysis	Average Flow Rate (lpm)	Time (min)	Sample Volume (L)	Beryllium Levels (ug/m3)	MDL (ug/m3)	TWA (ug/m3)
LUAR0291	06/22/98	#6, downwind	Be-7102	50	520	26000	U	0.004	0.0043
LUAR0292	06/22/98	#14 upwind	Be-7102	50	515	25750	U	0.004	0.0043
LUAR 0293	06/23/98	#6 downwind	Be-7102	50	515	25750	U	0.0004	0.0004
LUAR0294	06/23/98	#14 upwind	Be-7102	33	535	17655	U	0.0006	0.0007
LUAR0295	06/24/98	#6 downwind	Be-7102	50	470	23500	0.0004	0.0004	0.0004
LUAR0296	06/24/98	#14 upwind	Be-7102	50	570	28500	U	0.0004	0.0005
LUAR0297	06/25/98	#6 downwind	Be-7102	50	510	25500	0.0018	0.0004	0.0019
LUAR0298	06/25/98	#14 upwind	Be-7102	50	510	25500	U	0.0004	0.0004
LUAR0299	06/26/98	#5 downwind	Be-7102	50	510	25500	0.0008	0.0004	0.0009
LUAR0300	06/26/98	#14 upwind	Be-7102	50	505	25250	U	0.0004	0.0004
LUAR0301	06/27/98	#5 downwind	Be-7102	50	530	26500	U	0.0004	0.0004
LUAR0302	06/27/98	#14 upwind	Be-7102	50	490	24500	U	0.0004	0.0004
LUAR0303	06/28/98	#14, #5 upwind	Be-7102	50	560	28000	U	0.0004	0.0005
LUAR0304	06/28/98	#5, #2 downwind	Be-7102	50	540	27000	U	0.0004	0.0005
LUAR0305	06/29/98	#5 downwind	Be-7102	50	520	26000	0.0016	0.0008	0.0017
LUAR0306	06/29/98	#14 upwind	Be-7102	50	515	25750	U	0.0004	0.0004
	06/30/98					Samples destroyed in hail.			
LUAR0309	07/01/98	#14 upwind	Be-7102	50	520	26000	U	0.0004	0.0004
	07/01/98					Sample sucked into pump.			
LUAR0310	07/06/98	#5 downwind	Be-7102	50	620	31000	0.0009	0.0003	0.0012
LUAR0311	07/06/98	#14 upwind	Be-7102	50	585	29250	U	0.0003	0.0004
LUAR0312	07/07/98	#5 downwind	Be-7102	50	520	26000	0.0005	0.0005	0.0005
LUAR0201	07/07/98	#14 upwind	Be-7102	50	530	26500	U	0.0004	0.0004
LUAR0202	07/08/98	#5 downwind	Be-7102	50	310	15500	U	0.0006	0.0004
LUAR0203	07/08/98	#14 upwind	Be-7102	50	620	31000	U	0.0003	0.0004
LUAR0204	07/09/98	#5 downwind	Be-7102	50	510	25500	U	0.0004	0.0004
LUAR0205	07/09/98	#14 upwind	Be-7102	50	580	29000	U	0.0003	0.0004
LUAR0206	07/10/98	#5 downwind	Be-7102	50	510	25500	U	0.0004	0.0004
LUAR0207	07/10/98	#14 upwind	Be-7102	50	580	29000	U	0.0003	0.0004
LUAR0208	07/11/98	#5 downwind	Be-7102	50	560	28000	U	0.0004	0.0005
LUAR0209	07/11/98	#14 upwind	Be-7102	47.5	600	28500	U	0.0008	0.0010
LUAR0210	07/12/98	#5 downwind	Be-7102	50	510	25500	0.0004	0.0002	0.0004
LUAR0211	07/12/98	#14 upwind	Be-7102	50	600	30000	U	0.0003	0.0004
LUAR0212	07/13/98	#5 downwind	Be-7102	50	510	25500	0.0025	0.0008	0.0027
LUAR0213	07/13/98	#14 upwind	Be-7102	50	580	29000	U	0.0003	0.0004
LUAR0214	07/14/98	#5 upwind	Be-7102	50	540	27000	0.0043	0.0018	0.0048
LUAR0215	07/14/98	#14 downwind	Be-7102	50	525	26250	U	0.0004	0.0004

MDL - minimum detection limit
U - not detected
lpm - liters per minute
TWA - time weighted average

Table 3D.7. Phase IV Ambient Air Monitoring Results - Beryllium Analysis

Sample ID	Date	Air Station	Analysis	Average Flow Rate (lpm)	Time (min)	Sample Volume (L)	Beryllium Levels (ug/m3)	MDL (ug/m3)	TWA (ug/m3)
LUAR0216	07/15/98	#5 downwind	Be-7102	50	360	18000	0.0019	0.0006	0.0014
LUAR0217	07/15/98	#14 upwind	Be-7102	50	440	22000	U	0.0005	0.0005
LUAR0218	07/20/98	#5 downwind	Be-7102	50	480	24000	0.0052	0.0021	0.0052
LUAR0219	07/20/98	#14 upwind	Be-7102	50	555	27750	U	0.0004	0.0005
LUAR0220	07/22/98	#5 downwind	Be-7102	50	50	2500	0.0064	0.004	0.0007
LUAR0221	07/22/98	#14 upwind	Be-7102	50	620	31000	U	0.0003	0.0004
LUAR0222	07/23/98	#5 downwind	Be-7102	50	525	26250	0.0008	0.0004	0.0009
LUAR0223	07/23/98	#14 upwind	Be-7102	50	580	29000	U	0.0003	0.0004
LUAR0224	07/24/98	#5 downwind	Be-7102	50	480	24000	0.0006	0.0006	0.0006
LUAR0225	07/24/98	#14 upwind	Be-7102	50	615	30750	U	0.0003	0.0004
LUAR0226	07/25/98	#5 downwind	Be-7102	50	530	26500	0.0007	0.0004	0.0008
LUAR0227	07/25/98	#14 upwind	Be-7102	50	550	27500	U	0.0004	0.0005
LUAR0228	07/26/98	#5 downwind	Be-7102	50	540	27000	0.0025	0.0007	0.0028
LUAR0229	07/26/98	#14 upwind	Be-7102	50	580	29000	U	0.0003	0.0004
LUAR230	07/27/98	#5 downwind	Be-7102	50	525	26250	0.03	0.015	0.0328
LUAR231	07/27/98	#14 upwind	Be-7102	50	525	26250	U	0.0004	0.0004
LUAR232	07/28/98	#5 downwind	Be-7102	50	420	21000	0.03	0.019	0.0263
LUAR0233	07/28/98	#14 upwind	Be-7102	50	520	26000	U	0.0004	0.0004
LUAR0234	07/29/98	#5 downwind	Be-7102	50	420	21000	0.0012	0.0005	0.0011
LUAR0235	07/29/98	#14 upwind	Be-7102	50	550	27500	U	0.0004	0.0005
LUAR0236	08/03/98	#5 downwind	Be-7102	48.5	455.01	22068	0.0049	0.0023	0.0046
LUAR0237	08/03/98	#14 upwind	Be-7102	50	600	30000	U	0.0003	0.0004
LUAR0238	08/04/98	#5 downwind	Be-7102	50	390	19500	0.0062	0.002	0.0050
LUAR0239	08/04/98	#14 upwind	Be-7102	50	435	21750	U	0.0005	0.0005
LUAR0240	08/06/98	#5 downwind	Be-7102	50	420	21000	0.0008	0.0005	0.0007
LUAR0241	08/06/98	#14 upwind	Be-7102	50	510	25500	U	0.0004	0.0004
LUAR0242	08/07/98	#5 downwind	Be-7102	50	480	24000	U	0.0004	0.0004
LUAR0243	08/07/98	#14 upwind	Be-7102	50	540	27000	U	0.0004	0.0005
LUAR0244	08/08/98	#5 downwind	Be-7102	50	480	24000	U	0.0004	0.0004
LUAR0245	08/08/98	#14 upwind	Be-7102	50	510	25500	U	0.0004	0.0004
LUAR0246	08/09/98	#5 downwind	Be-7102	50	540	27000	U	0.0004	0.0005
LUAR0247	08/09/98	#14 upwind	Be-7102	50	560	28000	0.0016	0.0004	0.0019
LUAR0248	08/10/98	#5 downwind	Be-7102	50	495	24750	0.0008	0.0004	0.0008
LUAR0249	08/10/98	#14 upwind	Be-7102	50	570	28500	0.0007	0.0004	0.0008

MDL - minimum detection limit
U - not detected
lpm - liters per minute
TWA - time weighted average

Table 3D.8. Phase IV Personal Breathing Zone Results - Beryllium Analysis

Sample ID	Date	Sample Location	Pump ID	Analysis	Average Flow Rate (lpm)	Time (min)	Sample Volume (L)	Beryllium Levels (ug/m3)	MDL (ug/m3)	TWA (ug/m3)
LUAR0001	06/18/98	Building Annex	518032	Be-7102	2.178	248	540.144	U	Not reported	ND
LUAR0002	06/18/98	Building Annex	508161	Be -7102	2.043	260	531.13	U	Not reported	ND
LUAR0003	06/19/98	Building Annex	518061	Be -7102	2.27	260	590.2	U	Not reported	ND
LUAR0004	06/19/98	Building Annex	518032	Be -7102	2.2	266	585.2	U	Not reported	ND
LUAR0005	06/23/98	Building Annex	518061	Be -7102	2.23	262	585.2	U	0.02	0.011
LUAR0006	06/23/98	Building Annex	518052	Be -7102	2.15	277	594.5	U	0.02	0.012
LUAR0007	06/21/98	Building Annex	518061	Be -7102	2.274	131	297.9	U	0.02	0.005
LUAR0008	06/24/98	Building Annex	522723	Be -7102	2.229	263	586.2	U	0.02	0.011
LUAR0009	06/24/98	Building Annex	509179	Be -7102	2.234	255	569.7	U	0.02	0.011
LUAR0010	06/25/98	Building Annex	522723	Be -7102	3.34	275	918.5	0.66	0.01	0.378
LUAR0011	06/25/98	Building Annex	509179	Be -7102	3.31	246	814.3	0.3	0.1	0.154
LUAR0012	06/26/98	Building Annex	509179	Be -7102	3.25	214	696.2	0.02	0.01	0.009
LUAR0013	06/26/98	Building Annex	522723	Be -7102	3.34	259	865.2	0.02	0.01	0.011
LUAR0014	06/27/98	Building Annex	509179	Be -7102	3.27	307	1004.96	0.22	0.2	0.141
LUAR0015	06/27/98	Building Annex	522723	Be -7102	3.38	261	881.8	0.02	0.01	0.011
LUAR0016	06/28/98	Building Annex	NR	Be -7102	NR	NR	1025	0.05	0.02	ND
LUAR0017	06/28/98	Building Annex	NR	Be -7102	NR	NR	1096	0.05	0.02	ND
LUAR0018	06/29/98	Building Annex	508178	Be -7102	3.11	262	814.8	U	0.01	0.005
LUAR0019	06/29/98	Building Annex	508378	Be -7102	3.08	273	840.8	U	0.01	0.006
LUAR0020	07/06/98	Building Annex	509179	Be -7102	3.67	418	1534.1	U	0.01	0.009
LUAR0021	07/07/98	Building Annex	508378	Be -7102	3.34	332	1108.88	0.44	0.18	0.304
LUAR0022	07/07/98	Building Annex	522723	Be -7102	3.12	333	1039	0.01	0.01	0.007
LUAR0023	07/13/98	Maintance Bldg.	518032	Be -7102	3.3	290	957	0.05	0.02	0.030
LUAR0024	07/25/98	Production Bldg.	518052	Be -7102	3.08	372	1145.8	U	0.01	0.008
LUAR0025	07/27/98	Production Bldg.	518052	Be -7102	3.37	386	1300.8	0.05	0.04	0.040
LUAR0051	06/19/98	PZ1&2; IA07	518032	Be -7102	2.25	190	427.5	U	Not reported	ND
LUAR0052	06/22/98	PZ3; IA08	518052	Be -7102	2.26	156	352.6	U	0.02	0.007
LUAR0053	06/24/98	IA07	518052	Be -7102	3.461	125	432.6	U	0.02	0.005
LUAR0054	06/25/98	IA07	518052	Be -7102	3.54	235	831.9	U	0.01	0.005
LUAR0055	06/26/98	IA01	519738	Be -7102	3.573	128	457.3	U	0.02	0.005
LUAR0056	06/27/98	IA01	518061	Be -7102	3.51	164	575.6	0.01	0.01	0.003
LUAR0057	06/28/98	IA01	518061	Be -7102	3.51	133	466.8	0.02	0.02	0.006
LUAR0058	06/29/98	IA01/IA02	518061	Be -7102	3.56	153	544.7	0.02	0.02	0.006
LUAR0059	07/06/98	IA02	518032	Be -7102	3.55	106	376.3	U	0.03	0.007
LUAR0060	07/10/98	IA04	518052	Be -7102	3.55	169	600	U	0.02	0.007
LUAR0061	07/15/98	IA01	519738	Be -7102	3.59	175	628.3	U	0.02	0.007

MDL - minimum detection limit
U - not detected
lpm - liters per minute
ND - not determined
TWA - time weighted average

Table 3D.8. Phase IV Personal Breathing Zone Results - Beryllium Analysis

Sample ID	Date	Sample Location	Pump ID	Analysis	Average Flow Rate (lpm)	Time (min)	Sample Volume (L)	Beryllium Levels (ug/m3)	MDL (ug/m3)	TWA (ug/m3)
LUAR0062	07/24/98	IA01	518052	Be -7102	3.55	81	287.6	0.08	0.03	0.014
LUAR0063	07/26/98	IA03	518052	Be -7102	3.37	230	775.1	0.03	0.01	0.014
LUAR0065	10/28/98			Be -7102			761.36	0.07B		
LUAR0098	08/03/98		518032	Be -7102	3.41	139	474	0.05	0.02	0.014
LUAR0100	07/11/98		518061	Be -7102	3.22	250	805	0.19	0.06	0.099
LUAR 0101	06/19/98	MW01; IA05	518052	Be -7102	2.2	226	497.2	U	0.02	0.009
LUAR 0102	06/22/98	MW01; IA05	518061	Be -7102	2.236	252	563.5	U	0.02	0.011
LUAR 0103	06/23/98	MW02; IA05	518061	Be -7102	3.266	174	568.3	U	0.02	0.007
LUAR 0104	06/24/98	MW03/04; IA02	518061	Be -7102	3.377	245	827.4	U	0.01	0.005
LUAR 0105	06/25/98	MW03/04; IA02	518061	Be -7102	3.55	221	784.6	U	0.01	0.005
LUAR0106	06/27/98	IA01	519738	Be -7102	3.53	185	653.1	0.04	0.02	0.015
LUAR0107	06/28/98	IA01	519738	Be -7102	3.57	170	606.9	0.03	0.02	0.011
LUAR0108	06/29/98	IA01	519738	Be -7102	3.56	40	142.4	0.21	0.1	0.018
LUAR0109	07/09/98	IA01	518061	Be -7102	3.69	302	1114.4	0.057	0.018	0.036
LUAR0110	07/14/98	IA01/IA05	519738	Be -7102	3.58	95	340.1	0.06	0.03	0.012
LUAR0111	07/20/98	IA01	519738	Be -7102	3.59	106	380.5	0.14	0.05	0.031
LUAR0113	08/04/98	IA01; MW19	518032	Be -7102	3.45	224	772.8	0.01	0.01	0.005
LUAR0114	08/08/98	IA07	518052	Be -7102	3.38	269	909.2	U	0.01	0.006
LUAR0115	08/10/98	Luckey Dump	518032	Be -7102	3.27	254	830.6	U	0.01	0.005
LUAR0116	08/11/98	Luckey Dump	518032	Be -7102	3.12	147	458.6	U	0.02	0.006
LUAR0117	10/27/98			Be -7102			1897.4	0.03U		
LUAR0118	10/29/98			Be -7102			1459.2	0.03U		
LUAR0151	06/19/98	SB0003; IA07	543258	Be -7102	2.23	150	334.5	U	0.02	0.006
LUAR0152	06/22/98	SB0004&5; IA07	518032	Be -7102	2.2	279	613.8	0.1	0.02	0.058
LUAR0153	06/23/98	SB0001; IA07	519738	Be -7102	3.532	78	275.5	U	0.04	0.007
LUAR0154	06/24/98	SB0002; IA07	519738	Be -7102	3.518	267	939.3	U	0.01	0.006
LUAR0155	06/25/98	SB0006,7,8; IA07	519738	Be -7102	3.66	220	805.2	U	0.01	0.005
LUAR0156	06/27/98	IA07	518032	Be -7102	3.52	206	725.1	U	0.01	0.004
LUAR0157	06/28/98	IA03	518052	Be -7102	3.52	134	471.7	U	0.02	0.006
LUAR0158	06/29/98	IA03	518052	Be -7102	3.52	176	619.5	U	0.02	0.007
LUAR0159	07/08/98	IA02	518052	Be -7102	3.52	298	1049	0.1	0.05	0.062
LUAR0160	07/23/98	IA01	519738	Be -7102	3.64	71	258.4	0.67	0.2	0.099
LUAR0162	07/28/98	1A03	518032	Be -7102	3.35	458	1534.3	0.01	0.007	0.010
LUAR0163	08/06/98	IA02; MW23	518032	Be -7102	3.41	256	873	U	0.01	0.005
LUAR0164	08/07/98	IA02;MW24	518032	Be -7102	3.42	205	701.1	U	0.01	0.004
LUAR0165	08/09/98	IA02; MW20	518052	Be -7102	3.4	305	1037	U	0.01	0.006

MDL - minimum detection limit
U - not detected
lpm - liters per minute
ND - not determined
TWA - time weighted average

Table 3D.8. Phase IV Personal Breathing Zone Results - Beryllium Analysis

Sample ID	Date	Sample Location	Pump ID	Analysis	Average Flow Rate (lpm)	Time (min)	Sample Volume (L)	Beryllium Levels (ug/m3)	MDL (ug/m3)	TWA (ug/m3)
LUAR0166	08/12/98	Luckey Dump	518052	Be -7102	3.3	181	597.3	0.02	0.02	0.008
LUAR0366	07/20/99	BM0005	SKC-100	Be -7102	2.01	430	864	0.06	Not reported	0.054
LUAR0367	07/20/99	BM0005	SKC-187	Be -7102	2.12	401	850	<0.01	Not reported	0.008
LUAR0368	07/20/99	BM0005	SKC-706	Be -7102	2	407	814	0.98	Not reported	0.831
LUAR0369	07/21/99	BM0005/0004	SKC-100	Be -7102	1.98	435	861	0.07	Not reported	0.063
LUAR0370	07/21/99	BM0005/0004	SKC-2730	Be -7102	1.91	542	1035	<0.01	Not reported	0.011
LUAR0371	07/21/99	BM0005/0004	SKC-187	Be -7102	2.1	385	809	<0.01	Not reported	0.008
LUAR0372	07/22/99	BM0004	SKC-100	Be -7102	1.97	380	749	0.01	Not reported	0.008
LUAR0373	07/22/99	BM0004	SKC-706	Be -7102	1.97	465	916	<0.01	Not reported	0.010
LUAR0374	07/22/99	BM0004	SKC-187	Be -7102	2.04	330	673	<0.01	Not reported	0.007
LUAR0375	07/23/99	BM0004	SKC-100	Be -7102	1.99	496	987	<0.01	Not reported	0.010
LUAR0376	07/23/99	BM0004	SKC-706	Be -7102	1.99	364	724	<0.01	Not reported	0.008
LUAR0377	07/23/99	BM0004	SKC-2730	Be -7102	2.08	370	770	<0.01	Not reported	0.008
LUAR0378	07/24/99	BM0004/0002	SKC-706	Be -7102	1.99	216	430	<0.02	Not reported	0.009
LUAR0379	07/24/99	BM0004/0002	SKC-187	Be -7102	2.05	218	447	<0.02	Not reported	0.009
LUAR0380	07/24/99	BM0004/0002	SKC-100	Be -7102	1.98	223	442	<0.02	Not reported	0.009

MDL - minimum detection limit
U - not detected

lpm - liters per minute
ND - not determined

TWA - time weighted average

APPENDIX 3E:
Data Quality Assessment

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3E.1 INTRODUCTION

This data quality assessment (DQA) describes the evaluation of the data quality indicators (DQIs) that were used to assess the overall quality of the analytical data collected for the USACE Luckey RI. The DQIs (accuracy, precision, completeness, representativeness, and comparability) are assessed with respect to the data quality objectives (DQOs). Project DQOs establish the data end uses and end users and provide objective criteria by which the data quality can be measured. More importantly, the DQO process identifies the up-front protocols, processes, precedures, and methods by which the DQOs can be met. With the appropriate planning for project DQOs, their achievement provides the basis for concluding that the acquired investigation data is scientifically sound, legally defensible, and adequate for their intended use.

The specific DQOs for accuracy, precision, completeness, representativeness, and comparability were established in the project-planning phase. DQOs may be qualitative statements, while others set quantitative criteria or goals. Both are evaluated in this DQA. The numerical DQOs are presented in Tables 3E.1.1 for soil/sediment and 3E.1.2 for water matrices. Accuracy, precision, completeness, representativeness, and comparability are defined in Section 3E.2.

The Luckey RI sampling and analysis was conducted using the quality control (QC) requirements and quality assurance (QA) objectives as outlined in the Luckey Work Plan (SAIC 1998a), Sampling and Analysis Plan (SAP) (SAIC 1998b), and the Quality Assurance Project Plan (QAPP) (SAIC 1998c). Samples were analyzed for VOC, SVOC, pesticides/PCBs, TAL metals, and various radiochemical constituents. In addition, selected samples were also analyzed using various wet chemistry methods (i.e., ammonia, fluoride).

3E.1.1 ENVIRONMENTAL ANALYTICAL LABORATORIES

Environmental and field QC samples were analyzed by General Engineering Laboratories (GEL) and their affiliated radiochemical laboratory Environmental Physics Inc. (EPI) for the Luckey RI. The laboratory analyzed all environmental samples (i.e., soil and water) and field QC samples (i.e., trip blanks, equipment rinsates, field duplicates) using accepted laboratory SOPs based on EPA, DOE, and ASTM methods from the following references:

- *Methods for Chemical Analyses of Water and Wastes*, EPA-600/4-79-020, March 1983;
- *EML Procedures Manual HASL-300*, 1982;
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, September 1986, and current revisions (Update III); and
- *Prescribed Procedures for Measurement of Radioactivity in Drinking Water (900 series), USEPA, August 1980*.

3E.1.2 ANALYTICAL DATA VALIDATION

3E.1.2.1 Data Validation Resources

Analytical data were independently validated for adherence to method QA/QC criteria by SAIC using specifications established in the Luckey QAPP and GEL's QAP, and the guidelines described in the following documents:

- *National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration*, December 1990, Revised June 1991;
- *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses*, February 1988, Revised January 1993; and

- *SAIC Quality Assurance Technical Procedures; Volume I, Data Management: Data Validation Procedure,* Revision 3, September, 1996.

All data received from the laboratories were subjected to an initial review to ensure that all elements of the required deliverable were submitted. For 10% of the investigation data, review items included, but were not limited to, case narratives, chain of custody, detection limits, blanks, and QC summaries. These items were reviewed in accordance with the above referenced data validation procedures.

3E.1.2.2 Data Validation Results

Data validation qualifiers that resulted from the validation process were documented, incorporated into the Luckey database, and used to evaluate the data quality. A 10% level for data validation is believed to be sufficient to find any systematic problems within the laboratory. The validation task was designed to be inclusive of all facets of the laboratory operation, from sample receipt to final data reporting (hard copy and electronic data deliverable, or EDD). No systematic problems were noted during the data validation effort. The data validation process resulted in only minor qualifications of the data.

3E.1.3 QUALITY DATA MANAGEMENT

The Luckey database was populated with analytical results from samples collected during the Luckey RI. In certain cases, data were selected for incorporation into or exclusion from the database (i.e., two results from the same sampling point). The selection processes are described below.

- One data point qualified with "R" was marked to prevent incorporation into the usable data population.

- All laboratory and field QC results were marked to prevent incorporation into the usable data population.

- All duplicate values (same sample location) were identified with a unique sample ID to prevent incorporation into the usable data population.

- All dilutions results were evaluated for best value and detection limit using the following procedure:

    1) The diluted sample results were selected for all compounds that exceeded the analytical calibration range in the original data set,
    2) The non-diluted sample results were selected for all target compounds reported within the calibration range, and
    3) The most sensitive detection limit (the non-diluted or original sample) was selected for undetected compounds.

- All reanalysis results were evaluated for best value, based on QC results, established criteria, detection limit, and professional judgement.

3E.2 DATA QUALITY OBJECTIVES

As defined in the QAPP, the following specific DQOs for accuracy, precision, completeness, representativeness, and comparability were used to assess the overall quality of the analytical data collected for the Luckey RI.

Numerical DQOs for accuracy, precision, and completeness are listed in Table 3E.1.1 for soil/sediment and in Table 3E.1.2 for water matrices. These criteria were applied to the laboratory chemical and radiochemical QC analyses conducted during the RI. The project QC data are tabulated by amount of data observed within the criteria, the amount of data below the criteria, and the amount of data above the criteria. This provides the main point of reference for an assessment of the Luckey RI environmental database as a whole.

3E.2.1 ACCURACY

Accuracy is defined as the extent of agreement between a measured or calculated value and the true value. Accuracy was determined for the Luckey project using spike percent recovery data from matrix spike/matrix spike duplicate (MS/MSD) samples and laboratory control samples (LCSs). The overall analytical accuracy for the project is 96.7%. DQOs for accuracy were met for the project. Laboratory accuracy summaries for each matrix and analysis are presented in Section 3E.4.3 and Tables 3E.2.1 through 3E.2.18.

3E.2.2 PRECISION

Precision is defined as the reproducibility, or degree of agreement, among replicate measurements of the same compound or element analyzed under identical conditions. Precision is expressed as relative percent difference (RPD) between the two results. The overall analytical precision for the project is 97.7%. The data met the precision DQOs established for Luckey. Laboratory precision performance summaries for each matrix and analysis are presented in Section 3E.4.3 and Tables 3E.2.1 through 3E.2.18.

3E.2.3 COMPLETENESS

Completeness for the Luckey RI refers to the usable data acquired, which is expressed as a percentage of the planned valid data. Completeness determinations are made separately for samples obtained from the field collection effort and data obtained from the analytical measurement system.

3E.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 Luckey RI by collecting sufficient samples of a population medium, properly distributed with respect to location. Representativeness, in part, was accomplished by the consistent use of approved drilling techniques, sample collection methods, equipment, and sample containers for the field work. 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 homogeneity of the sampled medium.

3E.2.5 COMPARABILITY

Comparability refers to the confidence with which one data set can be compared to another. To achieve data comparability, the data set used for the Luckey RI was generated by employing standardized analytical methods and standardized data validation procedures. Also, the project planning, including lab selection, incorporated various appropriate EPA and USACE guidance documents, as well as direct input from USACE on field and laboratory issues, to ensure the comparability of the data.

Additionally, the laboratories participated in the analysis of Performance Evaluation (PE) samples for organics, inorganics, and radionuclides. The laboratory performance throughout the duration of the Luckey RI analytical testing indicates their ability to generate accurate results over time. Based on the overall quality of the PE 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.

3E.3 DATA QUALITY ASSESSMENT

Environmental samples were collected and analytical data were evaluated during the Luckey RI to support technical conclusions and recommendations. These data (e.g., concentration values and laboratory qualifiers) were incorporated into one database. Hard copy data packages were submitted to the data validators for validation. The qualifiers applied to estimated or rejected data points were incorporated into the database once the data validation reports were received and reviewed. The usable data population was then determined using the preparation and selection process described in Section 3E.1.3

3E.3.1 DATA VALIDATION PROCESS

Analytical data were validated according to the guidelines and procedures described in the documents listed in Section 3E.1.2.1. The validators were responsible for the following:

(1) reviewing laboratory data packages and applying required control limits (obtained from references listed in Section 3E.1.2.1),
(2) using professional judgment where specific limits were not specified,
(3) qualifying affected data points on the applicable result forms, and
(4) preparing a data validation report for actions taken.

Wet chemistry methods (i.e. chloride, pH, sulfate, etc.) were validated to equivalent levels as the balance of organic, inorganic, and radiochemical data. Wet chemistry methods have fewer laboratory QA/QC requirements and provide more general information than do SW-846 and radiochemical methods. The results of the wet chemistry data validation were incorporated into the Luckey RI database, but individual QA and method-specific results are not presented in this appendix.

3E.3.2 DATA VALIDATION REVIEW PROCESS

Analytical data received from the data validators were reviewed before the validation qualifiers were incorporated into the Luckey RI database. The validation results were reviewed for consistency, completeness, and to resolve any questions. After the validation qualifiers were incorporated into the database, an output report was printed and compared to the input data. All changes were documented and incorporated into the Luckey RI database as the final qualifiers.

3E.3.3 DATA BIAS ASSESSMENT

The DQA was conducted using the Luckey RI QC data (by matrix and by parameter) and the data validation results. The QC data were evaluated for the number of results observed within the set acceptance criteria, lower than the criteria exists, or higher than the criteria. When the data are observed as being lower or higher than the criteria, a bias.

Overall bias for the Luckey RI is as follows: approximately 1.7% are considered to have been reported at an artificially lower concentration (i.e., potentially biased low); approximately 3.1% of the Luckey RI data are considered to have been reported at a maximum value (i.e., potentially biased high); the remaining 95.2% are considered to have negligible bias (they are within the QC acceptance criteria).

3E.4 LABORATORY QUALITY CONTROL SUMMARY

3E.4.1 CONTRACT-REQUIRED HOLDING TIMES

Holding times are defined as the maximum amount of time allowed to lapse between the date and time of sample collection and the date and time of sample analysis. Analysis of samples that have exceeded the method-recommended holding times may result in the following:

1) concentrations of compounds that ordinarily would have been detected remain undetected due to chemical transformation, compound volatilization, or biodegradation;
2) reported concentrations are lower than those originally present, due to the factors previously stated; or
3) reported concentrations are greater than those originally present in the sample, due to external contamination of water samples or changes in soil moisture content. No data were rejected due to holding time violations.

3E.4.2 COMPLETENESS

The project completeness goal was 90%, and the analytical completeness goal was 95%. Analytical completeness was calculated by adding the number of samples collected for any analysis, subtracting the number of sample analyses that were rejected and dividing that number by the total samples collected. No sample analyses were rejected; therefore, the analytical completeness was 100% for all methods.

3E.4.3 ACCURACY AND PRECISION

Laboratory accuracy and precision assessment and sample matrix effect evaluation were conducted using LCS/LCSDs and MS/MSDs. Accuracy and precision were expressed as the percent recovery (%R) of the spike compounds, elements, or isotopes, and the RPD of the concentrations of the spike compounds, respectively. For samples collected and analyzed as field duplicates, precision was expressed as the percent difference of the concentration of elements detected in the sample and associated duplicate. As with MS/MSDs, the field duplicate data served as indications of the matrix sampled and precision in the analytical system. An MS/MSD or a spike and analytical duplicate analysis was required for every 20 samples of a similar matrix. Field duplicates were collected at a 10% frequency by matrix.

3E.4.3.1 Volatile Organic Compound Analyses

Forty-six soil LCSs and 47 water LCSs were analyzed for VOCs. All LCS results were within the specified QC limits. Six soil samples and 10 water samples were analyzed as MS/MSDs using USEPA SW-846 method 8260. These samples were spiked with the following compounds: 1,1-dichloroethene, TCE, benzene, toluene, and chlorobenzene. One hundred percent of the duplicate RPDs were within the acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables 3E.2.1 through 3E.2.18.

3E.4.3.2 Semivolatile Organic Compound Analyses

Thirty-two soil LCSs and 27 water LCSs were analyzed. LCS results were within the specified limits, except for two compounds in the water LCSs that were slightly low. Thirty soil and 30 water samples were analyzed as MS/MSDs using USEPA SW-846 method 8270. These samples were spiked with the following compounds: phenol, 2-chlorophenol, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, 4-chloro-3-methlyphenol, acenaphthene, 4-nitrophenol, 2,4-dinitrotoluene, pentachlorphenol, and pyrene. For soil/sediment samples 90.7%, and for water samples 98.7% of the duplicate RPDs were within the

acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables 3E.2.1 through 3E.2.18.

3E.4.3.3 Inorganic Chemical Analyses

Thirty-four soil LCSs and 35 water LCSs were analyzed. LCS results were within the specified limits, except for barium, iron , mercury, and sodium. Thirty-two soil/sediment and 30 water samples were analyzed as MS/MSDs using USEPA SW-846 method 6010 and the cold vapor analysis (method 7470 and 7471) for mercury. For soil/sediment samples 96.8%, and for water samples 99.8% of the duplicate RPDs were within the acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables3E.2.1 through 3E.2.18.

3E.4.3.4 Arsenic, Barium, Beryllium, and Lead Analyses

Twenty-two soil/sediment LCSs and 29 water LCSs were analyzed for arsenic, barium, beryllium, and lead. LCS results were within the specified limits, except for two barium results that were slightly high. Twenty-six soil/sediment samples were analyzed as MS/MSDs using USEPA SW-846 method 6010. For soil/sediment samples 96% of the duplicate RPDs were within the acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables 3E.2.1 through 3E.2.18.

3E.4.3.5 Beryllium Only

Twenty-seven soil/sediment LCSs and three water LCSs were analyzed for beryllium only. LCS results were within the specified limits. Forty-four soil/sediment samples were analyzed as MS/MSDs using USEPA SW-846 method 6010. For soil/sediment samples 100% of the duplicate RPDs were within the acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables 3E.2.1 through 3E.2.18.

3E.4.3.6 Radiochemical Analyses

Seventy soil LCSs and 51 water LCSs were analyzed for specified radiochemical constituents or isotopes. All LCS results were within the specified limits. Twenty-five soil/sediment and 20 water samples were analyzed as MS/MSDs using the referenced methods (EPA 900 and EML-HASL) for radiochemical analyses. One isotope was spiked per method to represent each reported isotope from that method. The soil radiochemical isotopes are cesium-137 (gamma), Th-232, and U-238 and for water they are gross-alpha, gross-beta, cesium-137 (gamma), Ra-226, Ra-228 Th-232, and U-238. For soil/sediment samples 92%, and for water samples 92.5% of the duplicate RPDs were within the acceptance criteria. The analytical accuracy and precision results for MS/MSDs and LCSs are summarized in Tables 3E.2.1 through 3E.2.18.

3E.4.4 REPRESENTATIVENESS

Representativeness was ensured by conducting all field measurements, sample collection procedures, and laboratory analyses according to the guidelines and specifications described in the Luckey RI Work Plan (SAIC 1998a), QAPP and Laboratory QAPP (SAIC 1998c). Laboratory procedures were evaluated prior to shipping samples and also during the data validation process. The data set is considered representative of site conditions for the purpose of the Luckey RI.

3E.5 FIELD QUALITY CONTROL SUMMARIES

Trip blanks, equipment rinsate blanks, and field duplicates were collected and analyzed for the same target compounds or elements and using the same laboratory techniques as those used for the environmental samples. The analytical results obtained from the field QC blanks were considered in assessing the sample collection, handling, and equipment decontamination procedures used in the field. Blanks were assessed as part of the data validation process, and results were qualified where appropriate.

3E.5.1 TRIP BLANKS

Trip blanks monitor for VOC contamination during sample transport and storage. Trip blanks were prepared by the laboratory with ASTM Type II water, stored with the unused sample bottles, and returned to the laboratory with each cooler containing VOC samples. 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 five 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.

3E.5.2 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 were used to collect. The equipment rinsate blanks were evaluated, and the reportable data points were adjusted using the procedure described for trip blanks.

3E.5.3 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. Where good field techniques are consistently implemented and matrix effects are minimum, the RPDs are expected to be low. Forty-nine percent of the field duplicate RPDs for organic results in soil/sediment were within acceptance criteria. While this percentage is low, it is not uncommon for PAHs to produce higher RPDs in some field duplicates. Eighty-two percent of the field duplicate RPDs for metal results in soil were within acceptance criteria, 86% in sediments, 84% in water samples, and 95% in filtered water samples. Ninety-two percent of the field duplicate RPDs for radiochemistry results in soil were within acceptance criteria, 90% in sediments, 73% in water samples, and 68% in filtered water samples. Many of these samples also serve to indicate good analytical precision. Tables 3E.5.1 through 3E.5.10 summarize the calculated RPD values [i.e. less than 35% (water samples) and less than 50% (soil samples)] for samples collected and analyzed for organic compounds, metals, and radiochemical results.

3E.6 DATA QUALITY ASSESSMENT SUMMARY

The overall findings of the DQA are as follows:

(1) the data validation process found no systematic problem and produced minor qualifications of the results,
(2) completeness for the Luckey RI is > 99%,
(3) overall project accuracy (all matrices/all parameters) is 96.7%,
(4) overall analytical precision (all matrices/all parameters) is 97.7%,
(5) overall field duplicate precision (all matrices/all parameters) is 84.8%,
(6) documented representativeness was achieved for the Luckey RI, and
(7) documented comparability was achieved for the RI. DQIs were found to be sufficiently in control.

All project DQOs were met. This DQA provides the foundational information to conclude that the investigation data acquired for the USACE Luckey RI is scientifically sound, legally defensible, and adequate for their intended use.

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Table 3E.1.1 Luckey RI Data Quality Objectives – Soil/Sediment

Analysis	Method	Accuracy (% R)*	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	SW-846	61-131	35	95%
Semivolatile Organic Compounds	SW-846	23-146	35	95%
Inorganics	SW-846	75-125	35	95%
Radiological Data	EPA 900s HASL-300	75-125	35	95%

RPD Relative percent difference
%R Percent recovery
* Indicates maximum and minimum limits of all compounds. Individual compound limits are likely to be different.

Table 3E.1.2 Luckey RI Data Quality Objectives – Water

Analysis	Method	Accuracy (% R)*	Precision (RPD)	Completeness (%)
Volatile Organic Compounds	SW-846	68-131	20	95%
Semivolatile Organic Compounds	SW-846	6-140	20	95%
Inorganics	SW-846	80-120	20	95%
Radiological Data	EPA 900s HASL-300	75-125	20	95%

* Indicates maximum and minimum limits of all compounds. Individual compound limits are likely to be different.

Table 3E.2.1 Volatile Organic Compounds Accuracy Summary – Soil and Sediment Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples					
1,1-Dichloroethene	6	6	97	99	68-136
Trichloroethene	6	6	90	116	63-129
Benzene	6	6	84	103	62-131
Toluene	6	6	84	109	67-143
Chlorobenzene	6	6	62	98	74-127
Laboratory Control Samples (LCSs)					
1,1-Dichloroethene	46	46	76	108	61-131
Trichloroethene	46	46	89	121	67-126
Benzene	46	46	86	116	64-126
Toluene	46	46	86	123	70-130
Chlorobenzene	46	46	84	112	77-123

Table 3E.2.2 Volatile Organic Compounds Accuracy Summary - Water Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples					
1,1-Dichloroethene	10	10	95	109	59-141
Trichloroethene	10	10	78	97	65-130
Benzene	10	10	87	107	63-134
Toluene	10	10	74	106	72-125
Chlorobenzene	10	10	76	107	78-125
Laboratory Control Samples (LCSs)					
1,1-Dichloroethene	47	47	75	115	68-127
Trichloroethene	47	47	76	110	75-131
Benzene	47	47	83	115	74-129
Toluene	47	47	81	112	77-118
Chlorobenzene	47	47	84	112	82-115

Table 3E.2.3 Volatile Organic Compounds Precision Summary – Soil and Sediment Samples

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
1,1-Dichloroethene	3	3	1	2	20
Trichloroethene	3	3	1	3	20
Benzene	3	3	2	3	16
Toluene	3	3	2	11	20
Chlorobenzene	3	3	3	12	15

Table3E.2.4 Volatile Organic Compounds Precision Summary - Water Samples

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
1,1-Dichloroethene	5	5	2	6	19
Trichloroethene	5	5	0	4	16
Benzene	5	5	0	6	16
Toluene	5	5	1	2	14
Chlorobenzene	5	5	0	5	12

Table 3E.2.5 Semivolatile Organic Compounds Accuracy Summary - Soil and Sediment Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples					
Phenol	30	29	50	116	26-112
2-Chlorophenol	30	27	31	120	38-115
1,4-Dichlorobenzene	30	29	45	216	23-117
1,2,4-Trichlorobenzene	30	30	50	125	30-133
4-Chloro-3-methylphenol	30	29	60	138	38-136
Acenaphthene	30	30	54	135	47-139
4-Nitrophenol	30	26	55	271	40-132
2,4-Dinitrotoluene	30	28	69	178	30-132
Pentachlorophenol	30	28	46	271	23-146
Pyrene	30	28	50	116	52-115
Laboratory Control Samples (LCSs)					
Phenol	32	32	49	84	29-103
2-Chlorophenol	32	32	51	90	51- 96
1,4-Dichlorobenzene	32	32	47	101	48-105
1,2,4-Trichlorobenzene	32	32	51	89	49-117
4-Chloro-3-methylphenol	32	32	57	91	56-109
Acenaphthene	32	32	58	95	55-116
4-Nitrophenol	32	32	54	111	51-120
2,4-Dinitrotoluene	32	32	72	113	37-113
Pentachlorophenol	32	32	57	90	37-134
Pyrene	32	32	62	94	61-115

Table 3E.2.6 Semivolatile Organic Compounds Accuracy Summary - Water Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples					
Phenol	30	30	15	46	6 -8 9
2-Chlorophenol	30	28	14	72	28-119
1,4-Dichlorobenzene	30	30	44	71	24-114
1,2,4-Trichlorobenzene	30	30	44	76	28-119
4-Chloro-3-methylphenol	30	28	28	85	39-128
Acenaphthene	30	30	53	78	50-112
4-Nitrophenol	30	16	6	117	40-115
2,4-Dinitrotoluene	30	30	53	100	8 -100
Pentachlorophenol	30	20	9	92	35-140
Pyrene	30	30	60	97	52-115
Laboratory Control Samples (LCSs)					
Phenol	27	27	22	41	12-7 9
2-Chlorophenol	27	27	54	79	53-97
1,4-Dichlorobenzene	27	26	42	81	48- 92
1,2,4-Trichlorobenzene	27	26	43	83	44-105
4-Chloro-3-methylphenol	27	27	69	88	55-107
Acenaphthene	27	27	64	94	61-110
4-Nitrophenol	27	27	19	42	11- 91
2,4-Dinitrotoluene	27	27	75	109	42-122
Pentachlorophenol	27	27	58	98	37-137
Pyrene	27	27	65	98	64-115

Table 3E.2.7 Semivolatile Organic Compounds Precision Summary – Soil and Sediment Samples

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Phenol	15	14	1	55	35
2-Chlorophenol	15	14	0	55	50
1,4-Dichlorobenzene	15	13	1	66	27
1,2,4-Trichlorobenzene	15	14	1	49	23
4-Chloro-3-methylphenol	15	13	1	56	33
Acenaphthene	15	13	0	49	19
4-Nitrophenol	15	13	0	108	47
2,4-Dinitrotoluene	15	14	2	72	50
Pentachlorophenol	15	14	0	60	47
Pyrene	15	14	1	50	36

Table 3E.2.8 Semivolatile Organic Compounds Precision Summary - Water Samples

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Phenol	15	15	0	20	42
2-Chlorophenol	15	15	1	25	40
1,4-Dichlorobenzene	15	15	0	15	28
1,2,4-Trichlorobenzene	15	15	0	19	28
4-Chloro-3-methylphenol	15	15	0	20	42
Acenaphthene	15	15	0	16	31
4-Nitrophenol	15	13	0	73	38
2,4-Dinitrotoluene	15	15	1	11	50
Pentachlorophenol	15	15	0	25	50
Pyrene	15	15	0	15	31

Table 3E.2.9 Metals Accuracy Summary - Soil and Sediment Samples
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Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples – Soil					
Aluminum	0	--	--	--	--
Antimony	26	10	8	42	24-125
Arsenic	26	26	76	115	75-125
Barium	26	18	41	688	75-125
Beryllium	26	21	38	163	75-125
Cadmium	26	26	75	110	75-125
Calcium	0	--	--	--	--
Chromium	26	25	66	112	75-125
Cobalt	26	24	69	145	75-125
Copper	26	26	84	113	75-125
Iron	0	--	--	--	75-125
Lead	26	23	66	133	75-125
Magnesium	0	--	--	--	--
Manganese	0	--	--	--	--
Mercury	12	12	78	103	75-125
Nickel	26	23	65	167	75-125
Potassium	0	--	--	--	--
Selenium	26	25	74	111	75-125
Silver	26	26	86	125	75-125
Sodium	26	26	75	117	75-125
Thallium	26	6	79	114	75-125
Vanadium	26	25	60	113	75-125
Zinc	26	24	78	342	75-125
Laboratory Control Samples (LCSs) – Soil					
Aluminum	34	34	80	109	61-139
Antimony	34	34	101	174	24-176
Arsenic	34	34	93	112	70-130

Table 3E.2.9 Metals Accuracy Summary - Soil and Sediment Samples (continued)
(Page 2 of 3)

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Laboratory Control Samples (LCSs) – Soil (continued)					
Barium	34	26	114	139	68-132
Beryllium	34	34	87	108	70-130
Cadmium	34	34	83	102	67-133
Calcium	34	34	107	125	65-135
Chromium	34	34	97	130	70-130
Cobalt	34	34	99	122	60-140
Copper	34	34	104	128	70-130
Iron	34	12	89	188	70-130
Lead	34	34	86	101	69-131
Magnesium	34	34	79	95	70-130
Manganese	34	34	93	126	70-130
Mercury	16	14	40	99	54-146
Nickel	34	34	95	125	70-130
Potassium	34	34	85	139	53-147
Selenium	34	34	93	107	70-130
Silver	34	34	100	117	55-145
Sodium	34	31	61	140	69-131
Thallium	34	34	82	103	47-153
Vanadium	34	34	90	108	80-120
Zinc	34	34	84	102	70-130
Matrix Spike (MS) Samples – Sediment					
Aluminum	0	--	--	--	--
Antimony	6	5	23	51	24-125
Arsenic	6	3	105	134	75-125
Barium	6	3	86	136	75-125
Beryllium	6	3	105	132	75-125
Cadmium	6	5	98	129	75-125

Table 3E.2.9 Metals Accuracy Summary - Soil and Sediment Samples (continued, Page 3 of 3)

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike (MS) Samples – Sediment (continued)					
Calcium	0	--	--	--	--
Chromium	6	4	100	129	75-125
Cobalt	6	4	100	129	75-125
Copper	6	2	112	138	75-125
Iron	0	--	--	--	--
Lead	6	3	100	1429	75-125
Magnesium	0	--	--	--	--
Manganese	0	--	--	--	--
Mercury	0	--	--	--	--
Nickel	6	4	99	129	75-125
Potassium	0	--	--	--	--
Selenium	6	5	97	127	75-125
Silver	6	2	110	139	75-125
Sodium	6	4	107	138	75-125
Thallium	6	3	104	130	75-125
Vanadium	6	4	96	130	75-125
Zinc	6	3	80	137	75-125

-- = Not Applicable

Table 3E.2.10 Metals Accuracy Summary – Water Samples
(Page 1 of 3)

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike Samples-Water (Total Metals)					
Aluminum	22	22	99	110	75-125
Antimony	22	22	99	107	75-125
Arsenic	22	22	99	109	75-125
Barium	22	22	92	104	75-125
Beryllium	22	22	98	109	75-125
Cadmium	22	22	96	108	75-125
Calcium	0	--	--	--	--
Chromium	22	22	95	107	75-125
Cobalt	22	22	96	109	75-125
Copper	22	22	96	104	75-125
Iron	0	--	--	--	--
Lead	22	22	98	108	75-125
Magnesium	0	--	--	--	--
Manganese	0	--	--	--	--
Mercury	22	22	86	119	75-125
Nickel	22	22	93	108	75-125
Potassium	22	22	92	109	75-125
Selenium	22	22	96	107	75-125
Silver	22	22	102	111	75-125
Sodium	22	21	78	139	75-125
Thallium	22	22	97	106	75-125
Vanadium	22	22	98	107	75-125
Zinc	22	22	97	116	75-125
Matrix Spike Sample – Water (Filtered)					
Aluminum	8	8	87	99	75-125
Antimony	8	8	91	108	75-125
Arsenic	8	8	95	106	75-125

Table 3E.2.10 Metals Accuracy Summary - Water Samples (continued)
(Page 2 of 3)

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike Sample – Water (Filtered, continued)					
Barium	8	8	76	102	75-125
Beryllium	8	8	93	105	75-125
Cadmium	8	8	92	102	75-125
Calcium	0	--	--	--	--
Chromium	8	8	86	105	75-125
Cobalt	8	8	92	104	75-125
Copper	8	8	88	99	75-125
Iron	8	8	100	102	75-125
Lead	8	8	93	105	75-125
Magnesium	0	--	--	--	--
Manganese	8	8	94	106	75-125
Mercury	8	8	80	106	75-125
Nickel	8	7	90	127	75-125
Potassium	8	8	92	101	75-125
Selenium	8	8	96	101	75-125
Silver	8	8	97	117	75-125
Sodium	8	8	93	103	75-125
Thallium	8	8	90	109	75-125
Vanadium	8	8	92	104	75-125
Zinc	8	8	91	107	75-125
Laboratory Control Sample (LCSs)					
Aluminum	35	35	89	108	80-120
Antimony	35	35	92	113	80-120
Arsenic	35	35	91	112	80-120
Barium	35	35	85	109	80-120
Beryllium	35	35	90	110	80-120

Table 3E.2.10 Metals Accuracy Summary - Water Samples (continued)
(Page 3 of 3)

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Laboratory Control Sample (LCSs), continued					
Cadmium	35	35	91	113	80-120
Calcium	35	35	94	111	80-120
Chromium	35	35	88	110	80-120
Cobalt	35	35	89	111	80-120
Copper	35	35	85	111	80-120
Iron	35	35	90	115	80-120
Lead	35	35	91	112	80-120
Magnesium	35	35	93	109	80-120
Manganese	35	35	89	110	80-120
Mercury	35	35	80	120	80-120
Nickel	35	35	88	112	80-120
Potassium	35	35	86	108	80-120
Selenium	35	35	89	109	80-120
Silver	35	35	94	120	80-120
Sodium	35	33	90	130	80-120
Thallium	35	35	91	112	80-120
Vanadium	35	35	90	110	80-120
Zinc	35	35	90	110	80-120

-- = Not Applicable

Table3E.2.11 Metals Precision Summary - Soil and Sediment Samples
(Page 1 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Min % RPD	Max % RPD	Limits
Matrix Spike/Matrix Spike Duplicate Samples – Soil					
Aluminum	13	13	1	26	35
Antimony	13	11	1	43	--
Arsenic	13	13	1	9	35
Barium	13	10	0	117	35
Beryllium	13	12	0	48	35
Cadmium	13	13	1	8	35
Calcium	13	13	1	17	35
Chromium	13	13	1	11	35
Cobalt	13	13	2	26	35
Copper	13	13	0	16	35
Iron	13	13	0	18	35
Lead	13	12	0	39	35
Magnesium	13	13	1	29	35
Manganese	13	12	1	151	35
Mercury	6	6	0	9	35
Nickel	13	13	0	29	35
Potassium	13	13	1	22	35
Selenium	13	13	1	7	35
Silver	13	13	0	10	35
Sodium	13	13	0	11	35
Thallium	13	13	0	7	35
Vanadium	13	13	0	12	35
Zinc	13	11	0	50	35

Table 3E.2.11 Metals Precision - Soil and Sediment Samples (continued)
(Page 2 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Matrix Spike/Matrix Spike Duplicate Samples – Sediment					
Aluminum	3	3	3	13	35
Antimony	3	3	6	47	35
Arsenic	3	3	1	7	35
Barium	3	3	4	14	35
Beryllium	3	3	1	8	35
Cadmium	3	3	1	5	35
Calcium	3	3	10	11	35
Chromium	3	3	3	5	35
Cobalt	3	3	2	8	35
Copper	3	3	0	4	35
Iron	3	3	2	6	35
Lead	3	2	2	164	35
Magnesium	3	3	16	26	35
Manganese	3	2	1	37	35
Mercury	0	--	--	--	--
Nickel	3	3	1	6	35
Potassium	3	3	6	21	35
Selenium	3	3	1	8	35
Silver	3	3	1	7	35
Sodium	3	3	0	8	35
Thallium	3	3	1	7	35
Vanadium	3	3	2	8	35
Zinc	3	3	0	2	35

Table 3E.2.11 Metals Precision - Soil and Sediment Samples (continued)
(Page 3 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Min % RPD	Max % RPD	Limits
Laboratory Control Samples (LCS)					
Aluminum	2	2	0	3	35
Antimony	2	2	2	3	35
Arsenic	2	2	2	3	35
Barium	2	2	0	3	35
Beryllium	2	2	1	3	35
Cadmium	2	2	0	2	35
Calcium	2	2	1	4	35
Chromium	2	2	1	2	35
Cobalt	2	2	1	3	35
Copper	2	2	0	3	35
Iron	2	2	1	3	35
Lead	2	2	1	3	35
Magnesium	2	2	1	3	35
Manganese	2	2	4	5	35
Mercury	4	3	0	39	35
Nickel	2	2	0	1	35
Potassium	2	2	1	3	35
Selenium	2	2	1	2	35
Silver	2	2	0	5	35
Sodium	2	2	3	8	35
Thallium	2	2	0	2	35
Vanadium	2	2	1	1	35
Zinc	2	2	0	2	35

-- = Not Applicable

Table 3E.2.12 Metals Precision Summary – Water Samples
(Page 1 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Matrix Spike/Matrix Spike Duplicate Samples (Total)					
Aluminum	11	11	0	3	20
Antimony	11	11	0	5	20
Arsenic	11	11	1	3	20
Barium	11	11	0	5	20
Beryllium	11	11	0	3	20
Cadmium	11	11	1	3	20
Calcium	11	11	0	3	20
Chromium	11	11	1	4	20
Cobalt	11	11	1	5	20
Copper	11	11	1	5	20
Iron	11	11	0	4	20
Lead	11	11	0	9	20
Magnesium	11	11	0	3	20
Manganese	11	11	0	3	20
Mercury	11	11	0	33	20
Nickel	11	11	1	3	20
Potassium	11	11	0	3	20
Selenium	11	11	1	3	20
Silver	11	11	0	3	20
Sodium	11	11	0	3	20
Thallium	11	11	1	3	20
Vanadium	11	11	1	3	20
Zinc	11	11	0	5	20

Table 3E.2.12 Metals Precision - Water Samples (continued)
(Page 2 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Matrix Spike/Matrix Spike Duplicate Samples (Filtered)					
Aluminum	4	4	0	6	20
Antimony	4	4	0	2	20
Arsenic	4	4	0	4	20
Barium	4	4	0	2	20
Beryllium	4	4	0	5	20
Cadmium	4	4	0	4	20
Calcium	4	4	0	3	20
Chromium	4	4	0	4	20
Cobalt	4	4	0	5	20
Copper	4	4	0	4	20
Iron	4	4	1	3	20
Lead	4	4	0	4	20
Magnesium	4	4	0	3	20
Manganese	4	4	0	5	20
Mercury	4	4	1	4	20
Nickel	4	4	0	5	20
Potassium	4	4	0	3	20
Selenium	4	4	0	3	20
Silver	4	4	0	4	20
Sodium	4	4	0	2	20
Thallium	4	4	0	5	20
Vanadium	4	4	0	5	20
Zinc	4	4	0	4	20

Table 3E.2.12 Metals Precision - Water Samples (continued)
(Page 3 of 3)

Analyte	Number of QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Laboratory Control Sample					
Aluminum	6	6	0	5	20
Antimony	6	6	0	2	20
Arsenic	7	7	0	2	--
Barium	7	7	0	2	20
Beryllium	7	7	0	3	20
Cadmium	6	6	0	3	20
Calcium	6	6	0	2	20
Chromium	6	6	0	2	20
Cobalt	6	6	0	3	20
Copper	6	6	0	5	20
Iron	6	6	0	2	20
Lead	7	7	0	3	--
Magnesium	6	6	0	2	20
Manganese	6	6	0	3	20
Mercury	6	6	0	10	--
Nickel	6	6	0	3	20
Potassium	6	6	0	1	20
Selenium	6	6	0	2	--
Silver	6	6	0	2	20
Sodium	6	6	1	1	20
Thallium	6	6	0	2	20
Vanadium	6	6	0	2	20
Zinc	6	6	0	2	20

Table 3E.2.13 Arsenic, Barium, Beryllium, and Lead Accuracy Summary - Soil and Sediment Samples

Analyte	Number of QA/QC Samples	Number in Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike Samples -Soil					
Arsenic	16	15	72	123	75-125
Barium	16	12	32	324	75-125
Beryllium	16	14	70	152	75-125
Lead	16	15	81	144	75-125
Matrix Spike Samples -Soil					
Beryllium (only)	44	41	74	113	75-125
Matrix Spike Samples –Sediment					
Arsenic	10	4	96	218	75-125
Barium	10	6	84	222	75-125
Beryllium	10	5	67	213	75-125
Lead	10	5	95	202	75-125
Laboratory Control Sample					
Arsenic	22	22	94	112	70-130
Barium	22	20	111	137	68-132
Beryllium	22	22	89	117	70-130
Lead	22	22	85	101	69-131
Laboratory Control Sample					
Beryllium (only)	27	27	79	107	70-130

Table 3E.2.14 Arsenic, Barium, Beryllium, and Lead Accuracy Summary – Water Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Laboratory Control Samples					
Arsenic	29	29	95	120	80-120
Barium	29	29	96	112	80-120
Beryllium	29	29	96	118	80-120
Lead	29	29	96	120	80-120
Laboratory Control Samples					
Beryllium (only)	3	3	101	103	80-120
Laboratory Control Samples					
Beryllium (swipe samples)	31	31	86	105	80-120

Table 3E.2.15 Arsenic, Barium, Beryllium, and Lead Precision Summary - Soil and Sediment Samples

Analyte	Number of QC/QA Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Matrix Spike/Matrix Spike Duplicate Samples - Soil					
Arsenic	8	8	0	20	35
Barium	8	7	2	59	35
Beryllium	8	8	2	32	35
Lead	8	7	1	41	35
Matrix Spike/Matrix Spike Duplicate Samples - Soil					
Beryllium (only)	22	22	0	11	35
Matrix Spike/Matrix Spike Duplicate Samples - Sediment					
Arsenic	5	5	0	9	35
Barium	5	5	1	4	35
Beryllium	5	5	0	5	35
Lead	5	5	0	7	35

Table 3E.2.16 Radiochemicals Accuracy Summary – Soil and Sediment Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike Sample					
Uranium –238	25	21	65	546	75-125
Thorium –232	25	10	57	168	75-125
Laboratory Control Sample					
Cesium –137	70	70	97	109	75-125
Uranium –238	70	70	78	121	75-125
Thorium -232	70	70	77	120	75-125

Table 3E.2.17 Radiochemicals Accuracy Summary - Water Samples

Analyte	Number of QA/QC Samples	Number within Limits	Minimum % Recovery	Maximum % Recovery	Limits
Matrix Spike Samples (Non-Filtered)					
Gross Alpha	12	12	78	100	75-125
Gross Beta	12	12	83	113	75-125
Cesium -137	20	20	91	107	75-125
Uranium -238	13	13	96	109	75-125
Thorium -232	13	13	85	119	75-125
Radium -226	13	13	83	117	75-125
Radium-228	13	13	75	118	75-125
Matrix Spike Samples (Filtered)					
Gross Alpha	4	4	76	94	75-125
Gross Beta	4	4	83	101	75-125
Cesium -137	3	3	96	100	75-125
Uranium -238	3	3	95	100	75-125
Thorium -232	3	3	102	114	75-125
Radium -226	3	3	78	111	75-125
Radium -228	3	3	80	117	75-125
Laboratory Control Samples					
Gross Alpha	35	35	81	127	75-125
Gross Beta	35	35	81	118	75-125
Cesium -137	51	51	95	115	75-125
Uranium -238	51	51	85	118	75-125
Thorium -232	51	51	77	125	75-125
Radium- 226	51	51	83	116	75-125
Radium -228	51	51	84	125	75-125

Table 3E.2.18 Radiochemicals Precision Summary - Water Samples

Analyte	Number QA/QC Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Matrix Spike/Matrix Spike Duplicate (Non-filtered)					
Gross Alpha	4	4	1	11	20
Gross Beta	4	4	0	6	20
Cesium- 137	9	9	1	8	20
Uranium -238	3	3	0	7	20
Thorium- 232	3	2	7	25	20
Radium -226	7	5	2	32	20
Radium- 228	3	3	5	8	20
Matrix Spike/Matrix Spike Duplicate (Filtered)					
Gross Alpha	1	1	6	6	20
Gross Beta	1	1	11	11	20
Cesium- 137	1	1	4	4	20
Uranium -238	1	1	5	5	20
Thorium -232	1	1	6	6	20
Radium- 226	1	1	15	15	20
Radium -228	1	1	17	17	20

Table 3E.5.1 Field Duplicate Organics Precision Summary - Soil Samples

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
2-Methylnaphthalene	1	1	16	16	50
Anthracene	1	0	163	163	50
Aroclors	5	3	27	78	50
Benzene	3	3	8.3	32	50
Benzo(a)anthracene	1	0	139	139	50
Benzo(a)pyrene	1	0	117	117	50
Benzo(b)fluoranthene	1	0	124	124	50
Benzo(ghi)perylene	1	0	87	87	50
Benzo(k)fluoranthene	1	0	117	117	50
bis(2-ethylhexyl)phthalate	1	1	43	43	50
Carbon disulfide	1	0	58	58	50
Chloroform	1	0	53	53	50
Chrysene	1	0	124	124	50
Dibenz(a,h)anthracene	1	0	69	69	50
Ethylbenzene	1	0	63	63	50
Fluoranthene	1	0	154	154	50
Indeno(1,2,3-c,d)pyrene	1	0	91	91	50
Phenanthrene	1	0	138	138	50
Pyrene	1	0	141	141	50
Toluene	5	4	3	64	50
Xylenes (total)	1	0	55	55	50

Table 3E.5.2 Field Duplicate Metals Precision – Soil Samples

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Aluminum	6	6	.4	26	50
Arsenic	35	25	.9	102	50
Barium	35	32	.4	108	50
Beryllium	85	60	0	188	50
Cadmium	3	2	6.3	51	50
Calcium	6	5	2	87	50
Chromium	6	6	.3	24	50
Cobalt	6	6	1.1	44	50
Copper	6	5	6.9	81	50
Iron	6	6	1.7	35	50
Lead	36	30	.9	122	50
Magnesium	6	5	.7	59	50
Manganese	6	4	0	66	50
Mercury	4	3	25	67	50
Nickel	6	6	9.3	39	50
Potassium	11	11	4.5	30	50
Selenium	6	6	5.7	43	50
Sodium	6	5	.1	146	50
Thallium	2	2	9.5	49	50
Vanadium	6	6	2.6	37	50
Zinc	6	6	3.3	35	50

Table 3E.5.3 Field Duplicate Radiochemical Precision – Soil

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Uranium- 233/234	3 6	34	0	178	50
Uranium -235	20	12	.2	141	50
Uranium -238	36	34	0	182	50
Actinium -227	5	3	28	53	50
Thorium- 228	34	30	2.6	60	50
Thorium- 230	36	35	0	68	50
Thorium- 232	34	29	.8	84	50
Actinium -228	32	32	1	47	50
Cesium -137	15	13	.9	77	50
Potassium- 40	35	34	0	61	50
Radium- 226	36	36	0	49	50
Radium- 228	33	33	1	47	50
Thorium-234	13	10	2	99	50

Table 3E.5.4Field Duplicate Organics Precision Summary - Sediment Samples

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Benzene	2	2	0	3.8	50
Carbon disulfide	2	1	15	68	50
Ethylbenzene	2	2	3	31	50
Toluene	2	2	2.3	16	50
Xylenes (total)	2	2	5.9	19	50

Table 3E.5.5 Field Duplicate Metals Precision Accuracy – Sediment Samples

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Aluminum	1	1	15	15	50
Arsenic	8	7	3.4	134	50
Barium	8	6	2.3	87	50
Beryllium	8	7	0	79	50
Calcium	1	1	34	34	50
Chromium	1	1	7.7	7.7	50
Cobalt	1	1	23	23	50
Copper	1	1	4	4	50
Iron	1	1	4	4	50
Lead	8	7	2.2	61	50
Magnesium	1	0	52	52	50
Manganese	1	0	67	67	50
Nickel	1	1	3	3	50
Potassium	1	1	3.7	3.7	50
Selenium	1	1	39	39	50
Sodium	1	1	31	31	50
Thallium	1	1	5.1	5.1	50
Vanadium	1	1	24	24	50
Zinc	1	1	3.3	3.3	50

Table 3E.5.6 Field Duplicate Radiochemical Precision – Sediment Samples

Analyte	Number of Pairs	Number within Limits	Minimum % RPD	Maximum % RPD	Limits
Uranium- 233/234	7	5	1.6	54	50
Uranium -235	2	2	8.4	29	50
Uranium -238	7	7	.9	47	50
Thorium -228	7	7	1.9	39	50
Thorium -230	7	6	8.3	69	50
Thorium -232	7	7	.6	37	50
Actinium- 228	6	5	1.2	88	50
Cesium- 137	2	0	56	59	50
Potassium- 40	7	7	1.3	22	50
Radium -226	7	7	2.6	27	50
Radium- 228	6	5	1.2	88	50
Thorium -234	3	3	19	23	50

Table 3E.5.7 Field Duplicate Metals Precision –Water Samples

Analyte	Number of Pairs	Number in Limits	Minimum % RPD	Maximum % RPD	Limits
Aluminum	3	3	11	33	35
Arsenic	2	1	29	44	35
Barium	14	13	0	51	35
Beryllium	5	4	0	56	35
Calcium	7	7	.3	3.9	35
Chromium	3	0	44	84	35
Cobalt	2	2	0	25	35
Copper	6	3	5.4	138	35
Iron	6	6	1.2	28	35
Lead	7	3	17	118	35
Magnesium	7	7	.6	6.3	35
Manganese	7	6	.4	59	35
Nickel	6	4	1	106	35
Potassium	7	7	.4	5.1	35
Sodium	7	7	.5	3.7	35
Thallium	1	1	9	9	35
Vanadium	1	1	17	17	35
Zinc	4	2	3.2	172	35

Table 3E.5.8 Field Duplicate Radiochemical Precision – Water Samples

Analyte	Number of Pairs	Number in Limits	Minimum % RPD	Maximum % RPD	Limits
Gross Alpha	10	6	.4	116	35
Gross Beta	9	8	7.3	100	35
Uranium -233/234	10	7	3.1	67	35
Uranium -235	1	1	14	14	35
Uranium -238	4	4	6.4	26	35
Thorium -228	4	2	1.7	44	35
Thorium -230	1	0	102	102	35
Radium -226	9	6	7.9	87	35

Table 3E.5.9 Field Duplicate Metals Precision Accuracy –Water Samples (filtered)

Analyte	Number of Pairs	Number in Limits	Minimum % RPD	Maximum % RPD	Limits
Aluminum	1	1	5.5	5.5	35
Arsenic	2	2	9.5	12	35
Barium	9	9	.6	25	35
Beryllium	2	2	5	15	35
Calcium	6	6	.2	4.8	35
Chromium	1	1	11.8	11.8	35
Cobalt	2	2	0	23	35
Copper	4	2	5.9	181	35
Iron	6	6	.4	34	35
Lead	4	3	0	59	35
Magnesium	6	6	0	6.3	35
Manganese	6	6	.2	12	35
Nickel	3	3	2.5	04.9	35
Potassium	6	6	.7	8.3	35
Selenium	2	1	3.7	45	35
Sodium	6	6	1	9.6	35
Zinc	2	1	19	42	35

Table 3E.5.10 Field Duplicate Radiochemical Precision – Water Samples (filtered)

Analyte	Number of Pairs	Number in Limits	Minimum % RPD	Maximum % RPD	Limits
Gross Alpha	5	1	22	113	35
Gross Beta	4	3	3.2	100	35
Uranium -233/234	3	3	1.7	31	35
Uranium -235	2	2	7.8	14	35
Uranium- 238	3	3	3.1	28	35
Thorium -228	1	0	76	76	35
Thorium -230	1	1	6.5	6.5	35
Radium -226	3	2	14	47	35

APPENDIX 3F:
Background Data and Summary Statistics

APPENDIX 3F: BACKGROUND DATA AND SUMMARY STATISTICS

LIST OF APPENDIX COMPONENTS

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

Background Analytical Results

- Soil Sample Results
- Sediment Sample Results
- Surface Water Sample Results
- Groundwater Sample Results

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

		Results			Detections			Detection		
	UNITS	Average	Maximum	Minimum	Average	Maximum	Minimum	Frequency	UTL	Dist.
Surface Water										
Metals										
Aluminum	UG/L	732.00	733.00	731.00	732.00	733.00	731.00	2/2	733.00	D
Antimony	UG/L	0.80	0.80	0.80				0/2		O
Arsenic	UG/L	1.05	1.05	1.05				0/2		O
Barium	UG/L	35.20	38.80	31.50	35.20	38.80	31.50	2/2	38.80	D
Beryllium	UG/L	0.10	0.10	0.10				0/2		O
Boron	UG/L	27.40	31.80	22.95				0/2		O
Cadmium	UG/L	0.15	0.15	0.15				0/2		O
Calcium	UG/L	81400.00	89400.00	73400.00	81400.00	89400.00	73400.00	2/2	89400.00	D
Chromium	UG/L	1.10	1.20	1.00	1.10	1.20	1.00	2/2	1.20	D
Cobalt	UG/L	0.56	0.65	0.47				0/2		O
Copper	UG/L	3.23	4.60	1.85	4.60	4.60	4.60	1/2	4.60	D
Iron	UG/L	841.00	871.00	810.00	841.00	871.00	810.00	2/2	871.00	D
Lead	UG/L	0.83	1.20	0.45	1.20	1.20	1.20	1/2	1.20	D
Magnesium	UG/L	23900.00	27000.00	20800.00	23900.00	27000.00	20800.00	2/2	27000.00	D
Manganese	UG/L	17.30	19.70	14.80	17.30	19.70	14.80	2/2	19.70	D
Molybdenum	UG/L	8.40	11.10	5.70	8.40	11.10	5.70	2/2	11.10	D
Nickel	UG/L	1.13	1.30	0.95				0/2		O
Phosphorus	MG/L	0.05	0.05	0.05				0/2		O
Potassium	UG/L	1550.00	1570.00	1530.00	1550.00	1570.00	1530.00	2/2	1570.00	D
Selenium	UG/L	1.70	1.70	1.70				0/2		O
Silicon	UG/L	2820.00	3620.00	2020.00	2820.00	3620.00	2020.00	2/2	3620.00	D
Silver	UG/L	1.30	1.40	1.20				0/2		O
Sodium	UG/L	14500.00	18500.00	10500.00	14500.00	18500.00	10500.00	2/2	18500.00	D
Strontium	UG/L	1290.00	1450.00	1130.00	1290.00	1450.00	1130.00	2/2	1450.00	D
Thallium	UG/L	2.50	2.50	2.50				0/2		O
Tin	UG/L	7.00	7.00	7.00				0/2		O
Vanadium	UG/L	2.05	2.20	1.90	2.05	2.20	1.90	2/2	2.20	D
Zinc	UG/L	4.53	5.60	3.45				0/2		O
Indicator Parameters										
Fluoride	MG/L	0.15	0.18	0.11	0.15	0.18	0.11	2/2	0.18	D
Radiological Parameters										
Actinium-227	PCI/L	0.31	0.36	0.25	0.36	0.36	0.36	1/2	0.36	D
Americium-241	PCI/L	-11.00	-6.69	-15.27				0/2		O
Cesium-137	PCI/L	-0.85	0.89	-2.58				0/2		O
Potassium-40	PCI/L	19.10	24.08	14.14				0/2		O
Protactinium-231	PCI/L	-36.00	-32.36	-39.54				0/2		O
Radium-226	PCI/L	0.28	0.32	0.24	0.24	0.24	0.24	1/2	0.24	D
Radium-228	PCI/L	0.13	0.21	0.04				0/2		O
Thorium-227	PCI/L	0.31	0.36	0.25	0.36	0.36	0.36	1/2	0.36	D
Thorium-228	PCI/L	0.13	0.21	0.04				0/2		O
Thorium-230	PCI/L	0.49	0.57	0.41	0.49	0.57	0.41	2/2	0.57	D
Thorium-232	PCI/L	0.26	0.26	0.25				0/2		O
Uranium-234	PCI/L	0.65	0.78	0.51	0.65	0.78	0.51	2/2	0.78	D
Uranium-235	PCI/L	0.22	0.32	0.12				0/2		O
Uranium-238	PCI/L	0.82	1.02	0.62	0.82	1.02	0.62	2/2	1.02	D

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

		Results			Detections			Detection		
	UNITS	Average	Maximum	Minimum	Average	Maximum	Minimum	Frequency	UTL	Dist.
Soil										
Metals										
Aluminum	MG/KG	16600.00	24400.00	11400.00	16600.00	24400.00	11400.00	65/65	23700.00	L
Antimony	MG/KG	0.37	0.90	0.13	0.67	0.90	0.28	9/55	0.90	D
Arsenic	MG/KG	7.65	24.10	2.50	7.65	24.10	2.50	65/65	24.10	X
Barium	MG/KG	102.00	209.00	70.60	102.00	209.00	70.60	65/65	209.00	X
Beryllium	MG/KG	0.90	1.20	0.61	0.90	1.20	0.61	65/65	1.13	N
Boron	MG/KG	8.33	13.40	2.10	8.33	13.40	2.10	29/29	13.40	X
Cadmium	MG/KG	0.34	0.98	0.03	0.47	0.98	0.11	43/65	0.98	X
Calcium	MG/KG	9680.00	55100.00	2970.00	9680.00	55100.00	2970.00	65/65	55100.00	X
Chromium	MG/KG	22.40	29.60	16.10	22.40	29.60	16.10	65/65	29.60	X
Cobalt	MG/KG	10.70	19.10	6.90	10.70	19.10	6.90	65/65	19.10	X
Copper	MG/KG	27.30	48.00	16.60	27.30	48.00	16.60	65/65	42.00	L
Iron	MG/KG	24300.00	40500.00	15600.00	24300.00	40500.00	15600.00	65/65	38600.00	L
Lead	MG/KG	15.10	23.20	10.10	15.10	23.20	10.10	65/65	23.20	X
Magnesium	MG/KG	5700.00	17100.00	3020.00	5700.00	17100.00	3020.00	65/65	17100.00	X
Manganese	MG/KG	396.00	2340.00	109.00	396.00	2340.00	109.00	65/65	2340.00	X
Mercury	MG/KG	0.03	0.19	0.01	0.04	0.19	0.02	36/65	0.19	X
Molybdenum	MG/KG	3.84	11.30	1.20	3.84	11.30	1.20	29/29	11.30	L
Nickel	MG/KG	30.70	53.00	17.50	30.70	53.00	17.50	65/65	46.10	L
Phosphorus	MG/KG	266.00	808.00	0.57	479.00	808.00	228.00	36/65	808.00	X
Potassium	MG/KG	2030.00	3470.00	814.00	2030.00	3470.00	814.00	65/65	3410.00	N
Selenium	MG/KG	1.34	2.40	0.09	1.38	2.40	0.29	63/65	2.33	N
Silicon	MG/KG	365.00	615.00	111.00	365.00	615.00	111.00	29/29	595.00	N
Silver	MG/KG	0.13	0.51	0.07	0.51	0.51	0.51	1/65	0.51	D
Sodium	MG/KG	141.00	285.00	41.70	141.00	285.00	41.70	65/65	285.00	X
Strontium	MG/KG	39.20	75.60	11.40	39.20	75.60	11.40	29/29	75.60	N
Thallium	MG/KG	0.76	2.10	0.18	1.22	2.10	0.42	33/65	2.10	X
Tin	MG/KG	1.28	1.60	1.00				0/6		O
Vanadium	MG/KG	32.40	42.80	21.00	32.40	42.80	21.00	65/65	42.80	X
Zinc	MG/KG	82.90	111.00	52.30	82.90	111.00	52.30	65/65	110.00	N
Indicator Parameters										
Fluoride	MG/KG	2.82	6.94	1.14	3.94	6.94	2.48	17/29	6.94	X
Radiological Parameters										
Actinium-227	PCI/G	0.30	1.76	-0.14	0.60	1.76	0.13	30/69	1.76	D
Actinium-228	PCI/G	1.06	1.37	0.78	1.06	1.37	0.78	36/36	1.35	N
Americium-241	PCI/G	-0.02	0.22	-0.41				0/33		O
Cesium-137	PCI/G	0.11	0.72	-0.02	0.24	0.72	0.05	30/69	0.72	D
Cobalt-60	PCI/G	0.01	0.05	-0.02				0/36		O
Potassium-40	PCI/G	20.60	27.20	14.21	20.60	27.20	14.21	69/69	27.20	X
Protactinium-231	PCI/G	-0.24	1.66	-2.36				0/69		O
Radium-226	PCI/G	1.75	3.50	0.65	1.77	3.50	0.92	68/69	2.97	L
Radium-228	PCI/G	1.10	1.76	0.78	1.10	1.76	0.78	69/69	1.48	L
Thorium-227	PCI/G	0.60	1.76	0.08	0.66	1.76	0.16	26/30	1.76	X
Thorium-228	PCI/G	1.15	1.76	0.64	1.15	1.76	0.64	69/69	1.60	N
Thorium-230	PCI/G	2.11	3.89	1.35	2.11	3.89	1.35	69/69	3.20	L
Thorium-232	PCI/G	1.03	1.49	0.54	1.03	1.49	0.54	69/69	1.48	N
Thorium-234	PCI/G	1.64	3.30	0.44	1.93	3.30	1.13	25/36	3.07	N
Uranium-234	PCI/G	1.48	2.61	0.82	1.48	2.61	0.82	69/69	2.36	L
Uranium-235	PCI/G	0.08	0.26	-0.18	0.12	0.26	0.04	26/68	0.25	D
Uranium-238	PCI/G	1.63	3.04	0.85	1.63	3.04	0.85	69/69	2.63	L

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

		Results			Detections			Detection		
	UNITS	Average	Maximum	Minimum	Average	Maximum	Minimum	Frequency	UTL	Dist.
Sediment										
Metals										
Aluminum	MG/KG	7220.00	12000.00	2700.00	7220.00	12000.00	2700.00	11/11	12000.00	L
Antimony	MG/KG	0.35	0.88	0.15	0.65	0.88	0.42	2/11	0.88	D
Arsenic	MG/KG	6.96	12.10	4.50	6.96	12.10	4.50	13/13	12.10	L
Barium	MG/KG	44.30	94.30	17.40	44.30	94.30	17.40	13/13	94.30	L
Beryllium	MG/KG	0.42	0.69	0.26	0.42	0.69	0.26	13/13	0.69	L
Boron	MG/KG	10.20	15.50	4.90	10.20	15.50	4.90	2/2	15.50	D
Cadmium	MG/KG	0.26	0.51	0.07	0.34	0.51	0.19	6/11	0.51	D
Calcium	MG/KG	62900.00	109000.00	24000.00	62900.00	109000.00	24000.00	11/11	109000.00	N
Chromium	MG/KG	11.50	17.60	5.10	11.50	17.60	5.10	11/11	17.60	N
Cobalt	MG/KG	6.77	10.00	4.00	6.77	10.00	4.00	11/11	10.00	N
Copper	MG/KG	17.00	23.00	9.10	17.00	23.00	9.10	11/11	23.00	N
Iron	MG/KG	15400.00	20500.00	8220.00	15400.00	20500.00	8220.00	11/11	20500.00	N
Lead	MG/KG	9.90	14.30	6.70	9.90	14.30	6.70	13/13	14.30	L
Magnesium	MG/KG	11100.00	18900.00	6970.00	11100.00	18900.00	6970.00	11/11	18900.00	L
Manganese	MG/KG	393.00	563.00	248.00	393.00	563.00	248.00	11/11	563.00	L
Mercury	MG/KG	0.01	0.04	0.01				0/10		O
Molybdenum	MG/KG	2.55	2.60	2.50	2.55	2.60	2.50	2/2	2.60	D
Nickel	MG/KG	17.80	25.30	10.00	17.80	25.30	10.00	11/11	25.30	N
Phosphorus	MG/KG	404.00	680.00	0.64	494.00	680.00	362.00	9/11	680.00	N
Potassium	MG/KG	1430.00	2390.00	598.00	1430.00	2390.00	598.00	11/11	2390.00	N
Selenium	MG/KG	1.15	1.80	0.48	1.20	1.80	0.48	10/11	1.80	N
Silicon	MG/KG	478.00	567.00	388.00	478.00	567.00	388.00	2/2	567.00	D
Silver	MG/KG	0.22	0.60	0.11				0/11		O
Sodium	MG/KG	146.00	373.00	32.30	146.00	373.00	32.30	11/11	373.00	L
Strontium	MG/KG	88.40	98.30	78.40	88.40	98.30	78.40	2/2	98.30	D
Thallium	MG/KG	1.36	3.40	0.28	1.86	3.40	1.00	7/11	3.40	D
Tin	MG/KG	1.50	2.20	0.80				0/2		O
Vanadium	MG/KG	17.70	24.80	9.60	17.70	24.80	9.60	11/11	24.80	N
Zinc	MG/KG	56.70	108.00	25.30	56.70	108.00	25.30	11/11	108.00	L
Indicator Parameters										
Fluoride	MG/KG	3.42	5.35	0.70	3.42	5.35	0.70	4/4	5.35	D
Radiological Parameters										
Actinium-227	PCI/G	0.13	0.40	-0.01	0.24	0.40	0.12	5/13	0.40	D
Actinium-228	PCI/G	0.57	0.76	0.39	0.57	0.76	0.39	11/11	0.76	N
Americium-241	PCI/G	-0.13	-0.13	-0.13				0/2		O
Cesium-137	PCI/G	0.06	0.16	0.01	0.08	0.16	0.04	9/13	0.16	N
Cobalt-60	PCI/G	0.00	0.01	-0.01				0/11		O
Gross Alpha	PCI/G	15.70	16.50	14.90	15.70	16.50	14.90	2/2	16.50	D
Nonvolatile Beta	PCI/G	19.50	20.80	18.20	19.50	20.80	18.20	2/2	20.80	D
Potassium-40	PCI/G	15.10	18.10	9.79	15.10	18.10	9.79	13/13	18.10	N
Protactinium-231	PCI/G	-0.04	0.62	-0.60				0/13		O
Radium-226	PCI/G	1.22	1.63	0.97	1.22	1.63	0.97	13/13	1.63	L
Radium-228	PCI/G	0.62	1.11	0.39	0.62	1.11	0.39	13/13	1.11	L
Thorium-227	PCI/G	0.31	0.40	0.22	0.31	0.40	0.22	2/2	0.40	D
Thorium-228	PCI/G	0.77	1.19	0.08	0.83	1.19	0.48	12/13	1.19	N
Thorium-230	PCI/G	1.45	1.89	0.73	1.45	1.89	0.73	13/13	1.89	N
Thorium-232	PCI/G	0.53	0.84	0.27	0.53	0.84	0.27	13/13	0.84	L
Thorium-234	PCI/G	1.26	2.27	0.36	1.60	2.27	1.26	6/11	2.27	D
Uranium-234	PCI/G	1.08	1.80	0.55	1.08	1.80	0.55	13/13	1.80	L
Uranium-235	PCI/G	0.04	0.07	0.00	0.05	0.06	0.04	3/13	0.06	D
Uranium-238	PCI/G	1.09	2.08	0.67	1.07	2.08	0.67	12/13	2.08	X

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

		Results			Detections			Detection		
	UNITS	Average	Maximum	Minimum	Average	Maximum	Minimum	Frequency	UTL	Dist.
Groundwater										
Metals										
Aluminum (Filtered)	UG/L	10.20	32.40	3.70	23.70	32.40	14.30	4/17	32.40	D
Aluminum	UG/L	570.00	2960.00	12.35	644.00	2960.00	20.60	15/17	2960.00	L
Antimony (Filtered)	UG/L	2.01	5.15	0.95	3.35	4.00	2.70	2/17	4.00	D
Antimony	UG/L	1.78	3.90	0.95	2.40	2.90	1.90	2/17	2.90	D
Arsenic (Filtered)	UG/L	3.38	6.20	1.50	5.08	6.20	3.50	6/17	6.20	D
Arsenic	UG/L	2.72	4.70	1.35	3.64	4.70	2.80	5/17	4.70	D
Barium (Filtered)	UG/L	40.50	93.10	8.00	40.50	93.10	8.00	17/17	93.10	L
Barium	UG/L	45.30	105.00	10.10	45.30	105.00	10.10	17/17	105.00	L
Beryllium (Filtered)	UG/L	0.08	0.14	0.07				0/17		O
Beryllium	UG/L	0.14	0.79	0.07	0.33	0.79	0.15	4/17	0.79	D
Cadmium (Filtered)	UG/L	0.57	1.15	0.17	0.36	0.36	0.36	1/17	0.36	D
Cadmium	UG/L	0.69	1.15	0.17	0.93	1.00	0.79	3/17	1.00	D
Calcium (Filtered)	UG/L	74400.00	112000.00	43600.00	74400.00	112000.00	43600.00	17/17	112000.00	L
Calcium	UG/L	79900.00	119000.00	54600.00	79900.00	119000.00	54600.00	17/17	119000.00	L
Chromium (Filtered)	UG/L	0.38	0.70	0.21				0/17		O
Chromium	UG/L	2.76	22.00	0.35	4.02	22.00	0.80	11/17	21.30	L
Cobalt (Filtered)	UG/L	0.44	0.80	0.22				0/17		O
Cobalt	UG/L	0.56	1.20	0.22	0.98	1.20	0.86	3/17	1.20	D
Copper (Filtered)	UG/L	6.55	40.80	0.75	6.91	40.80	0.75	16/17	40.80	X
Copper	UG/L	2.84	5.60	0.75	2.97	5.60	1.20	16/17	5.60	L
Iron (Filtered)	UG/L	456.00	1060.00	1.25	607.00	1060.00	135.00	12/16	1060.00	N
Iron	UG/L	1150.00	4330.00	135.00	1150.00	4330.00	135.00	16/16	4330.00	L
Lead (Filtered)	UG/L	0.95	1.80	0.65	1.80	1.80	1.80	1/17	1.80	D
Lead	UG/L	2.94	7.20	0.65	3.95	7.20	1.70	11/17	7.20	L
Magnesium (Filtered)	UG/L	39100.00	55300.00	27900.00	39100.00	55300.00	27900.00	17/17	55300.00	L
Magnesium	UG/L	42400.00	72700.00	28300.00	42400.00	72700.00	28300.00	17/17	72700.00	L
Manganese (Filtered)	UG/L	31.40	91.60	0.22	35.50	91.60	1.10	15/17	91.60	X
Manganese	UG/L	49.70	144.00	1.80	49.70	144.00	1.80	17/17	144.00	N
Mercury (Filtered)	UG/L	0.05	0.06	0.05				0/17		O
Mercury	UG/L	0.06	0.10	0.05	0.10	0.10	0.10	1/17	0.10	D
Nickel (Filtered)	UG/L	1.43	6.40	0.50	3.83	6.40	1.20	4/17	6.40	D
Nickel	UG/L	2.20	5.50	0.55	2.58	5.50	1.10	13/17	5.50	L
Phosphorus (Filtered)	UG/L	58.30	218.00	7.50	79.50	218.00	14.20	12/17	218.00	X
Phosphorus	UG/L	45.40	177.00	1.50	66.60	177.00	3.50	11/17	177.00	L
Potassium (Filtered)	UG/L	2550.00	16100.00	503.00	2550.00	16100.00	503.00	17/17	16100.00	X
Potassium	UG/L	2700.00	16200.00	606.00	2700.00	16200.00	606.00	17/17	16200.00	X
Selenium (Filtered)	UG/L	3.14	7.50	1.20	5.82	7.50	4.00	6/17	7.50	D
Selenium	UG/L	1.42	2.50	0.95				0/17		O
Silver (Filtered)	UG/L	0.74	1.00	0.43				0/17		O
Silver	UG/L	0.85	2.20	0.45	1.65	2.20	1.10	2/17	2.20	D
Sodium (Filtered)	UG/L	12700.00	27400.00	1440.00	12700.00	27400.00	1440.00	17/17	27400.00	N
Sodium	UG/L	13200.00	28100.00	1150.00	13200.00	28100.00	1150.00	17/17	28100.00	N
Thallium (Filtered)	UG/L	3.06	5.00	2.00	4.75	5.00	4.50	2/17	5.00	D
Thallium	UG/L	3.79	6.70	2.00	5.58	6.70	4.90	5/17	6.70	D
Vanadium (Filtered)	UG/L	0.42	1.40	0.24	1.40	1.40	1.40	1/17	1.40	D
Vanadium	UG/L	1.17	6.30	0.24	2.99	6.30	0.84	5/17	6.30	D
Zinc (Filtered)	UG/L	5.55	13.90	0.23	9.22	13.90	3.90	9/17	13.90	X
Zinc	UG/L	25.30	122.00	1.30	32.40	122.00	6.40	13/17	122.00	L
Indicator Parameters										
Fluoride	MG/L	0.79	1.24	0.14	0.79	1.24	0.14	11/11	1.24	X

Table 3F.1. Summary Statistics for Calculation of Background Concentrations

		Results			Detections			Detection		
	UNITS	Average	Maximum	Minimum	Average	Maximum	Minimum	Frequency	UTL	Dist.
Groundwater (continued)										
Radiological Parameters										
Actinium-227 (Filtered)	PCI/L	0.02	0.19	-0.03				0/11		O
Actinium-227	PCI/L	0.07	0.35	-0.05	0.35	0.35	0.35	2/17	0.35	D
Actinium-228 (Filtered)	PCI/L	7.17	13.90	0.00				0/11		O
Actinium-228	PCI/L	7.95	18.90	0.00				0/17		O
Cesium-137 (Filtered)	PCI/L	0.26	1.79	-2.34				0/11		O
Cesium-137	PCI/L	0.27	5.29	-1.16	5.29	5.29	5.29	1/17	5.29	D
Cobalt-60 (Filtered)	PCI/L	0.23	2.10	-1.21				0/11		O
Cobalt-60	PCI/L	0.11	4.13	-2.36				0/17		O
Gross Alpha (Filtered)	PCI/L	1.80	5.48	0.21	2.29	5.48	0.21	7/11	5.48	D
Gross Alpha	PCI/L	2.53	6.03	0.67	2.79	6.03	0.96	13/17	6.03	L
Nonvolatile Beta (Filtered)	PCI/L	2.26	3.81	0.19	3.02	3.81	2.29	7/11	3.81	D
Nonvolatile Beta	PCI/L	3.17	14.60	0.74	3.84	14.60	1.27	12/17	12.10	L
Potassium-40 (Filtered)	PCI/L	29.60	67.00	0.73	31.80	31.80	31.80	1/11	31.80	D
Potassium-40	PCI/L	29.90	65.60	0.00	39.00	39.00	39.00	1/17	39.00	D
Protactinium-231 (Filtered)	PCI/L	12.00	105.00	-59.60				0/11		O
Protactinium-231	PCI/L	-2.93	79.50	-93.70				0/17		O
Radium-226 (Filtered)	PCI/L	1.21	2.63	0.45	1.38	2.63	0.85	9/11	2.63	L
Radium-226	PCI/L	1.05	1.86	0.29	1.20	1.86	0.53	14/17	1.86	N
Radium-228 (Filtered)	PCI/L	0.52	1.30	-0.42	1.16	1.30	1.02	2/11	1.30	D
Radium-228	PCI/L	0.31	1.57	-0.33	1.57	1.57	1.57	1/17	1.57	D
Thorium-228 (Filtered)	PCI/L	0.07	0.23	-0.06				0/11		O
Thorium-228	PCI/L	0.28	0.65	-0.02	0.49	0.65	0.28	4/17	0.65	D
Thorium-230 (Filtered)	PCI/L	0.26	0.99	-0.07	0.56	0.99	0.32	5/11	0.99	D
Thorium-230	PCI/L	0.98	14.70	-0.03	2.64	14.70	0.14	6/17	14.70	D
Thorium-232 (Filtered)	PCI/L	0.00	0.05	-0.03				0/11		O
Thorium-232	PCI/L	0.03	0.11	-0.02				0/17		O
Thorium-234 (Filtered)	PCI/L	68.40	137.00	0.00				0/11		O
Thorium-234	PCI/L	46.70	139.00	0.00				0/17		O
Uranium-234 (Filtered)	PCI/L	0.51	1.00	0.07	0.71	1.00	0.34	7/11	1.00	D
Uranium-234	PCI/L	0.69	1.62	0.10	0.81	1.62	0.11	14/17	1.62	L
Uranium-235 (Filtered)	PCI/L	0.02	0.11	-0.03				0/11		O
Uranium-235	PCI/L	0.03	0.12	-0.02				1/17		O
Uranium-238 (Filtered)	PCI/L	0.39	1.00	-0.02	0.70	1.00	0.34	5/11	1.00	D
Uranium-238	PCI/L	0.44	1.40	0.10	0.60	1.40	0.20	11/17	1.40	L

D - Distribution not determined because fewer than 8 detects or less than 50% detects
L - Distribution most similar to lognormal
N - distribution most similar to normal
O - 100% nondetects
X - Distributiuon significantly different from normal and lognormal

Background Soil Sample Results

Phase II Background Soil

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Metals									
Aluminum (mg/kg)	6280	6970	11400	8090	12500	14200	5350	5720	13100
Antimony (mg/kg)	0.2 UJ	0.2 UJ	0.64 J	0.7 J	0.68 J	0.47 J	0.15 UJ	0.15 UJ	0.15 UJ
Arsenic (mg/kg)	4	4.4	7	3.7	7.1	11.2	2.7	3	11.3
Barium (mg/kg)	32	23.9	66.3	35.2	58.6	100	30.4	22.2	74.7
Beryllium (mg/kg)	0.3	0.34	0.6	0.35	0.73	0.84	0.29	0.26	0.76
Boron (mg/kg)	3.9	3.4	6.6	4.7	4.9	6.9	13 U	13 U	5.9
Cadmium (mg/kg)	0.3	0.22	0.35	0.34	0.32	0.51	0.15	0.02 U	0.02 U
Calcium (mg/kg)	3060	1540	15900	2920	2210	3030	2560	1280	8040
Chromium (mg/kg)	7	10	15.6	9.2	18.1	19.9	7.6	6.8	19.1
Cobalt (mg/kg)	2.8	3.3	8.1	3.4	9.1	11.8	2.3	3.2	12.3
Copper (mg/kg)	11.5	18.9	29.9	9.2	22.3	31.5	7.5	7.4	26.6
Iron (mg/kg)	8840	10100	19000	9740	21400	25300	6470	6520	24200
Lead (mg/kg)	18.3	5.2	7.7	12.3	10	11.8	10 J	5.1 J	12.1 J
Magnesium (mg/kg)	1100	1100	4480	1490	3330	3880	990	1150	4310
Manganese (mg/kg)	105	117	372	119	196	348	82.4 J	51.1 J	567 J
Mercury (mg/kg)	0 U	0 U	0 U	0 U	0 U	0 U	0.02 UJ	0.02 UJ	0.02 UJ
Molybdenum (mg/kg)	1.3	1.3	2.3	1.5	2.3	3.9	1.1	1.3	4.5
Nickel (mg/kg)	6.8	7.9	22.9	7.8	20	28.8	6.8	7.7	31.5
Potassium (mg/kg)	321	342	1090	471	872	1100	257 J	296 J	1190 J
Selenium (mg/kg)	0.94	0.73	0.9	0.63	1.1	0.68	0.78	0.29	0.87
Silicon (mg/kg)	376 J	329 J	387 J	429 J	295 J	325 J	495	287	489
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sodium (mg/kg)	155	195	227	208	184	194	214	184	247
Strontium (mg/kg)	28.3	15.2	44.2	25.2	18.1	21.6	23.7	11.4	31.1
Thallium (mg/kg)	0.61 J	0.25 U	0.77 J	0.25 U	1.1 J	1.5 J	2.3 U	2.3 U	1.4
Tin (mg/kg)	1 U	1 U	1 U	1 U	1 U	1 U			
Vanadium (mg/kg)	12.7	14.6	23.6	15.5	24.7	29.7	10.3	11.3	29.2
Zinc (mg/kg)	32.2	27.9	43.7	37.7	50.9	61.7	31.9	20.1	56.1
Indicator Parameters									
% Moisture (%)							11.8	5.63	11.8
Chloride (mg/kg)	0 U	1.36 R	0 R	1.98 R	1.45 R	2.22 R	2.38	0.6 U	0.6 U
Fluoride (mg/kg)	1.82 J	1.09 J	3 J	1.29 R	1.2 R	3.21 R	0.4 U	0.4 U	2.49
Nitrate, as N (mg/kg)	5.19	0 R	0 R	13.2 R	0 U	0 R	2.95	0.2 U	0.2 U
Phosphorus (mg/kg)	0 R	0 UJ	0 UJ	0 R	0 R	0 R	0.8 U	0.8 U	0.8 U
Sulfate (mg/kg)	5.84	6.18 R	16.8 R	6.06 R	7.25	25.1 R	7.37	3.81	31.8
pH (ph)	6.28	6.49	7.88	6.3	6.13	6.33	6.18	6.37	7.61

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	55 U	55 U	55 U
2,4-Dichlorophenol (ug/kg)	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	50 UJ	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	49.5 U	49.5 U	49.5 U
2-fluorobiphenyl (%)	73	70	72	73	70	74	71.5	66.6	74.7
2-fluorophenol (%)	72	70	71	72	72	76	86.6	47.9	88.2
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 UJ	86 UJ	86 UJ	86 UJ	86 UJ	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	75 U	75 U	75 U
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	60 U	60 U	60 U
Anthracene (ug/kg)	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	73.35 U	73.35 U	73.35 U	73.35 U	73.35 U	73.35 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	72.2 U	72.2 U	72.2 U	72.2 U	72.2 U	72.2 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	65.9 U	65.9 U	65.9 U	65.9 U	65.9 U	65.9 U	60 U	60 U	60 U

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Benzo(ghi)perylene (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	122 U	122 U	122 U	122 U	122 U	122 U	50 U	50 U	50 U
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	145 U	145 U	145 U	145 U	145 U	145 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	68.8 U	68.8 U	68.8 U	68.8 U	68.8 U	68.8 U	50 U	50 U	50 U
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	42.55 U	42.55 U	42.55 U	42.55 U	42.55 U	42.55 U	50 U	50 U	50 U
Fluorene (ug/kg)	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	50 U	50 U	50 U
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U	38.95 U	38.95 U	38.95 U	38.95 U	55 U	55 U	55 U
Isophorone (ug/kg)	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	55 U	55 U	55 U
Naphthalene (ug/kg)	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	50 U	50 U	50 U
Pentachlorophenol (ug/kg)	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)	22.05 U	22.05 U	22.05 U	22.05 U	22.05 U	22.05 U	55 U	55 U	55 U
Phenol (ug/kg)	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	50 U	50 U	50 U
Pyrene (ug/kg)	64.25 U	64.25 U	64.25 U	64.25 U	64.25 U	64.25 U	60 U	60 U	60 U
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	70 UJ	70 UJ	70 UJ
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)		1.28 UJ			1.28 UJ			1.3 U	1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)		0.6 UJ			0.6 UJ			1.45 U	1.45 U
1,1,2-Trichloroethane (ug/kg)		1.35 UJ			1.35 UJ			1.35 U	1.35 U
1,1-Dichloroethane (ug/kg)		0.26 UJ			0.26 UJ			0.65 U	0.65 U
1,1-Dichloroethene (ug/kg)		0.31 UJ			0.31 UJ			0.7 U	0.7 U

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
1,2-Dichloroethane (ug/kg)		0.12 UJ			0.12 UJ			0.85 U	0.85 U
1,2-Dichloropropane (ug/kg)		0.24 UJ			0.24 UJ			1.1 U	1.1 U
1,2-dichloroethylene(total) (ug/kg)		0 UJ			0 UJ			1.4 U	1.4 U
2-Butanone (ug/kg)		0.7 UJ			0.7 UJ			2.6 UJ	2.6 UJ
2-Hexanone (ug/kg)		0.7 UJ			0.7 UJ			1.9 U	1.9 UJ
4-Methyl-2-pentanone (ug/kg)		0.27 UJ			0.27 UJ			2.15 U	2.15 U
Acetone (ug/kg)		0.8 R			180 R			3.4 UJ	3.4 UJ
Benzene (ug/kg)		0.22 UJ			0.22 UJ			0.55 U	0.55 U
Bromodichloromethane (ug/kg)		0.36 UJ			0.36 UJ			1.2 U	1.2 U
Bromofluorobenzene (%)		74			124			86.9	97.7
Bromomethane (ug/kg)		0.32 UJ			0.32 UJ			1.1 U	1.1 U
Carbon disulfide (ug/kg)		0.3 UJ			0.3 UJ			0.9 U	3 J
Carbon tetrachloride (ug/kg)		0.16 UJ			0.16 UJ			1.55 U	1.55 U
Chlorobenzene (ug/kg)		0.35 UJ			0.35 UJ			0.9 U	0.9 U
Chloroethane (ug/kg)		0.55 UJ			0.55 UJ			1.45 U	1.45 U
Chloroform (ug/kg)		0.24 UJ			0.24 UJ			0.7 U	0.7 U
Chloromethane (ug/kg)		0.5 UJ			0.5 UJ			1.45 U	1.45 U
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)		0.44 UJ			0.44 UJ			1.55 U	1.55 U
Ethylbenzene (ug/kg)		0.33 UJ			0.33 UJ			0.7 U	0.7 U
Methylene chloride (ug/kg)		0.95 UJ			0.95 UJ			0.65 UJ	0.65 UJ
Styrene (ug/kg)		1.2 UJ			1.2 UJ			0.75 U	0.75 U
Tetrachloroethene (ug/kg)		0.3 UJ			0.3 UJ			1 U	1 U
Toluene (ug/kg)		0.13 UJ			12 J			0.6 U	0.6 U
Tribromomethane (ug/kg)		0.75 UJ			0.75 UJ			1.65 U	1.65 U
Trichloroethene (ug/kg)		0.35 UJ			0.35 UJ			1.1 U	1.1 U
Vinyl chloride (ug/kg)		0.49 UJ			0.49 UJ			1.35 U	1.35 U
Xylenes (total) (ug/kg)		0 UJ			0 UJ			5 J	1.8 U
cis-1,3-dichloropropene (ug/kg)		0.18 UJ			0.18 UJ			0.9 U	0.9 U
trans-1,3-dichloropropene (ug/kg)		0.22 UJ			0.22 UJ			1.05 U	1.05 U
Pesticides									
4,4'-DDD (ug/kg)				0.16 U					
4,4'-DDE (ug/kg)				0.04 U					
4,4'-DDT (ug/kg)				0.15 U					
Aldrin (ug/kg)				0.03 U					
Alpha-bhc (ug/kg)				0.03 U					
Alpha-chlordane (ug/kg)				0.03 UJ					

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Aroclor-1016 (ug/kg)				0.93 U					
Aroclor-1221 (ug/kg)				0.93 U					
Aroclor-1232 (ug/kg)				0.93 U					
Aroclor-1242 (ug/kg)				0.93 U					
Aroclor-1248 (ug/kg)				0.93 U					
Aroclor-1254 (ug/kg)				0.67 U					
Aroclor-1260 (ug/kg)				0.67 U					
Beta-BHC (ug/kg)				2.8 J					
Decachlorobiphenyl (%)				69					
Delta-BHC (ug/kg)				0.02 U					
Dieldrin (ug/kg)				0.05 U					
Endosulfan sulfate (ug/kg)				0.03 U					
Endosulfan-i (ug/kg)				0.07 UJ					
Endosulfan-ii (ug/kg)				0.03 UJ					
Endrin (ug/kg)				0.06 UJ					
Endrin aldehyde (ug/kg)				0.06 U					
Endrin ketone (ug/kg)				0.02 UJ					
Gamma-chlordane (ug/kg)				0.04 UJ					
Heptachlor (ug/kg)				0.06 UJ					
Heptachlor epoxide (ug/kg)				0.02 U					
Lindane (ug/kg)				0.04 U					
Methoxychlor (ug/kg)				0.55 U					
T.chlordane (ug/kg)									
Toxaphene (ug/kg)				1.83 U					
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.5 UJ	0.21	0.16	0.17	0.4	0.12	0.5 U	0.4	0.34
Radium-226 (pCi/g)	0.89	0.56	1.3	0.5	0.62	0.87	0.58	0.53	1.02
Radium-228 (pCi/g)	0.39	0.38	0.89	0.74	0.93	1.05	0.39	0.49	0.9
Thorium-227 (pCi/g)	0.5 UJ	0.21	0.16	0.17	0.4	0.12	0.5 U	0.4	0.34
Thorium-228 (pCi/g)	0.39	0.38	0.89	0.74	0.93	1.05	0.39	0.49	0.9
Thorium-230 (pCi/g)	0.5 U	1.17	1.77	1.33	2	2.23	0.83	0.83	2.59
Thorium-232 (pCi/g)	0.32	0.6	0.79	0.53	0.82	0.87	0.5 U	0.55	1.14
Uranium-234 (pCi/g)	0.94	1.15	1.66	1.04	1.41	1.4	0.64	0.98	1.21
Uranium-235 (pCi/g)	0.09 J	0.5 UJ	0.1 J	0.07 J	0.5 UJ	0.5 UJ	0.1 R	0.08 R	0.03 R
Uranium-238 (pCi/g)	0.84	0.86	1.99	1.24	1.7	1.68	0.91	0.89	1.66
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0.68	0 UJ	0 UJ	0 UJ	0.63	0.59	0 UJ	0 UJ	1.35

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.14	0.5 UJ	0.5 UJ	0.23	0.27	0.5 UJ	0.12	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	10.58	10.11	11.84	10.97	14.22	14.73	10.2	10.49	14.45
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.34 J	0.22 J	0.39 J	0.36 J	0.62 J	0.64 J	0.35 J	0.23 J	0.77 J
Radium-228 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57	0 UJ	0.19	0.67
Thorium-228 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57			
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57	0 UJ	0.19	0.67
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 U	0 UJ	0 UJ

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	16000	15000	14100	14100	14800	13200			
Antimony (mg/kg)	0.78 J	0.75 J	0.86 J	0.6 J	0.86 J	0.73 J			
Arsenic (mg/kg)	8.7	12.4	13	8.4	12.9	14.9			
Barium (mg/kg)	99.4	135	125	81.6	128	85.7			
Beryllium (mg/kg)	0.9	0.92	0.83	0.82	0.92	0.79			
Boron (mg/kg)	13.2	9.9	9.1	10.4	10.3	10.7			
Cadmium (mg/kg)	0.59	0.82	0.79	0.56	0.96	0.52			
Calcium (mg/kg)	6180	6500	3920	5700	4820	6860			
Chromium (mg/kg)	21.3	20.1	21.4	19.4	19.7	19.1			
Cobalt (mg/kg)	10.6	14.6	17	9.4	19.1	14.9			
Copper (mg/kg)	26	25.6	27.4	24	26.1	30.2			
Iron (mg/kg)	26300	28900	30500	25100	29900	31500			
Lead (mg/kg)	17.6	19.2	14.2	15.5	18.3	14.7			
Magnesium (mg/kg)	5480	5010	5270	5220	4460	6630			
Manganese (mg/kg)	424	711	1450	362	1130	789			
Mercury (mg/kg)	0 U	0 U	0 U	0 U	0 U	0 U			
Molybdenum (mg/kg)	2.5	4.7	4.2	2	4	5.6			
Nickel (mg/kg)	26.3	30	46.9	25.7	36.3	40.9			
Potassium (mg/kg)	2290	1740	1590	1780	1720	1740			
Selenium (mg/kg)	2	1.3	1.8	1.4	1.5	1.5			
Silicon (mg/kg)	431 J	303 J	337 J	364 J	314 J	483 J			
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U			
Sodium (mg/kg)	218	196	209	197	204	203			
Strontium (mg/kg)	20.9	18.1	11.4	16.3	15.2	12.2			
Thallium (mg/kg)	2.1 J	1.4 J	1.5 J	1.4 J	1.6 J	2.1 J			
Tin (mg/kg)	1 U	1 U	1 U	1 U	1 U	1 U			
Vanadium (mg/kg)	32.6	30.7	30.2	27.5	31.2	28			
Zinc (mg/kg)	94.4	96.9	87.2	86.9	93.8	92.2			
Indicator Parameters									
% Moisture (%)									
Chloride (mg/kg)	1.72 R	0 R	0 R	2 R	0 R	1.43 R			
Fluoride (mg/kg)	3.83 R	4.09 R	3.81 R	3.74 R	6.54 R	5.96 R			
Nitrate, as N (mg/kg)	4.23	3.97 R	1.43 R	6.86 R	3.27 R	1.43 R			
Phosphorus (mg/kg)	0 R	0 R	0 R	0 R	0 R	0 R			
Sulfate (mg/kg)	3.7 R	4.69 R	10.6 R	5.11 R	6.18 R	18.1 R			
pH (ph)	7.42	7.96	7.98	7.61	7.68	8.08			

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U			
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U			
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U			
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U			
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U			
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U			
2,4,6-Trichlorophenol (ug/kg)	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U			
2,4-Dichlorophenol (ug/kg)	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U			
2,4-Dimethylphenol (ug/kg)	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U			
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 U	132.8 U	132.8 U	132.8 U	132.8 U			
2,4-Dinitrotoluene (ug/kg)	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U			
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U			
2-Chloronaphthalene (ug/kg)	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U			
2-Chlorophenol (ug/kg)	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U			
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U			
2-Methylphenol (ug/kg)	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U			
2-Nitroaniline (ug/kg)	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U			
2-Nitrophenol (ug/kg)	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U			
2-fluorobiphenyl (%)	74	73	76	75	74	77			
2-fluorophenol (%)	72	71	76	73	71	71			
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 U	86 U	86 U	86 U	86 U			
3-Nitroaniline (ug/kg)	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U			
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U			
4-Chloroaniline (ug/kg)	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U			
4-Methylphenol (ug/kg)	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U			
4-Nitroaniline (ug/kg)	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U			
4-Nitrophenol (ug/kg)	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U			
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U			
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U			
4-chlorophenylphenylether (ug/kg)	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U			
Acenaphthene (ug/kg)	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U			
Acenaphthylene (ug/kg)	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U			
Anthracene (ug/kg)	29.1 U	29.1 U	29.1 U	47 J	29.1 U	29.1 U			
Benzo(a)anthracene (ug/kg)	45 J	73.35 U	73.35 U	88 J	73.35 U	73.35 U			
Benzo(a)pyrene (ug/kg)	72.2 U	72.2 U	72.2 U	86 J	72.2 U	72.2 U			
Benzo(b)fluoranthene (ug/kg)	65.9 U	65.9 U	65.9 U	88 J	65.9 U	65.9 U			

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	45 U	45 U	45 U	45 J	45 U	45 U			
Benzo(k)fluoranthene (ug/kg)	45 J	122 U	122 U	84 J	122 U	122 U			
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U			
Carbazole (ug/kg)	145 U	145 U	145 U	48 J	145 U	145 U			
Chrysene (ug/kg)	50 J	68.8 U	68.8 U	96 J	68.8 U	68.8 U			
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U			
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U			
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U			
Dibenzofuran (ug/kg)	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U			
Diethyl phthalate (ug/kg)	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U			
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U			
Fluoranthene (ug/kg)	110 J	42.55 U	42.55 U	240 J	42.55 U	42.55 U			
Fluorene (ug/kg)	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U			
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U			
Hexachlorobutadiene (ug/kg)	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U			
Hexachlorocyclopentadiene (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U			
Hexachloroethane (ug/kg)	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U			
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U	38.95 U	44 J	38.95 U	38.95 U			
Isophorone (ug/kg)	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U			
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U			
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U			
Naphthalene (ug/kg)	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U			
Nitrobenzene (ug/kg)	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U			
Pentachlorophenol (ug/kg)	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U			
Perylene (ug/kg)	380 R								
Phenanthrene (ug/kg)	91 J	22.05 U	22.05 U	240 J	22.05 U	22.05 U			
Phenol (ug/kg)	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U			
Pyrene (ug/kg)	90 J	64.25 U	64.25 U	190 J	64.25 U	64.25 U			
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U			
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U			
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ			
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)		1.28 UJ			1.28 UJ				
1,1,2,2-Tetrachloroethane (ug/kg)		0.6 UJ			0.6 UJ				
1,1,2-Trichloroethane (ug/kg)		1.35 UJ			1.35 UJ				
1,1-Dichloroethane (ug/kg)		0.26 UJ			0.26 UJ				
1,1-Dichloroethene (ug/kg)		0.31 UJ			0.31 UJ				

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1,2-Dichloroethane (ug/kg)		0.12 UJ			0.12 UJ				
1,2-Dichloropropane (ug/kg)		0.24 UJ			0.24 UJ				
1,2-dichloroethylene(total) (ug/kg)		0 UJ			0 UJ				
2-Butanone (ug/kg)		0.7 UJ			0.7 UJ				
2-Hexanone (ug/kg)		0.7 UJ			0.7 UJ				
4-Methyl-2-pentanone (ug/kg)		0.27 UJ			0.27 UJ				
Acetone (ug/kg)		0.8 R			0.8 R				
Benzene (ug/kg)		0.22 UJ			0.22 UJ				
Bromodichloromethane (ug/kg)		0.36 UJ			0.36 UJ				
Bromofluorobenzene (%)		57			64				
Bromomethane (ug/kg)		0.32 UJ			0.32 UJ				
Carbon disulfide (ug/kg)		0.3 UJ			0.3 UJ				
Carbon tetrachloride (ug/kg)		0.16 UJ			0.16 UJ				
Chlorobenzene (ug/kg)		0.35 UJ			0.35 UJ				
Chloroethane (ug/kg)		0.55 UJ			0.55 UJ				
Chloroform (ug/kg)		0.24 UJ			0.24 UJ				
Chloromethane (ug/kg)		0.5 UJ			0.5 UJ				
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)		0.44 UJ			0.44 UJ				
Ethylbenzene (ug/kg)		0.33 UJ			0.33 UJ				
Methylene chloride (ug/kg)		0.95 UJ			0.95 UJ				
Styrene (ug/kg)		1.2 UJ			1.2 UJ				
Tetrachloroethene (ug/kg)		0.3 UJ			0.3 UJ				
Toluene (ug/kg)		0.13 UJ			0.13 UJ				
Tribromomethane (ug/kg)		0.75 UJ			0.75 UJ				
Trichloroethene (ug/kg)		0.35 UJ			0.35 UJ				
Vinyl chloride (ug/kg)		0.49 UJ			0.49 UJ				
Xylenes (total) (ug/kg)		0 UJ			0 UJ				
cis-1,3-dichloropropene (ug/kg)		0.18 UJ			0.18 UJ				
trans-1,3-dichloropropene (ug/kg)		0.22 UJ			0.22 UJ				
Pesticides									
4,4'-DDD (ug/kg)	0.16 R								
4,4'-DDE (ug/kg)	0.12 R								
4,4'-DDT (ug/kg)	0.15 R								
Aldrin (ug/kg)	0.07 R								
Alpha-bhc (ug/kg)	0.03 R								
Alpha-chlordane (ug/kg)	0.09 R								

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Aroclor-1016 (ug/kg)	1.19 R								
Aroclor-1221 (ug/kg)	0.11 R								
Aroclor-1232 (ug/kg)	0 R								
Aroclor-1242 (ug/kg)	0.55 R								
Aroclor-1248 (ug/kg)	1.15 R								
Aroclor-1254 (ug/kg)	0 R								
Aroclor-1260 (ug/kg)	0 R								
Beta-BHC (ug/kg)	0.05 R								
Decachlorobiphenyl (%)	95								
Delta-BHC (ug/kg)	0.02 R								
Dieldrin (ug/kg)	0.08 R								
Endosulfan sulfate (ug/kg)	0.14 R								
Endosulfan-i (ug/kg)	0.14 R								
Endosulfan-ii (ug/kg)	0.03 R								
Endrin (ug/kg)	0.06 R								
Endrin aldehyde (ug/kg)	0.14 R								
Endrin ketone (ug/kg)	0.1 R								
Gamma-chlordane (ug/kg)	0.09 R								
Heptachlor (ug/kg)	0.08 R								
Heptachlor epoxide (ug/kg)	0.12 R								
Lindane (ug/kg)	0 R								
Methoxychlor (ug/kg)	0.77 R								
T.chlordane (ug/kg)									
Toxaphene (ug/kg)	0.36 R								
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.28	0.22	0.59	0.21	0.31	0.22			
Radium-226 (pCi/g)	1.46	1.35	2.35	1.65	2.18	3.15	2.64	2.29	2.68
Radium-228 (pCi/g)	1.09	1.14	1.17	1.01	0.95	0.93			
Thorium-227 (pCi/g)	0.28	0.22	0.59	0.21	0.31	0.22			
Thorium-228 (pCi/g)	1.09	1.14	1.17	1.01	0.95	0.93	1.48 J	1.43 J	0.74 J
Thorium-230 (pCi/g)	1.9	2.26	2.11	2.25	1.98	2.13	3.89 J	3.11 J	3.39 J
Thorium-232 (pCi/g)	1.21	1.22	1.2	1.11	0.94	0.92	1.3 J	0.85 J	1.33 J
Uranium-234 (pCi/g)	1.71	1.54	1.86	1.81	1.59	2.24	1.27	1.89	1.63
Uranium-235 (pCi/g)	0.14 J	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.18 J	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	1.62	1.64	1.91	1.64	2.21	2.16	1.48	2	1.79
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0 UJ	11.63	0 UJ	0 UJ	1.15	1.23	0 UJ	0.13	0 UJ

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**	**BH0005**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00055**	**LU00056**	**LU00057**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.09	0.5 UJ	0.5 UJ	0.11	0.5 UJ	0.5 UJ	0.18	0.12	0 UJ
Potassium-40 (pCi/g)	15.44	18.14	20.02	18.35	19.52	20.42	24.8	23.6	25.72
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.81 J	0.93 J	1.06 J	0.82 J	1.27 J	1.28 J	1.18 J	1.25 J	1.52 J
Radium-228 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89	1.03	1.03	1.05
Thorium-228 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89	1.03	1.03	1.05
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89	1.03	1.03	1.05
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0.21	0 UJ	0 UJ
Uranium-238 (pCi/g)	1.9	2.87	0 UJ	4.77	3.16	0 UJ	0 UJ	0 UJ	0 UJ

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	13300	14000	12500	12300					
Antimony (mg/kg)	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ					
Arsenic (mg/kg)	8.2	11.5	15.1	14.5					
Barium (mg/kg)	84.4	99.9	85.8	109					
Beryllium (mg/kg)	0.78	0.86	0.75	0.76					
Boron (mg/kg)	9.5	7.5	9.8	10.5					
Cadmium (mg/kg)	0.23	0.11	0.02 U	0.24					
Calcium (mg/kg)	25000	4830	27500	55100					
Chromium (mg/kg)	16.8	18.7	17.7	16.9					
Cobalt (mg/kg)	8.3	10.9	13.4	15.8					
Copper (mg/kg)	23.8	26.6	30.2	30.6					
Iron (mg/kg)	22200	27300	28200	27200					
Lead (mg/kg)	16.3 J	17.2 J	13.6 J	14 J					
Magnesium (mg/kg)	17100	4460	11000	10600					
Manganese (mg/kg)	369 J	404 J	572 J	1060 J					
Mercury (mg/kg)	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ					
Molybdenum (mg/kg)	2.5	3.9	5.9	6.4					
Nickel (mg/kg)	23	27.6	34.9	42					
Potassium (mg/kg)	1820 J	1650 J	1780 J	1850 J					
Selenium (mg/kg)	1.1	1.5	1.1	0.15 U					
Silicon (mg/kg)	465	427	324	334					
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U					
Sodium (mg/kg)	285	253	271	252					
Strontium (mg/kg)	20	14.3	23.1	36.5					
Thallium (mg/kg)	1.3	1.4	1.7	1.7					
Tin (mg/kg)									
Vanadium (mg/kg)	26.1	28.6	26.8	26.6					
Zinc (mg/kg)	82.4	95.7	83.5	76.1					
Indicator Parameters									
% Moisture (%)	14.3	14.8	13.6	13.3					
Chloride (mg/kg)	0.6 U	0.6 U	0.6 U	0.6 U					
Fluoride (mg/kg)	2.68	3.99	6.94	6.69					
Nitrate, as N (mg/kg)	2.45	1.88	0.2 U	0.2 U					
Phosphorus (mg/kg)	0.8 U	0.8 U	0.8 U	0.8 U					
Sulfate (mg/kg)	3.15	2.93	11.7	10.8					
pH (ph)	7.56	7.68	8.22	8.28					

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U	47 U	47 U					
1,2-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U					
1,3-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U					
1,4-Dichlorobenzene (ug/kg)	60 U	60 U	60 U	60 U					
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U					
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U					
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U					
2,4-Dichlorophenol (ug/kg)	55 U	55 U	55 U	55 U					
2,4-Dimethylphenol (ug/kg)	80 U	80 U	80 U	80 U					
2,4-Dinitrophenol (ug/kg)	50 UJ	50 UJ	50 UJ	50 U					
2,4-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U					
2,6-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U					
2-Chloronaphthalene (ug/kg)	55 U	55 U	55 U	55 U					
2-Chlorophenol (ug/kg)	48.5 U	48.5 U	48.5 U	48.5 U					
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U	42.5 U	42.5 U					
2-Methylphenol (ug/kg)	65 U	65 U	65 U	65 U					
2-Nitroaniline (ug/kg)	55 U	55 U	55 U	55 U					
2-Nitrophenol (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U					
2-fluorobiphenyl (%)	67.1	77.3	75.5	70.1					
2-fluorophenol (%)	71.2	82.1	96.5	88.9					
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U	60 U	60 U					
3-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U					
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U	50 U	50 U					
4-Chloroaniline (ug/kg)	105 U	105 U	105 U	105 U					
4-Methylphenol (ug/kg)	47 U	47 U	47 U	47 U					
4-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U					
4-Nitrophenol (ug/kg)	55 U	55 U	55 U	55 U					
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U	43 U	43 U					
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U	45 U	45 U					
4-chlorophenylphenylether (ug/kg)	60 U	60 U	60 U	60 U					
Acenaphthene (ug/kg)	50 U	50 U	50 U	2800					
Acenaphthylene (ug/kg)	60 U	60 U	60 U	60 U					
Anthracene (ug/kg)	46 J	50 U	50 U	50 U					
Benzo(a)anthracene (ug/kg)	120 J	50 U	50 U	50 U					
Benzo(a)pyrene (ug/kg)	100 J	41.5 U	41.5 U	41.5 U					
Benzo(b)fluoranthene (ug/kg)	170 J	60 U	60 U	60 U					

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	61 J	65 U	65 U	65 U					
Benzo(k)fluoranthene (ug/kg)	50 U	50 U	50 U	50 U					
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U					
Carbazole (ug/kg)	42.75 U	42.75 U	42.75 U	42.75 U					
Chrysene (ug/kg)	130 J	50 U	50 U	50 U					
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U					
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U					
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U	60 U	60 U					
Dibenzofuran (ug/kg)	55 U	55 U	55 U	55 U					
Diethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U					
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U					
Fluoranthene (ug/kg)	270 J	50 U	50 U	50 U					
Fluorene (ug/kg)	50 U	50 U	50 U	50 U					
Hexachlorobenzene (ug/kg)	42 U	42 U	42 U	42 U					
Hexachlorobutadiene (ug/kg)	45 U	45 U	45 U	45 U					
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U	37.5 U	37.5 U					
Hexachloroethane (ug/kg)	47 U	47 U	47 U	47 U					
Indeno(1,2,3-c,d)pyrene (ug/kg)	58 J	55 U	55 U	55 U					
Isophorone (ug/kg)	50 U	50 U	50 U	50 U					
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U	43.5 U	43.5 U					
N-nitrosodiphenylamine (ug/kg)	55 U	55 U	55 U	55 U					
Naphthalene (ug/kg)	55 U	55 U	55 U	55 U					
Nitrobenzene (ug/kg)	50 U	50 U	50 U	50 U					
Pentachlorophenol (ug/kg)	38 U	38 U	38 U	38 U					
Perylene (ug/kg)									
Phenanthrene (ug/kg)	360 J	55 U	55 U	55 U					
Phenol (ug/kg)	50 U	50 U	50 U	50 U					
Pyrene (ug/kg)	210 J	60 U	60 U	60 U					
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U					
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U	50 U	50 U					
bis(2-ethylhexyl)phthalate (ug/kg)	70 U	70 UJ	70 U	70 UJ					
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)		1.3 R	1.3 UJ	1.3 UJ					
1,1,2,2-Tetrachloroethane (ug/kg)		1.45 R	1.45 UJ	1.45 UJ					
1,1,2-Trichloroethane (ug/kg)		1.35 R	1.35 UJ	1.35 UJ					
1,1-Dichloroethane (ug/kg)		0.65 R	0.65 UJ	0.65 UJ					
1,1-Dichloroethene (ug/kg)		0.7 R	0.7 UJ	0.7 UJ					

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
1,2-Dichloroethane (ug/kg)		0.85 R	0.85 UJ	0.85 UJ					
1,2-Dichloropropane (ug/kg)		1.1 R	1.1 UJ	1.1 UJ					
1,2-dichloroethylene(total) (ug/kg)		1.4 R	1.4 UJ	1.4 UJ					
2-Butanone (ug/kg)		2.6 R	2.6 UJ	2.6 UJ					
2-Hexanone (ug/kg)		1.9 R	1.9 UJ	1.9 UJ					
4-Methyl-2-pentanone (ug/kg)		2.15 R	2.15 UJ	2.15 UJ					
Acetone (ug/kg)		3.4 R	3.4 UJ	3.4 UJ					
Benzene (ug/kg)		0.55 R	0.55 UJ	0.55 UJ					
Bromodichloromethane (ug/kg)		1.2 R	1.2 UJ	1.2 UJ					
Bromofluorobenzene (%)		68.2 R	65	70.3					
Bromomethane (ug/kg)		1.1 R	1.1 UJ	1.1 UJ					
Carbon disulfide (ug/kg)		0.9 R	0.9 UJ	0.9 UJ					
Carbon tetrachloride (ug/kg)		1.55 R	1.55 UJ	1.55 UJ					
Chlorobenzene (ug/kg)		0.9 R	0.9 UJ	0.9 UJ					
Chloroethane (ug/kg)		1.45 R	1.45 UJ	1.45 UJ					
Chloroform (ug/kg)		0.7 R	0.7 UJ	0.7 UJ					
Chloromethane (ug/kg)		1.45 R	1.45 UJ	1.45 UJ					
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)		1.55 R	1.55 UJ	1.55 UJ					
Ethylbenzene (ug/kg)		0.7 R	0.7 UJ	0.7 UJ					
Methylene chloride (ug/kg)		30 R	79 J	0.65 UJ					
Styrene (ug/kg)		0.75 R	0.75 UJ	0.75 UJ					
Tetrachloroethene (ug/kg)		1 R	1 UJ	1 UJ					
Toluene (ug/kg)		0.6 R	0.6 UJ	4 J					
Tribromomethane (ug/kg)		1.65 R	1.65 UJ	1.65 UJ					
Trichloroethene (ug/kg)		1.1 R	1.1 UJ	1.1 UJ					
Vinyl chloride (ug/kg)		1.35 R	1.35 UJ	1.35 UJ					
Xylenes (total) (ug/kg)		1.8 R	1.8 UJ	1.8 UJ					
cis-1,3-dichloropropene (ug/kg)		0.9 R	0.9 UJ	0.9 UJ					
trans-1,3-dichloropropene (ug/kg)		1.05 R	1.05 UJ	1.05 UJ					
Pesticides									
4,4'-DDD (ug/kg)									
4,4'-DDE (ug/kg)									
4,4'-DDT (ug/kg)									
Aldrin (ug/kg)									
Alpha-bhc (ug/kg)									
Alpha-chlordane (ug/kg)									

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
Aroclor-1016 (ug/kg)									
Aroclor-1221 (ug/kg)									
Aroclor-1232 (ug/kg)									
Aroclor-1242 (ug/kg)									
Aroclor-1248 (ug/kg)									
Aroclor-1254 (ug/kg)									
Aroclor-1260 (ug/kg)									
Beta-BHC (ug/kg)									
Decachlorobiphenyl (%)									
Delta-BHC (ug/kg)									
Dieldrin (ug/kg)									
Endosulfan sulfate (ug/kg)									
Endosulfan-i (ug/kg)									
Endosulfan-ii (ug/kg)									
Endrin (ug/kg)									
Endrin aldehyde (ug/kg)									
Endrin ketone (ug/kg)									
Gamma-chlordane (ug/kg)									
Heptachlor (ug/kg)									
Heptachlor epoxide (ug/kg)									
Lindane (ug/kg)									
Methoxychlor (ug/kg)									
T.chlordane (ug/kg)									
Toxaphene (ug/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.5 U	0.25	0.25	0.22	0.2	0.5 UJ	0.17	0.25	0.17
Radium-226 (pCi/g)	1.14	1.24	1.1	0.92	2.08	3.5	2.52 J	1.9	2.45
Radium-228 (pCi/g)	0.93	0.81	1.16	0.82	1.17	1.19	1.32	1.14	1.02
Thorium-227 (pCi/g)	0.5 U	0.25	0.25	0.22	0.2	0.5 UJ	0.17	0.25	0.17
Thorium-228 (pCi/g)	0.93	0.81	1.16	0.82	1.17	1.19	1.32	1.14	1.02
Thorium-230 (pCi/g)	1.66	2.55	2.31	2.49	2.23	2.04	2.69	2.16	2.38
Thorium-232 (pCi/g)	1.22	0.86	1.08	0.83	1.16	1.15	1.42	1.03	1.21
Uranium-234 (pCi/g)	1.45	1.74	1.64	1.68	2.31	1.46	1.16	2.42	2.61
Uranium-235 (pCi/g)	0.12 R	0.08 R	0.03 R	0.13 J	0.2 J	0.5 UJ	0.5 UJ	0.08 J	0.19 J
Uranium-238 (pCi/g)	1.77	2.07	1.7	1.87	2.51	1.38	1.74	2	3.04
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0 UJ	0 UJ	1.51	0 UJ	0.7	0 UJ	0.85	1.02	2.05

Station	**BH0006**	**BH0006**	**BH0006**	**BH0006**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**
Sample No	**LU00016**	**LU00017**	**LU00018**	**LU00045**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**
Collection Date	**09/15/97**	**09/15/97**	**09/15/97**	**09/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517437**	**517437**	**517437**	**517437**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**196150**	**196150**	**196150**	**0**	**0**	**0**	**0**	**0**
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.16	0.08	0.5 UJ	0.5 UJ	0.38	0.1	0 UJ	0.32	0.37
Potassium-40 (pCi/g)	17.11	16.12	16.67	16.57	17.24	19.29	18.93	15.69	17.15
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	-1.76
Radium-226 (pCi/g)	0.67 J	0.87 J	0.94 J	0.69 J	0.82 J	0.8 J	0.97 J	0.86 J	0.86 J
Radium-228 (pCi/g)	0.77	0.79	0.54	0.33	0.78	0.87	0.67	0.6	0.57
Thorium-228 (pCi/g)					0.78	0.87	0.67	0.6	0 UJ
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.77	0.79	0.54	0.33	0.78	0.87	0.67	0.6	0.57
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	3.28	0 UJ	0 UJ	2.78	0 UJ	1.61	0 UJ	2.39	5.74

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)			15800	17800	16100	14000	18300	17700	12900
Antimony (mg/kg)			0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
Arsenic (mg/kg)			3.6	7.5	15.2	5.6	5.1	10.5	3.5
Barium (mg/kg)			97.2	97	86.9	96.8	114	101	81.6
Beryllium (mg/kg)			0.82	0.92	0.94	0.88	1	0.96	0.76
Boron (mg/kg)			13.4	11.7	8.7	11.7	10.8	12.6	7.4
Cadmium (mg/kg)			0.43	0.02 U	0.02 U	0.48	0.02 U	0.02 U	0.28
Calcium (mg/kg)			8660	5290	15100	29100	6720	13500	6690
Chromium (mg/kg)			22.2	25.4	24	19.9	25.4	25.3	19.2
Cobalt (mg/kg)			8.7	11.5	15.1	8.8	11.2	14.1	7.9
Copper (mg/kg)			25.3	19.2	25.3	34	29.2	26	19.8
Iron (mg/kg)			18400	27200	36000	18700	23500	30600	17000
Lead (mg/kg)			19.9 J	13.3 J	13.6 J	18.9 J	14.5 J	13.2 J	15.5 J
Magnesium (mg/kg)			4650	5160	7990	6830	5520	7490	4180
Manganese (mg/kg)			136 J	214 J	314 J	256 J	250 J	341 J	124 J
Mercury (mg/kg)			0.02 UJ	0.02 UJ	0.19 J	0.02 UJ	0.06 J	0.02 UJ	0.02 UJ
Molybdenum (mg/kg)			1.2	5.2	11.3	2.8	4.3	9	1.2
Nickel (mg/kg)			27.8	32.8	38.8	29.2	34.2	37.3	25.6
Potassium (mg/kg)			2160 J	2200 J	1990 J	2280 J	2080 J	2260 J	1530 J
Selenium (mg/kg)			1.6	0.96	1.1	1.4	1	1	1.6
Silicon (mg/kg)			408	375	376	379	472	395	615
Silver (mg/kg)			0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sodium (mg/kg)			279	270	270	255	256	275	213
Strontium (mg/kg)			47.2	32.2	35.3	56	37.5	37.2	37.7
Thallium (mg/kg)			1.4	1.7	1.6	0.59	1.1	1.7	1.1
Tin (mg/kg)									
Vanadium (mg/kg)			25.4	34.7	37.3	26.9	33.5	37.6	21.1
Zinc (mg/kg)			109	84.1	80.6	89.9	87.7	82.5	83.2
Indicator Parameters									
% Moisture (%)			18.1	13.5	12.9	17	14	12.2	17.6
Chloride (mg/kg)			0.6 U	0.6 U	0.6 U	4.34	2.44	0.6 U	0.6 U
Fluoride (mg/kg)			0.4 U	0.4 U	2.87	0.4 U	2.79	3.76	0.4 U
Nitrate, as N (mg/kg)			4.52	0.2 U	0.2 U	5.06	1.28	0.2 U	2.43
Phosphorus (mg/kg)			0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Sulfate (mg/kg)			18.7	15.3	37	10.1	20.5	33	5.95
pH (ph)			6.71	7.78	8.11	7.84	7.97	8.11	6.95

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)			47 U	47 U	47 U	47 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)			44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dichlorophenol (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)			80 U	80 U	80 U	80 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)			48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)			42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)			65 U	65 U	65 U	65 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)			49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
2-fluorobiphenyl (%)			68.4	72	67	72.7	70.1	66.3	69.1
2-fluorophenol (%)			84.6	93.4	86.4	87.2	91.7	87.2	75.5
3,3'-Dichlorobenzidine (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
3-Nitroaniline (ug/kg)			75 U	75 U	75 U	75 U	75 U	75 U	75 U
4,6-Dinitro-2-methylphenol (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)			105 U	105 U	105 U	105 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)			47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)			75 U	75 U	75 U	75 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)			43 U	43 U	43 U	43 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)			45 U	45 U	45 U	45 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Acenaphthene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Anthracene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)			41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)			65 U	65 U	65 U	65 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Butylbenzylphthalate (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)			42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-butylphthalate (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Fluorene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexachlorobenzene (ug/kg)			42 U	42 U	42 U	42 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)			45 U	45 U	45 U	45 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)			37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)			47 U	47 U	47 U	47 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Isophorone (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)			43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Naphthalene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol (ug/kg)			38 U	38 U	38 U	38 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)			55 U	55 U	55 U	55 U	55 U	55 U	55 U
Phenol (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pyrene (ug/kg)			60 U	60 U	60 U	60 U	60 U	60 U	60 U
bis(2-chloroethoxy)methane (ug/kg)			49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)			50 U	50 U	50 U	50 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)			70 U	70 U	70 UJ	70 UJ	70 U	70 UJ	70 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)				1.3 U	1.3 U		1.3 U	1.3 U	
1,1,2,2-Tetrachloroethane (ug/kg)				1.45 U	1.45 U		1.45 U	1.45 U	
1,1,2-Trichloroethane (ug/kg)				1.35 U	1.35 U		1.35 U	1.35 U	
1,1-Dichloroethane (ug/kg)				0.65 U	0.65 U		0.65 U	0.65 U	
1,1-Dichloroethene (ug/kg)				0.7 U	0.7 U		0.7 U	0.7 U	

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
1,2-Dichloroethane (ug/kg)				0.85 U	0.85 U		0.85 U	0.85 U	
1,2-Dichloropropane (ug/kg)				1.1 U	1.1 U		1.1 U	1.1 U	
1,2-dichloroethylene(total) (ug/kg)				1.4 U	1.4 U		1.4 U	1.4 U	
2-Butanone (ug/kg)				2.6 UJ	2.6 UJ		2.6 UJ	2.6 UJ	
2-Hexanone (ug/kg)				1.9 U	1.9 U		1.9 UJ	1.9 U	
4-Methyl-2-pentanone (ug/kg)				2.15 U	2.15 U		2.15 U	2.15 U	
Acetone (ug/kg)				54 J	57 J		3.4 UJ	58 J	
Benzene (ug/kg)				0.55 U	0.55 U		0.55 U	0.55 U	
Bromodichloromethane (ug/kg)				1.2 U	1.2 U		1.2 U	1.2 U	
Bromofluorobenzene (%)				77.1	88		79.6	79.9	
Bromomethane (ug/kg)				1.1 U	1.1 U		1.1 U	1.1 U	
Carbon disulfide (ug/kg)				0.9 U	0.9 U		0.9 U	0.9 U	
Carbon tetrachloride (ug/kg)				1.55 U	1.55 U		1.55 U	1.55 U	
Chlorobenzene (ug/kg)				0.9 U	0.9 U		0.9 U	0.9 U	
Chloroethane (ug/kg)				1.45 U	1.45 U		1.45 U	1.45 U	
Chloroform (ug/kg)				0.7 U	0.7 U		0.7 U	0.7 U	
Chloromethane (ug/kg)				1.45 U	1.45 U		1.45 U	1.45 U	
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)				1.55 U	1.55 U		1.55 U	1.55 U	
Ethylbenzene (ug/kg)				0.7 U	0.7 U		0.7 U	0.7 U	
Methylene chloride (ug/kg)				0.65 UJ	0.65 UJ		0.65 UJ	0.65 U	
Styrene (ug/kg)				0.75 U	0.75 U		0.75 U	0.75 U	
Tetrachloroethene (ug/kg)				1 U	1 U		1 U	1 U	
Toluene (ug/kg)				0.6 U	0.6 U		0.6 U	0.6 U	
Tribromomethane (ug/kg)				1.65 U	1.65 U		1.65 U	1.65 U	
Trichloroethene (ug/kg)				1.1 U	1.1 U		1.1 U	1.1 U	
Vinyl chloride (ug/kg)				1.35 U	1.35 U		1.35 U	1.35 U	
Xylenes (total) (ug/kg)				1.8 U	1.8 U		1.8 U	1.8 U	
cis-1,3-dichloropropene (ug/kg)				0.9 U	0.9 U		0.9 U	0.9 U	
trans-1,3-dichloropropene (ug/kg)				1.05 U	1.05 U		1.05 U	1.05 U	
Pesticides									
4,4'-DDD (ug/kg)			0.05 R						0.05 R
4,4'-DDE (ug/kg)			0.08 R						0.08 R
4,4'-DDT (ug/kg)			0.13 R						0.13 R
Aldrin (ug/kg)			0.03 R						0.03 R
Alpha-bhc (ug/kg)			0.07 R						0.07 R
Alpha-chlordane (ug/kg)			0.13 R						0.13 R

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
Aroclor-1016 (ug/kg)			1.3 R						1.3 R
Aroclor-1221 (ug/kg)			1.15 R						1.15 R
Aroclor-1232 (ug/kg)			0.9 R						0.9 R
Aroclor-1242 (ug/kg)			0.8 R						0.8 R
Aroclor-1248 (ug/kg)			1.1 R						1.1 R
Aroclor-1254 (ug/kg)			1.6 R						1.6 R
Aroclor-1260 (ug/kg)			1.35 R						1.35 R
Beta-BHC (ug/kg)			0.06 R						0.06 R
Decachlorobiphenyl (%)			102.7 R						85.4 R
Delta-BHC (ug/kg)			0.04 R						0.04 R
Dieldrin (ug/kg)			0.09 R						0.09 R
Endosulfan sulfate (ug/kg)			0.13 R						0.13 R
Endosulfan-i (ug/kg)			0.05 R						0.05 R
Endosulfan-ii (ug/kg)			0.05 R						0.05 R
Endrin (ug/kg)			0.06 R						0.06 R
Endrin aldehyde (ug/kg)			0.11 R						0.11 R
Endrin ketone (ug/kg)			0.06 R						0.06 R
Gamma-chlordane (ug/kg)			0.07 R						0.07 R
Heptachlor (ug/kg)			0.05 R						0.05 R
Heptachlor epoxide (ug/kg)			0.03 R						0.03 R
Lindane (ug/kg)			0.03 R						0.03 R
Methoxychlor (ug/kg)			0.2 R						0.2 R
T.chlordane (ug/kg)									
Toxaphene (ug/kg)			1 R						1 R
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.16	0.3	0.48	0.5 U	0.5 U				
Radium-226 (pCi/g)	2.32 J	2.65	0.5 UJ	1.35	1.69				
Radium-228 (pCi/g)	1.38	1.08	1.28	1.2	1.22				
Thorium-227 (pCi/g)	0.16	0.3	0.48	0.5 U	0.5 U				
Thorium-228 (pCi/g)	1.38	1.08	1.28	1.2	1.22				
Thorium-230 (pCi/g)	2.66	2.17	2.45	2.68	2.16				
Thorium-232 (pCi/g)	1.44	1.3	1.02	1.01	0.98				
Uranium-234 (pCi/g)	1.28	1.54	1.3	1.35	1.69				
Uranium-235 (pCi/g)	1.56	0.08 J	0.24	0.5 UJ	0.5 UJ				
Uranium-238 (pCi/g)	1.79	1.53	1.94	2.1	1.89				
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0.77	1.89	1.27 J	1.31 J	1.64 J				

Station	**BH0008**	**BH0008**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**
Sample No	**LU00023**	**LU00024**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**
Collection Date	**05/16/97**	**05/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ				
Cesium-137 (pCi/g)	0 UJ	0 UJ	0.23	0.5 UJ	0.5 UJ				
Potassium-40 (pCi/g)	18.8	16.42	18.24 J	16.45 J	18.61 J				
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ				
Radium-226 (pCi/g)	0.88 J	0.98 J	0.75 J	0.92 J	0.86 J				
Radium-228 (pCi/g)	0.82	0.76	0.82 J	0.93 J	0.81 J				
Thorium-228 (pCi/g)	0.82	0.76							
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ				
Thorium-232 (pCi/g)	0.82	0.76	0.82 J	0.93 J	0.81 J				
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ				
Uranium-238 (pCi/g)	0 UJ	0 UJ	2.36 J	1.89 J	0 UJ				

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	17200	14000	11400	15500	12200	12600	14500	13700	16400
Antimony (mg/kg)	0.15 UJ	0.15 UJ	0.54 R	0.5 R	0.56 R	0.44 R	0.49 R	0.74 R	0.78 R
Arsenic (mg/kg)	5.7	10.9	3.1	2.8	4.1	3.1	2.6	6.8	4.1
Barium (mg/kg)	99.9	79.9	96.1	123	93.9	105	123	98.5	119
Beryllium (mg/kg)	0.91	0.82	0.94	1	0.82	1	1	0.84	1.1
Boron (mg/kg)	8.5	7.5	4.7	2.9	2.5	6.4	2.9	2.9	11.8
Cadmium (mg/kg)	0.02 U	0.02 U	0.59	0.46	0.33	0.66	0.53	0.51	0.78
Calcium (mg/kg)	5460	21900	6690	5930	5240	8160	5820	8820	8450
Chromium (mg/kg)	24.8	20.8	16.1	20.8	18.5	17.5	19.7	19.2	21.9
Cobalt (mg/kg)	10.7	12.6	7.3	8.5	8.4	7.6	8.6	9.9	8.5
Copper (mg/kg)	17.5	22.1	31.1	33	36	31.8	31.1	31.5	41.4
Iron (mg/kg)	24600	29200	15600	19100	18500	16500	18000	22800	19800
Lead (mg/kg)	13.3 J	12 J	18.9	13.4	12.1	20.5	13.3	12.2	22.3
Magnesium (mg/kg)	5220	8470	3920 J	4900 J	4630 J	4200 J	4740 J	6180 J	4760 J
Manganese (mg/kg)	197 J	290 J	247	253	267	236	292	451	265
Mercury (mg/kg)	0.02 UJ	0.02 UJ	0.08 J	0.05 J	0.04 J	0.07 J	0.06 J	0.01 UJ	0.07 J
Molybdenum (mg/kg)	3.8	8	1.4	1.8	2.6	1.4	1.7	4.7	1.9
Nickel (mg/kg)	31.1	33.6	24.8	29.3	27.5	25.8	29.1	30.8	27.7
Potassium (mg/kg)	2000 J	1790 J	1020	983	814	1350	849	1140	2010
Selenium (mg/kg)	0.93	0.68	1.2	0.83	0.12 U	1.2	0.77	0.29	1.3
Silicon (mg/kg)	350	339	362 J	240 J	294 J	338 J	395 J	164 J	525 J
Silver (mg/kg)	0.1 U	0.1 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Sodium (mg/kg)	239	236	128	182	153	146	166	166	138
Strontium (mg/kg)	33.2	38.8	60.7	54	39.8	68.2	57.4	47.4	75.6
Thallium (mg/kg)	0.98	1.5	0.23 U	0.23 U	0.23 U	0.45	0.23 U	0.42	0.23 U
Tin (mg/kg)									
Vanadium (mg/kg)	29.9	30.1	21	25.9	24.6	23.5	24.6	26.4	33.6
Zinc (mg/kg)	84.2	72.4	95.3	90.1	76.7	92.4	87	77.1	111
Indicator Parameters									
% Moisture (%)	13.7	12.2	20.1 J	14.5 J	12.5 J	25.1 J	15.5 J	12 J	25.8 J
Chloride (mg/kg)	0.6 U	0.6 U	4.63	3.27	2.97	4.81	3.43	0.6 U	4.99
Fluoride (mg/kg)	0.4 U	3.08	0.4 U	0.4 U	0.4 U	0.4 U	2.48	3.07	0.4 U
Nitrate, as N (mg/kg)	0.2 U	0.2 U	2.88 J	0.2 UJ	0.2 UJ	3.34 J	0.2 UJ	0.2 UJ	5.66 J
Phosphorus (mg/kg)	0.8 U	0.8 U	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ
Sulfate (mg/kg)	11.6	28.9	14.5	33	32.1	13.5	22	25.2	16.2
pH (ph)	7.53	8.15	7.05	7.16	7.47	7.44	7.39	8.04	7.17

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
2-fluorobiphenyl (%)	66.3	72	82.4	79	77.3	90	91.1	89.5	92.7
2-fluorophenol (%)	86.7	87.1	91.6	84.7	70.7	84.1	84.2	102.2	103.9
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	55 U	55 U	50 J	55 U	55 U	55 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 UJ	50 UJ
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Fluorene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexachlorobenzene (ug/kg)	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Isophorone (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Naphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol (ug/kg)	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Phenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pyrene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 UJ	60 UJ
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	70 U	70 U	70 U	70 U	70 U	70 U	70 U	41 J	130 J
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	1.3 U	1.3 U		1.3 U	1.3 U		1.3 U	1.3 U	
1,1,2,2-Tetrachloroethane (ug/kg)	1.45 U	1.45 U		12	1.45 U		1.45 U	1.45 U	
1,1,2-Trichloroethane (ug/kg)	1.35 U	1.35 U		1.35 U	1.35 U		1.35 U	1.35 U	
1,1-Dichloroethane (ug/kg)	0.65 U	0.65 U		0.65 U	0.65 U		0.65 U	0.65 U	
1,1-Dichloroethene (ug/kg)	0.7 U	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U	

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1,2-Dichloroethane (ug/kg)	0.85 U	0.85 U		0.85 U	0.85 U		0.85 U	0.85 U	
1,2-Dichloropropane (ug/kg)	1.1 U	1.1 U		1.1 U	1.1 U		1.1 U	1.1 U	
1,2-dichloroethylene(total) (ug/kg)	1.4 U	1.4 U		1.4 U	1.4 U		1.4 U	1.4 U	
2-Butanone (ug/kg)	2.6 UJ	2.6 UJ		2.6 U	2.6 U		2.6 UJ	2.6 UJ	
2-Hexanone (ug/kg)	1.9 U	1.9 UJ		1.9 U	1.9 U		1.9 U	1.9 U	
4-Methyl-2-pentanone (ug/kg)	2.15 U	2.15 U		2.15 U	2.15 U		2.15 U	2.15 U	
Acetone (ug/kg)	52 J	3.4 UJ		14 J	20 J		3700 J	4300 J	
Benzene (ug/kg)	0.55 U	0.55 U		0.55 U	0.55 U		0.55 U	0.55 U	
Bromodichloromethane (ug/kg)	1.2 U	1.2 U		1.2 U	1.2 U		1.2 U	1.2 U	
Bromofluorobenzene (%)	81.4	85.2		95.8	85.9		104.3	108.1	
Bromomethane (ug/kg)	1.1 U	1.1 U		1.1 U	1.1 U		1.1 UJ	1.1 UJ	
Carbon disulfide (ug/kg)	0.9 U	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U	
Carbon tetrachloride (ug/kg)	1.55 U	1.55 U		1.55 U	1.55 U		1.55 U	1.55 U	
Chlorobenzene (ug/kg)	0.9 U	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U	
Chloroethane (ug/kg)	1.45 U	1.45 U		1.45 U	1.45 U		1.45 UJ	1.45 UJ	
Chloroform (ug/kg)	0.7 U	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U	
Chloromethane (ug/kg)	1.45 U	1.45 U		1.45 U	1.45 U		1.45 U	1.45 U	
Cyclotetrasiloxane (ug/kg)					13 R				
Dibromochloromethane (ug/kg)	1.55 U	1.55 U		1.55 U	1.55 U		1.55 U	1.55 U	
Ethylbenzene (ug/kg)	0.7 U	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U	
Methylene chloride (ug/kg)	0.65 UJ	0.65 UJ		49 J	66 J		7600 J	4500 J	
Styrene (ug/kg)	0.75 U	0.75 U		0.75 U	0.75 U		0.75 U	0.75 U	
Tetrachloroethene (ug/kg)	1 U	1 U		1 U	1 U		1 U	1 U	
Toluene (ug/kg)	0.6 U	5 J		0.6 U	4 J		0.6 U	0.6 U	
Tribromomethane (ug/kg)	1.65 U	1.65 U		1.65 U	1.65 U		1.65 U	1.65 U	
Trichloroethene (ug/kg)	1.1 U	1.1 U		1.1 U	1.1 U		1.1 U	1.1 U	
Vinyl chloride (ug/kg)	1.35 U	1.35 U		1.35 U	1.35 U		1.35 U	1.35 U	
Xylenes (total) (ug/kg)	1.8 U	1.8 U		1.8 U	1.8 U		1.8 U	1.8 U	
cis-1,3-dichloropropene (ug/kg)	0.9 U	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U	
trans-1,3-dichloropropene (ug/kg)	1.05 U	1.05 U		1.05 U	1.05 U		1.05 U	1.05 U	
Pesticides									
4,4'-DDD (ug/kg)			0.05 R						
4,4'-DDE (ug/kg)			0.08 UJ						
4,4'-DDT (ug/kg)			1.9 J						
Aldrin (ug/kg)			0.03 R						
Alpha-bhc (ug/kg)			0.07 R						
Alpha-chlordane (ug/kg)									

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Aroclor-1016 (ug/kg)			1.3 R						
Aroclor-1221 (ug/kg)			1.15 R						
Aroclor-1232 (ug/kg)			0.9 UJ						
Aroclor-1242 (ug/kg)			0.8 R						
Aroclor-1248 (ug/kg)			1.1 R						
Aroclor-1254 (ug/kg)			1.6 R						
Aroclor-1260 (ug/kg)			1.35 R						
Beta-BHC (ug/kg)									
Decachlorobiphenyl (%)			54.1						
Delta-BHC (ug/kg)									
Dieldrin (ug/kg)			0.57 J						
Endosulfan sulfate (ug/kg)			0.13 UJ						
Endosulfan-i (ug/kg)			0.05 R						
Endosulfan-ii (ug/kg)			0.06 R						
Endrin (ug/kg)			0.06 R						
Endrin aldehyde (ug/kg)			0.11 R						
Endrin ketone (ug/kg)			0.06 R						
Gamma-chlordane (ug/kg)									
Heptachlor (ug/kg)			0.05 R						
Heptachlor epoxide (ug/kg)			0.03 R						
Lindane (ug/kg)			0.03 R						
Methoxychlor (ug/kg)			0.2 R						
T.chlordane (ug/kg)			0 R						
Toxaphene (ug/kg)			1 R						
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)			1.34 J	1.41	1.23	1.13	1.16	1.16	1.12
Radium-226 (pCi/g)			1.27	1.46 J	1.69	1.38	1.55	1.49	1.08
Radium-228 (pCi/g)			1.34 J	1.41	1.23	1.13	1.16	1.16	1.12
Thorium-227 (pCi/g)			1.34 J	1.41	1.23	1.13	1.16	1.16	1.12
Thorium-228 (pCi/g)			1.34 J	1.41	1.23	1.13	1.16	1.16	1.12
Thorium-230 (pCi/g)			2.74 J	2.25	1.55	1.98	2.04	2.2	2.01
Thorium-232 (pCi/g)			1.49 J	1.27	1.26	0.97	0.87	1.03	0.92
Uranium-234 (pCi/g)			1.79	1.56	1.27	2.43	1.3	1.36	1.38 J
Uranium-235 (pCi/g)			0.5 UJ	0.5 UJ	0.25	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)			1.82	1.95	1.31	2.71	1.62	1.44	1.45 J
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)			0.79	1.57	1.98	0 UJ	1.39	0 UJ	0.67

Station	**BH0011**	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**
Sample No	**LU00032**	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**
Collection Date	**09/16/97**	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Americium-241 (pCi/g)			0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)			0.29	0.5 UJ	0.5 UJ	0.39	0.5 UJ	0.5 UJ	0.34
Potassium-40 (pCi/g)			15.38	15.6	15.28	17.35	14.54	16.69	14.21
Protactinium-231 (pCi/g)			0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)			0.99 J	0.95 J	1 J	1.09 J	0.91 J	0.92 J	0.98 J
Radium-228 (pCi/g)			0.75	0.94	0.75	0.67	0.78	0.76	0.68
Thorium-228 (pCi/g)			0.75	0.94	0.75	0.67	0.78	0.76	0.68
Thorium-230 (pCi/g)			0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)			0.75	0.94	0.75	0.67	0.78	0.76	0.68
Uranium-235 (pCi/g)			0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)			5.4	0 UJ	2.06	0 UJ	0 UJ	0 UJ	0 UJ

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Metals			
Aluminum (mg/kg)	14400	15900	14000
Antimony (mg/kg)	0.55 R	0.68 R	0.52 R
Arsenic (mg/kg)	3.9	4.2	3.9
Barium (mg/kg)	126	119	112
Beryllium (mg/kg)	1.1	1.1	0.92
Boron (mg/kg)	2.9	9.4	2.1
Cadmium (mg/kg)	0.61	0.81	0.54
Calcium (mg/kg)	6910	8310	6250
Chromium (mg/kg)	19.2	21.4	19.6
Cobalt (mg/kg)	9.4	8.9	9.7
Copper (mg/kg)	42.6	41.7	34.7
Iron (mg/kg)	18800	20400	20000
Lead (mg/kg)	15.2	21.4	13.2
Magnesium (mg/kg)	4510 J	4690 J	5860 J
Manganese (mg/kg)	276	267	315
Mercury (mg/kg)	0.06 J	0.08 J	0.05 J
Molybdenum (mg/kg)	1.9	2.1	3.3
Nickel (mg/kg)	28.5	28.2	29.2
Potassium (mg/kg)	849	1770	961
Selenium (mg/kg)	0.69	1.3	0.64
Silicon (mg/kg)	273 J	397 J	111 J
Silver (mg/kg)	0.09 U	0.09 U	0.09 U
Sodium (mg/kg)	148	151	243
Strontium (mg/kg)	65.2	74.4	51.7
Thallium (mg/kg)	0.23 U	0.23 U	0.23 U
Tin (mg/kg)			
Vanadium (mg/kg)	29.7	33.7	27.6
Zinc (mg/kg)	98.8	110	92.4
Indicator Parameters			
% Moisture (%)	17 J	25.1 J	14.1 J
Chloride (mg/kg)	2.53	5.21	5
Fluoride (mg/kg)	0.4 U	0.4 U	2.91
Nitrate, as N (mg/kg)	1.44 J	6.41 J	0.2 UJ
Phosphorus (mg/kg)	0.8 UJ	0.8 UJ	0.8 UJ
Sulfate (mg/kg)	18.3	15.8	45.8
pH (ph)	7.27	7.19	7.42

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Semivolatile Organics			
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U	55 U
2,4-Dichlorophenol (ug/kg)	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	50 UJ	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	49.5 U	49.5 U	49.5 U
2-fluorobiphenyl (%)	91.4	91.2	92.5
2-fluorophenol (%)	103.2	102	104.4
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	75 U	75 U	75 U
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	105 U	105 U	105 U
4-Methylphenol (ug/kg)	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	60 U	60 U	60 U
Acenaphthene (ug/kg)	50 U	50 U	50 U
Acenaphthylene (ug/kg)	60 U	60 U	60 U
Anthracene (ug/kg)	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	60 U	60 U	60 U

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	50 UJ	50 UJ	50 UJ
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U
Carbazole (ug/kg)	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	50 U	50 U	50 U
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U	60 U
Dibenzofuran (ug/kg)	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U
Fluoranthene (ug/kg)	50 U	50 U	50 U
Fluorene (ug/kg)	50 U	50 U	50 U
Hexachlorobenzene (ug/kg)	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	55 U	55 U	55 U
Isophorone (ug/kg)	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	55 U	55 U	55 U
Naphthalene (ug/kg)	55 U	55 U	55 U
Nitrobenzene (ug/kg)	50 U	50 U	50 U
Pentachlorophenol (ug/kg)	38 U	38 U	38 U
Perylene (ug/kg)			
Phenanthrene (ug/kg)	55 U	55 U	55 U
Phenol (ug/kg)	50 U	50 U	50 U
Pyrene (ug/kg)	60 UJ	60 UJ	60 UJ
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	70 UJ	63 J	70 UJ
Volatile Organics			
1,1,1-Trichloroethane (ug/kg)	1.3 U		1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	1.45 U		1.45 U
1,1,2-Trichloroethane (ug/kg)	1.35 U		1.35 U
1,1-Dichloroethane (ug/kg)	0.65 U		0.65 U
1,1-Dichloroethene (ug/kg)	0.7 U		0.7 U

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
1,2-Dichloroethane (ug/kg)	0.85 U		0.85 U
1,2-Dichloropropane (ug/kg)	1.1 U		1.1 U
1,2-dichloroethylene(total) (ug/kg)	1.4 U		1.4 U
2-Butanone (ug/kg)	2.6 U		2.6 U
2-Hexanone (ug/kg)	1.9 U		1.9 U
4-Methyl-2-pentanone (ug/kg)	2.15 U		2.15 U
Acetone (ug/kg)	52 J		33 J
Benzene (ug/kg)	0.55 U		0.55 U
Bromodichloromethane (ug/kg)	1.2 U		1.2 U
Bromofluorobenzene (%)	86.8		85.7
Bromomethane (ug/kg)	1.1 U		1.1 U
Carbon disulfide (ug/kg)	0.9 U		0.9 U
Carbon tetrachloride (ug/kg)	1.55 U		1.55 U
Chlorobenzene (ug/kg)	0.9 U		0.9 U
Chloroethane (ug/kg)	1.45 U		1.45 U
Chloroform (ug/kg)	0.7 U		0.7 U
Chloromethane (ug/kg)	1.45 U		1.45 U
Cyclotetrasiloxane (ug/kg)			9 R
Dibromochloromethane (ug/kg)	1.55 U		1.55 U
Ethylbenzene (ug/kg)	0.7 U		0.7 U
Methylene chloride (ug/kg)	85 J		60 J
Styrene (ug/kg)	0.75 U		0.75 U
Tetrachloroethene (ug/kg)	1 U		1 U
Toluene (ug/kg)	0.6 U		3 J
Tribromomethane (ug/kg)	1.65 U		1.65 U
Trichloroethene (ug/kg)	1.1 U		1.1 U
Vinyl chloride (ug/kg)	1.35 U		1.35 U
Xylenes (total) (ug/kg)	1.8 U		1.8 U
cis-1,3-dichloropropene (ug/kg)	0.9 U		0.9 U
trans-1,3-dichloropropene (ug/kg)	1.05 U		1.05 U
Pesticides			
4,4'-DDD (ug/kg)			
4,4'-DDE (ug/kg)			
4,4'-DDT (ug/kg)			
Aldrin (ug/kg)			
Alpha-bhc (ug/kg)			
Alpha-chlordane (ug/kg)			

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Aroclor-1016 (ug/kg)			
Aroclor-1221 (ug/kg)			
Aroclor-1232 (ug/kg)			
Aroclor-1242 (ug/kg)			
Aroclor-1248 (ug/kg)			
Aroclor-1254 (ug/kg)			
Aroclor-1260 (ug/kg)			
Beta-BHC (ug/kg)			
Decachlorobiphenyl (%)			
Delta-BHC (ug/kg)			
Dieldrin (ug/kg)			
Endosulfan sulfate (ug/kg)			
Endosulfan-i (ug/kg)			
Endosulfan-ii (ug/kg)			
Endrin (ug/kg)			
Endrin aldehyde (ug/kg)			
Endrin ketone (ug/kg)			
Gamma-chlordane (ug/kg)			
Heptachlor (ug/kg)			
Heptachlor epoxide (ug/kg)			
Lindane (ug/kg)			
Methoxychlor (ug/kg)			
T.chlordane (ug/kg)			
Toxaphene (ug/kg)			
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	1.27	1.23	1.76
Radium-226 (pCi/g)	1.84	1.48	2.28
Radium-228 (pCi/g)	1.27	1.23	1.76
Thorium-227 (pCi/g)	1.27	1.23	1.76
Thorium-228 (pCi/g)	1.27	1.23	1.76
Thorium-230 (pCi/g)	2.78	2.36	3.21
Thorium-232 (pCi/g)	1.41	1.04	1.27
Uranium-234 (pCi/g)	1.16	1.76 J	1.22
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	1.71	2.42 J	1.75
Radiological Parameters (GammaSpec)			
Actinium-227 (pCi/g)	1.91	1.64	1.96

Station	**BH0014**	**BH0014**	**BH0014**
Sample No	**LU00044**	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**0.5-1.5**	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.28	0.5 UJ
Potassium-40 (pCi/g)	15.21	16.54	16.26
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.04 J	0.97 J	1.07 J
Radium-228 (pCi/g)	0.77	0.78	0.77
Thorium-228 (pCi/g)	0.77	0.78	0.77
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.77	0.78	0.77
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ	1.88

Station	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0003**	**BKG-SB0003**	**BKG-SB0003**
Sample No	**LUSB0983**	**LUSB0984**	**LUSB0985**	**LUSB0986**	**LUSB0987**	**LUSB0988**	**LUSB0989**	**LUSB0990**	**LUSB0991**
Collection Date	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**
Depth (ft)	**0.0-0.5**	**1.0-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	15900	18600	17600	14000	14600	17400	20400	19300	17200
Antimony (mg/kg)	0.33 UN	0.28 BN	0.28 UN	0.31 UN	0.27 UN	0.28 UN	0.3 UN	0.27 UN	0.26 UN
Arsenic (mg/kg)	3.1	4.9	11.4	2.8	5.2	5.6	4	4.8	12.8
Barium (mg/kg)	83.9	94.1	95.3	85.2	93.7	95.2	118	113	115
Beryllium (mg/kg)	0.83	0.94	0.93	0.81	0.82	0.84	1.1	0.98	0.9
Cadmium (mg/kg)	0.76	0.31	0.35	0.91	0.38	0.24	0.98	0.42	0.37
Calcium (mg/kg)	7020	4880	6670	6760	4430	12200	7380	6980	26000
Chromium (mg/kg)	22	25.5	25.2	20.1	21.1	24.8	26.9	25.7	24
Cobalt (mg/kg)	7.5	9.3	15	7.4	10.9	11.6	8.9	10.6	15.2
Copper (mg/kg)	29	28.4	25.9	30.6	23.3	20.8	48	27.3	22.9
Iron (mg/kg)	16500	23000	31900	16000	21700	24500	21100	23900	34200
Lead (mg/kg)	19.1	12.4	12.9	21.6	12.8	10.9	23.2	13	11.5
Magnesium (mg/kg)	4180	4700	6150	4050	4350	7460	5060	5720	9950
Manganese (mg/kg)	118 N	180 N	314 N	123 N	374 N	328 N	140 N	281 N	668 N
Mercury (mg/kg)	0.02 U	0.02 B	0.02 U	0.03 B	0.03 B	0.02 U	0.04	0.02 B	0.02 B
Nickel (mg/kg)	27.2	29.7	36.6	27.7	30.7	33.8	32.4	32.5	37.9
Phosphorus (mg/kg)	808	530	466	782	467	464	726	475	457
Potassium (mg/kg)	2500	2500	2330	1950	1420	2240	2690	2290	1940
Selenium (mg/kg)	1.9	1.1	1.5	2.1	1.2	1.3	2.2	1.3	1.4
Silver (mg/kg)	0.27 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.25 U	0.22 U	0.22 U
Sodium (mg/kg)	62.3 E	87.7 E	85.1 E	62.3 E	64.6 E	96 E	80.3 E	86.6 E	86.2 E
Thallium (mg/kg)	0.74 B	0.89 B	1.2 B	0.59 B	0.84 B	1.2 B	1.3 B	0.92 B	0.84 B
Vanadium (mg/kg)	28.6	38.3	41.1	24.1	28.3	33.3	40.3	38.1	38.2
Zinc (mg/kg)	93.6	76.6	75.2	95.7	76.3	76.4	110	79.9	76.2
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
1,2-Dichlorobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
1,3-Dichlorobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
1,4-Dichlorobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,4,5-Trichlorophenol (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U
2,4,6-Trichlorophenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,4-Dichlorophenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,4-Dimethylphenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,4-Dinitrophenol (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U

Station	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0003**	**BKG-SB0003**	**BKG-SB0003**
Sample No	**LUSB0983**	**LUSB0984**	**LUSB0985**	**LUSB0986**	**LUSB0987**	**LUSB0988**	**LUSB0989**	**LUSB0990**	**LUSB0991**
Collection Date	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**
Depth (ft)	**0.0-0.5**	**1.0-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,4-Dinitrotoluene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2,6-Dinitrotoluene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2-Chloronaphthalene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2-Chlorophenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2-Methylnaphthalene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2-Nitrophenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
2-methyl-4,6-dinitrophenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
3,3'-Dichlorobenzidine (ug/kg)	2270 U	1950 U	1960 U	2180 U	1940 U	1900 U	2140 U	1930 U	1880 U
4-Bromophenyl phenyl ether (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
4-Chloroaniline (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
4-Chlorophenylphenylether (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
4-Nitrophenol (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U
4-chloro-3-methyl phenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Acenaphthene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Acenaphthylene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Anthracene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Benzo(a)anthracene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Benzo(a)pyrene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Benzo(b)fluoranthene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Benzo(ghi)perylene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Benzo(k)fluoranthene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Butylbenzylphthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Carbazole (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Chrysene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Di-n-butylphthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Di-n-octylphthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Dibenz(a,h)anthracene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Dibenzofuran (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Diethyl phthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Dimethyl phthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Fluoranthene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Fluorene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Hexachlorobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Hexachlorobutadiene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Hexachlorocyclopentadiene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Hexachloroethane (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U

Station	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0003**	**BKG-SB0003**	**BKG-SB0003**
Sample No	**LUSB0983**	**LUSB0984**	**LUSB0985**	**LUSB0986**	**LUSB0987**	**LUSB0988**	**LUSB0989**	**LUSB0990**	**LUSB0991**
Collection Date	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**
Depth (ft)	**0.0-0.5**	**1.0-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Indeno(1,2,3-c,d)pyrene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Isophorone (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
N-Nitrosodiphenylamine (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
N-Nitrosodipropylamine (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Naphthalene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Nitrobenzene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Pentachlorophenol (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U
Phenanthrene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Phenol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Pyrene (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
bis(2-chloroethoxy)methane (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
bis(2-chloroethyl) ether (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
bis(2-ethylhexyl)phthalate (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
m,p-Cresol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
m-Nitroaniline (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U
o-Cresol (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
o-Nitroaniline (ug/kg)	1130 U	976 U	979 U	1090 U	971 U	950 U	1070 U	964 U	939 U
p-Nitroaniline (ug/kg)	454 U	390 U	392 U	436 U	388 U	380 U	427 U	386 U	376 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,1,2,2-Tetrachloroethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,1,2-Trichloroethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,1-Dichloroethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,1-Dichloroethene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,2-Dichloroethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,2-Dichloroethylene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
1,2-Dichloropropane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
2-Butanone (ug/kg)	22.8	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
2-Hexanone (ug/kg)	15.1 U	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
4-Methyl-2-pentanone (ug/kg)	15.1 U	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
Acetone (ug/kg)	58.8	21.9	11	27.7	10.4 J	10.6 U	52.1	9.7 U	12.1 U
Benzene (ug/kg)	7.5 U	0.57 J	5 U	6.6 U	5.2 U	2.5 J	6.3 U	0.93 J	2.6 J
Bromoform (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Carbon disulfide (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Carbon tetrachloride (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Chlorobenzene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U

Station	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0003**	**BKG-SB0003**	**BKG-SB0003**
Sample No	**LUSB0983**	**LUSB0984**	**LUSB0985**	**LUSB0986**	**LUSB0987**	**LUSB0988**	**LUSB0989**	**LUSB0990**	**LUSB0991**
Collection Date	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**
Depth (ft)	**0.0-0.5**	**1.0-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chlorodibromomethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Chloroethane (ug/kg)	15.1 U	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
Chloroform (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Dichlorobromomethane (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Ethylbenzene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	1.4 J	6.3 U	4.9 U	1.3 J
Hexane (ug/kg)						9.4 J			
Methyl Bromide (ug/kg)	15.1 U	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
Methyl Chloride (ug/kg)	15.1 U	10 U	10 U	13.2 U	10.5 U	10.6 U	12.6 U	9.7 U	12.1 U
Methylene chloride (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Pentanal (ug/kg)									
Pentane, 2-methyl- (ug/kg)						10 J			
Styrene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Tetrachloroethene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Toluene (ug/kg)	3 U	0.56 J	0.57 J	2.6 U	2.1 U	5.1	1 J	2.2	5.6
Trichloroethene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
Vinyl chloride (ug/kg)	3 U	2 U	2 U	2.6 U	2.1 U	2.1 U	2.5 U	1.9 U	2.4 U
Xylenes (total) (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	3 J	6.3 U	0.75 J	2.8 J
cis-1,3-dichloropropene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
trans-1,3-Dichloropropene (ug/kg)	7.5 U	5 U	5 U	6.6 U	5.2 U	5.3 U	6.3 U	4.9 U	6 U
PCBs									
Aroclor-1016 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3 JP	3.8 U
Aroclor-1221 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	3.8 U
Aroclor-1232 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	3.8 U
Aroclor-1242 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	3.8 U
Aroclor-1248 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	3.8 U
Aroclor-1254 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	19.4 P
Aroclor-1260 (ug/kg)	4.6 U	4 U	3.9 U	4.3 U	3.9 U	3.8 U	4.3 U	3.8 U	3.8 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.144 J	-0.0252 U	0 U	0.0768 U	0.118 U	0.279 J	0.0396 U	0.224 U	0.0916 U
Thorium-228 (pCi/g)	1.18	1.27	1.46	1.24	1.39	1.63	1.28	1.57	1
Thorium-230 (pCi/g)	1.68	1.97	2.16	1.58	2.32	1.77	1.54	2.11	1.65
Thorium-232 (pCi/g)	0.537 J	1.07	0.975 J	0.988 J	0.819 J	0.965 J	0.922 J	0.798 J	1.09
Uranium-233/234 (pCi/g)	2.01	1.23	0.965 J	1.8	1.3	1.37	1.93	1.29	1.33
Uranium-235 (pCi/g)	0.0871 J	0.128 J	-0.003 U	0.06 U	0.0838 U	0.0905 J	0.121 J	0.0575 U	0.0713 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	2.14	1.01	1.32	1.75	1.07	1.37	2.18	1.4	1.4

Station	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0001**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0002**	**BKG-SB0003**	**BKG-SB0003**	**BKG-SB0003**
Sample No	**LUSB0983**	**LUSB0984**	**LUSB0985**	**LUSB0986**	**LUSB0987**	**LUSB0988**	**LUSB0989**	**LUSB0990**	**LUSB0991**
Collection Date	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**	**07/24/98**
Depth (ft)	**0.0-0.5**	**1.0-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.01	1.14	0.94 J	1.06	1.12	1.07	1.19	1.27	1.07
Cesium-137 (pCi/g)	0.399	0 U	-0.0037 U	0.446	0.042 U	0.0245 U	0.467	-0.0069 U	-0.0023 U
Cobalt-60 (pCi/g)	-0.0051 U	-0.014 U	0.0061 U	0.0188 U	0.003 U	-0.0105 U	0.0034 U	-0.0003 U	0 U
Potassium-40 (pCi/g)	22.7	24.2	25	23.1	25.5	21.8	23	23.8	25.4
Protactinium-231 (pCi/g)	0.241 U	0.201 U	0.0139 U	-0.775 U	-0.352 U	-1.52 U	0.144 U	0.121 U	-0.325 U
Radium-226 (pCi/g)	1.45	1.53	1.73	1.46	1.77	1.86	1.77	1.83	1.53
Radium-228 (pCi/g)	1.01	1.14	0.94 J	1.06	1.12	1.07	1.19	1.27	1.07
Thorium-234 (pCi/g)	2.05 J	1.28 J	2.47 J	2.4 J	0.735 U	2.2 J	2.36 J	1.49 U	1.21 J
Uranium-235 (pCi/g)	0.0871 U	0.325 J	0.0319 U	0.179 U	0.196 U	0.145 U	0.221 U	0.302 J	0.118 U

Station	**BKG-SB0003**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0006**
Sample No	**LUSB0989D**	**LUSB0992**	**LUSB0993**	**LUSB0994**	**LUSB0992D**	**LUSB0995**	**LUSB0996**	**LUSB0997**	**LUSB0998**
Collection Date	**07/24/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Duplicate ID	**LUSB9102**				**LUSB9103**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	17600	20300	22800	20500	17600	20800	24400	20200	20600
Antimony (mg/kg)	0.3 UN	0.28 UN	0.27 UN	0.28 UN	0.28 U	0.3 UN	0.3 UN	0.27 UN	0.31 UN
Arsenic (mg/kg)	3.7	2.9	4.7	11.1	3	2.5	2.5	8	3.4
Barium (mg/kg)	101	89.5	91.8	81.1	89	96.1	101	84.8	87.3
Beryllium (mg/kg)	0.96	0.93	0.92	0.87	0.96	0.96	1	0.91	0.89
Cadmium (mg/kg)	0.92	0.44	0.12 U	0.13 U	0.74	0.18 B	0.14 U	0.13 U	0.34
Calcium (mg/kg)	6930	4980	4260	5500	5380	5920	5490	24100	5670
Chromium (mg/kg)	23.6	25.1	27.8	26.5	23.1	25.9	29.6	25.4	24.9
Cobalt (mg/kg)	8	7.7	9.2	13.7	8.1	8.2	8.8	10.3	7.2
Copper (mg/kg)	44.8	31.8	20.1	22.5	34.7	25.5	26.1	23.8	26
Iron (mg/kg)	18400	17600	23900	31000	16600	18900	19400	27700	17300
Lead (mg/kg)	22.1	14.5	11.5	10.1	15.6	13.7	12.4	12.8	20.9
Magnesium (mg/kg)	4480	4650	5240	6070	4450	4980	5580	5910	4550
Manganese (mg/kg)	131 N	109 *	155 *	295 *	109	125 *	130 *	208 *	117 *
Mercury (mg/kg)	0.02 B	0.02 U	0.03 B	0.02 U	0.02 B	0.03 B	0.02 B	0.03 B	0.02 B
Nickel (mg/kg)	29.5	27.9	28.8	33.9	30.8	27.7	29.6	29.6	25.2
Phosphorus (mg/kg)	704	578	419	456	710	550	535	420	621
Potassium (mg/kg)	2570	3100 *	3420 *	3390 *	2380	2380 *	3470 *	2930 *	3410 *
Selenium (mg/kg)	2	1.1 B	1.1 B	1.1 B	1.7	1.3	1.2	0.99 B	0.96 B
Silver (mg/kg)	0.25 U	0.23 U	0.22 U	0.23 U	0.23 U	0.25 U	0.24 U	0.22 U	0.51 B
Sodium (mg/kg)	73 E	68.7 E	103 E	97.5 E	68.6	75.5 E	89.3 E	85.1 E	82.7 E
Thallium (mg/kg)	0.79 B	0.46 U	0.44 U	0.46 U	0.46 U	0.49 U	0.48 U	0.44 U	0.5 U
Vanadium (mg/kg)	33.8	33.1	42.8	37.4	28.6	33.3	38.8	39.6	33.2
Zinc (mg/kg)	101	77	72.2	66.9	79.9	75.3	76.8	66	82
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
1,2-Dichlorobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
1,3-Dichlorobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
1,4-Dichlorobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,4,5-Trichlorophenol (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U
2,4,6-Trichlorophenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,4-Dichlorophenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,4-Dimethylphenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,4-Dinitrophenol (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U

Station	**BKG-SB0003**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0006**
Sample No	**LUSB0989D**	**LUSB0992**	**LUSB0993**	**LUSB0994**	**LUSB0992D**	**LUSB0995**	**LUSB0996**	**LUSB0997**	**LUSB0998**
Collection Date	**07/24/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Duplicate ID	**LUSB9102**				**LUSB9103**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,4-Dinitrotoluene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2,6-Dinitrotoluene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2-Chloronaphthalene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	454
2-Chlorophenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2-Methylnaphthalene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2-Nitrophenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
2-methyl-4,6-dinitrophenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
3,3'-Dichlorobenzidine (ug/kg)	2050 U	1970 U	1990 U	1950 U	1970 U	2100 U	1990 U	1970 U	2150 U
4-Bromophenyl phenyl ether (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
4-Chloroaniline (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
4-Chlorophenylphenylether (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
4-Nitrophenol (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U
4-chloro-3-methyl phenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Acenaphthene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Acenaphthylene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Anthracene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Benzo(a)anthracene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Benzo(a)pyrene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Benzo(b)fluoranthene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Benzo(ghi)perylene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Benzo(k)fluoranthene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Butylbenzylphthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Carbazole (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Chrysene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Di-n-butylphthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Di-n-octylphthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Dibenz(a,h)anthracene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Dibenzofuran (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Diethyl phthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Dimethyl phthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Fluoranthene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Fluorene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Hexachlorobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Hexachlorobutadiene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Hexachlorocyclopentadiene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Hexachloroethane (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U

Station	**BKG-SB0003**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0006**
Sample No	**LUSB0989D**	**LUSB0992**	**LUSB0993**	**LUSB0994**	**LUSB0992D**	**LUSB0995**	**LUSB0996**	**LUSB0997**	**LUSB0998**
Collection Date	**07/24/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Duplicate ID	**LUSB9102**				**LUSB9103**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Indeno(1,2,3-c,d)pyrene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Isophorone (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
N-Nitrosodiphenylamine (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
N-Nitrosodipropylamine (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Naphthalene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Nitrobenzene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Pentachlorophenol (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U
Phenanthrene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Phenol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Pyrene (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
bis(2-chloroethoxy)methane (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
bis(2-chloroethyl) ether (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
bis(2-ethylhexyl)phthalate (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
m,p-Cresol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
m-Nitroaniline (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U
o-Cresol (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
o-Nitroaniline (ug/kg)	1020 U	985 U	997 U	974 U	984 U	1050 U	997 U	985 U	1080 U
p-Nitroaniline (ug/kg)	410 U	394 U	399 U	390 U	394 U	419 U	399 U	394 U	430 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,1,2,2-Tetrachloroethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,1,2-Trichloroethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,1-Dichloroethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,1-Dichloroethene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,2-Dichloroethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,2-Dichloroethylene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
1,2-Dichloropropane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
2-Butanone (ug/kg)	20.7	3.2 J	1.3 J	9.8 U	11.6 U	2.6 J	11.1 U	10.2 U	0.78 J
2-Hexanone (ug/kg)	12 U	10.8 U	10.2 U	9.8 U	11.6 U	12 U	11.1 U	10.2 U	12.1 U
4-Methyl-2-pentanone (ug/kg)	12 U	10.8 U	10.2 U	9.8 U	11.6 U	12 U	11.1 U	10.2 U	12.1 U
Acetone (ug/kg)	65.4	29.8	17	12.9	16.8	31.4	17.3	13.2	24.4
Benzene (ug/kg)	6 U	5.4 U	0.67 J	0.95 J	5.8 U	0.65 J	0.65 J	1 J	6.1 U
Bromoform (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Carbon disulfide (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Carbon tetrachloride (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Chlorobenzene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U

Station	**BKG-SB0003**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0006**
Sample No	**LUSB0989D**	**LUSB0992**	**LUSB0993**	**LUSB0994**	**LUSB0992D**	**LUSB0995**	**LUSB0996**	**LUSB0997**	**LUSB0998**
Collection Date	**07/24/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Duplicate ID	**LUSB9102**				**LUSB9103**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chlorodibromomethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Chloroethane (ug/kg)	12 U	10.8 U	10.2 U	9.8 U	11.6 U	12 U	11.1 U	10.2 U	12.1 U
Chloroform (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	1.1 J	6 U	5.5 U	5.1 U	6.1 U
Dichlorobromomethane (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Ethylbenzene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Hexane (ug/kg)									
Methyl Bromide (ug/kg)	12 U	10.8 U	10.2 U	9.8 U	11.6 U	12 U	11.1 U	10.2 U	12.1 U
Methyl Chloride (ug/kg)	12 U	10.8 U	10.2 U	9.8 U	11.6 U	12 U	11.1 U	10.2 U	12.1 U
Methylene chloride (ug/kg)	6 U	1.2 JB	1.1 JB	0.84 JB	5.8 U	0.93 JB	1.3 JB	1.1 JB	0.7 JB
Pentanal (ug/kg)							5.8 J		
Pentane, 2-methyl- (ug/kg)									
Styrene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Tetrachloroethene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Toluene (ug/kg)	0.97 J	0.8 J	0.93 J	1.3 J	2.3 U	0.99 J	0.95 J	1.5 J	2.4 U
Trichloroethene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
Vinyl chloride (ug/kg)	2.4 U	2.2 U	2 U	2 U	2.3 U	2.4 U	2.2 U	2 U	2.4 U
Xylenes (total) (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
cis-1,3-dichloropropene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
trans-1,3-Dichloropropene (ug/kg)	6 U	5.4 U	5.1 U	4.9 U	5.8 U	6 U	5.5 U	5.1 U	6.1 U
PCBs									
Aroclor-1016 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1221 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1232 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1242 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1248 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1254 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Aroclor-1260 (ug/kg)	4.2 U	39.4 U	39.9 U	39 U	4 U	41.9 U	4 U	3.9 U	43 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.144 J	-0.0927 U	-0.0132 U	0.0213 U	0.102 U	0.0954 U	0.219 U	0.158 U	0.0514 U
Thorium-228 (pCi/g)	1.06	1.16	1.05	0.919 J	1.22	1.31	1.5	1.19	1.11
Thorium-230 (pCi/g)	1.89	1.51	2.01	1.56	2.21	1.8	1.66	1.73	1.62
Thorium-232 (pCi/g)	0.968 J	0.771 J	1.15	0.844 J	1.17	0.923 J	0.786 J	1.12	1.17
Uranium-233/234 (pCi/g)	2.59	1.3	1.05	1.23	1.58	1.74	1.36	0.974 J	1.56
Uranium-235 (pCi/g)	0.0854 U	0.0698 J	0.0351 U	0.124 J	0.0883 J	0.0441 J	0.0243 U	0.045 U	0.0676 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	2.35	1.41	1.28	1.5	1.68	1.63	1.27	1.35	1.75

Station	**BKG-SB0003**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0004**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0005**	**BKG-SB0006**
Sample No	**LUSB0989D**	**LUSB0992**	**LUSB0993**	**LUSB0994**	**LUSB0992D**	**LUSB0995**	**LUSB0996**	**LUSB0997**	**LUSB0998**
Collection Date	**07/24/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**
Duplicate ID	**LUSB9102**				**LUSB9103**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.27	0.933 J	1.19	1.09	1.1	1.12	1.37	1.03	1.35
Cesium-137 (pCi/g)	0.43	0.0746 J	-0.0104 U	0.0094 U	0.168	0.226	-0.0053 U	-0.013 U	0.723
Cobalt-60 (pCi/g)	0.0363 U	-0.0135 U	0.0017 U	-0.0011 U	0.003 U	0.0216 U	0.0465 U	-0.0002 U	0.0351 U
Potassium-40 (pCi/g)	23.8	24.4	24.3	25.7	25.7	23.8	24.2	25.3	21.2
Protactinium-231 (pCi/g)	-0.499 U	-0.68 U	0.461 U	-0.16 U	-0.171 U	0.0052 U	0.126 U	-0.188 U	-0.203 U
Radium-226 (pCi/g)	1.95	1.62	1.76	1.55	1.79	1.67	1.61	1.7	1.8
Radium-228 (pCi/g)	1.27	0.933 J	1.19	1.09	1.1	1.12	1.37	1.03	1.35
Thorium-234 (pCi/g)	1.84 U	2.36 J	1.23 U	2.07 J	2.77 J	1.98 J	1.19 U	2.6 J	0.899 U
Uranium-235 (pCi/g)	0.374 J	0.155 U	0.121 U	0.158 U	0.0664 U	0.164 U	0.0985 U	0.0712 U	0.174 U

Station	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0008**	**BKG-SB0008**	**BKG-SB0008**
Sample No	**LUSB0999**	**LUSB1000**	**LUSB9602**	**LUSB1001**	**LUSB1002**	**LUSB1003**	**LUSB1004**	**LUSB1005**	**LUSB1006**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	22800	22900		14700	19600	21100	15900	19500	18100
Antimony (mg/kg)	0.29 UN	0.27 UN		0.28 UN	0.28 UN	0.28 UN	0.28 UN	0.28 UN	0.29 BN
Arsenic (mg/kg)	2.8	5		9.4	8.2	8.6	11.5	13.8	13
Barium (mg/kg)	93	103		85.2	105	110	105	149	110
Beryllium (mg/kg)	0.94	1		0.73	0.89	0.93	0.84	1	0.93
Cadmium (mg/kg)	0.19 B	0.13 U		0.37	0.43	0.34	0.35	0.46	0.12 U
Calcium (mg/kg)	5460	4610		6400	7000	4400	3680	3790	5750
Chromium (mg/kg)	27.5	28.5		18.2	23.8	24.6	21.5	26.4	24.5
Cobalt (mg/kg)	8	10.5		9.1	8.9	8.7	10.4	18.8	12.1
Copper (mg/kg)	28	24.9		25.5	26.6	30.8	22.8	29.5	27.5
Iron (mg/kg)	19500	25800		24100	26000	28300	28700	33300	33300
Lead (mg/kg)	12.5	12.3		21.7	16.4	14.9	17.2	14.5	15.8
Magnesium (mg/kg)	5100	5520		5150	5650	5100	4110	5710	6850
Manganese (mg/kg)	114 *	163 *		408 *	361 *	258 *	455	1310	489
Mercury (mg/kg)	0.03 B	0.03 B		0.04	0.03 B	0.04	0.04	0.02 B	0.02 B
Nickel (mg/kg)	27.8	33.1		23.4	23.7	25.9	26.3	53	37.2
Phosphorus (mg/kg)	549	440		559	540	421	333	369	461
Potassium (mg/kg)	3270 *	2990 *		1960 *	2440 *	2870 *	1740	2580	2170
Selenium (mg/kg)	1.2	1 B		1.7	1.4	1.5	1.9	1.7	1.6
Silver (mg/kg)	0.24 U	0.22 U		0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.21 U
Sodium (mg/kg)	96.6 E	90.6 E		99.1 E	127 E	105 E	52.1 E	85.2 E	73.5 E
Thallium (mg/kg)	0.47 U	0.45 U		0.46 U	0.45 U	0.45 U	0.46 U	0.45 U	1.2 B
Vanadium (mg/kg)	38.4	41.6		28.3	36.8	40	33.4	40.6	35.3
Zinc (mg/kg)	74.7	72.7		88.5	89.3	101	77.2	83.3	97.8
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
1,2-Dichlorobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
1,3-Dichlorobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
1,4-Dichlorobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,4,5-Trichlorophenol (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U
2,4,6-Trichlorophenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,4-Dichlorophenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,4-Dimethylphenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,4-Dinitrophenol (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U

Station	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0008**	**BKG-SB0008**	**BKG-SB0008**
Sample No	**LUSB0999**	**LUSB1000**	**LUSB9602**	**LUSB1001**	**LUSB1002**	**LUSB1003**	**LUSB1004**	**LUSB1005**	**LUSB1006**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,4-Dinitrotoluene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2,6-Dinitrotoluene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2-Chloronaphthalene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2-Chlorophenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2-Methylnaphthalene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2-Nitrophenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
2-methyl-4,6-dinitrophenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
3,3'-Dichlorobenzidine (ug/kg)	1990 U	1950 U		2040 U	2020 U	2020 U	1950 U	1920 U	1920 U
4-Bromophenyl phenyl ether (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
4-Chloroaniline (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
4-Chlorophenylphenylether (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
4-Nitrophenol (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U
4-chloro-3-methyl phenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Acenaphthene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Acenaphthylene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Anthracene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Benzo(a)anthracene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Benzo(a)pyrene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Benzo(b)fluoranthene (ug/kg)	399 U	390 U		208 J	404 U	404 U	390 U	385 U	385 U
Benzo(ghi)perylene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Benzo(k)fluoranthene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Butylbenzylphthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Carbazole (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Chrysene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Di-n-butylphthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Di-n-octylphthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Dibenz(a,h)anthracene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Dibenzofuran (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Diethyl phthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Dimethyl phthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Fluoranthene (ug/kg)	399 U	390 U		385 J	404 U	404 U	390 U	385 U	385 U
Fluorene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Hexachlorobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Hexachlorobutadiene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Hexachlorocyclopentadiene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Hexachloroethane (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U

Station	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0008**	**BKG-SB0008**	**BKG-SB0008**
Sample No	**LUSB0999**	**LUSB1000**	**LUSB9602**	**LUSB1001**	**LUSB1002**	**LUSB1003**	**LUSB1004**	**LUSB1005**	**LUSB1006**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Indeno(1,2,3-c,d)pyrene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Isophorone (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
N-Nitrosodiphenylamine (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
N-Nitrosodipropylamine (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Naphthalene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Nitrobenzene (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Pentachlorophenol (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U
Phenanthrene (ug/kg)	399 U	390 U		288 J	404 U	404 U	390 U	385 U	385 U
Phenol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Pyrene (ug/kg)	399 U	390 U		215 J	404 U	404 U	390 U	385 U	385 U
bis(2-chloroethoxy)methane (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
bis(2-chloroethyl) ether (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
bis(2-ethylhexyl)phthalate (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
m,p-Cresol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
m-Nitroaniline (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U
o-Cresol (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
o-Nitroaniline (ug/kg)	997 U	974 U		1020 U	1010 U	1010 U	974 U	962 U	962 U
p-Nitroaniline (ug/kg)	399 U	390 U		409 U	404 U	404 U	390 U	385 U	385 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,1,2-Trichloroethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,1-Dichloroethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,1-Dichloroethene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,2-Dichloroethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,2-Dichloroethylene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
1,2-Dichloropropane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
2-Butanone (ug/kg)	11 U	10.2 U		12.9	3.8 J	2.5 J	10 U	9.2 U	9.5 U
2-Hexanone (ug/kg)	11 U	10.2 U		11 U	10.4 U	11.1 U	10 U	9.2 U	9.5 U
4-Methyl-2-pentanone (ug/kg)	11 U	10.2 U		11 U	10.4 U	11.1 U	10 U	9.2 U	9.5 U
Acetone (ug/kg)	18.9	12.5		58.6	34.9	34	26.2	18.6	10.5
Benzene (ug/kg)	0.7 J	0.72 J		2.6 J	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Bromoform (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Carbon disulfide (ug/kg)	5.5 U	5.1 U		4.3 J	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Carbon tetrachloride (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Chlorobenzene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U

Station	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0008**	**BKG-SB0008**	**BKG-SB0008**
Sample No	**LUSB0999**	**LUSB1000**	**LUSB9602**	**LUSB1001**	**LUSB1002**	**LUSB1003**	**LUSB1004**	**LUSB1005**	**LUSB1006**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chlorodibromomethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Chloroethane (ug/kg)	11 U	10.2 U		11 U	10.4 U	11.1 U	10 U	9.2 U	9.5 U
Chloroform (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	1.3 JB	1 J	4.8 U
Dichlorobromomethane (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Ethylbenzene (ug/kg)	5.5 U	5.1 U		1.2 J	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Hexane (ug/kg)									
Methyl Bromide (ug/kg)	11 U	10.2 U		11 U	10.4 U	11.1 U	10 U	9.2 U	9.5 U
Methyl Chloride (ug/kg)	11 U	10.2 U		11 U	10.4 U	11.1 U	10 U	9.2 U	9.5 U
Methylene chloride (ug/kg)	1.3 JB	1.1 JB		1.1 JB	1 JB	1.2 JB	5 U	4.6 U	4.8 U
Pentanal (ug/kg)									
Pentane, 2-methyl- (ug/kg)									
Styrene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Tetrachloroethene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Toluene (ug/kg)	1 J	1.7 J		6	0.89 J	0.95 J	8.3	1.8 U	1.9 U
Trichloroethene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
Vinyl chloride (ug/kg)	2.2 U	2 U		2.2 U	2.1 U	2.2 U	2 U	1.8 U	1.9 U
Xylenes (total) (ug/kg)	5.5 U	5.1 U		2.5 J	5.2 U	5.5 U	1 J	4.6 U	4.8 U
cis-1,3-dichloropropene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
trans-1,3-Dichloropropene (ug/kg)	5.5 U	5.1 U		5.5 U	5.2 U	5.5 U	5 U	4.6 U	4.8 U
PCBs									
Aroclor-1016 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1221 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1232 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1242 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1248 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1254 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Aroclor-1260 (ug/kg)	4 U	3.9 U		40.9 U	4 U	4 U	3.9 U	3.8 U	3.8 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0655 U	0.15 U	0.04 U	0.0217 U	0.0604 U	0.0896 U	0.0222 U	0.0204 U	0.121 U
Thorium-228 (pCi/g)	1.07	1.42	0.55	1.13	0.683 J	1.01	0.772 J	1.05	1.25
Thorium-230 (pCi/g)	1.92	2.28	1.05	2.09	1.57	2.6	1.61	2.2	2.1
Thorium-232 (pCi/g)	1.18	1.44	0.72	0.98 J	0.867 J	0.688 J	0.707 J	0.793 J	1.02
Uranium-233/234 (pCi/g)	1.35	1	0.1	1.19	1.46	1.23	1.51	1.49	1.49
Uranium-235 (pCi/g)	0.0847 J	0.101 J		0.119 J	0.0398 U	0.0695 J	0.12 J	0.114 J	0.0921 J
Uranium-235/236 (pCi/g)			0.01 U						
Uranium-238 (pCi/g)	1.5	1.55	0.1	1.53	1.43	1.41	1.71	1.57	1.22

Station	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0006**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0007**	**BKG-SB0008**	**BKG-SB0008**	**BKG-SB0008**
Sample No	**LUSB0999**	**LUSB1000**	**LUSB9602**	**LUSB1001**	**LUSB1002**	**LUSB1003**	**LUSB1004**	**LUSB1005**	**LUSB1006**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.14	1.1		1.07	0.782 J	1.09	0.882 J	1.04	1.1
Cesium-137 (pCi/g)	0.0461 J	-0.0078 U		0.243	0.231	0.0118 U	0.0697 J	0.0046 U	0.0205 U
Cobalt-60 (pCi/g)	-0.0134 U	0.0036 U		-0.0009 U	0.0069 U	-0.005 U	0.0021 U	0.0157 U	0.0089 U
Potassium-40 (pCi/g)	25.8	24.5		21.6	20.3	22.4	20	24.4	22.8
Protactinium-231 (pCi/g)	0.24 U	-0.229 U		0.804 U	1.21 U	0.101 U	-0.452 U	0.34 U	0.264 U
Radium-226 (pCi/g)	1.62	1.64		1.64	1.66	1.9	1.45	1.87	1.89
Radium-228 (pCi/g)	1.14	1.1		1.07	0.782 J	1.09	0.882 J	1.04	1.1
Thorium-234 (pCi/g)	1.13 J	1.66 J		0.442 U	1.45 U	2.25 J	1.49 J	1.98 J	1.02 U
Uranium-235 (pCi/g)	0.0696 U	0.07 U		0.157 U	0.218 U	0.122 U	0.0981 U	0.125 U	0.199 U

Station	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0011**	**BKG-SB0011**
Sample No	**LUSB1007**	**LUSB1008**	**LUSB1009**	**LUSB1007D**	**LUSB1010**	**LUSB1011**	**LUSB1012**	**LUSB1013**	**LUSB1014**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID				**LUSB9104**					
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	14800	19700	17300	19300	15300	16100	14700	19600	17300
Antimony (mg/kg)	0.26 UN	0.27 UN	0.26 UN	0.65 U	0.28 UN	0.66 U	0.66 U	0.9 B	0.68 U
Arsenic (mg/kg)	8	10.5	8.3	8.4	4.9	9.7	24.1	6.2	9.8
Barium (mg/kg)	75.5	104	98.1	88.4	95.4	104	209	111	99.8
Beryllium (mg/kg)	0.61	1.2	0.88	1.3	0.88	0.91	0.9	1	0.92
Cadmium (mg/kg)	0.16 B	0.13 B	0.12 U	0.3 U	0.36	0.3 U	0.3 U	0.32 U	0.32 U
Calcium (mg/kg)	2970	6260	51200	4620	5600	4690	9010	7360	4860
Chromium (mg/kg)	19.5	25.6	23.2	24.7	20.3	23.5	22.4	25.9	24.3
Cobalt (mg/kg)	8.2	10.6	10.1	12.6	7.9	11.5	18.7	10.8	12.7
Copper (mg/kg)	16.8	20	24.3	39.8	21.7	19.5	31.7	29.5	25.3
Iron (mg/kg)	22600	27500	25800	32100	18800	26800	40500	23600	27600
Lead (mg/kg)	13.8	12	10.8	12.6	17.2	12.5	13.4	19.9	13.1
Magnesium (mg/kg)	3380	5340	10100	5040	3930	4870	5470	5140	4880
Manganese (mg/kg)	247	297	364	283	220	602	2340	355	490
Mercury (mg/kg)	0.02 U	0.02 B	0.02 U	0.03 B	0.02 B	0.02 U	0.01 U	0.04	0.02 B
Nickel (mg/kg)	19.4	30.6	32.4	28.8	24.1	33.6	46	31.3	35.2
Phosphorus (mg/kg)	230	273	330	330	570	390	552	744	437
Potassium (mg/kg)	1240	2170	2830	1530	1600	1580	1570	2580	1900
Selenium (mg/kg)	1.9	1.7	1.3	1.7	2.2	1.5	2.4	2	2
Silver (mg/kg)	0.22 U	0.22 U	0.22 U	0.53 U	0.23 U	0.54 U	0.54 U	0.57 U	0.56 U
Sodium (mg/kg)	49.7 E	87.1 E	109 E	309	55.1 E	68.9	71.5	102	95
Thallium (mg/kg)	0.43 U	0.7 B	0.95 B	1 U	0.45 U	1.1 U	1.1 U	1.1 U	1.1 U
Vanadium (mg/kg)	28.8	39.3	30.6	41.7	31.3	36.3	34.7	40	36.8
Zinc (mg/kg)	56.8	63.9	64.4	62	74.1	68.2	77.7	97.4	77.2
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
1,2-Dichlorobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
1,3-Dichlorobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
1,4-Dichlorobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,4,5-Trichlorophenol (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U
2,4,6-Trichlorophenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,4-Dichlorophenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,4-Dimethylphenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,4-Dinitrophenol (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U

Station	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0011**	**BKG-SB0011**
Sample No	**LUSB1007**	**LUSB1008**	**LUSB1009**	**LUSB1007D**	**LUSB1010**	**LUSB1011**	**LUSB1012**	**LUSB1013**	**LUSB1014**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID				**LUSB9104**					
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,4-Dinitrotoluene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2,6-Dinitrotoluene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2-Chloronaphthalene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2-Chlorophenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2-Methylnaphthalene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2-Nitrophenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
2-methyl-4,6-dinitrophenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
3,3'-Dichlorobenzidine (ug/kg)	1900 U	1860 U	1880 U	1890 U	1900 U	1830 U	1830 U	1990 U	1850 U
4-Bromophenyl phenyl ether (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
4-Chloroaniline (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
4-Chlorophenylphenylether (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
4-Nitrophenol (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U
4-chloro-3-methyl phenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Acenaphthene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Acenaphthylene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Anthracene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Benzo(a)anthracene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Benzo(a)pyrene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Benzo(b)fluoranthene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Benzo(ghi)perylene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Benzo(k)fluoranthene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Butylbenzylphthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Carbazole (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Chrysene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Di-n-butylphthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Di-n-octylphthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Dibenz(a,h)anthracene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Dibenzofuran (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Diethyl phthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Dimethyl phthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Fluoranthene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Fluorene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Hexachlorobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Hexachlorobutadiene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Hexachlorocyclopentadiene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Hexachloroethane (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U

Station	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0011**	**BKG-SB0011**
Sample No	**LUSB1007**	**LUSB1008**	**LUSB1009**	**LUSB1007D**	**LUSB1010**	**LUSB1011**	**LUSB1012**	**LUSB1013**	**LUSB1014**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID				**LUSB9104**					
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Indeno(1,2,3-c,d)pyrene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Isophorone (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
N-Nitrosodiphenylamine (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
N-Nitrosodipropylamine (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Naphthalene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Nitrobenzene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Pentachlorophenol (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U
Phenanthrene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Phenol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Pyrene (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
bis(2-chloroethoxy)methane (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
bis(2-chloroethyl) ether (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
bis(2-ethylhexyl)phthalate (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
m,p-Cresol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
m-Nitroaniline (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U
o-Cresol (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
o-Nitroaniline (ug/kg)	952 U	930 U	941 U	947 U	952 U	915 U	915 U	993 U	925 U
p-Nitroaniline (ug/kg)	381 U	372 U	376 U	379 U	381 U	366 U	366 U	397 U	370 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,1,2,2-Tetrachloroethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,1,2-Trichloroethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,1-Dichloroethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,1-Dichloroethene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,2-Dichloroethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,2-Dichloroethylene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
1,2-Dichloropropane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
2-Butanone (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
2-Hexanone (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
4-Methyl-2-pentanone (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
Acetone (ug/kg)	19.2	15.1	9.8 U	27.8	27.8	23.8	61.5	36.7	27.9
Benzene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	0.62 J	6.2 U	6.1 U
Bromoform (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Carbon disulfide (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Carbon tetrachloride (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Chlorobenzene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U

Station	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0011**	**BKG-SB0011**
Sample No	**LUSB1007**	**LUSB1008**	**LUSB1009**	**LUSB1007D**	**LUSB1010**	**LUSB1011**	**LUSB1012**	**LUSB1013**	**LUSB1014**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID				**LUSB9104**					
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chlorodibromomethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Chloroethane (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
Chloroform (ug/kg)	0.81 J	4.5 U	4.9 U	1.4 JB	1.3 J	1.1 J	0.71 J	1.4 J	1.3 J
Dichlorobromomethane (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Ethylbenzene (ug/kg)	4.6 U	0.48 J	4.9 U	6.2 U	0.89 J	5.2 U	6 U	6.2 U	6.1 U
Hexane (ug/kg)									
Methyl Bromide (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
Methyl Chloride (ug/kg)	9.2 U	9 U	9.8 U	12.3 U	11.9 U	10.3 U	12 U	12.4 U	12.2 U
Methylene chloride (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Pentanal (ug/kg)									
Pentane, 2-methyl- (ug/kg)									
Styrene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Tetrachloroethene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Toluene (ug/kg)	1.8 U	8.4	1.7 J	1.3 J	18.7	0.61 J	0.95 J	2.5 U	2.7
Trichloroethene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
Vinyl chloride (ug/kg)	1.8 U	1.8 U	2 U	2.5 U	2.4 U	2.1 U	2.4 U	2.5 U	2.4 U
Xylenes (total) (ug/kg)	4.6 U	1 J	0.73 J	6.2 U	3.3 J	5.2 U	6 U	6.2 U	6.1 U
cis-1,3-dichloropropene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
trans-1,3-Dichloropropene (ug/kg)	4.6 U	4.5 U	4.9 U	6.2 U	6 U	5.2 U	6 U	6.2 U	6.1 U
PCBs									
Aroclor-1016 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1221 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1232 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1242 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1248 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1254 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Aroclor-1260 (ug/kg)	3.8 U	3.7 U	3.8 U	3.8 U	3.8 U	3.6 U	3.6 U	4 U	3.7 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.116 U	0.0591 U	-0.0292 U	0.26 U	-0.138 U	0.0631 U	-0.0666 U	0.134 U	0.118 U
Thorium-228 (pCi/g)	0.901 J	1	1.09	0.651 J	0.956 J	1.09	0.965 J	0.988 J	1.06
Thorium-230 (pCi/g)	1.42	1.91	1.35	1.3	2.04	1.88	2.14	2.28	1.85
Thorium-232 (pCi/g)	0.606 J	1.21	0.859 J	0.592 J	0.974 J	1.09	1.04	1.41	0.943 J
Uranium-233/234 (pCi/g)	0.963 J	1.36	1.58	0.906 J	1.33	0.818 J	1.31	1.17	1.21
Uranium-235 (pCi/g)	0.0421 U	0.0377 U	0.166 J	0.123 J	0.0751 J	0.0567 U	0.0943 U	0.0494 U	0.0513 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.19	1.3	1.8	1.03	1.59	0.853 J	1.26	1.53	1.01

Station	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0009**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0010**	**BKG-SB0011**	**BKG-SB0011**
Sample No	**LUSB1007**	**LUSB1008**	**LUSB1009**	**LUSB1007D**	**LUSB1010**	**LUSB1011**	**LUSB1012**	**LUSB1013**	**LUSB1014**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID				**LUSB9104**					
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.895 J	0.824 J	1.18	0.618 J	0.949 J	0.973 J	1.18	1.05	1.04
Cesium-137 (pCi/g)	0.132	0.0078 U	-0.0066 U	0.217	0.153	-0.0099 U	0.0015 U	0.158	0.0254 U
Cobalt-60 (pCi/g)	0.0137 U	-0.0208 U	0.0187 U	-0.004 U	-0.0115 U	0.0124 U	0.0108 U	0.046 U	0.0275 U
Potassium-40 (pCi/g)	19.5	21.8	27.2	18.1	20.6	22.4	25.9	23.2	23.2
Protactinium-231 (pCi/g)	-0.0532 U	-1.31 U	0.634 U	0.496 U	-0.222 U	0.668 U	-0.11 U	0.0075 U	-0.236 U
Radium-226 (pCi/g)	1.44	1.96	1.81	1.29	1.71	1.79	2.2	1.52	1.67
Radium-228 (pCi/g)	0.895 J	0.824 J	1.18	0.618 J	0.949 J	0.973 J	1.18	1.05	1.04
Thorium-234 (pCi/g)	1.52 J	1.47 J	2.44 J	1.29 J	0.896 U	1.55 J	3.3 J	1.49 J	1.96 J
Uranium-235 (pCi/g)	0.059 U	0.108 U	0.236 U	0.157 U	0.153 U	0.143 U	0.156 U	0.027 U	0.126 U

Station	**BKG-SB0011**	**BKG-SB0011**	**BKG-SB0012**	**BKG-SB0012**	**BKG-SB0012**
Sample No	**LUSB1015**	**LUSB9603**	**LUSB1016**	**LUSB1017**	**LUSB1018**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**2.0-3.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID					
Northing	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**
Metals					
Aluminum (mg/kg)	18300	19800	13400	16100	13700
Antimony (mg/kg)	0.65 U	0.71 U	0.68 U	0.66 U	0.68 U
Arsenic (mg/kg)	14	7.4	4.6	4.6	4.9
Barium (mg/kg)	106	111	70.6	86	73.6
Beryllium (mg/kg)	1	1	0.64	0.77	0.65
Cadmium (mg/kg)	0.3 U	0.33 U	0.32 U	0.3 U	0.32 U
Calcium (mg/kg)	17300	5520	3820	3770	3410
Chromium (mg/kg)	26.4	27.4	17.9	21.1	18.8
Cobalt (mg/kg)	13.7	11.9	6.9	8.2	6.9
Copper (mg/kg)	34.2	27.1	16.6	22.1	18.9
Iron (mg/kg)	34100	27000	16200	19100	16400
Lead (mg/kg)	14.3	13.6	16	11.4	11.3
Magnesium (mg/kg)	6990	5370	3080	3540	3020
Manganese (mg/kg)	790	408	181	190	177
Mercury (mg/kg)	0.02 U	0.02 B	0.02 U	0.02 B	0.02 B
Nickel (mg/kg)	40.5	35.7	17.5	22.4	19
Phosphorus (mg/kg)	495	481	332	252	228
Potassium (mg/kg)	2350	2200	1380	1450	1430
Selenium (mg/kg)	2.1	2.6	1.7	1.6	1.1
Silver (mg/kg)	0.53 U	0.58 U	0.56 U	0.54 U	0.56 U
Sodium (mg/kg)	103	80.6	45.1	60.8	41.7
Thallium (mg/kg)	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Vanadium (mg/kg)	41.9	40.3	28.3	32.5	28.7
Zinc (mg/kg)	82.5	83.3	58	60.4	52.3
Semivolatile Organics					
1,2,4-Trichlorobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
1,2-Dichlorobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
1,3-Dichlorobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
1,4-Dichlorobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,4,5-Trichlorophenol (ug/kg)	915 U	936 U	969 U	915 U	925 U
2,4,6-Trichlorophenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,4-Dichlorophenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,4-Dimethylphenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,4-Dinitrophenol (ug/kg)	915 U	936 U	969 U	915 U	925 U

Station	**BKG-SB0011**	**BKG-SB0011**	**BKG-SB0012**	**BKG-SB0012**	**BKG-SB0012**
Sample No	**LUSB1015**	**LUSB9603**	**LUSB1016**	**LUSB1017**	**LUSB1018**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**2.0-3.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID					
Northing	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**
2,4-Dinitrotoluene (ug/kg)	366 U	374 U	388 U	366 U	370 U
2,6-Dinitrotoluene (ug/kg)	366 U	374 U	388 U	366 U	370 U
2-Chloronaphthalene (ug/kg)	366 U	374 U	388 U	366 U	370 U
2-Chlorophenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
2-Methylnaphthalene (ug/kg)	366 U	374 U	388 U	366 U	370 U
2-Nitrophenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
2-methyl-4,6-dinitrophenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
3,3'-Dichlorobenzidine (ug/kg)	1830 U	1870 U	1940 U	1830 U	1850 U
4-Bromophenyl phenyl ether (ug/kg)	366 U	374 U	388 U	366 U	370 U
4-Chloroaniline (ug/kg)	366 U	374 U	388 U	366 U	370 U
4-Chlorophenylphenylether (ug/kg)	366 U	374 U	388 U	366 U	370 U
4-Nitrophenol (ug/kg)	915 U	936 U	969 U	915 U	925 U
4-chloro-3-methyl phenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
Acenaphthene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Acenaphthylene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Anthracene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Benzo(a)anthracene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Benzo(a)pyrene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Benzo(b)fluoranthene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Benzo(ghi)perylene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Benzo(k)fluoranthene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Butylbenzylphthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
Carbazole (ug/kg)	366 U	374 U	388 U	366 U	370 U
Chrysene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Di-n-butylphthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
Di-n-octylphthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
Dibenz(a,h)anthracene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Dibenzofuran (ug/kg)	366 U	374 U	388 U	366 U	370 U
Diethyl phthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
Dimethyl phthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
Fluoranthene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Fluorene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Hexachlorobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Hexachlorobutadiene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Hexachlorocyclopentadiene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Hexachloroethane (ug/kg)	366 U	374 U	388 U	366 U	370 U

Station	**BKG-SB0011**	**BKG-SB0011**	**BKG-SB0012**	**BKG-SB0012**	**BKG-SB0012**
Sample No	**LUSB1015**	**LUSB9603**	**LUSB1016**	**LUSB1017**	**LUSB1018**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**2.0-3.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID					
Northing	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**
Indeno(1,2,3-c,d)pyrene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Isophorone (ug/kg)	366 U	374 U	388 U	366 U	370 U
N-Nitrosodiphenylamine (ug/kg)	366 U	374 U	388 U	366 U	370 U
N-Nitrosodipropylamine (ug/kg)	366 U	374 U	388 U	366 U	370 U
Naphthalene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Nitrobenzene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Pentachlorophenol (ug/kg)	915 U	936 U	969 U	915 U	925 U
Phenanthrene (ug/kg)	366 U	374 U	388 U	366 U	370 U
Phenol (ug/kg)	366 U	374 U	388 U	366 U	370 U
Pyrene (ug/kg)	366 U	374 U	388 U	366 U	370 U
bis(2-chloroethoxy)methane (ug/kg)	366 U	374 U	388 U	366 U	370 U
bis(2-chloroethyl) ether (ug/kg)	366 U	374 U	388 U	366 U	370 U
bis(2-ethylhexyl)phthalate (ug/kg)	366 U	374 U	388 U	366 U	370 U
m,p-Cresol (ug/kg)	366 U	374 U	388 U	366 U	370 U
m-Nitroaniline (ug/kg)	915 U	936 U	969 U	915 U	925 U
o-Cresol (ug/kg)	366 U	374 U	388 U	366 U	370 U
o-Nitroaniline (ug/kg)	915 U	936 U	969 U	915 U	925 U
p-Nitroaniline (ug/kg)	366 U	374 U	388 U	366 U	370 U
Volatile Organics					
1,1,1-Trichloroethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,1,2,2-Tetrachloroethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,1,2-Trichloroethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,1-Dichloroethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,1-Dichloroethene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,2-Dichloroethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,2-Dichloroethylene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
1,2-Dichloropropane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
2-Butanone (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
2-Hexanone (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
4-Methyl-2-pentanone (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
Acetone (ug/kg)	9.3 U	18.2	38.2	32	13.1
Benzene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Bromoform (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Carbon disulfide (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Carbon tetrachloride (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Chlorobenzene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U

Station	**BKG-SB0011**	**BKG-SB0011**	**BKG-SB0012**	**BKG-SB0012**	**BKG-SB0012**
Sample No	**LUSB1015**	**LUSB9603**	**LUSB1016**	**LUSB1017**	**LUSB1018**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**2.0-3.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID					
Northing	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**
Chlorodibromomethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Chloroethane (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
Chloroform (ug/kg)	4.6 U	0.74 JB	6.2 U	1.6 JB	0.95 JB
Dichlorobromomethane (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Ethylbenzene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Hexane (ug/kg)					
Methyl Bromide (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
Methyl Chloride (ug/kg)	9.3 U	11 U	12.5 U	11.8 U	9 U
Methylene chloride (ug/kg)	4.6 U	5.5 U	6.2 U	1.4 JB	4.5 U
Pentanal (ug/kg)					
Pentane, 2-methyl- (ug/kg)					
Styrene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Tetrachloroethene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Toluene (ug/kg)	1.7 J	2.4	4.7	1.2 J	0.52 J
Trichloroethene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
Vinyl chloride (ug/kg)	1.9 U	2.2 U	2.5 U	2.4 U	1.8 U
Xylenes (total) (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
cis-1,3-dichloropropene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
trans-1,3-Dichloropropene (ug/kg)	4.6 U	5.5 U	6.2 U	5.9 U	4.5 U
PCBs					
Aroclor-1016 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1221 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1232 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1242 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1248 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1254 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Aroclor-1260 (ug/kg)	3.6 U	3.7 U	3.9 U	3.6 U	3.7 U
Radiological Parameters (AlphaSpec)					
Actinium-227 (pCi/g)	0.172 U	0.165 U	0.0095 U	0.285 J	0.0191 U
Thorium-228 (pCi/g)	1.32	0.8 J	0.642 J	1.17	0.803 J
Thorium-230 (pCi/g)	1.77	1.43	1.64	1.78	1.54
Thorium-232 (pCi/g)	0.945 J	0.949 J	0.63 J	0.747 J	0.771 J
Uranium-233/234 (pCi/g)	1.01	1.2	1.45	1.24	0.879 J
Uranium-235 (pCi/g)	0.0382 U	0.0893 J	0.0704 U	0.032 U	0.0529 U
Uranium-235/236 (pCi/g)					
Uranium-238 (pCi/g)	1.22	1.34	1.21	1.07	1.02

Station	**BKG-SB0011**	**BKG-SB0011**	**BKG-SB0012**	**BKG-SB0012**	**BKG-SB0012**
Sample No	**LUSB1015**	**LUSB9603**	**LUSB1016**	**LUSB1017**	**LUSB1018**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**2.0-3.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID					
Northing	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (GammaSpec)					
Actinium-228 (pCi/g)	1.11	1.18	0.889 J	1	0.797 J
Cesium-137 (pCi/g)	-0.0131 U	0.037 U	0.198	0.0245 U	0.098 J
Cobalt-60 (pCi/g)	0.0021 U	0.0143 U	-0.0052 U	0.0128 U	-0.0151 U
Potassium-40 (pCi/g)	24.3	23.3	18.9	20.9	20
Protactinium-231 (pCi/g)	-0.714 U	1.21 U	0.0272 U	-0.377 U	-0.4 U
Radium-226 (pCi/g)	1.66	1.72	1.34	1.31	1.32
Radium-228 (pCi/g)	1.11	1.18	0.889 J	1	0.797 J
Thorium-234 (pCi/g)	0.687 U	1.25 U	0.545 U	1.96 J	1.16 J
Uranium-235 (pCi/g)	0.0752 U	0.108 U	0.111 U	0.428 J	0.123 U

Background Sediment Sample Results

Phase II Background Sediment

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	11800 J	2700
Antimony (mg/kg)	0.88	0.2 UJ
Arsenic (mg/kg)	4.5 J	4.8
Barium (mg/kg)	76.6 J	22.2
Beryllium (mg/kg)	0.69	0.26
Boron (mg/kg)	15.5 J	4.9
Cadmium (mg/kg)	0.51	0.19
Calcium (mg/kg)	25900 J	48200
Chromium (mg/kg)	17 J	5.1
Cobalt (mg/kg)	8.5 J	4
Copper (mg/kg)	21 J	9.1
Iron (mg/kg)	18500 J	8220
Lead (mg/kg)	12.6 J	6.7
Magnesium (mg/kg)	7200 J	7400
Manganese (mg/kg)	471 J	248
Mercury (mg/kg)	0 UJ	0 U
Molybdenum (mg/kg)	2.5 J	2.6
Nickel (mg/kg)	22.5 J	10.8
Potassium (mg/kg)	2390 J	598
Selenium (mg/kg)	1.8 J	0.48
Silicon (mg/kg)	567 J	388 J
Silver (mg/kg)	0.1 UJ	0.1 U
Sodium (mg/kg)	373 J	237
Strontium (mg/kg)	98.3 J	78.4
Thallium (mg/kg)	1.1 J	0.25 U
Tin (mg/kg)	1 UJ	1 U
Vanadium (mg/kg)	24.7 J	9.6
Zinc (mg/kg)	108 J	25.3
Indicator Parameters		
Chloride (mg/kg)	40.6 R	14.4 R
Fluoride (mg/kg)	3.75	1.08
Nitrate, as N (mg/kg)	0 R	0 R
Phosphorus (mg/kg)	0 R	0 R
Sulfate (mg/kg)	24.7 R	4.32
Total organic carbon (mg/kg)	27800	10800
pH (ph)	6.91	7.17

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/kg)	35.5 UJ	35.5 U
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U
2,4,6-Trichlorophenol (ug/kg)	37.8 UJ	37.8 U
2,4,6-tribromophenol (%)	83	80
2,4-Dichlorophenol (ug/kg)	43.6 UJ	43.6 U
2,4-Dimethylphenol (ug/kg)	47.9 UJ	47.9 U
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 UJ
2,4-Dinitrotoluene (ug/kg)	93.2 UJ	93.2 U
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U
2-Chloronaphthalene (ug/kg)	34.7 UJ	34.7 U
2-Chlorophenol (ug/kg)	37.9 UJ	37.9 U
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U
2-Methylphenol (ug/kg)	46.7 UJ	46.7 U
2-Nitroaniline (ug/kg)	73.05 U	73.05 U
2-Nitrophenol (ug/kg)	37.15 U	37.15 U
2-fluorobiphenyl (%)	73	76
2-fluorophenol (%)	72	73
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 UJ
3-Nitroaniline (ug/kg)	66.75 U	66.75 U
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 UJ	75.1 U
4-Chloroaniline (ug/kg)	85.05 U	85.05 U
4-Methylphenol (ug/kg)	50.75 U	50.75 U
4-Nitroaniline (ug/kg)	118.45 U	118.45 U
4-Nitrophenol (ug/kg)	128.75 U	128.75 U
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U
4-chlorophenylphenylether (ug/kg)	37.2 UJ	37.2 U
Acenaphthene (ug/kg)	28.8 UJ	28.8 U
Acenaphthylene (ug/kg)	18.9 UJ	18.9 U
Anthracene (ug/kg)	29.1 UJ	29.1 U
Benzo(a)anthracene (ug/kg)	73.35 U	73.35 U
Benzo(a)pyrene (ug/kg)	72.2 UJ	72.2 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzo(b)fluoranthene (ug/kg)	65.9 UJ	65.9 U
Benzo(ghi)perylene (ug/kg)	45 UJ	45 U
Benzo(k)fluoranthene (ug/kg)	122 UJ	122 U
Butylbenzylphthalate (ug/kg)	60 UJ	60 U
Carbazole (ug/kg)	145 UJ	145 U
Chrysene (ug/kg)	68.8 UJ	52 J
Di-n-butylphthalate (ug/kg)	55 UJ	55 U
Di-n-octylphthalate (ug/kg)	55 UJ	55 U
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U
Dibenzofuran (ug/kg)	40.2 UJ	40.2 U
Diethyl phthalate (ug/kg)	41.7 UJ	41.7 U
Dimethyl phthalate (ug/kg)	60 UJ	60 U
Fluoranthene (ug/kg)	42.55 U	76 J
Fluorene (ug/kg)	32.5 UJ	32.5 U
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U
Hexachlorobutadiene (ug/kg)	78.9 UJ	78.9 U
Hexachlorocyclopentadiene (ug/kg)	44.5 UJ	44.5 U
Hexachloroethane (ug/kg)	37.65 U	37.65 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U
Isophorone (ug/kg)	28.95 U	28.95 U
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U
Naphthalene (ug/kg)	37.1 UJ	37.1 U
Nitrobenzene (ug/kg)	35.85 U	35.85 U
Pentachlorophenol (ug/kg)	68.25 U	68.25 U
Phenanthrene (ug/kg)	22.05 U	56 J
Phenol (ug/kg)	36.55 U	36.55 U
Pyrene (ug/kg)	64.25 U	74 J
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ
Volatile Organics		
1,1,1-Trichloroethane (ug/kg)	1.28 U	1.28 U
1,1,2,2-Tetrachloroethane (ug/kg)	0.6 UJ	0.6 U
1,1,2-Trichloroethane (ug/kg)	1.35 U	1.35 U
1,1-Dichloroethane (ug/kg)	0.26 U	0.26 U
1,1-Dichloroethene (ug/kg)	0.31 U	0.31 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,2-Dichloroethane (ug/kg)	0.12 U	0.12 U
1,2-Dichloropropane (ug/kg)	0.24 U	0.24 U
1,2-dichloroethylene(total) (ug/kg)	0 UJ	0 U
2-Butanone (ug/kg)	0.7 UJ	0.7 UJ
2-Hexanone (ug/kg)	0.7 UJ	0.7 UJ
4-Methyl-2-pentanone (ug/kg)	0.27 U	0.27 U
Acetone (ug/kg)	0.8 R	0.8 R
Benzene (ug/kg)	0.22 U	0.22 U
Bromodichloromethane (ug/kg)	0.36 U	0.36 U
Bromofluorobenzene (%)	55	74
Bromomethane (ug/kg)	0.32 U	0.32 U
Carbon disulfide (ug/kg)	0.3 UJ	0.3 U
Carbon tetrachloride (ug/kg)	0.16 U	0.16 U
Chlorobenzene (ug/kg)	0.35 U	0.35 U
Chloroethane (ug/kg)	0.55 U	0.55 U
Chloroform (ug/kg)	0.24 U	0.24 U
Chloromethane (ug/kg)	0.5 UJ	0.5 U
Dibromochloromethane (ug/kg)	0.44 U	0.44 U
Dibromofluoromethane (%)	88	99
Ethylbenzene (ug/kg)	0.33 U	0.33 U
Methylene chloride (ug/kg)	0.95 U	0.95 U
Styrene (ug/kg)	1.2 UJ	1.2 U
Tetrachloroethene (ug/kg)	0.3 UJ	0.3 U
Toluene (ug/kg)	0.13 U	0.13 U
Toluene-d8 (%)	75	89
Tribromomethane (ug/kg)	0.75 U	0.75 U
Trichloroethene (ug/kg)	0.35 U	0.35 U
Vinyl chloride (ug/kg)	0.49 U	0.49 U
Xylenes (total) (ug/kg)	0 UJ	0 U
cis-1,3-dichloropropene (ug/kg)	0.18 U	0.18 U
trans-1,3-dichloropropene (ug/kg)	0.22 U	0.22 U
Pesticides		
4,4'-DDD (ug/kg)	0.16 U	0.16 U
4,4'-DDE (ug/kg)	0.04 U	0.04 U
4,4'-DDT (ug/kg)	0.15 U	0.15 U
Aldrin (ug/kg)	0.03 U	0.03 U
Alpha-bhc (ug/kg)	0.03 U	0.03 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Alpha-chlordane (ug/kg)	0.03 U	0.03 U
Aroclor-1016 (ug/kg)	0.93 U	0.93 U
Aroclor-1221 (ug/kg)	0.93 U	0.93 U
Aroclor-1232 (ug/kg)	0.93 U	0.93 U
Aroclor-1242 (ug/kg)	0.93 U	0.93 U
Aroclor-1248 (ug/kg)	0.93 U	0.93 U
Aroclor-1254 (ug/kg)	0.67 U	0.67 U
Aroclor-1260 (ug/kg)	0.67 U	0.67 U
Beta-BHC (ug/kg)	0.03 U	0.03 U
Decachlorobiphenyl (%)	80	86
Delta-BHC (ug/kg)	0.02 U	0.02 U
Dieldrin (ug/kg)	0.05 U	0.05 U
Endosulfan sulfate (ug/kg)	0.03 U	0.03 U
Endosulfan-i (ug/kg)	0.07 U	0.07 U
Endosulfan-ii (ug/kg)	0.03 U	0.03 U
Endrin (ug/kg)	0.06 U	0.06 U
Endrin aldehyde (ug/kg)	0.06 U	0.06 U
Endrin ketone (ug/kg)	0.02 U	0.02 U
Gamma-chlordane (ug/kg)	0.04 U	0.04 U
Heptachlor (ug/kg)	0.06 U	0.06 U
Heptachlor epoxide (ug/kg)	0.02 U	0.02 U
Lindane (ug/kg)	0.04 U	0.04 U
Methoxychlor (ug/kg)	0.55 U	0.55 U
Toxaphene (ug/kg)	1.83 U	1.83 U
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	0.22	0.4
Radium-226 (pCi/g)	1.63	1.02
Radium-228 (pCi/g)	1.11	0.64
Thorium-227 (pCi/g)	0.22	0.4
Thorium-228 (pCi/g)	1.11	0.64
Thorium-230 (pCi/g)	1.89	1.32
Thorium-232 (pCi/g)	0.84	0.56
Uranium-234 (pCi/g)	1.8	1.76
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	2.08	0.5 U
Radiological Parameters (GammaSpec)		
Actinium-227 (pCi/g)	1.35	0.67

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.13	0.5 U
Potassium-40 (pCi/g)	17.25	9.79
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	0.86	0.57
Radium-228 (pCi/g)	0.73	0.34
Thorium-228 (pCi/g)	0.73	0.34
Thorium-230 (pCi/g)	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.73	0.34
Uranium-235 (pCi/g)	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ

Phase IV Background Sediment

Station	BKG-SD0001	BKG-SD0001	BKG-SD0002	BKG-SD0002	BKG-SD0003	BKG-SD0004	BKG-SD0005	BKG-SD0006	BKG-SD0007
Sample No	LUSD0166	LUSD0176	LUSD0167	LUSD0167D	LUSD0168	LUSD0169	LUSD0170	LUSD0171	LUSD0172
Collection Date	07/13/98	07/07/99	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98
Depth (ft)	0.0-1.0	0.0-0.5	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0
Duplicate ID				LUSD9105					
Northing	199456	199456	198111	198111	197636	197642	197237	197063	196417
Easting	515397	515397	513672	513672	513770	513157	512443	512005	510406
Metals									
Aluminum (mg/kg)	4090		7040	8170	7500	3330	5830	10800	8640
Antimony (mg/kg)	0.3 UN		0.29 UN	0.31 UN	0.29 UN	1.4 UN	1.4 UN	0.43 UN	0.35 UN
Arsenic (mg/kg)	7.7	6.8 J	5.5	6.6	12.1	7.1	6.5	5.8	10.2
Barium (mg/kg)	23.5	17.4	37.8	50.8	55.2	22.2	41.6	67.8	51
Beryllium (mg/kg)	0.28	0.25999 J	0.4	0.46	0.47	0.3 B	0.4 B	0.54	0.52
Cadmium (mg/kg)	0.14 U		0.13 U	0.14 U	0.13 U	0.63 U	0.66 U	0.28 B	0.36
Calcium (mg/kg)	68300		71400	50500	65000	109000	92400	67000	68500
Chromium (mg/kg)	7.1		11.3	12.2	11.8	7	11.5	15.2	13.5
Cobalt (mg/kg)	4.6		6.4	8.1	7.3	5.1 B	6.8	7.2	8
Copper (mg/kg)	9.5		15	15.6	22	12.4	15.6	18.1	22.3
Iron (mg/kg)	12300		15400	14800	18100	11700	14400	16100	18900
Lead (mg/kg)	6.8	6.7	7.2	11.5	9.9	7.5	9.5	11.3	14.3
Magnesium (mg/kg)	9970 *		11500 *	6760 *	9890 *	9260 *	18900 *	18000 *	13500 *
Manganese (mg/kg)	322 *		563 *	279 *	501 *	354	343	336	364
Mercury (mg/kg)	0.02 U		0.02 U	0.03 B	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U
Nickel (mg/kg)	10		16.5	17	19	13.4	18	19.9	23
Phosphorus (mg/kg)	402		362	401	421	367	401	603	669
Potassium (mg/kg)	845 *		1600 *	1660 *	1550 *	609	1160	2300	1750
Selenium (mg/kg)	1 B		0.94 B	1.4	1.2 B	1.6 B	1.4 U	1.4 B	1.1 B
Silver (mg/kg)	0.24 U		0.24 U	0.25 U	0.23 U	1.1 U	1.2 U	0.35 U	0.29 U
Sodium (mg/kg)	111 E		118 E	86.5 E	134 E	32.3 BE	53.3 BE	160 E	144 E
Thallium (mg/kg)	2.1 B		2 B	1.9 B	2.1 B	2.2 U	3.4 B	1.3 B	1 B
Vanadium (mg/kg)	13.4		16.4	20.9	21.5	10.8 B	15.8	22.3	21.2
Zinc (mg/kg)	28.3 N		54.4 N	56.2 N	54 N	34.7	40.5	65	64.3
Indicator Parameters									
Fluoride (mg/kg)		4.09							
Nitrogen, Ammonia (mg/kg)		3.38							
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
1,2-Dichlorobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
1,3-Dichlorobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
1,4-Dichlorobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2,4,5-Trichlorophenol (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
2,4,6-Trichlorophenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U

Station	**BKG-SD0001**	**BKG-SD0001**	**BKG-SD0002**	**BKG-SD0002**	**BKG-SD0003**	**BKG-SD0004**	**BKG-SD0005**	**BKG-SD0006**	**BKG-SD0007**
Sample No	**LUSD0166**	**LUSD0176**	**LUSD0167**	**LUSD0167D**	**LUSD0168**	**LUSD0169**	**LUSD0170**	**LUSD0171**	**LUSD0172**
Collection Date	**07/13/98**	**07/07/99**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID				**LUSD9105**					
Northing	**199456**	**199456**	**198111**	**198111**	**197636**	**197642**	**197237**	**197063**	**196417**
Easting	**515397**	**515397**	**513672**	**513672**	**513770**	**513157**	**512443**	**512005**	**510406**
2,4-Dichlorophenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2,4-Dimethylphenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2,4-Dinitrophenol (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
2,4-Dinitrotoluene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2,6-Dinitrotoluene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2-Chloronaphthalene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2-Chlorophenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2-Methylnaphthalene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2-Nitrophenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
2-methyl-4,6-dinitrophenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
3,3'-Dichlorobenzidine (ug/kg)	4170 U		2010 U	4360 U	2010 U	2030 U	2110 U	7410 U	2520 U
4-Bromophenyl phenyl ether (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
4-Chloroaniline (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
4-Chlorophenylphenylether (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
4-Nitrophenol (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
4-chloro-3-methyl phenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Acenaphthene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Acenaphthylene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Anthracene (ug/kg)	419 J		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Benzo(a)anthracene (ug/kg)	952		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Benzo(a)pyrene (ug/kg)	880		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Benzo(b)fluoranthene (ug/kg)	1570		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Benzo(ghi)perylene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Benzo(k)fluoranthene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Butylbenzylphthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Carbazole (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Chrysene (ug/kg)	1320		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Di-n-butylphthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Di-n-octylphthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Dibenz(a,h)anthracene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Dibenzofuran (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Diethyl phthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Dimethyl phthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Fluoranthene (ug/kg)	2660		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Fluorene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Hexachlorobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U

Station	**BKG-SD0001**	**BKG-SD0001**	**BKG-SD0002**	**BKG-SD0002**	**BKG-SD0003**	**BKG-SD0004**	**BKG-SD0005**	**BKG-SD0006**	**BKG-SD0007**
Sample No	**LUSD0166**	**LUSD0176**	**LUSD0167**	**LUSD0167D**	**LUSD0168**	**LUSD0169**	**LUSD0170**	**LUSD0171**	**LUSD0172**
Collection Date	**07/13/98**	**07/07/99**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID				**LUSD9105**					
Northing	**199456**	**199456**	**198111**	**198111**	**197636**	**197642**	**197237**	**197063**	**196417**
Easting	**515397**	**515397**	**513672**	**513672**	**513770**	**513157**	**512443**	**512005**	**510406**
Hexachlorobutadiene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Hexachlorocyclopentadiene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Hexachloroethane (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	561 J		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Isophorone (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
N-Nitrosodiphenylamine (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
N-Nitrosodipropylamine (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Naphthalene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Nitrobenzene (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Pentachlorophenol (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
Phenanthrene (ug/kg)	1630		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Phenol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Pyrene (ug/kg)	1850		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
bis(2-chloroethoxy)methane (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
bis(2-chloroethyl) ether (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
bis(2-ethylhexyl)phthalate (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
m,p-Cresol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
m-Nitroaniline (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
o-Cresol (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
o-Nitroaniline (ug/kg)	2080 U		1000 U	2180 U	1010 U	1020 U	1050 U	3700 U	1260 U
p-Nitroaniline (ug/kg)	833 U		402 U	871 U	402 U	406 U	422 U	1480 U	505 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,1,2-Trichloroethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,1-Dichloroethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,1-Dichloroethene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,2-Dichloroethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,2-Dichloroethylene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
1,2-Dichloropropane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
2-Butanone (ug/kg)	7.7 J		5 J	15	1.1 J	10.6 U	5.5 J	9 J	19
2-Hexanone (ug/kg)	10.6 U		11.1 U	11 U	9.5 U	10.6 U	10.9 U	23.8 U	15.9 U
4-Methyl-2-pentanone (ug/kg)	10.6 U		11.1 U	11 U	9.5 U	10.6 U	10.9 U	23.8 U	15.9 U
Acetone (ug/kg)	43.3		50.4	60.9	39.4	393	452	28.7	67.1
Benzene (ug/kg)	1.7 J		2.2 J	2.2 J	2.6 J	2.4 J	1.3 J	2.7 J	3.4 J
Bromoform (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U

Station	**BKG-SD0001**	**BKG-SD0001**	**BKG-SD0002**	**BKG-SD0002**	**BKG-SD0003**	**BKG-SD0004**	**BKG-SD0005**	**BKG-SD0006**	**BKG-SD0007**
Sample No	**LUSD0166**	**LUSD0176**	**LUSD0167**	**LUSD0167D**	**LUSD0168**	**LUSD0169**	**LUSD0170**	**LUSD0171**	**LUSD0172**
Collection Date	**07/13/98**	**07/07/99**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID				**LUSD9105**					
Northing	**199456**	**199456**	**198111**	**198111**	**197636**	**197642**	**197237**	**197063**	**196417**
Easting	**515397**	**515397**	**513672**	**513672**	**513770**	**513157**	**512443**	**512005**	**510406**
Carbon disulfide (ug/kg)	10.4		4.9 J	10	4.8 U	5.3 U	8.9	18	11.8
Carbon tetrachloride (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Chlorobenzene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Chlorodibromomethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Chloroethane (ug/kg)	10.6 U		11.1 U	11 U	9.5 U	10.6 U	10.9 U	23.8 U	15.9 U
Chloroform (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Dichlorobromomethane (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Ethylbenzene (ug/kg)	0.55 J		1.2 J	0.88 J	1.6 J	1.2 J	5.4 U	11.9 U	1.3 J
Hexane (ug/kg)									
Methyl Bromide (ug/kg)	10.6 U		11.1 U	11 U	9.5 U	10.6 U	10.9 U	23.8 U	15.9 U
Methyl Chloride (ug/kg)	10.6 U		11.1 U	11 U	9.5 U	10.6 U	10.9 U	23.8 U	15.9 U
Methylene chloride (ug/kg)	0.62 JB		5.5 U	5.5 U	4.8 U	0.59 JB	5.4 U	11.9 U	8 U
Styrene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Tetrachloroethene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Toluene (ug/kg)	3.1		6 B	5.1	7 B	5.2 B	2 JB	37.2	31.6
Trichloroethene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Vinyl chloride (ug/kg)	2.1 U		2.2 U	2.2 U	1.9 U	2.1 U	2.2 U	4.8 U	3.2 U
Xylenes (total) (ug/kg)	1.2 J		3.4 J	2.8 J	5.1	3.9 J	0.77 J	11.9 U	2.9 J
cis-1,3-dichloropropene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
trans-1,3-Dichloropropene (ug/kg)	5.3 U		5.5 U	5.5 U	4.8 U	5.3 U	5.4 U	11.9 U	8 U
Radiological Parameters									
Gross Alpha (pCi/g)		16.5							
Nonvolatile Beta (pCi/g)		18.2							
Weight of Sample, A&B (mg)		40							
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	-0.0149 U	0.0571 U	0.018 U	0.135 U	0.215 J	0.139 U	0.137 U	0.222 J	-0.0065 U
Thorium-228 (pCi/g)	0.484 J	0.08479 U	0.693 J	0.779 J	1.07	0.716 J	1.19	0.766 J	1.02
Thorium-230 (pCi/g)	1.28	0.73299	1.31	0.985 J	1.53	1.81	1.79	1.39	1.75
Thorium-232 (pCi/g)	0.328 J	0.266	0.343 J	0.341 J	0.485 J	0.639 J	0.837 J	0.611 J	0.382 J
Uranium-233/234 (pCi/g)	1.01	0.546	1.17	1	1.11	1.02	0.669 J	0.809 J	1.14
Uranium-235 (pCi/g)	0.0631 U	0.0368 J	0.0587 J	0.0786 J	0.0102 U	0.0418 U	0.0346 U	0 U	0.0098 U
Uranium-238 (pCi/g)	1.03	0.671	1.06	1.05	1	1.1	0.945 J	0.914 J	0.973 J
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)		-0.0496 U							
Actinium-228 (pCi/g)	0.54 J	0.54699 J	0.472 J	0 U	0.589 J	0.518 J	0.59 J	0.61 J	0.681 J
Cesium-137 (pCi/g)	0.0412 J	0.00745 U	0.049 J	0.0898 J	0.0079 U	0.0624 J	0.0712 J	0.0594 J	0.125

Station	**BKG-SD0001**	**BKG-SD0001**	**BKG-SD0002**	**BKG-SD0002**	**BKG-SD0003**	**BKG-SD0004**	**BKG-SD0005**	**BKG-SD0006**	**BKG-SD0007**
Sample No	**LUSD0166**	**LUSD0176**	**LUSD0167**	**LUSD0167D**	**LUSD0168**	**LUSD0169**	**LUSD0170**	**LUSD0171**	**LUSD0172**
Collection Date	**07/13/98**	**07/07/99**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID				**LUSD9105**					
Northing	**199456**	**199456**	**198111**	**198111**	**197636**	**197642**	**197237**	**197063**	**196417**
Easting	**515397**	**515397**	**513672**	**513672**	**513770**	**513157**	**512443**	**512005**	**510406**
Cobalt-60 (pCi/g)	-0.011 U	-0.012 U	-0.0093 U	0.0248 U	0.0072 U	0.0097 U	-0.0093 U	0.0136 U	-0.0013 U
Potassium-40 (pCi/g)	15	13.2	16.6	14.5	16.4	12.2	15.6	13.7	17.2
Protactinium-231 (pCi/g)	-0.0544 U	-0.06639 U	0.024 U	-0.652 U	0.622 U	-0.167 U	0.623 U	0.169 U	-0.599 U
Radium-226 (pCi/g)	1.24	1.07	1.19	1.42	1.61	1.02	1.2	0.974 J	1.19
Radium-228 (pCi/g)	0.54 J	0.54699 J	0.472 J	0 U	0.589 J	0.518 J	0.59 J	0.61 J	0.681 J
Thorium-234 (pCi/g)	1.59 J	0.358 U	1.26 J	0.0945 U	0.867 U	1.57 J	1.56 J	0.884 U	1.34 J
Uranium-235 (pCi/g)	0.0468 U	0.108 U	0.181 U	0.238 U	0.068 U	0.148 U	0.186 U	0.0568 U	0.0807 U
Wet Chemistry									
Total Organic Carbon (mg/kg)		10000							

Station	**BKG-SD0008**	**BKG-SD0009**	**BKG-SWSD0002**	**BKG-SWSD0002**
Sample No	**LUSD0173**	**LUSD0174**	**LUSD0175**	**LUSD9622**
Collection Date	**07/13/98**	**07/13/98**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				
Northing	**196098**	**196024**	**0**	**0**
Easting	**508743**	**513766**	**0**	**0**
Metals				
Aluminum (mg/kg)	5640	12000		
Antimony (mg/kg)	0.34 UN	0.42 BN		
Arsenic (mg/kg)	6.6	5.4	7.5 J	9 J
Barium (mg/kg)	43.4	94.3	22.5	19.5
Beryllium (mg/kg)	0.39	0.69	0.3 J	0.28 J
Cadmium (mg/kg)	0.27 B	0.43		
Calcium (mg/kg)	52300	24000		
Chromium (mg/kg)	9.8	17.6		
Cobalt (mg/kg)	6.6	10		
Copper (mg/kg)	19.2	23		
Iron (mg/kg)	14800	20500		
Lead (mg/kg)	13.6	13.8	8.8	9.2
Magnesium (mg/kg)	9010 *	6970 *		
Manganese (mg/kg)	306	519		
Mercury (mg/kg)	0.02 U			
Nickel (mg/kg)	17.8	25.3		
Phosphorus (mg/kg)	542	680		
Potassium (mg/kg)	919	2010		
Selenium (mg/kg)	0.93 B	1.5		
Silver (mg/kg)	0.28 U	0.3 U		
Sodium (mg/kg)	138 E	109 E		
Thallium (mg/kg)	0.56 U	0.6 U		
Vanadium (mg/kg)	14.5	24.8		
Zinc (mg/kg)	61.8	87.7		
Indicator Parameters				
Fluoride (mg/kg)			5.35	3.77
Nitrogen, Ammonia (mg/kg)			8.1	10.9
Semivolatile Organics				
1,2,4-Trichlorobenzene (ug/kg)	1020 U	521 U		
1,2-Dichlorobenzene (ug/kg)	1020 U	521 U		
1,3-Dichlorobenzene (ug/kg)	1020 U	521 U		
1,4-Dichlorobenzene (ug/kg)	1020 U	521 U		
2,2'-Oxybis (1-chloropropane) (ug/kg)	1020 U	521 U		
2,4,5-Trichlorophenol (ug/kg)	2550 U	1300 U		
2,4,6-Trichlorophenol (ug/kg)	1020 U	521 U		

Station	**BKG-SD0008**	**BKG-SD0009**	**BKG-SWSD0002**	**BKG-SWSD0002**
Sample No	**LUSD0173**	**LUSD0174**	**LUSD0175**	**LUSD9622**
Collection Date	**07/13/98**	**07/13/98**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				
Northing	**196098**	**196024**	**0**	**0**
Easting	**508743**	**513766**	**0**	**0**
2,4-Dichlorophenol (ug/kg)	1020 U	521 U		
2,4-Dimethylphenol (ug/kg)	1020 U	521 U		
2,4-Dinitrophenol (ug/kg)	2550 U	1300 U		
2,4-Dinitrotoluene (ug/kg)	1020 U	521 U		
2,6-Dinitrotoluene (ug/kg)	1020 U	521 U		
2-Chloronaphthalene (ug/kg)	1020 U	521 U		
2-Chlorophenol (ug/kg)	1020 U	521 U		
2-Methylnaphthalene (ug/kg)	1020 U	521 U		
2-Nitrophenol (ug/kg)	1020 U	521 U		
2-methyl-4,6-dinitrophenol (ug/kg)	1020 U	521 U		
3,3'-Dichlorobenzidine (ug/kg)	5090 U	2600 U		
4-Bromophenyl phenyl ether (ug/kg)	1020 U	521 U		
4-Chloroaniline (ug/kg)	1020 U	521 U		
4-Chlorophenylphenylether (ug/kg)	1020 U	521 U		
4-Nitrophenol (ug/kg)	2550 U	1300 U		
4-chloro-3-methyl phenol (ug/kg)	1020 U	521 U		
Acenaphthene (ug/kg)	1020 U	521 U		
Acenaphthylene (ug/kg)	1020 U	521 U		
Anthracene (ug/kg)	1020 U	521 U		
Benzo(a)anthracene (ug/kg)	1020 U	521 U		
Benzo(a)pyrene (ug/kg)	1020 U	521 U		
Benzo(b)fluoranthene (ug/kg)	1020 U	521 U		
Benzo(ghi)perylene (ug/kg)	1020 U	521 U		
Benzo(k)fluoranthene (ug/kg)	1020 U	521 U		
Butylbenzylphthalate (ug/kg)	1020 U	521 U		
Carbazole (ug/kg)	1020 U	521 U		
Chrysene (ug/kg)	1020 U	521 U		
Di-n-butylphthalate (ug/kg)	1020 U	521 U		
Di-n-octylphthalate (ug/kg)	1020 U	521 U		
Dibenz(a,h)anthracene (ug/kg)	1020 U	521 U		
Dibenzofuran (ug/kg)	1020 U	521 U		
Diethyl phthalate (ug/kg)	1020 U	521 U		
Dimethyl phthalate (ug/kg)	1020 U	521 U		
Fluoranthene (ug/kg)	648 J	521 U		
Fluorene (ug/kg)	1020 U	521 U		
Hexachlorobenzene (ug/kg)	1020 U	521 U		

Station	**BKG-SD0008**	**BKG-SD0009**	**BKG-SWSD0002**	**BKG-SWSD0002**
Sample No	**LUSD0173**	**LUSD0174**	**LUSD0175**	**LUSD9622**
Collection Date	**07/13/98**	**07/13/98**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				
Northing	**196098**	**196024**	**0**	**0**
Easting	**508743**	**513766**	**0**	**0**
Hexachlorobutadiene (ug/kg)	1020 U	521 U		
Hexachlorocyclopentadiene (ug/kg)	1020 U	521 U		
Hexachloroethane (ug/kg)	1020 U	521 U		
Indeno(1,2,3-c,d)pyrene (ug/kg)	1020 U	521 U		
Isophorone (ug/kg)	1020 U	521 U		
N-Nitrosodiphenylamine (ug/kg)	1020 U	521 U		
N-Nitrosodipropylamine (ug/kg)	1020 U	521 U		
Naphthalene (ug/kg)	1020 U	521 U		
Nitrobenzene (ug/kg)	1020 U	521 U		
Pentachlorophenol (ug/kg)	2550 U	1300 U		
Phenanthrene (ug/kg)	1020 U	521 U		
Phenol (ug/kg)	1020 U	521 U		
Pyrene (ug/kg)	1020 U	521 U		
bis(2-chloroethoxy)methane (ug/kg)	1020 U	521 U		
bis(2-chloroethyl) ether (ug/kg)	1020 U	521 U		
bis(2-ethylhexyl)phthalate (ug/kg)	1020 U	521 U		
m,p-Cresol (ug/kg)	1020 U	521 U		
m-Nitroaniline (ug/kg)	2550 U	1300 U		
o-Cresol (ug/kg)	1020 U	521 U		
o-Nitroaniline (ug/kg)	2550 U	1300 U		
p-Nitroaniline (ug/kg)	1020 U	521 U		
Volatile Organics				
1,1,1-Trichloroethane (ug/kg)	7.5 U	876 U		
1,1,2,2-Tetrachloroethane (ug/kg)	7.5 U	876 U		
1,1,2-Trichloroethane (ug/kg)	7.5 U	876 U		
1,1-Dichloroethane (ug/kg)	7.5 U	876 U		
1,1-Dichloroethene (ug/kg)	7.5 U	876 U		
1,2-Dichloroethane (ug/kg)	7.5 U	876 U		
1,2-Dichloroethylene (ug/kg)	7.5 U	876 U		
1,2-Dichloropropane (ug/kg)	7.5 U	876 U		
2-Butanone (ug/kg)	19.5	210 J		
2-Hexanone (ug/kg)	14.9 U	1750 U		
4-Methyl-2-pentanone (ug/kg)	14.9 U	1750 U		
Acetone (ug/kg)	60.3	435 J		
Benzene (ug/kg)	2.2 J	876 U		
Bromoform (ug/kg)	7.5 U	876 U		

Station	**BKG-SD0008**	**BKG-SD0009**	**BKG-SWSD0002**	**BKG-SWSD0002**
Sample No	**LUSD0173**	**LUSD0174**	**LUSD0175**	**LUSD9622**
Collection Date	**07/13/98**	**07/13/98**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				
Northing	**196098**	**196024**	**0**	**0**
Easting	**508743**	**513766**	**0**	**0**
Carbon disulfide (ug/kg)	35	876 U		
Carbon tetrachloride (ug/kg)	7.5 U	876 U		
Chlorobenzene (ug/kg)	7.5 U	876 U		
Chlorodibromomethane (ug/kg)	7.5 U	876 U		
Chloroethane (ug/kg)	14.9 U	1750 U		
Chloroform (ug/kg)	7.5 U	876 U		
Dichlorobromomethane (ug/kg)	7.5 U	876 U		
Ethylbenzene (ug/kg)	7.5 U	876 U		
Hexane (ug/kg)	8.6 J			
Methyl Bromide (ug/kg)	14.9 U	1750 U		
Methyl Chloride (ug/kg)	14.9 U	1750 U		
Methylene chloride (ug/kg)	7.5 U	178 JB		
Styrene (ug/kg)	7.5 U	876 U		
Tetrachloroethene (ug/kg)	7.5 U	876 U		
Toluene (ug/kg)	7	610 B		
Trichloroethene (ug/kg)	7.5 U	876 U		
Vinyl chloride (ug/kg)	3 U	350 U		
Xylenes (total) (ug/kg)	1.5 J	876 U		
cis-1,3-dichloropropene (ug/kg)	7.5 U	876 U		
trans-1,3-Dichloropropene (ug/kg)	7.5 U	876 U		
Radiological Parameters				
Gross Alpha (pCi/g)			14.9	14.5
Nonvolatile Beta (pCi/g)			20.8	23.6
Weight of Sample, A&B (mg)			40.9	42.9
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.0039 U	0.108 U	0.12399	0.0115 U
Thorium-228 (pCi/g)	0.74 J	0.867 J	0.609	0.45399
Thorium-230 (pCi/g)	1.36	1.59	1.05	1.13
Thorium-232 (pCi/g)	0.678 J	0.511 J	0.38499	0.35199
Uranium-233/234 (pCi/g)	1.23	0.857 J	0.97	0.745
Uranium-235 (pCi/g)	0.0167 U	0.027 U	0.0493 J	0.02559 U
Uranium-238 (pCi/g)	1.3	0.898 J	0.915	0.805
Radiological Parameters (GammaSpec)				
Actinium-227 (pCi/g)			0.06469 U	-0.118 U
Actinium-228 (pCi/g)	0.557 J	0.763 J	0.393 J	0.56999 J
Cesium-137 (pCi/g)	0.0599 J	0.157	0.0271 U	0.0104 U

Station	**BKG-SD0008**	**BKG-SD0009**	**BKG-SWSD0002**	**BKG-SWSD0002**
Sample No	**LUSD0173**	**LUSD0174**	**LUSD0175**	**LUSD9622**
Collection Date	**07/13/98**	**07/13/98**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				
Northing	**196098**	**196024**	**0**	**0**
Easting	**508743**	**513766**	**0**	**0**
Cobalt-60 (pCi/g)	0.0076 U	0.0096 U	-0.00775 U	0.0329 U
Potassium-40 (pCi/g)	17.2	18.1	13.8	13.6
Protactinium-231 (pCi/g)	0.0545 U	-0.224 U	-0.13199 U	0.45899 U
Radium-226 (pCi/g)	1.12	1.33	1.24	1.16
Radium-228 (pCi/g)	0.557 J	0.763 J	0.393 J	0.56999 J
Thorium-234 (pCi/g)	1.11 U	1.05 U	2.27 J	0.944 U
Uranium-235 (pCi/g)	0.0966 U	0.189 U	0.0898 U	0.11599 U
Wet Chemistry				
Total Organic Carbon (mg/kg)			16500	17600

Background Surface Water Sample Results

Phase II Background Surface Water

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (ug/l)	733	731
Antimony (ug/l)	2 U	2 U
Arsenic (ug/l)	2.5 U	2.5 U
Barium (ug/l)	38.8	31.5
Beryllium (ug/l)	0.5 U	0.5 U
Boron (ug/l)	20 U	20 U
Cadmium (ug/l)	0.5 U	0.5 U
Calcium (ug/l)	89400	73400
Chromium (ug/l)	1	1.2
Cobalt (ug/l)	1 U	1 U
Copper (ug/l)	4.6	1 U
Iron (ug/l)	810	871
Lead (ug/l)	1.2	1.5 U
Magnesium (ug/l)	27000	20800
Manganese (ug/l)	19.7	14.8
Mercury (ug/l)	0 R	0 R
Molybdenum (ug/l)	5.7	11.1
Nickel (ug/l)	0.5 U	0.5 U
Potassium (ug/l)	1530	1570
Selenium (ug/l)	2.5 U	2.5 U
Silicon (ug/l)	3620	2020
Silver (ug/l)	1 U	1 U
Sodium (ug/l)	10500	18500
Strontium (ug/l)	1130	1450
Thallium (ug/l)	2.5 U	2.5 U
Tin (ug/l)	10 U	10 U
Vanadium (ug/l)	2.2	1.9
Zinc (ug/l)	2 U	2 U
Indicator Parameters		
Alkalinity (mg/l)	207	146
Chloride (mg/l)	36.3 R	44.5 R
Fluoride (mg/l)	0.16	0.08
Nitrate, as N (mg/l)	10.3 R	7.2 R
Phosphorus (mg/l)	0 R	0 R
Sulfate (mg/l)	60 R	67.8 R
Total dissolved solids (mg/l)	434	398

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Total suspended solids (mg/l)	16	20
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/l)	0.63 U	0.63 U
1,2-Dichlorobenzene (ug/l)	1.18 U	1.18 U
1,3-Dichlorobenzene (ug/l)	1.2 U	1.2 U
1,4-Dichlorobenzene (ug/l)	1.32 U	1.32 U
2,2'-oxybis (1-chloropropane) (ug/l)	1.73 U	1.73 U
2,4,5-Trichlorophenol (ug/l)	1.17 U	1.17 U
2,4,6-Trichlorophenol (ug/l)	0.54 U	0.54 U
2,4-Dichlorophenol (ug/l)	0.87 U	0.87 U
2,4-Dimethylphenol (ug/l)	1.1 U	1.1 U
2,4-Dinitrophenol (ug/l)	3.27 U	3.27 U
2,4-Dinitrotoluene (ug/l)	2.27 U	2.27 U
2,6-Dinitrotoluene (ug/l)	1.88 U	1.88 U
2-Chloronaphthalene (ug/l)	0.65 U	0.65 U
2-Chlorophenol (ug/l)	1.46 U	1.46 U
2-Methylnaphthalene (ug/l)	0.85 U	0.85 U
2-Methylphenol (ug/l)	1.92 U	1.92 U
2-Nitroaniline (ug/l)	1.85 U	1.85 U
2-Nitrophenol (ug/l)	1.15 U	1.15 U
3,3'-Dichlorobenzidine (ug/l)	1.42 U	1.42 U
3-Nitroaniline (ug/l)	1.79 U	1.79 U
4,6-Dinitro-2-methylphenol (ug/l)	2.84 U	2.84 U
4-Chloroaniline (ug/l)	1.25 U	1.25 U
4-Methylphenol (ug/l)	2.78 U	2.78 U
4-Nitroaniline (ug/l)	2.44 U	2.44 U
4-Nitrophenol (ug/l)	3.55 U	3.55 U
4-bromophenyl phenyl ether (ug/l)	1.13 U	1.13 U
4-chloro-3-methyl phenol (ug/l)	1.64 U	1.64 U
4-chlorophenylphenylether (ug/l)	0.9 U	0.9 U
Acenaphthene (ug/l)	0.7 U	0.7 U
Acenaphthylene (ug/l)	0.55 U	0.55 U
Anthracene (ug/l)	1.2 U	1.2 U
Benzo(a)anthracene (ug/l)	0.8 U	0.8 U
Benzo(a)pyrene (ug/l)	0.6 U	0.6 U
Benzo(b)fluoranthene (ug/l)	1.35 U	1.35 U
Benzo(ghi)perylene (ug/l)	1.35 U	1.35 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzo(k)fluoranthene (ug/l)	1.65 U	1.65 U
Butylbenzylphthalate (ug/l)	0.55 U	0.55 U
Carbazole (ug/l)	0.9 U	0.9 U
Chrysene (ug/l)	1 U	1 U
Di-n-butylphthalate (ug/l)	1 U	1 U
Di-n-octylphthalate (ug/l)	1 U	1 U
Dibenz(a,h)anthracene (ug/l)	1.2 U	1.2 U
Dibenzofuran (ug/l)	0.76 U	0.76 U
Diethyl phthalate (ug/l)	0.18 U	0.18 U
Dimethyl phthalate (ug/l)	0.4 U	0.4 U
Fluoranthene (ug/l)	1.35 U	1.35 U
Fluorene (ug/l)	0.95 U	0.95 U
Hexachlorobenzene (ug/l)	1.29 U	1.29 U
Hexachlorobutadiene (ug/l)	0.68 U	0.68 U
Hexachlorocyclopentadiene (ug/l)	0 U	0 U
Hexachloroethane (ug/l)	1.22 U	1.22 U
Indeno(1,2,3-c,d)pyrene (ug/l)	1.05 U	1.05 U
Isophorone (ug/l)	1.41 U	1.41 U
N-nitroso-di-n-propylamine (ug/l)	3.08 U	3.08 U
N-nitrosodiphenylamine (ug/l)	0.82 U	0.82 U
Naphthalene (ug/l)	0.8 U	0.8 U
Nitrobenzene (ug/l)	0.59 U	0.59 U
Pentachlorophenol (ug/l)	2.41 U	2.41 U
Phenanthrene (ug/l)	0.9 U	0.9 U
Phenol (ug/l)	1.88 U	1.88 U
Pyrene (ug/l)	1.6 U	1.6 U
bis(2-chloroethoxy)methane (ug/l)	0.9 U	0.9 U
bis(2-chloroethyl) ether (ug/l)	1.63 U	1.63 U
bis(2-ethylhexyl)phthalate (ug/l)	3.04 U	3.04 U
Volatile Organics		
1,1,1-Trichloroethane (ug/l)	0.31 U	0.31 U
1,1,2,2-Tetrachloroethane (ug/l)	0 U	0 U
1,1,2-Trichloroethane (ug/l)	0.4 U	0.4 U
1,1-Dichloroethane (ug/l)	0 U	0 U
1,1-Dichloroethene (ug/l)	0 U	0 U
1,2-Dichloroethane (ug/l)	0 U	0 U
1,2-Dichloropropane (ug/l)	0 U	0 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,2-dichloroethylene(total) (ug/l)	0 U	0 U
2-Butanone (ug/l)	0 UJ	0 UJ
2-Hexanone (ug/l)	0 UJ	0 UJ
4-Methyl-2-pentanone (ug/l)	0 UJ	0 UJ
Acetone (ug/l)	0 R	0 R
Benzene (ug/l)	0 U	0 U
Bromodichloromethane (ug/l)	0 U	0 U
Bromomethane (ug/l)	0 U	0 U
Carbon disulfide (ug/l)	0 U	0 U
Carbon tetrachloride (ug/l)	0 U	0 U
Chlorobenzene (ug/l)	0 U	0 U
Chloroethane (ug/l)	0 U	0 U
Chloroform (ug/l)	0 U	2 J
Chloromethane (ug/l)	0 U	0 U
Dibromochloromethane (ug/l)	0 U	0 U
Ethylbenzene (ug/l)	0 U	0 U
Methylene chloride (ug/l)	0 U	0 U
Styrene (ug/l)	0 U	0 U
Tetrachloroethene (ug/l)	0 U	0 U
Toluene (ug/l)	0 U	0 U
Tribromomethane (ug/l)	0 U	0 U
Trichloroethene (ug/l)	0 U	0 U
Vinyl chloride (ug/l)	0 U	0 U
Xylenes (total) (ug/l)	0.1 U	0.1 U
cis-1,3-dichloropropene (ug/l)	0 U	0 U
trans-1,3-dichloropropene (ug/l)	0 U	0 U
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/l)	0.36	0.5 UJ
Radium-226 (pCi/l)	0.24	0.5 UJ
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.36	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.41	0.57
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.51	0.78
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/l)	0.62	1.02

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Radiological Parameters (GammaSpec)		
Actinium-227 (pCi/l)	0 UJ	0 UJ
Americium-241 (pCi/l)	0 UJ	0 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ
Potassium-40 (pCi/l)	0 UJ	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ
Radium-226 (pCi/l)	0 UJ	0 UJ
Radium-228 (pCi/l)	0 UJ	0 UJ
Thorium-228 (pCi/l)	0 UJ	0 UJ
Thorium-230 (pCi/l)	0 UJ	0 UJ
Thorium-232 (pCi/l)	0 UJ	0 UJ
Uranium-235 (pCi/l)	0 UJ	0 UJ
Uranium-238 (pCi/l)	0 UJ	0 UJ

Background Groundwater Sample Results

Phase IV Background Ground Water

Station	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-10(S)	IA09-BMW-10(S)
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	24.7 U	12.4 U	7.4 U	191 J		24.7 U	12.4 U
Aluminum (ug/l)	24.7 U	205	20.6 B	12.4 U		24.7 U	29.4 B
Antimony (Filtered) (ug/l)	6.2 U	4 B	1.9 U	3.2 U		10.3 U	2.7 B
Antimony (ug/l)	4.9 U	2.9 B	1.9 U	2.5 U		7.8 U	2.5 U
Arsenic (Filtered) (ug/l)	8 U	3 U	3.5 J	3 U		8 U	3 U
Arsenic (ug/l)	8 U	3 U	2.7 U	3 U		8 U	3.6 B
Barium (Filtered) (ug/l)	34.1	43	19.8	50.4		34.8	27
Barium (ug/l)	33.7	51.3	22.5	44.2		35.7	27.5
Beryllium (Filtered) (ug/l)	0.27 U	0.13 U	0.14 U	0.13 U		0.27 U	0.13 U
Beryllium (ug/l)	0.27 U	0.17 B	0.15 B	0.13 U		0.27 U	0.13 U
Cadmium (Filtered) (ug/l)	2.3 U	1.1 U	0.36 B	1.1 U		2.3 U	1.1 U
Cadmium (ug/l)	2.3 U	1.1 U	0.99 B	1.1 U		2.3 U	1.1 U
Calcium (Filtered) (ug/l)	103000	97200	86700	97000		112000	104000
Calcium (ug/l)	101000	102000	85100	99700		110000	105000
Chromium (Filtered) (ug/l)	1.4 U	0.7 U	0.42 U	0.83 U		1.4 U	0.7 U
Chromium (ug/l)	1.4 U	1.8 B	1 B	0.7 U		1.4 U	0.7 U
Cobalt (Filtered) (ug/l)	1.6 U	0.82 U	0.44 U	0.82 U		1.6 U	0.82 U
Cobalt (ug/l)	1.6 U	0.82 U	0.44 U	0.82 U		1.6 U	0.82 U
Copper (Filtered) (ug/l)	1.6 B	40.8	0.98 B	2 B		1.5 B	22.2
Copper (ug/l)	1.5 U	2.3 B	2.7 B	1 B		3 B	1.7 B
Iron (Filtered) (ug/l)	611	276	383	390		1060	937
Iron (ug/l)	564	422	514	318		846	973
Lead (Filtered) (ug/l)	3 U	1.5 U	1.3 U	3.2 B		3 U	1.5 U
Lead (ug/l)	3 U	2 B	7.2	1.5 U		3 U	1.5 U
Magnesium (Filtered) (ug/l)	51200	48000	44900	48100 J		55300	49700
Magnesium (ug/l)	49400	50900	43400	49200 J		54400	49800
Manganese (Filtered) (ug/l)	54.2	41.1	15.5	46.3		91.6	30.2
Manganese (ug/l)	64.8	47.5	18.9	40.7		144	31.8
Mercury (Filtered) (ug/l)	0.1 U	0.1 U	0.12 U	0.1 U		0.1 U	0.1 U
Mercury (ug/l)	0.1 B	0.1 U	0.12 U	0.21 J		0.1 U	0.1 U
Nickel (Filtered) (ug/l)	2.2 U	6.4 B	1 U	1.1 U		2.2 U	3.9 B
Nickel (ug/l)	2.2 U	2.1 B	2 B	1.1 U		2.2 U	1.1 U
Phosphorus (Filtered) (ug/l)	218	15 U	39.7 BE	15 U		14.2	15 U
Phosphorus (ug/l)	150	15 U	26.3 BE	28.3 U		177	15 U

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (Filtered) (ug/l)	2600	2410	16100	2620		2900	2400
Potassium (ug/l)	2580	2660	16200	2540		2890	2480
Selenium (Filtered) (ug/l)	5 U	2.4 U	6.5	2.4 B		5 U	2.4 U
Selenium (ug/l)	5 U	2.4 U	1.9 U	2.4 U		5 U	2.4 U
Silver (Filtered) (ug/l)	1.7 U	2 U	0.89 U	2 U		1.7 U	2 U
Silver (ug/l)	1.7 U	2 U	0.89 U	2 U		1.7 U	2 U
Sodium (Filtered) (ug/l)	22100	19500	27400	21300		17900	16900
Sodium (ug/l)	24600	21300	28100	20600		18600	17300
Thallium (Filtered) (ug/l)	7.9 U	5 B	5.6 U	4 U		7.9 U	4 U
Thallium (ug/l)	7.9 U	5 B	5.6 U	4 U		7.9 U	4.9 B
Vanadium (Filtered) (ug/l)	1.4 B	0.67 U	0.47 U	0.74 B		1.3 U	0.67 U
Vanadium (ug/l)	1.3 U	0.67 U	0.47 U	0.67 U		1.3 U	0.67 U
Zinc (Filtered) (ug/l)	5.2 U	13.4	0.46 U	6.7 U		5.2 U	9
Zinc (ug/l)	5.2 U	22	10.5	2.6 U		38.1	2.6 U
Indicator Parameters							
Alkalinity (mg/l)			200				
Chloride (mg/l)			13.7				
Fluoride (mg/l)	0.959		0.82			0.937	
Nitrate/Nitrite (mg/l)			0.04 J				
Nitrogen, Ammonia (mg/l)	0.21		0.21			0.17	
Sulfate (mg/l)			250				
Total Dissolved Solids (mg/l)			616				
Total Suspended Solids (mg/l)			2 J				
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)			11.1 U				
1,2-Dichlorobenzene (ug/l)			11.1 U				
1,3-Dichlorobenzene (ug/l)			11.1 U				
1,4-Dichlorobenzene (ug/l)			11.1 U				
2,2'-Oxybis (1-cloropropane) (ug/l)			11.1 U				
2,4,5-Trichlorophenol (ug/l)			11.1 U				
2,4,6-Trichlorophenol (ug/l)			11.1 U				
2,4-Dichlorophenol (ug/l)			11.1 U				
2,4-Dimethylphenol (ug/l)			11.1 U				
2,4-Dinitrophenol (ug/l)			27.8 U				
2,4-Dinitrotoluene (ug/l)			11.1 U				

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,6-Dinitrotoluene (ug/l)			11.1 U				
2-Chloronaphthalene (ug/l)			11.1 U				
2-Chlorophenol (ug/l)			11.1 U				
2-Methylnaphthalene (ug/l)			11.1 U				
2-Nitrophenol (ug/l)			11.1 U				
2-methyl-4,6-dinitrophenol (ug/l)			11.1 U				
3,3'-Dichlorobenzidine (ug/l)			55.6 U				
4-Bromophenyl phenyl ether (ug/l)			11.1 U				
4-Chloroaniline (ug/l)			22.2 U				
4-Chlorophenylphenylether (ug/l)			11.1 U				
4-Nitrophenol (ug/l)			27.8 U				
4-chloro-3-methyl phenol (ug/l)			11.1 U				
Acenaphthene (ug/l)			11.1 U				
Acenaphthylene (ug/l)			11.1 U				
Anthracene (ug/l)			11.1 U				
Benzo(a)anthracene (ug/l)			11.1 U				
Benzo(a)pyrene (ug/l)			11.1 U				
Benzo(b)fluoranthene (ug/l)			11.1 U				
Benzo(ghi)perylene (ug/l)			11.1 U				
Benzo(k)fluoranthene (ug/l)			11.1 U				
Butylbenzylphthalate (ug/l)			11.1 U				
Carbazole (ug/l)			11.1 U				
Chrysene (ug/l)			11.1 U				
Di-n-butylphthalate (ug/l)			11.1 U				
Di-n-octylphthalate (ug/l)			11.1 U				
Dibenz(a,h)anthracene (ug/l)			11.1 U				
Dibenzofuran (ug/l)			11.1 U				
Diesel Range Organics (mg/l)			0.01 U				
Diethyl phthalate (ug/l)			11.1 U				
Dimethyl phthalate (ug/l)			11.1 U				
Diphenylamine (ug/l)			11.1 U				
Fluoranthene (ug/l)			11.1 U				
Fluorene (ug/l)			11.1 U				
Hexachlorobenzene (ug/l)			11.1 U				
Hexachlorobutadiene (ug/l)			11.1 U				

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Hexachlorocyclopentadiene (ug/l)			11.1 U				
Hexachloroethane (ug/l)			11.1 U				
Indeno(1,2,3-c,d)pyrene (ug/l)			11.1 U				
Isophorone (ug/l)			11.1 U				
N-Nitrosodipropylamine (ug/l)			11.1 U				
Naphthalene (ug/l)			11.1 U				
Nitrobenzene (ug/l)			11.1 U				
Pentachlorophenol (ug/l)			27.8 U				
Phenanthrene (ug/l)			11.1 U				
Phenol (ug/l)			11.1 U				
Pyrene (ug/l)			11.1 U				
bis(2-chloroethoxy)methane (ug/l)			11.1 U				
bis(2-chloroethyl) ether (ug/l)			11.1 U				
bis(2-ethylhexyl)phthalate (ug/l)			11.1 U				
m,p-Cresol (ug/l)			11.1 U				
m-Nitroaniline (ug/l)			27.8 U				
o-Cresol (ug/l)			11.1 U				
o-Nitroaniline (ug/l)			11.1 U				
p-Nitroaniline (ug/l)			11.1 U				
Volatile Organics							
1,1,1-Trichloroethane (ug/l)			5 U				
1,1,2,2-Tetrachloroethane (ug/l)			5 U				
1,1,2-Trichloroethane (ug/l)			5 U				
1,1-Dichloroethane (ug/l)			5 U				
1,1-Dichloroethene (ug/l)			5 U				
1,2-Dichloroethane (ug/l)			5 U				
1,2-Dichloroethylene (ug/l)			5 U				
1,2-Dichloropropane (ug/l)			5 U				
2-Butanone (ug/l)			10 U				
2-Hexanone (ug/l)			10 U				
4-Methyl-2-pentanone (ug/l)			10 U				
Acetone (ug/l)			4.1 U				
Benzene (ug/l)			5 U				
Bromoform (ug/l)			5 U				
Carbon disulfide (ug/l)			1.9 J				

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Carbon tetrachloride (ug/l)			5 U				
Chlorobenzene (ug/l)			5 U				
Chlorodibromomethane (ug/l)			5 U				
Chloroethane (ug/l)			10 U				
Chloroform (ug/l)			5 U				
Dichlorobromomethane (ug/l)			5 U				
Ethylbenzene (ug/l)			5 U				
Gasoline Range Organics (ug/l)			50 U				
Methyl Bromide (ug/l)			10 U				
Methyl Chloride (ug/l)			10 U				
Methylene chloride (ug/l)			5 U				
Styrene (ug/l)			5 U				
Tetrachloroethene (ug/l)			5 U				
Toluene (ug/l)			2 U				
Trichloroethene (ug/l)			5 U				
Vinyl chloride (ug/l)			2 U				
Xylenes (total) (ug/l)			5 U				
cis-1,3-dichloropropene (ug/l)			5 U				
trans-1,3-Dichloropropene (ug/l)			5 U				
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	5.48	2.92 J		4.25 J		1.46 U	1.61 J
Gross Alpha (pCi/l)	6.03	2.33 U	4 J	4 J	6.4 U	2.38 J	2.15 J
Gross Beta (pCi/l)					6.4		
Nonvolatile Beta (Filtered) (pCi/l)	3.81 J	2.95 J		3.1 J		3 J	3.25 J
Nonvolatile Beta (pCi/l)	3.72 J	3.55 J	14.6 J	3.14 J		1.8 U	2.93 J
Radium-226 (Filtered) (pCi/l)	1.66	1.64		1.42		0.848 J	1.24
Radium-226 (pCi/l)	1.39	1.55	1.18	1.8	1 U	0.833 J	1.36
Radium-228 (Filtered) (pCi/l)	1.02	0.578 U		0.216 U		0.624 U	0.559 U
Radium-228 (pCi/l)	-0.328 U	0.392 U	0.71 U	0.676 U	1.7 U	0.535 U	0.176 U
Weight of Sample, A&B (Filtered) (mg)	99.1	99.2		99.4		95.8	98.9
Weight of Sample, A&B (mg)	97.8	97.9	52.9 J	98.1		97.4	95.9
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.0225 U	0.185 U		0.0911 U		-0.0181 U	0 U
Actinium-227 (pCi/l)	0.0127 U	-0.0475 U	-0.05 U	0.309 U	0.29	-0.0003 U	0.0961 U
Thorium-228 (Filtered) (pCi/l)	0.03 U	-0.0621 U		-0.0626 U		0.0275 U	0.205 U

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0084**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**
Collection Date	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9188**			
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-228 (pCi/l)	0.188 U	-0.0169 U	0.52 U	0.31 U	1.2 U	0.148 U	0.191 U
Thorium-230 (Filtered) (pCi/l)	0.0255 U	0.35 J		0.328 J		0.0327 U	-0.0708 U
Thorium-230 (pCi/l)	0.0435 U	0.111 U	0.2 J	0.103 U	0.07	0.0353 U	0.0842 U
Thorium-232 (Filtered) (pCi/l)	-0.0027 U	0 U		0.0393 U		-0.0062 U	-0.0283 U
Thorium-232 (pCi/l)	-0.0001 U	0 U	0.02 U	-0.0151 U	0.03 U	0.0142 U	0.0281 U
Uranium-233/234 (Filtered) (pCi/l)	0.59 J	0.788 J		0.577 J		0.287 U	0.72 J
Uranium-233/234 (pCi/l)	0.819 J	0.581 J	0.47 J	0.659 J	0.66	0.359 J	0.738 J
Uranium-235 (Filtered) (pCi/l)	-0.0123 U	0.018 U		0.105 U		-0.0166 U	0.105 U
Uranium-235 (pCi/l)	-0.0137 U	0.0253 U	0.02 U	0.0801 U		0.03 U	-0.0189 U
Uranium-235/236 (pCi/l)					0.04 U		
Uranium-238 (Filtered) (pCi/l)	0.5 J	0.338 J		0.446 J		0.312 U	0.142 U
Uranium-238 (pCi/l)	0.357 J	0.183 U	0.14 U	0.659 J	0.3	0.269 J	0.0991 U
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	6.11 U	0 U		11.5 U		7.54 U	0 U
Actinium-228 (pCi/l)	0 U	18.9 U	0.79 U	15.9 U		3.3 U	7.11 U
Cesium-137 (Filtered) (pCi/l)	1.51 U	1.79 U		-1.54 U		1.54 U	-0.514 U
Cesium-137 (pCi/l)	-0.643 U	1.56 U	-0.71 U	1.22 U		-0.198 U	1.77 U
Cobalt-60 (Filtered) (pCi/l)	1.26 U	-0.982 U		-2.59 U		0.211 U	0.0479 U
Cobalt-60 (pCi/l)	-0.787 U	-2.36 U	0.43 U	0.205 U		0.793 U	-1.75 U
Potassium-40 (Filtered) (pCi/l)	18 U	67 U		52 U		18.6 U	41.1 U
Potassium-40 (pCi/l)	39 J	35.8 U	26.4 U	24.6 U		25.2 U	37 U
Protactinium-231 (Filtered) (pCi/l)	-51.2 U	36.1 U		28.6 U		-22.1 U	69 U
Protactinium-231 (pCi/l)	60.3 U	79.5 U	-89.1 U	-69.4 U		2.71 U	3.41 U
Thorium-234 (Filtered) (pCi/l)	0 U	137 U		154 U		66.8 U	98.7 U
Thorium-234 (pCi/l)	26.5 U	31.5 U	21.3 U	61.7 U		72.3 U	28.6 U
Uranium-235 (Filtered) (pCi/l)	-6.36 U	19.7 U		21.5 U		4.26 U	16.3 U
Uranium-235 (pCi/l)	27 R	2.83 U	4.42 U	2.7 U		1.07 U	2.73 U

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	7.4 U	12.4 U	12.4 U	7.4 U	18.4 B	7.4 U	32.4 B
Aluminum (ug/l)	22.9 B	70.4	178	249	2420	1150	2960
Antimony (Filtered) (ug/l)	1.9 U	2.5 U	2.5 U	1.9 U	2.5 U	1.9 U	9.1 U
Antimony (ug/l)	1.9 U	5.6 U	2.5 U	1.9 B	2.5 U	1.9 U	4.9 U
Arsenic (Filtered) (ug/l)	5.4 J	4 U	3 U	5 J	3 U	5 J	8 U
Arsenic (ug/l)	2.8 B	4 U	3 U	2.7 U	4.7 B	2.7 U	8 U
Barium (Filtered) (ug/l)	25.5	13.5	14.4	8	27.4	10.3	93.1
Barium (ug/l)	28.1	14.3	15	10.1	43.1	18.4	105
Beryllium (Filtered) (ug/l)	0.14 U	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.27 U
Beryllium (ug/l)	0.14 U	0.13 U	0.13 U	0.79 B	0.2 B	0.14 U	0.27 U
Cadmium (Filtered) (ug/l)	0.34 U	1.1 U	1.1 U	0.34 U	1.1 U	0.34 U	2.3 U
Cadmium (ug/l)	0.79 B	1.1 U	1.1 U	1	1.1 U	0.34 U	2.3 U
Calcium (Filtered) (ug/l)	101000	66200	64000	61500	72400	66100	49700
Calcium (ug/l)	101000	67200	65400	62200	119000	76800	55900
Chromium (Filtered) (ug/l)	0.42 U	0.7 U	0.7 U	0.42 U	0.7 U	0.42 U	1.4 U
Chromium (ug/l)	0.8 B	0.7 U	0.7 U	1.2 B	5.7	2.9 B	1.5 B
Cobalt (Filtered) (ug/l)	0.44 U	0.82 U	0.82 U	0.44 U	0.82 U	0.44 U	1.6 U
Cobalt (ug/l)	0.44 U	0.82 U	0.82 U	0.86 B	1.2 B	0.89 B	1.6 U
Copper (Filtered) (ug/l)	1.2 B	1.3 B	19.9	0.94 B	3 B	1.9 B	2.8 B
Copper (ug/l)	3.5 B	1.6 B	5.5	2 B	5.6	3.4 B	1.5 B
Iron (Filtered) (ug/l)	817		2.5 U	8.4 U	2.5 U	8.4 U	309
Iron (ug/l)	934		135	290	4330	2170	910
Lead (Filtered) (ug/l)	1.3 U	1.5 U	1.8 B	1.3 U	1.5 U	1.3 U	3 U
Lead (ug/l)	6.7	1.7 B	2.5 B	3.3	5.1	4.4	4.3 B
Magnesium (Filtered) (ug/l)	51000	29600	27900	28300	41900	30200	37800
Magnesium (ug/l)	49800	30200	28500	28300	72700	37300	43200
Manganese (Filtered) (ug/l)	36	1.1 B	9.5	0.44 U	11.9	0.44 U	20.8
Manganese (ug/l)	44.3	1.8 B	10.1	4 B	81.3	47.8	41.1
Mercury (Filtered) (ug/l)	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U	0.12 U	0.1 U
Mercury (ug/l)	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U	0.12 U	0.1 U
Nickel (Filtered) (ug/l)	1 U	1.2 B	3.8 B	1 U	1.1 U	1 U	2.2 U
Nickel (ug/l)	1.1 B	1.6 B	1.9 B	2.3 B	5.5 B	4.4 B	2.2 U
Phosphorus (Filtered) (ug/l)	33.2 BE	39.4 B	15 U	43.7 BE	15 U	63.2 E	194
Phosphorus (ug/l)	3.5 BE	3 U	15 U	12.7 BE	15 U	33.1 BE	146

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (Filtered) (ug/l)	2660	705	719	503	2210	806	1690
Potassium (ug/l)	2510	747	783	606	3010	1010	1780
Selenium (Filtered) (ug/l)	5.5	2.5 U	2.4 U	7.5	2.4 U	5.7	5 U
Selenium (ug/l)	1.9 U	2.5 U	2.4 U	1.9 U	2.4 U	1.9 U	5 U
Silver (Filtered) (ug/l)	0.89 U	0.86 U	2 U	0.89 U	2 U	0.89 U	1.7 U
Silver (ug/l)	0.89 U	1.1 B	2 U	0.89 U	2.2 B	0.89 U	1.7 U
Sodium (Filtered) (ug/l)	16900	11500	6200	1440	9380	3840	14100
Sodium (ug/l)	17200	13100	5850	1150	10800	2640	14300
Thallium (Filtered) (ug/l)	5.6 U	4 U	4 U	5.6 U	4 U	5.6 U	7.9 U
Thallium (ug/l)	5.6 U	6.7 B	4 U	5.6 U	5.2 B	5.6 U	7.9 U
Vanadium (Filtered) (ug/l)	0.47 U	0.67 U	0.67 U	0.47 U	0.67 U	0.47 U	1.3 U
Vanadium (ug/l)	0.47 U	0.84 B	0.67 U	1.3 B	6.3 B	3.1 B	1.3 U
Zinc (Filtered) (ug/l)	0.46 U	3.9 B	10.2	8.3	3.9 B	7	5.2 U
Zinc (ug/l)	10.7	6.5	10.2	19.2	88.8	63.8	5.2 U
Indicator Parameters							
Alkalinity (mg/l)	218			214		242	
Chloride (mg/l)	14.9			3.66		4.22	
Fluoride (mg/l)	0.74	0.189		0.14		0.17	1.21
Nitrate/Nitrite (mg/l)	0.04 J			5.45		4.6	
Nitrogen, Ammonia (mg/l)	0.16	0 U		0 U		0 U	0.14
Sulfate (mg/l)	260			24.5		27.6	
Total Dissolved Solids (mg/l)	634			276		297	
Total Suspended Solids (mg/l)	3.2 J			5.8		154	
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	11 U			10.6 U		11.9 U	
1,2-Dichlorobenzene (ug/l)	11 U			10.6 U		11.9 U	
1,3-Dichlorobenzene (ug/l)	11 U			10.6 U		11.9 U	
1,4-Dichlorobenzene (ug/l)	11 U			10.6 U		11.9 U	
2,2'-Oxybis (1-cloropropane) (ug/l)	11 U			10.6 U		11.9 U	
2,4,5-Trichlorophenol (ug/l)	11 U			10.6 U		11.9 UJ	
2,4,6-Trichlorophenol (ug/l)	11 U			10.6 U		11.9 UJ	
2,4-Dichlorophenol (ug/l)	11 U			10.6 U		11.9 U	
2,4-Dimethylphenol (ug/l)	11 U			10.6 U		11.9 U	
2,4-Dinitrophenol (ug/l)	27.5 U			26.6 U		29.8 UJ	
2,4-Dinitrotoluene (ug/l)	11 U			10.6 U		11.9 U	

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,6-Dinitrotoluene (ug/l)	11 U			10.6 U		11.9 U	
2-Chloronaphthalene (ug/l)	11 U			10.6 U		11.9 U	
2-Chlorophenol (ug/l)	11 U			10.6 U		11.9 UJ	
2-Methylnaphthalene (ug/l)	11 U			10.6 U		11.9 U	
2-Nitrophenol (ug/l)	11 U			10.6 U		11.9 UJ	
2-methyl-4,6-dinitrophenol (ug/l)	11 U			10.6 U		11.9 UJ	
3,3'-Dichlorobenzidine (ug/l)	54.9 U			53.2 U		59.5 U	
4-Bromophenyl phenyl ether (ug/l)	11 U			10.6 U		11.9 U	
4-Chloroaniline (ug/l)	22 U			21.3 U		23.8 U	
4-Chlorophenylphenylether (ug/l)	11 U			10.6 U		11.9 U	
4-Nitrophenol (ug/l)	27.5 U			26.6 U		29.8 UJ	
4-chloro-3-methyl phenol (ug/l)	11 U			10.6 U		11.9 UJ	
Acenaphthene (ug/l)	11 U			10.6 U		11.9 U	
Acenaphthylene (ug/l)	11 U			10.6 U		11.9 U	
Anthracene (ug/l)	11 U			10.6 U		11.9 U	
Benzo(a)anthracene (ug/l)	11 U			10.6 U		11.9 U	
Benzo(a)pyrene (ug/l)	11 U			10.6 U		11.9 U	
Benzo(b)fluoranthene (ug/l)	11 U			10.6 U		11.9 U	
Benzo(ghi)perylene (ug/l)	11 U			10.6 U		11.9 U	
Benzo(k)fluoranthene (ug/l)	11 U			10.6 U		11.9 U	
Butylbenzylphthalate (ug/l)	11 U			10.6 U		11.9 U	
Carbazole (ug/l)	11 U			10.6 U		11.9 U	
Chrysene (ug/l)	11 U			10.6 U		11.9 U	
Di-n-butylphthalate (ug/l)	11 U			10.6 U		11.9 U	
Di-n-octylphthalate (ug/l)	11 U			10.6 U		11.9 U	
Dibenz(a,h)anthracene (ug/l)	11 U			10.6 U		11.9 U	
Dibenzofuran (ug/l)	11 U			10.6 U		11.9 U	
Diesel Range Organics (mg/l)	0.01 U			0.01 U		0.01 U	
Diethyl phthalate (ug/l)	11 U			10.6 U		11.9 U	
Dimethyl phthalate (ug/l)	11 U			10.6 U		11.9 U	
Diphenylamine (ug/l)	11 U			10.6 U		11.9 U	
Fluoranthene (ug/l)	11 U			10.6 U		11.9 U	
Fluorene (ug/l)	11 U			10.6 U		11.9 U	
Hexachlorobenzene (ug/l)	11 U			10.6 U		11.9 U	
Hexachlorobutadiene (ug/l)	11 U			10.6 U		11.9 U	

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Hexachlorocyclopentadiene (ug/l)	11 U			10.6 U		11.9 U	
Hexachloroethane (ug/l)	11 U			10.6 U		11.9 U	
Indeno(1,2,3-c,d)pyrene (ug/l)	11 U			10.6 U		11.9 U	
Isophorone (ug/l)	11 U			10.6 U		11.9 U	
N-Nitrosodipropylamine (ug/l)	11 U			10.6 U		11.9 U	
Naphthalene (ug/l)	11 U			10.6 U		11.9 U	
Nitrobenzene (ug/l)	11 U			10.6 U		11.9 U	
Pentachlorophenol (ug/l)	27.5 U			26.6 U		29.8 UJ	
Phenanthrene (ug/l)	11 U			10.6 U		11.9 U	
Phenol (ug/l)	11 U			10.6 U		11.9 UJ	
Pyrene (ug/l)	11 U			10.6 U		11.9 U	
bis(2-chloroethoxy)methane (ug/l)	11 U			10.6 U		11.9 U	
bis(2-chloroethyl) ether (ug/l)	11 U			10.6 U		11.9 U	
bis(2-ethylhexyl)phthalate (ug/l)	11 U			10.6 U		11.9 U	
m,p-Cresol (ug/l)	11 U			10.6 U		11.9 U	
m-Nitroaniline (ug/l)	27.5 U			26.6 U		29.8 U	
o-Cresol (ug/l)	11 U			10.6 U		11.9 UJ	
o-Nitroaniline (ug/l)	11 U			10.6 U		11.9 U	
p-Nitroaniline (ug/l)	11 U			10.6 U		11.9 U	
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	5 U			5 U		5 U	
1,1,2,2-Tetrachloroethane (ug/l)	5 U			5 U		5 U	
1,1,2-Trichloroethane (ug/l)	5 U			5 U		5 U	
1,1-Dichloroethane (ug/l)	5 U			5 U		5 U	
1,1-Dichloroethene (ug/l)	5 U			5 U		5 U	
1,2-Dichloroethane (ug/l)	5 U			5 U		5 U	
1,2-Dichloroethylene (ug/l)	5 U			5 U		5 U	
1,2-Dichloropropane (ug/l)	5 U			5 U		5 U	
2-Butanone (ug/l)	10 U			10 U		10 U	
2-Hexanone (ug/l)	10 U			10 U		10 U	
4-Methyl-2-pentanone (ug/l)	10 U			10 U		10 U	
Acetone (ug/l)	2 U			2.1 U		1.8 U	
Benzene (ug/l)	5 U			5 U		5 U	
Bromoform (ug/l)	5 U			5 U		5 U	
Carbon disulfide (ug/l)	5 U			5 U		5 U	

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Carbon tetrachloride (ug/l)	5 U			5 U		5 U	
Chlorobenzene (ug/l)	5 U			5 U		5 U	
Chlorodibromomethane (ug/l)	5 U			5 U		5 U	
Chloroethane (ug/l)	10 U			10 U		10 U	
Chloroform (ug/l)	5 U			5 U		5 U	
Dichlorobromomethane (ug/l)	5 U			5 U		5 U	
Ethylbenzene (ug/l)	5 U			5 U		5 U	
Gasoline Range Organics (ug/l)	50 U			50 U		57.2	
Methyl Bromide (ug/l)	10 U			10 U		10 U	
Methyl Chloride (ug/l)	10 U			10 U		10 U	
Methylene chloride (ug/l)	5 U			5 U		5 U	
Styrene (ug/l)	5 U			5 U		5 U	
Tetrachloroethene (ug/l)	5 U			5 U		5 U	
Toluene (ug/l)	2 U			2 U		2 U	
Trichloroethene (ug/l)	5 U			5 U		5 U	
Vinyl chloride (ug/l)	2 U			2 U		2 U	
Xylenes (total) (ug/l)	5 U			5 U		5 U	
cis-1,3-dichloropropene (ug/l)	5 U			5 U		5 U	
trans-1,3-Dichloropropene (ug/l)	5 U			5 U		5 U	
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)		2.78 J	0.207 J		1.52 J		0.543 U
Gross Alpha (pCi/l)	3.23 J	3.46 J	2.17 U	2.67 J	3.13 J	2.17 J	1.57 U
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)		1.41 U	0.192 U		3.43 J		2.4 J
Nonvolatile Beta (pCi/l)	4.4 J	1.65 U	0.744 U	1.79 J	3.03 J	2.41 J	1.87 U
Radium-226 (Filtered) (pCi/l)		0.531 U	2.63		0.448 U		1.12
Radium-226 (pCi/l)	0.74 J	1.57	1.86	0.43 U	1.65	0.77 J	0.532 J
Radium-228 (Filtered) (pCi/l)		-0.422 U	0.326 U		0.701 U		1.3
Radium-228 (pCi/l)	0 U	0.408 U	0.325 U	-0.23 U	0.648 U	-0.31 U	0.611 U
Weight of Sample, A&B (Filtered) (mg)		49.7	46.2		49.4		51.8
Weight of Sample, A&B (mg)	54.2 J	50.6	44.8	76.5 J	90.9	99.1	59.5
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)		0.0015 U	0 U		-0.0138 U		-0.0276 U
Actinium-227 (pCi/l)	0.09 U	0.0638 U	0.207 U	-0.05 U	-0.0188 U	0.05 U	0.35 J
Thorium-228 (Filtered) (pCi/l)		0.228 U	-0.0091 U		0.07 U		0.117 U

Station	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**
Sample No	**LUGW0085**	**LUGW0011**	**LUGW0019**	**LUGW0086**	**LUGW0020**	**LUGW0087**	**LUGW0013**
Collection Date	**04/06/99**	**11/18/98**	**08/18/98**	**04/06/99**	**08/18/98**	**04/07/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-228 (pCi/l)	0.44 J	0.105 U	0.276 U	0.3 U	0.306 U	0.27 U	0.276 J
Thorium-230 (Filtered) (pCi/l)		0.0444 U	0.66 J		0.471 J		-0.0214 U
Thorium-230 (pCi/l)	0.03 U	0.0669 U	0.339 J	-0.03 U	0.0827 U	0.23 J	0.142 J
Thorium-232 (Filtered) (pCi/l)		0.0148 U	0.0484 U		-0.0141 U		0 U
Thorium-232 (pCi/l)	0.03 U	-0.0037 U	0.111 U	-0.02 U	0.0827 U	0.07 U	0.0448 U
Uranium-233/234 (Filtered) (pCi/l)		0.976 J	0.999 J		0.53 J		0.0667 U
Uranium-233/234 (pCi/l)	0.51 J	1.08 J	1.62	1.4 J	1.19	1.46 J	0.105 J
Uranium-235 (Filtered) (pCi/l)		0.024 U	0.0334 U		0.0313 U		0 U
Uranium-235 (pCi/l)	0.04 U	0.0516 UJ	0.118 U	0 U	-0.0071 U	-0.01 U	0.0395 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)		0.736 J	0.932 J		0.998 J		0.146 U
Uranium-238 (pCi/l)	0.27 J	0.785 J	1.4	1.03 J	0.976 J	0.9 J	0.197 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)		13.9 U	11.7 U		1.9 U		8.31 U
Actinium-228 (pCi/l)	0.91 U	8.98 U	16.3 U	5.93 U	15.5 U	5.7 U	2.35 U
Cesium-137 (Filtered) (pCi/l)		-0.697 U	1.31 U		-0.226 U		0.149 U
Cesium-137 (pCi/l)	0.28 U	-1.16 U	-1.16 U	-0.02 U	0.432 U	-0.27 U	0.0057 U
Cobalt-60 (Filtered) (pCi/l)		0.0592 U	0.906 U		-1.1 U		1.52 U
Cobalt-60 (pCi/l)	-0.1 U	0.929 U	-1.79 U	-0.41 U	4.13 U	-0.58 U	-0.496 U
Potassium-40 (Filtered) (pCi/l)		16.6 U	55.8 U		34.9 U		31.8 J
Potassium-40 (pCi/l)	32.5 U	41.1 U	65.6 U	27.9 U	63.3 U	28 U	37.5 U
Protactinium-231 (Filtered) (pCi/l)		12.9 U	60.3 U		-44.5 U		-25.2 U
Protactinium-231 (pCi/l)	10.2 U	-68.4 U	-93.7 U	50.3 U	-82.6 U	-19.9 U	-21.2 U
Thorium-234 (Filtered) (pCi/l)		87.1 U	0 U		96.5 U		96.4 U
Thorium-234 (pCi/l)	139 U	47 U	56.1 U	30.5 U	0 U	64 U	84.9 U
Uranium-235 (Filtered) (pCi/l)		12.2 U	7.63 U		9.05 U		16.5 U
Uranium-235 (pCi/l)	-5.88 U	-12.2 U	3.29 U	3.82 U	-1.95 U	-1.29 U	5.38 U

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	12.4 U	7.4 U	7.4 U	29.8 B	14.3 B	7.4 U	31.5 B
Aluminum (ug/l)	304	59.6	46.2 B	220	1650	124	307
Antimony (Filtered) (ug/l)	2.5 U	1.9 U	1.9 U	5.6 U	2.5 U	1.9 U	4.9 U
Antimony (ug/l)	2.5 U	1.9 U	1.9 U	5.7 U	2.5 U	1.9 U	7.3 U
Arsenic (Filtered) (ug/l)	3 U	6.2 J	5.5 J	8 U	3 U	5.4 J	8 U
Arsenic (ug/l)	3 U	4.1 B	5.5	8 U	3 U	3 B	8 U
Barium (Filtered) (ug/l)	92.7	81.1	79.6	58.8	52.9	52.6	61.2
Barium (ug/l)	95.7	86.6	85.1	62.1	63.7	56.9	62
Beryllium (Filtered) (ug/l)	0.13 U	0.14 U	0.14 U	0.27 U	0.13 U	0.14 U	0.27 U
Beryllium (ug/l)	0.13 U	0.14 U	4.6	0.27 U	0.13 U	0.14 U	0.27 U
Cadmium (Filtered) (ug/l)	1.1 U	0.34 U	0.34 U	2.3 U	1.1 U	0.34 U	2.3 U
Cadmium (ug/l)	1.1 U	0.34 U	4.9	2.3 U	1.1 U	0.34 U	2.3 U
Calcium (Filtered) (ug/l)	43600	54400	55100	64000	61400	58100	61900
Calcium (ug/l)	54600	55800	55400	65900	71900	59200	63400
Chromium (Filtered) (ug/l)	0.7 U	0.42 U	0.42 U	1.4 U	0.7 U	0.42 U	1.4 U
Chromium (ug/l)	0.7 U	2.3 B	0.94 B	22	2.4 B	2.6 B	1.4 U
Cobalt (Filtered) (ug/l)	0.82 U	0.44 U	0.44 U	1.6 U	0.82 U	0.44 U	1.6 U
Cobalt (ug/l)	0.82 U	0.44 U	4.4 B	1.6 U	0.82 U	0.44 U	1.6 U
Copper (Filtered) (ug/l)	2.4 B	0.75 B	0.85 B	1.5 U	8.1	1.2 B	1.6 B
Copper (ug/l)	3.4 B	1.2 B	6.6	1.7 B	5.5	2.9 B	1.8 B
Iron (Filtered) (ug/l)	135	384	392	934	705	727	964
Iron (ug/l)	512	552	478	1310	2840	1090	1380
Lead (Filtered) (ug/l)	1.5 U	1.3 U	1.3 U	3 U	1.5 U	1.3 U	3 U
Lead (ug/l)	2.8 B	1.3 U	5.2	3 U	1.5 U	3.4	3 U
Magnesium (Filtered) (ug/l)	35200	33900	34100	35600	32100	32800	33600
Magnesium (ug/l)	43700	35000	34800	36200	36500	32200	34000
Manganese (Filtered) (ug/l)	10.2	11.1	11.2	80.8	42.7	76.4	82.9
Manganese (ug/l)	18.5	15.7	19.9	93.6	86.8	92.6	93.2
Mercury (Filtered) (ug/l)	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U
Mercury (ug/l)	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U
Nickel (Filtered) (ug/l)	1.1 U	1 U	1 U	2.2 U	1.1 U	1 U	2.2 U
Nickel (ug/l)	1.5 B	1.8 B	5.9 B	4.1 B	3.5 B	1.8 B	2.3 B
Phosphorus (Filtered) (ug/l)	25.6 B	57.3 E	51.1 E	192	15 U	33.8 BE	58.6
Phosphorus (ug/l)	15 U	25.4 BE	26.1 BE	101	22.9 B	35.2 BE	67.7

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (Filtered) (ug/l)	1900	1360	1350	1570	1310	1430	1590
Potassium (ug/l)	2130	1410	1340	1680	1920	1430	1700
Selenium (Filtered) (ug/l)	2.4 U	4 B	6.3	5 U	2.4 U	5.7	5 U
Selenium (ug/l)	2.4 U	1.9 U	1.9 U	5 U	2.4 U	1.9 U	5 U
Silver (Filtered) (ug/l)	2 U	0.89 U	0.89 U	1.7 U	2 U	0.89 U	1.7 U
Silver (ug/l)	2 U	0.89 U	0.89 U	1.7 U	2 U	0.89 U	1.7 U
Sodium (Filtered) (ug/l)	12700	10300	10200	9720	8020	7960	8830
Sodium (ug/l)	14000	10900	10600	9100	8140	8100	8770
Thallium (Filtered) (ug/l)	4.5 B	5.6 U	5.6 U	7.9 U	4 U	5.6 U	7.9 U
Thallium (ug/l)	4 U	5.6 U	5.6 U	7.9 U	6.1 B	5.6 U	7.9 U
Vanadium (Filtered) (ug/l)	0.67 U	0.47 U	0.47 U	1.3 U	0.67 U	0.47 U	1.3 U
Vanadium (ug/l)	0.67 U	0.47 U	3.9 B	1.3 U	3.4 B	0.47 U	1.9 B
Zinc (Filtered) (ug/l)	13.4	0.46 U	0.46 U	5.2 U	13.9	0.46 U	5.2 U
Zinc (ug/l)	6.4	122	9.2	5.2 U	11	12.2	5.2 U
Indicator Parameters							
Alkalinity (mg/l)		244	230			232	
Chloride (mg/l)		8.82	8.94			2.24	
Fluoride (mg/l)		1.13	1.16	1.24		1.12	1.21
Nitrate/Nitrite (mg/l)		0.03 J	0.03 J			0.03 J	
Nitrogen, Ammonia (mg/l)		0.1	0.09	0.18		0.15	0.17
Sulfate (mg/l)		61.7	61.3			64	
Total Dissolved Solids (mg/l)		341	343			352	
Total Suspended Solids (mg/l)		27.6	23.8			11.6	
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)		10.3 U	10 U			10.5 U	
1,2-Dichlorobenzene (ug/l)		10.3 U	10 U			10.5 U	
1,3-Dichlorobenzene (ug/l)		10.3 U	10 U			10.5 U	
1,4-Dichlorobenzene (ug/l)		10.3 U	10 U			10.5 U	
2,2'-Oxybis (1-cloropropane) (ug/l)		10.3 U	10 U			10.5 U	
2,4,5-Trichlorophenol (ug/l)		10.3 U	10 U			10.5 U	
2,4,6-Trichlorophenol (ug/l)		10.3 U	10 U			10.5 U	
2,4-Dichlorophenol (ug/l)		10.3 U	10 U			10.5 U	
2,4-Dimethylphenol (ug/l)		10.3 U	10 U			10.5 U	
2,4-Dinitrophenol (ug/l)		25.8 U	25 U			26.3 U	
2,4-Dinitrotoluene (ug/l)		10.3 U	10 U			10.5 U	

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2,6-Dinitrotoluene (ug/l)		10.3 U	10 U			10.5 U	
2-Chloronaphthalene (ug/l)		10.3 U	10 U			10.5 U	
2-Chlorophenol (ug/l)		10.3 U	10 U			10.5 U	
2-Methylnaphthalene (ug/l)		10.3 U	10 U			10.5 U	
2-Nitrophenol (ug/l)		10.3 U	10 U			10.5 U	
2-methyl-4,6-dinitrophenol (ug/l)		10.3 U	10 U			10.5 U	
3,3'-Dichlorobenzidine (ug/l)		51.5 U	50 U			52.6 U	
4-Bromophenyl phenyl ether (ug/l)		10.3 U	10 U			10.5 U	
4-Chloroaniline (ug/l)		20.6 U	20 U			21 U	
4-Chlorophenylphenylether (ug/l)		10.3 U	10 U			10.5 U	
4-Nitrophenol (ug/l)		25.8 U	25 U			26.3 U	
4-chloro-3-methyl phenol (ug/l)		10.3 U	10 U			10.5 U	
Acenaphthene (ug/l)		10.3 U	10 U			10.5 U	
Acenaphthylene (ug/l)		10.3 U	10 U			10.5 U	
Anthracene (ug/l)		10.3 U	10 U			10.5 U	
Benzo(a)anthracene (ug/l)		10.3 U	10 U			10.5 U	
Benzo(a)pyrene (ug/l)		10.3 U	10 U			10.5 U	
Benzo(b)fluoranthene (ug/l)		10.3 U	10 U			10.5 U	
Benzo(ghi)perylene (ug/l)		10.3 U	10 U			10.5 U	
Benzo(k)fluoranthene (ug/l)		10.3 U	10 U			10.5 U	
Butylbenzylphthalate (ug/l)		10.3 U	10 U			10.5 U	
Carbazole (ug/l)		10.3 U	10 U			10.5 U	
Chrysene (ug/l)		10.3 U	10 U			10.5 U	
Di-n-butylphthalate (ug/l)		10.3 U	10 U			10.5 U	
Di-n-octylphthalate (ug/l)		10.3 U	10 U			10.5 U	
Dibenz(a,h)anthracene (ug/l)		10.3 U	10 U			10.5 U	
Dibenzofuran (ug/l)		10.3 U	10 U			10.5 U	
Diesel Range Organics (mg/l)		0.01 U	0.01 U			0.01 U	
Diethyl phthalate (ug/l)		10.3 U	10 U			10.5 U	
Dimethyl phthalate (ug/l)		10.3 U	10 U			10.5 U	
Diphenylamine (ug/l)		10.3 U	10 U			10.5 U	
Fluoranthene (ug/l)		10.3 U	10 U			10.5 U	
Fluorene (ug/l)		10.3 U	10 U			10.5 U	
Hexachlorobenzene (ug/l)		10.3 U	10 U			10.5 U	
Hexachlorobutadiene (ug/l)		10.3 U	10 U			10.5 U	

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Hexachlorocyclopentadiene (ug/l)		10.3 U	10 U			10.5 U	
Hexachloroethane (ug/l)		10.3 U	10 U			10.5 U	
Indeno(1,2,3-c,d)pyrene (ug/l)		10.3 U	10 U			10.5 U	
Isophorone (ug/l)		10.3 U	10 U			10.5 U	
N-Nitrosodipropylamine (ug/l)		10.3 U	10 U			10.5 U	
Naphthalene (ug/l)		10.3 U	10 U			10.5 U	
Nitrobenzene (ug/l)		10.3 U	10 U			10.5 U	
Pentachlorophenol (ug/l)		25.8 U	25 U			26.3 U	
Phenanthrene (ug/l)		10.3 U	10 U			10.5 U	
Phenol (ug/l)		10.3 U	10 U			10.5 U	
Pyrene (ug/l)		10.3 U	10 U			10.5 U	
bis(2-chloroethoxy)methane (ug/l)		10.3 U	10 U			10.5 U	
bis(2-chloroethyl) ether (ug/l)		10.3 U	10 U			10.5 U	
bis(2-ethylhexyl)phthalate (ug/l)		10.3 U	10 U			10.5 U	
m,p-Cresol (ug/l)		10.3 U	10 U			10.5 U	
m-Nitroaniline (ug/l)		25.8 U	25 U			26.3 U	
o-Cresol (ug/l)		10.3 U	10 U			10.5 U	
o-Nitroaniline (ug/l)		10.3 U	10 U			10.5 U	
p-Nitroaniline (ug/l)		10.3 U	10 U			10.5 U	
Volatile Organics							
1,1,1-Trichloroethane (ug/l)		5 U	5 U			5 U	
1,1,2,2-Tetrachloroethane (ug/l)		5 U	5 U			5 U	
1,1,2-Trichloroethane (ug/l)		5 U	5 U			5 U	
1,1-Dichloroethane (ug/l)		5 U	5 U			5 U	
1,1-Dichloroethene (ug/l)		5 U	5 U			5 U	
1,2-Dichloroethane (ug/l)		5 U	5 U			5 U	
1,2-Dichloroethylene (ug/l)		5 U	5 U			5 U	
1,2-Dichloropropane (ug/l)		5 U	5 U			5 U	
2-Butanone (ug/l)		10 U	10 U			10 U	
2-Hexanone (ug/l)		10 U	10 U			10 U	
4-Methyl-2-pentanone (ug/l)		10 U	10 U			10 U	
Acetone (ug/l)		1.6 U	2.5 U			10 U	
Benzene (ug/l)		5 U	5 U			5 U	
Bromoform (ug/l)		5 U	5 U			5 U	
Carbon disulfide (ug/l)		5 U	5 U			5 U	

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Carbon tetrachloride (ug/l)		5 U	5 U			5 U	
Chlorobenzene (ug/l)		5 U	5 U			5 U	
Chlorodibromomethane (ug/l)		5 U	5 U			5 U	
Chloroethane (ug/l)		10 U	10 U			10 U	
Chloroform (ug/l)		5 U	5 U			5 U	
Dichlorobromomethane (ug/l)		5 U	5 U			5 U	
Ethylbenzene (ug/l)		5 U	5 U			5 U	
Gasoline Range Organics (ug/l)		50 U	50 U			50 U	
Methyl Bromide (ug/l)		10 U	10 U			10 U	
Methyl Chloride (ug/l)		10 U	10 U			10 U	
Methylene chloride (ug/l)		5 U	5 U			5 U	
Styrene (ug/l)		5 U	5 U			5 U	
Tetrachloroethene (ug/l)		5 U	5 U			5 U	
Toluene (ug/l)		2 U	2 U			2 U	
Trichloroethene (ug/l)		5 U	5 U			5 U	
Vinyl chloride (ug/l)		2 U	2 U			2 U	
Xylenes (total) (ug/l)		5 U	5 U			5 U	
cis-1,3-dichloropropene (ug/l)		5 U	5 U			5 U	
trans-1,3-Dichloropropene (ug/l)		5 U	5 U			5 U	
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	0.861 U			1.48 J	0.905 U		4.45 J
Gross Alpha (pCi/l)	0.674 U	1.18 J	4.43 J	3.2 J	1.67 J	0.96 J	2.38 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	2.29 J			1.36 U	0.788 U		4.39 J
Nonvolatile Beta (pCi/l)	1.69 U	2.24 J	6.73 J	3.43 J	2.72 J	1.27 J	2.89 J
Radium-226 (Filtered) (pCi/l)	0.918 J			1.16	1.16		0.717 J
Radium-226 (pCi/l)	1.26	0.29 U	1.15	0.756 J	1.31	0.34 U	0.999 J
Radium-228 (Filtered) (pCi/l)	0.32 U			0.561 U	0.164 U		0.267 U
Radium-228 (pCi/l)	-0.217 U	0.27 U	0.3 U	0.705 U	1.57	0.01 U	0.286 U
Weight of Sample, A&B (Filtered) (mg)	52.6			55.4	59.2		55.7
Weight of Sample, A&B (mg)	62.3	81.6 J	54.2 J	64.5	66.4	36.5 J	54.9
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.0641 U			0.0655 U	-0.0083 U		0.0415 U
Actinium-227 (pCi/l)	0.0421 U	0.02 U	-0.04 U	0.351 J	-0.0418 U	0.12 U	0.09 U
Thorium-228 (Filtered) (pCi/l)	0.0024 U			0.0544 U	0.142 U		0.148 J

Station	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0021**	**LUGW0088**	**LUGW0088D**	**LUGW0014**	**LUGW0022**	**LUGW0089**	**LUGW0014D**
Collection Date	**08/18/98**	**04/06/99**	**04/06/99**	**11/17/98**	**08/18/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9194**				**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-228 (pCi/l)	0.108 U	0.58 J	0.57 J	0.29 U	0.152 U	0.65 J	0.127 U
Thorium-230 (Filtered) (pCi/l)	0.322 J			0.0085 U	0.986 J		0.0492 U
Thorium-230 (pCi/l)	14.7	0.08 U	-0.07 U	0.212 J	0.234 U	0.02 U	0.0424 U
Thorium-232 (Filtered) (pCi/l)	0 U			0 U	-0.0062 U		0.0063 U
Thorium-232 (pCi/l)	0.0569 U	-0.01 U	-0.03 U	0.0265 U	-0.0096 U	0.01 U	-0.0072 U
Uranium-233/234 (Filtered) (pCi/l)	0.0802 U			0.174 U	0.344 J		0.193 U
Uranium-233/234 (pCi/l)	0.615 J	0.36 J	0.32 J	0.174 UJ	0.169 U	0.1 U	0.243 J
Uranium-235 (Filtered) (pCi/l)	-0.028 U			0.0398 U	0.0363 U		0 U
Uranium-235 (pCi/l)	0.0635 U	0.01 U	0 U	0.0582 UJ	0.0286 U	0 U	0.0134 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	0.0988 U			0.0764 U	-0.0174 U		0.113 U
Uranium-238 (pCi/l)	0.125 U	0.2 J	0.26 J	0.232 J	0.142 U	0.11 U	0.0538 U
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	11.1 U			4.88 U	13.4 U		10.8 U
Actinium-228 (pCi/l)	17 U	9.44 U	4.22 U	7.61 U	10.5 U	4.77 U	7.8 U
Cesium-137 (Filtered) (pCi/l)	-2.34 U			0.617 U	-0.24 U		0.501 U
Cesium-137 (pCi/l)	0.0083 U	-0.1 U	0.31 U	5.29 J	0 U	-0.56 U	1.55 U
Cobalt-60 (Filtered) (pCi/l)	-1.21 U			-0.292 U	2.1 U		1.63 U
Cobalt-60 (pCi/l)	1.12 U	0.9 U	-1.52 U	0.189 U	2.16 U	-0.57 U	1.78 U
Potassium-40 (Filtered) (pCi/l)	16.2 U			24.9 U	0.726 U		12.1 U
Potassium-40 (pCi/l)	3.05 U	24.4 U	22.8 U	11.7 U	0 U	9.66 U	19.3 U
Protactinium-231 (Filtered) (pCi/l)	105 U			51.2 U	-59.6 U		-35 U
Protactinium-231 (pCi/l)	11.1 U	-11.3 U	86.9 U	-15.2 U	64.8 U	69.2 U	81 U
Thorium-234 (Filtered) (pCi/l)	131 U			3.78 U	35.6 U		88.1 U
Thorium-234 (pCi/l)	0 U	73.5 U	130 U	0 U	0 U	119 U	83.5 U
Uranium-235 (Filtered) (pCi/l)	19.1 U			5.21 U	8.97 U		3.64 U
Uranium-235 (pCi/l)	12.8 U	18.4 U	2.75 U	4.84 U	4.06 U	-5.45 U	0.376 U

APPENDIX 4A:
Phase II and Phase IV Analytical Data

APPENDIX 4A: PHASE II AND PHASE IV ANALYTICAL DATA

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Table 4A.1. Data Qualifiers for Inorganic Analyses

Qualifier	Explanation
E	This qualifier is used when the percent difference between the parent sample and its serial dilution's concentrations exceed 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP (6010B/ILMO 3.0) or 100 times the absolute value of the preparation blank's concentration (6020).
J	This qualifier indicates the analyte concentration is estimated. This qualifier is applied during the data validation process.
*	This qualifier indicates the duplicate sample analysis for an analyte is out of control.
B	This qualifier indicates the reported result fell above the IDL/MDL but below the laboratory's RDL.
N	This qualifier indicates the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.
R	Data qualified as unusable.
U	The analyte's result was less than the IDL/MDL.
UJ	Analyte was not detected and the RDL is estimated. This qualifier is applied during the data validation process.

RDL – reporting detection limit
IDL – instrument detection limit
ICP – inductively coupled plasma
MDL – method detection limit

Table 4A.2. Data Qualifiers for Organic Analyses

Qualifier	Explanation
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
J	This qualifier indicates an estimated value concerning either, (1) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL or (2) qualified during the data validation process.
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.
NJ	Analyte has been "tentatively identified" and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.
P	Pesticide/PCB target analyte is greater than 25% difference for the detected concentrations between the two GC columns.
R	Data qualified as unusable.
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).
UJ	Compound was not detected and the RDL is estimated. This qualifier is applied during the data validation process.

GC – gas chromatograph
PCB – polychlorinated biphenyl
RDL – reporting detection limit
MDL – method detection limit
PQL – practical quantitation limit
TIC – tentatively identified compounds

APPENDIX 4A.1:
Analytical Soil Sample Results

Phase II IA01 Soil

Station	**09EJ01**	**09EZ01**	**09FU01**	**10FD01**	**10FI01**	**11EV01**	**11EV01**
Sample No	**LU00204**	**LU00148**	**LU00202**	**LU00149**	**LU00206**	**LU00208**	**LU00214**
Collection Date	**10/30/97**	**10/07/97**	**10/30/97**	**10/07/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.5-1.5**	**0.0-0.2**	**2.5-3.5**	**0.0-0.2**	**2.5-3.5**	**1.5-2.5**	**1.5-2.5**
Northing	**0**	**517533**	**0**	**517590**	**0**	**0**	**0**
Easting	**0**	**199521**	**0**	**199542**	**0**	**0**	**0**
Metals							
Aluminum (mg/kg)	24600	19400	18400	14300	27100	12600	14500
Antimony (mg/kg)	1.4 J	0.48	0.77 J	1.2 J	0.04 UJ	0.04 UJ	0.04 UJ
Arsenic (mg/kg)	28.2	5.1	15.7	3.9	1.8	2.6	1.8
Barium (mg/kg)	116 J	39.7	94.3 J	96.8 J	31.3 J	45.1 J	33.3 J
Beryllium (mg/kg)	3920 J	2610	321 J	5210	2300 J	819 J	1270 J
Boron (mg/kg)	31.8 J	20	20.8 J	16.3	0.48 U	0.48 U	0.48 U
Cadmium (mg/kg)	3.9	0.01 U	0.78	3.7	0.01 U	0.01 U	0.01 U
Calcium (mg/kg)	29200	18900	53400	34400	4710	1900	1710
Chromium (mg/kg)	97.3	56.6	30.4	68.6	17.9	18.9	22.1
Cobalt (mg/kg)	11.2	6.1	17.3	5.5	5.4	3.8	2.5
Copper (mg/kg)	126 J	38	36.2 J	35 J	8 J	16 J	13.6 J
Iron (mg/kg)	38400 J	24500	28700 J	12500	4550 J	9960 J	6610 J
Lead (mg/kg)	2480	8490	151	28900 J	52.6	23	25.8
Magnesium (mg/kg)	10200	6280	13000	11700	1370	1990	1290
Manganese (mg/kg)	335	327	544	285	301	113	61.7
Mercury (mg/kg)	1.4	0.49 J	0.13	0.82	0.04	0.09	0.11
Molybdenum (mg/kg)	12.7	3.3	5.1	4.9	0.63	1.4	0.94
Nickel (mg/kg)	84.6	81.5	45.8	63.3	17.3	18.9	19.9
Potassium (mg/kg)	3380 J	1650	4070 J	3720	642 J	809 J	799 J
Selenium (mg/kg)	0.76	1.4	0.4	2.8	0.04 U	0.42	0.04 U
Silicon (mg/kg)	2560 J	1730	1800 J	4710 J	2940 J	1100 J	1350 J
Silver (mg/kg)	0.34	0.2	0.23	0.63	0.02 U	0.02 U	0.02 U
Sodium (mg/kg)	711	22300	431	4720	7520	7540	9300
Strontium (mg/kg)	146	160	95.4	0.125 J	54.9	46.7	60
Thallium (mg/kg)	3.6	0.97	2.7	0.07 U	2.1	1	1.2
Vanadium (mg/kg)	35.6	11.1	39.5	21.9	5.4	12.2	8.4
Zinc (mg/kg)	822	226	200	1830	16	29.7	21
Indicator Parameters							
% Moisture (%)	30	20	19	13	48	32	38
Chloride (mg/kg)	7.76 J	320	8.29 J	149	0.08 UJ	16.8 J	11.8 J
Fluoride (mg/kg)	206	558	190	576	213	164	152
Nitrate, as N (mg/kg)	1.06	521	1.74	306	2.27	1.94	1.06
Phosphorus (mg/kg)	0.25 U	0.19 UJ	0.22 U	0.17 U	0.35 U	0.25 U	0.25 U
Sulfate (mg/kg)	623	24800	42.7	3180	307	1410	1350
Temperature (c)	29.2 J	25.6	24.7 J	23.6	38 J	28.8 J	31.9 J
pH (ph)	7.83	8.86	8.15	7.77	7.9	7.7	7.64

Phase II IA01 Soil

Station	09EJ01	09EZ01	09FU01	10FD01	10FI01	11EV01	11EV01
Sample No	LU00204	LU00148	LU00202	LU00149	LU00206	LU00208	LU00214
Collection Date	10/30/97	10/07/97	10/30/97	10/07/97	10/30/97	10/30/97	10/30/97
Depth (ft)	0.5-1.5	0.0-0.2	2.5-3.5	0.0-0.2	2.5-3.5	1.5-2.5	1.5-2.5
Northing	0	517533	0	517590	0	0	0
Easting	0	199521	0	199542	0	0	0
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
1,2-Dichlorobenzene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
1,3-Dichlorobenzene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
1,4-Dichlorobenzene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,2'-oxybis (1-chloropropane) (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,4,5-Trichlorophenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,4,6-Trichlorophenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,4,6-tribromophenol (%)	56	68	69 R	75	49	60	42
2,4-Dichlorophenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,4-Dimethylphenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,4-Dinitrophenol (ug/kg)	235 UJ	205 UJ	200 UJ	160 UJ	320 UJ	240 UJ	260 UJ
2,4-Dinitrotoluene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2,6-Dinitrotoluene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Chloronaphthalene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Chlorophenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Methylnaphthalene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Methylphenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Nitroaniline (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-Nitrophenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
2-fluorobiphenyl (%)	76	76	83 R	74	51	68	55
2-fluorophenol (%)	71	66	80 R	67	48	64	53
3,3'-Dichlorobenzidine (ug/kg)	115 U	205 U	100 U	160 U	160 U	120 U	130 U
3-Nitroaniline (ug/kg)	140 UJ	125 U	120 UJ	100 U	190 UJ	145 UJ	160 UJ
4,6-Dinitro-2-methylphenol (ug/kg)	115 U	105 UJ	100 U	80 UJ	160 U	120 U	130 U
4-Chloroaniline (ug/kg)	140 UJ	125 U	120 UJ	100 U	190 UJ	145 UJ	160 UJ
4-Nitroaniline (ug/kg)	115 UJ	105 U	100 UJ	80 U	160 UJ	120 UJ	130 UJ
4-Nitrophenol (ug/kg)	115 U	105 UJ	100 U	80 UJ	160 U	120 U	130 U
4-bromophenyl phenyl ether (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
4-chloro-3-methyl phenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
4-chlorophenylphenylether (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Acenaphthene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Acenaphthylene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Anthracene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Benzo(a)anthracene (ug/kg)	115 U	105 U	100 U	166 J	160 U	120 U	130 U
Benzo(a)pyrene (ug/kg)	301 J	105 U	100 U	187 J	160 U	120 U	130 U
Benzo(b)fluoranthene (ug/kg)	412 J	105 U	100 U	275 J	160 U	120 U	130 U

Station	**09EJ01**	**09EZ01**	**09FU01**	**10FD01**	**10FI01**	**11EV01**	**11EV01**
Sample No	**LU00204**	**LU00148**	**LU00202**	**LU00149**	**LU00206**	**LU00208**	**LU00214**
Collection Date	**10/30/97**	**10/07/97**	**10/30/97**	**10/07/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.5-1.5**	**0.0-0.2**	**2.5-3.5**	**0.0-0.2**	**2.5-3.5**	**1.5-2.5**	**1.5-2.5**
Northing	**0**	**517533**	**0**	**517590**	**0**	**0**	**0**
Easting	**0**	**199521**	**0**	**199542**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Benzo(k)fluoranthene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Butylbenzylphthalate (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Carbazole (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Chrysene (ug/kg)	258 J	105 U	100 U	200 J	160 U	120 U	130 U
Di-n-butylphthalate (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Di-n-octylphthalate (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Dibenz(a,h)anthracene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Dibenzofuran (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Diethyl phthalate (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Dimethyl phthalate (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Fluoranthene (ug/kg)	446 J	105 U	100 U	387	160 U	120 U	130 U
Fluorene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Hexachlorobenzene (ug/kg)	140 U	125 U	120 U	100 U	190 U	145 U	160 U
Hexachlorobutadiene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Hexachlorocyclopentadiene (ug/kg)	115 UJ	105 UJ	100 UJ	80 UJ	160 UJ	120 UJ	130 UJ
Hexachloroethane (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Isophorone (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
N-nitroso-di-n-propylamine (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
N-nitrosodiphenylamine (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Naphthalene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Nitrobenzene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Nitrobenzene-d5 (%)	77	73	84 R	72	52	68	54
Pentachlorophenol (ug/kg)	115 UJ	105 U	100 UJ	80 U	160 UJ	120 UJ	130 UJ
Phenanthrene (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Phenol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Phenol-d5 (%)	75	72	83 R	71	52	70	57
Pyrene (ug/kg)	115 U	105 U	100 U	231 J	160 U	120 U	130 U
Terphenyl-d14 (%)	97	101	96 R	102	77	85	70
bis(2-chloroethoxy)methane (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
bis(2-chloroethyl) ether (ug/kg)	115 U	105 UJ	100 U	80 UJ	160 U	120 U	130 U
bis(2-ethylhexyl)phthalate (ug/kg)	242 J	246 J	100 U	80 U	160 U	120 U	130 U
m,p-cresol (ug/kg)	115 U	105 U	100 U	80 U	160 U	120 U	130 U
Volatile Organics							
1,1,1-Trichloroethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
1,1,2,2-Tetrachloroethane (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ

Station	**09EJ01**	**09EZ01**	**09FU01**	**10FD01**	**10FI01**	**11EV01**	**11EV01**
Sample No	**LU00204**	**LU00148**	**LU00202**	**LU00149**	**LU00206**	**LU00208**	**LU00214**
Collection Date	**10/30/97**	**10/07/97**	**10/30/97**	**10/07/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.5-1.5**	**0.0-0.2**	**2.5-3.5**	**0.0-0.2**	**2.5-3.5**	**1.5-2.5**	**1.5-2.5**
Northing	**0**	**517533**	**0**	**517590**	**0**	**0**	**0**
Easting	**0**	**199521**	**0**	**199542**	**0**	**0**	**0**
1,1,2-Trichloroethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
1,1-Dichloroethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
1,1-Dichloroethene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
1,2-Dichloroethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
1,2-Dichloropropane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
2-Butanone (ug/kg)	14.3 UJ		1.25 U		1.9 UJ	1.45 UJ	1.6 UJ
2-Hexanone (ug/kg)	35.7 U		3.1 UJ		4.8 U	3.7 U	4.05 UJ
4-Methyl-2-pentanone (ug/kg)	35.7 U		3.1 UJ		4.8 U	3.7 U	4.05 UJ
Acetone (ug/kg)	35.7 UJ		3.1 UJ		4.8 UJ	3.7 UJ	4.05 UJ
Benzene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Bromodichloromethane (ug/kg)	7.15 U		0.6 U		1.2 J	0.75 U	0.8 UJ
Bromofluorobenzene (%)	99		103		93	92	123
Bromomethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Carbon disulfide (ug/kg)	14.3 UJ		1.25 UJ		1.9 UJ	1.45 UJ	1.6 UJ
Carbon tetrachloride (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Chlorobenzene (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
Chloroethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Chloroform (ug/kg)	7.15 U		0.6 U		7.9 J	0.75 U	0.8 UJ
Chloromethane (ug/kg)	7.15 UJ		0.6 U		0.95 UJ	0.75 UJ	0.8 UJ
Dibromochloromethane (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Dibromofluoromethane (%)	110		98		112	106	115
Ethylbenzene (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
Methylene chloride (ug/kg)	7.15 U		7.8		0.95 U	2.8 J	5 J
Styrene (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
Tetrachloroethene (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
Toluene (ug/kg)	162 J		3.7 J		3.8 J	4.3 J	43.2 J
Toluene-d8 (%)	113		103		110	102	123
Tribromomethane (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
Trichloroethene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Vinyl chloride (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Xylenes (total) (ug/kg)	7.15 U		0.6 UJ		0.95 U	0.75 U	0.8 UJ
cis-1,2-dichloroethene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
cis-1,3-dichloropropene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
trans-1,2-dichloroethene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
trans-1,3-dichloropropene (ug/kg)	7.15 U		0.6 U		0.95 U	0.75 U	0.8 UJ
Radiological Parameters (AlphaSpec)							
Actinium-227 (pCi/g)	1.98	0.865	0.984	0.845	2.08	0.338	0.369

Phase II IA01 Soil
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Station	**09EJ01**	**09EZ01**	**09FU01**	**10FD01**	**10FI01**	**11EV01**	**11EV01**
Sample No	**LU00204**	**LU00148**	**LU00202**	**LU00149**	**LU00206**	**LU00208**	**LU00214**
Collection Date	**10/30/97**	**10/07/97**	**10/30/97**	**10/07/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.5-1.5**	**0.0-0.2**	**2.5-3.5**	**0.0-0.2**	**2.5-3.5**	**1.5-2.5**	**1.5-2.5**
Northing	**0**	**517533**	**0**	**517590**	**0**	**0**	**0**
Easting	**0**	**199521**	**0**	**199542**	**0**	**0**	**0**
Radium-228 (pCi/g)	0.992	0.356	0.781	1.34	0.0945	0.188	0.293
Thorium-227 (pCi/g)	1.98	0.865	0.984	0.845	2.08	0.338	0.369
Thorium-228 (pCi/g)	0.992	0.356	0.781	1.34	0.0945	0.188	0.293
Thorium-230 (pCi/g)	60.3	16.4	17.6	23.5	14	2.8	2.76
Thorium-232 (pCi/g)	1.11	0.367	0.667	1.21	0.104	0.175	0.231
Uranium-234 (pCi/g)	31.1	12	14.5	5.5	21.4	3.13	2.4
Uranium-235 (pCi/g)	1.16	0.452	0.671	0.289	0.782	0.071	0.126
Uranium-238 (pCi/g)	30.5	12	14	5.83	21.3	2.83	2.61
Radiological Parameters (GammaSpec)							
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	13.4	4.26	24.6	6.62	0 UJ	6	9.97
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	34 J	22.6	17.4 J	9.32	193 J	30.7 J	30.5 J
Radium-228 (pCi/g)							
Thorium-228 (pCi/g)							
Thorium-230 (pCi/g)							
Thorium-232 (pCi/g)							
Uranium-235 (pCi/g)							
Uranium-238 (pCi/g)							

Phase II IA01 Soil

Station	**BH0016**	**BH0016**
Sample No	**LU9002**	**LU9003**
Collection Date	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	12000	18300
Antimony (mg/kg)	0.71 J	0.04 R
Arsenic (mg/kg)	22.3 J	22.9 J
Barium (mg/kg)	121 J	115 J
Beryllium (mg/kg)	10.9	9.6
Boron (mg/kg)	0.48 UJ	0.48 UJ
Cadmium (mg/kg)	0.01 U	0.01 U
Calcium (mg/kg)	1690	1740
Chromium (mg/kg)	27.6	38
Cobalt (mg/kg)	28.5	25.8
Copper (mg/kg)	6.1 J	7.8 J
Iron (mg/kg)	32400	37700
Lead (mg/kg)	42	41.5
Magnesium (mg/kg)	588	1150
Manganese (mg/kg)	2720	2510
Mercury (mg/kg)	0.93	0.99
Molybdenum (mg/kg)	0.16	0.14
Nickel (mg/kg)	9.9	13.6
Potassium (mg/kg)	684 J	1140 J
Selenium (mg/kg)	3.7 J	2.7 J
Silicon (mg/kg)	1230	2110
Silver (mg/kg)	0.21 J	0.22 J
Sodium (mg/kg)	37.4 J	54.9 J
Strontium (mg/kg)	4.5	6.1
Thallium (mg/kg)	12	9.2
Vanadium (mg/kg)	31.2	38.3
Zinc (mg/kg)	20.4 J	32.7 J
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	0.5 UJ	0.204
Radium-228 (pCi/g)	0.845	0.882
Thorium-227 (pCi/g)	0.5 UJ	0.204
Thorium-228 (pCi/g)	0.845	0.882
Thorium-230 (pCi/g)	0.45	0.601
Thorium-232 (pCi/g)	0.749	0.848
Uranium-234 (pCi/g)	0.327	0.501
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ

Phase II IA01 Soil

Station	**BH0016**	**BH0016**
Sample No	**LU9002**	**LU9003**
Collection Date	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**
Easting	**0**	**0**
Uranium-238 (pCi/g)	0.327	0.256
Radiological Parameters (GammaSpec)		
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	4.69	4.66
Potassium-40 (pCi/g)	10.9	10.9
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	8.4 J	18.8 J
Radium-228 (pCi/g)		
Thorium-228 (pCi/g)		
Thorium-230 (pCi/g)		
Thorium-232 (pCi/g)		
Uranium-235 (pCi/g)		
Uranium-238 (pCi/g)		

Phase II IA01 Soil
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Station	**09EH01**	**09EH01**	**09EI01**	**09EI02**	**09EJ01**	**09EJ02**	**10EF00**	**10EF01**	**10EV01**
Sample No	**LU00280**	**LU00282**	**LU00278**	**LU00279**	**LU00276**	**LU00277**	**LU00275**	**LU00274**	**121139**
Collection Date	**11/05/97**	**11/05/97**	**11/05/97**	**11/05/97**	**11/05/97**	**11/05/97**	**11/05/97**	**11/05/97**	**11/12/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517530**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**199490**	**0**	**0**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.46	0.5 UJ	0.736	0.595	1.23	1.38	1.47	1.37	
Radium-228 (pCi/g)	0.764	0.748	0.932	0.715	0.915	1.02	1.06	0.871	
Thorium-227 (pCi/g)	0.46	0.5 UJ	0.736	0.595	1.23	1.38	1.47	1.37	
Thorium-228 (pCi/g)	0.764	0.748	0.932	0.715	0.915	1.02	1.06	0.871	
Thorium-230 (pCi/g)	11.5	11.2	18.3	11.8	29.4	32.5	39.8	39	
Thorium-232 (pCi/g)	0.607	0.6	0.804	0.731	0.708	0.99	0.979	0.963	
Uranium-234 (pCi/g)	5.96	5.67	8.07	5.46	16	12.6	13.2	15.5	
Uranium-235 (pCi/g)	0.184	0.225	0.289	0.211	0.818	0.563	0.456	0.544	
Uranium-238 (pCi/g)	6.02	5.77	8.13	5.25	16.2	13.1	13.1	14.7	
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0.55
Cesium-137 (pCi/g)	0.5 UJ	0.235	0.495	0.282	0.5 UJ	0.5 UJ	0.405	0.323	0.06
Potassium-40 (pCi/g)	18.2	21	17.1	20.5	17.3	9.64	14.5	14.5	
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	
Radium-226 (pCi/g)	5.59 J	5.58 J	9.67 J	9.16 J	16.7 J	9.24 J	16.8 J	16.6 J	
Radium-228 (pCi/g)									
Thorium-228 (pCi/g)									
Thorium-230 (pCi/g)									
Thorium-232 (pCi/g)									
Uranium-235 (pCi/g)									
Uranium-238 (pCi/g)									

Phase II IA01 Soil

Station	**10EV01**	**11EA00**	**11FA00**
Sample No	**121155**	**121455**	**121412**
Collection Date	**11/12/97**	**11/12/97**	**11/12/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**517580**	**517580**
Easting	**0**	**199480**	**199530**
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)			
Radium-228 (pCi/g)			
Thorium-227 (pCi/g)			
Thorium-228 (pCi/g)			
Thorium-230 (pCi/g)			
Thorium-232 (pCi/g)			
Uranium-234 (pCi/g)			
Uranium-235 (pCi/g)			
Uranium-238 (pCi/g)			
Radiological Parameters (GammaSpec)			
Americium-241 (pCi/g)	0.27	0.67	1.21
Cesium-137 (pCi/g)	0.03	0.07	0.13
Potassium-40 (pCi/g)	2.12	1.04	0.72
Protactinium-231 (pCi/g)			
Radium-226 (pCi/g)	0.47	1.23	6.35
Radium-228 (pCi/g)	0.18	0.19	0.35
Thorium-228 (pCi/g)	0.18	0.19	0.35
Thorium-230 (pCi/g)	17.4	40.6	74.4
Thorium-232 (pCi/g)	0.18	0.19	0.35
Uranium-235 (pCi/g)	0.26	0.61	0.56
Uranium-238 (pCi/g)	0.57	4.85	4.83

Phase IV IA01 Soil

Station	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0004**	**IA01-SB0004**
Sample No	**LUSB0001**	**LUSB1019**	**LUSB0002**	**LUSB1020**	**LUSB0002D**	**LUSB0003**	**LUSB1022**	**LUSB0004**	**LUSB1025**
Collection Date	**07/08/98**	**07/08/98**	**07/09/98**	**07/10/98**	**07/09/98**	**07/13/98**	**07/14/98**	**07/20/98**	**07/20/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**	**1.0-2.0**	**6.0-7.0**
Duplicate ID					**LUSB9001**				
Northing	**199502**	**199502**	**199521**	**199521**	**199521**	**199494**	**199494**	**199554**	**199554**
Easting	**517588**	**517588**	**517565**	**517565**	**517565**	**517528**	**517528**	**517519**	**517519**
Metals									
Aluminum (mg/kg)	64700	16400	22800	19600	22900	13500	12500	14200	15300
Antimony (mg/kg)	0.56 U	0.35 U	0.35 U	0.51 B	0.32 U	0.45 B	1.5 UJ	0.28 UN	0.3 UN
Arsenic (mg/kg)	2.2 B	0.57 U	6	11.2	3.3	7.2	13.1	8.2	33.5
Barium (mg/kg)	26.7	12.4	76	96.9	60.8	87.3	129	80.7 N	95.3 N
Beryllium (mg/kg)	5130	1830	968	156	1200	734	8.5	141 N	335 N
Cadmium (mg/kg)	0.26 U	0.16 U	0.29	0.61	0.15 U	3.9	0.68 U	0.31	0.51
Calcium (mg/kg)	7310	792	14700	21500	5820	91700	76900	39800	39000
Chromium (mg/kg)	40.3	28.1	27.1	37.5	23.8	30	18.5	26.2	25.6
Cobalt (mg/kg)	3.8	0.92 B	8.6	12	5.5	4.3	12.3	9.3	13.7
Copper (mg/kg)	26.1	15.7	27.1	33.7	20.5	181	34.5	25.1	58.7
Iron (mg/kg)	8170	2210	19600	54400	13700	16700	27900	23100	31800
Lead (mg/kg)	70	19	40.7	18.8	31.8	1140	40	452 N	80.6 N
Magnesium (mg/kg)	2260	435	6450	9240	3510	18200	15300 J	11400	10300
Manganese (mg/kg)	210	31.5	395	520	198	284	447	359	537
Mercury (mg/kg)	0.06 B	0.13	0.09 B	0.04	0.07	1.2	0.04	0.04	0.08
Nickel (mg/kg)	19	24.7	29.4	35.7	21.9	31.8	33.5	35.2	39.2
Phosphorus (mg/kg)		57.1		457 E	296	326	463	413	863
Potassium (mg/kg)	905	324	2240	3850	1650	1470	3140	2770	2470
Selenium (mg/kg)	0.91 B	0.34 B	0.92 B	2.8	1.2 B	1.4	1.9 B	0.93 B	1.9
Silver (mg/kg)	0.46 U	0.29 U	0.28 U	0.25 U	0.26 U	0.29 B	1.2 U	0.23 U	0.25 U
Sodium (mg/kg)	16500	8310	7550		8830	1040	539 J	329	373
Thallium (mg/kg)	0.91 U	0.56 U	0.56 U	0.49 U	1.1 B	0.51 U	2.4 U	0.95 B	1.4 B
Vanadium (mg/kg)	5.8	1.5 B	26.9	42.2	19.3	17.6	25	32.2	32
Zinc (mg/kg)	39.2	6.5	64.6	77.2	45.5	1160	75.1	122 N	226 N
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
1,2-Dichlorobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
1,3-Dichlorobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
1,4-Dichlorobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2,4,5-Trichlorophenol (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
2,4,6-Trichlorophenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U

Phase IV IA01 Soil

Station	IA01-SB0001	IA01-SB0001	IA01-SB0002	IA01-SB0002	IA01-SB0002	IA01-SB0003	IA01-SB0003	IA01-SB0004	IA01-SB0004
Sample No	LUSB0001	LUSB1019	LUSB0002	LUSB1020	LUSB0002D	LUSB0003	LUSB1022	LUSB0004	LUSB1025
Collection Date	07/08/98	07/08/98	07/09/98	07/10/98	07/09/98	07/13/98	07/14/98	07/20/98	07/20/98
Depth (ft)	1.0-2.0	3.0-4.0	1.0-2.0	5.0-6.0	1.0-2.0	1.0-2.0	8.5-9.5	1.0-2.0	6.0-7.0
Duplicate ID					LUSB9001				
Northing	199502	199502	199521	199521	199521	199494	199494	199554	199554
Easting	517588	517588	517565	517565	517565	517528	517528	517519	517519
2,4-Dichlorophenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2,4-Dimethylphenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2,4-Dinitrophenol (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
2,4-Dinitrotoluene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2,6-Dinitrotoluene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2-Chloronaphthalene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2-Chlorophenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2-Methylnaphthalene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2-Nitrophenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
2-methyl-4,6-dinitrophenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
3,3'-Dichlorobenzidine (ug/kg)	3600 U	2830 U	2490 U	2140 U	2250 U	8680 U	1670 U	2110 U	2140 U
4-Bromophenyl phenyl ether (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
4-Chloroaniline (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
4-Chlorophenylphenylether (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
4-Nitrophenol (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
4-chloro-3-methyl phenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Acenaphthene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Acenaphthylene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Anthracene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Benzo(a)anthracene (ug/kg)	720 U	565 U	498 U	427 U	450 U	896 J	333 U	422 U	427 U
Benzo(a)pyrene (ug/kg)	720 U	565 U	498 U	427 U	450 U	874 J	333 U	422 U	427 U
Benzo(b)fluoranthene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1190 J	333 U	422 U	427 U
Benzo(ghi)perylene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Benzo(k)fluoranthene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Butylbenzylphthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Carbazole (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Chrysene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1060 J	333 U	422 U	427 U
Di-n-butylphthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Di-n-octylphthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Dibenz(a,h)anthracene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Dibenzofuran (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Diesel Range Organics (mg/kg)									
Diethyl phthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Dimethyl phthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Fluoranthene (ug/kg)	720 U	565 U	498 U	427 U	450 U	2670	333 U	422 U	427 U
Fluorene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U

Station	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0004**	**IA01-SB0004**
Sample No	**LUSB0001**	**LUSB1019**	**LUSB0002**	**LUSB1020**	**LUSB0002D**	**LUSB0003**	**LUSB1022**	**LUSB0004**	**LUSB1025**
Collection Date	**07/08/98**	**07/08/98**	**07/09/98**	**07/10/98**	**07/09/98**	**07/13/98**	**07/14/98**	**07/20/98**	**07/20/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**	**1.0-2.0**	**6.0-7.0**
Duplicate ID					**LUSB9001**				
Northing	**199502**	**199502**	**199521**	**199521**	**199521**	**199494**	**199494**	**199554**	**199554**
Easting	**517588**	**517588**	**517565**	**517565**	**517565**	**517528**	**517528**	**517519**	**517519**
Hexachlorobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Hexachlorobutadiene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Hexachlorocyclopentadiene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Hexachloroethane (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Isophorone (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
N-Nitrosodiphenylamine (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
N-Nitrosodipropylamine (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Naphthalene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Nitrobenzene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Pentachlorophenol (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
Phenanthrene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1900	333 U	422 U	427 U
Phenol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Pyrene (ug/kg)	720 U	565 U	498 U	427 U	450 U	1830	333 U	422 U	427 U
bis(2-chloroethoxy)methane (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
bis(2-chloroethyl) ether (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
bis(2-ethylhexyl)phthalate (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
m,p-Cresol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
m-Nitroaniline (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
o-Cresol (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
o-Nitroaniline (ug/kg)	1800 U	1410 U	1240 U	1070 U	1130 U	4340 U	833 U	1050 U	1070 U
p-Nitroaniline (ug/kg)	720 U	565 U	498 U	427 U	450 U	1740 U	333 U	422 U	427 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	16.7 U	2.1 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,1,2,2-Tetrachloroethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,1,2-Trichloroethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,1-Dichloroethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,1-Dichloroethene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,2-Dichloroethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,2-Dichloroethylene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
1,2-Dichloropropane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
2-Butanone (ug/kg)	33.4 U	2.7 U	13.7 U	3.8 J	3.9 U	11.7 U	6.1 U	11.4 U	1.6 U
2-Hexanone (ug/kg)	33.4 U	21.4 U	13.7 U	9.4 U	15.1 U	11.4 U	1.1 J	11.4 U	13.4 U
4-Methyl-2-pentanone (ug/kg)	33.4 U	21.4 U	13.7 U	9.4 U	15.1 U	11.4 U	9.9 U	11.4 U	13.4 U
Acetone (ug/kg)	63.7 U	40.7 U	35.8 U	21.4 U	27.4 U	32.5 U	23.8 U	3.1 U	12.3 U
Benzene (ug/kg)	2 J	1.1 J	3.4 J	3.1 J	2.7 J	5.4 J	2.2 J	2.9 J	2.9 J

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Station	IA01-SB0001	IA01-SB0001	IA01-SB0002	IA01-SB0002	IA01-SB0002	IA01-SB0003	IA01-SB0003	IA01-SB0004	IA01-SB0004
Sample No	**LUSB0001**	**LUSB1019**	**LUSB0002**	**LUSB1020**	**LUSB0002D**	**LUSB0003**	**LUSB1022**	**LUSB0004**	**LUSB1025**
Collection Date	**07/08/98**	**07/08/98**	**07/09/98**	**07/10/98**	**07/09/98**	**07/13/98**	**07/14/98**	**07/20/98**	**07/20/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**	**1.0-2.0**	**6.0-7.0**
Duplicate ID					**LUSB9001**				
Northing	**199502**	**199502**	**199521**	**199521**	**199521**	**199494**	**199494**	**199554**	**199554**
Easting	**517588**	**517588**	**517565**	**517565**	**517565**	**517528**	**517528**	**517519**	**517519**
Bromoform (ug/kg)	16.7 U	2.1 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Carbon disulfide (ug/kg)	16.7 U	10.7 U	6.9 U	13	7.6 U	3.2 J	2 J	5.7 U	6.7 U
Carbon tetrachloride (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Chlorobenzene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Chlorodibromomethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Chloroethane (ug/kg)	33.4 U	21.4 U	13.7 U	9.4 U	15.1 U	11.4 U	9.9 U	11.4 U	13.4 U
Chloroform (ug/kg)	16.7 U	1.6 J	6.9 U	4.7 U	0.92 J	5.7 U	4.9 U	5.7 U	6.7 U
Dichlorobromomethane (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Ethyl Methyl Benzene Isomer (ug/kg)						6.4 J			
Ethylbenzene (ug/kg)	16.7 U	10.7 U	2.5 J	49.7	1.3 J	2.9 J	0.5 J	0.76 J	0.96 J
Methyl Bromide (ug/kg)	33.4 U	21.4 U	13.7 U	9.4 U	15.1 U	11.4 U	9.9 U	11.4 U	13.4 U
Methyl Chloride (ug/kg)	33.4 U	21.4 U	13.7 U	9.4 U	15.1 U	11.4 U	9.9 U	11.4 U	13.4 U
Methylene chloride (ug/kg)	3.7 U	2 U	6.9 U	4.7 U	0.92 U	5.7 U	4.9 U	0.76 U	0.88 U
Styrene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Tetrachloroethene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Toluene (ug/kg)	5.8 J	15.2	8.2	11.9 B	11.6	12.6	3.6 B	5	4.4
Trichloroethene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
Trimethylbenzene Isomer (ug/kg)						33.7 J			
Vinyl chloride (ug/kg)	6.7 U	4.3 U	2.7 U	1.9 U	3 U	2.3 U	2 U	2.3 U	2.7 U
Xylenes (total) (ug/kg)	16.7 U	1.7 U	7.4 U	244 U	4.4 U	26.9	1.4 J	2 J	2.2 J
cis-1,3-dichloropropene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
ethyl-methyl-Benzene isomer (ug/kg)				31.6 J					
n-Butyl Alcohol (ug/kg)	17 U		7.1 U						
trans-1,3-Dichloropropene (ug/kg)	16.7 U	10.7 U	6.9 U	4.7 U	7.6 U	5.7 U	4.9 U	5.7 U	6.7 U
trimethyl-Benzene isomer (ug/kg)				15.4 J					
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	2.06 J	0.756 J	0.656 J	0.143 J	1.13 J	0.219 J	0.19 J	0.165 U	0.526 J
Thorium-228 (pCi/g)	0.35 J	0.368 J	0.851 J	0.77 J	0.67 J	0.835 J	2.11	1.17	1.41
Thorium-230 (pCi/g)	21	8.39	12.1	1.75	14.8	6.03	1.6	3.84	12.6
Thorium-232 (pCi/g)	0.268 J	0.205 J	0.694 J	0.685 J	0.433 J	0.731 J	0.89 J	0.637 J	0.964 J
Uranium-233/234 (pCi/g)	36.3	13.1	0.996 J	1.8	17.5	3.59	1.45	1.87	10.4
Uranium-235 (pCi/g)	1.94	0.694 J	0.0074 U	0.0958 U	0.676 J	0.189 J	0.0471 U	0.122 J	0.454 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	37.3	12.6	0.864 J	1.78	18.6	3.24	1.33	1.97	9.37
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.513 U	0.809 J	0.898 J	1.09	0.715 J	0.874 J	1.09	1.16	1.27

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Station	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0004**	**IA01-SB0004**
Sample No	**LUSB0001**	**LUSB1019**	**LUSB0002**	**LUSB1020**	**LUSB0002D**	**LUSB0003**	**LUSB1022**	**LUSB0004**	**LUSB1025**
Collection Date	**07/08/98**	**07/08/98**	**07/09/98**	**07/10/98**	**07/09/98**	**07/13/98**	**07/14/98**	**07/20/98**	**07/20/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**	**1.0-2.0**	**6.0-7.0**
Duplicate ID					**LUSB9001**				
Northing	**199502**	**199502**	**199521**	**199521**	**199521**	**199494**	**199494**	**199554**	**199554**
Easting	**517588**	**517588**	**517565**	**517565**	**517565**	**517528**	**517528**	**517519**	**517519**
Cesium-137 (pCi/g)	0.0546 U	-0.0125 U	0.0667 U	0.0055 U	0.0591 U	0.0923 J	0 U	0.0285 U	-0.0069 U
Cobalt-60 (pCi/g)	0.0226 U	-0.0165 U	-0.0561 U	-0.0036 U	-0.0363 U	0.0075 U	0.0128 U	0.0043 U	0.0069 U
Potassium-40 (pCi/g)	3.11	13.3	15.2	23.6	14.9	9.37	26.5	23.7	23.7
Protactinium-231 (pCi/g)	3.29 U	3.13 U	-2.4 U	0.616 U	-1.62 U	-0.571 U	0.416 U	-0.66 U	-0.816 U
Radium-226 (pCi/g)	41	22.4	22.9	1.78	22.2	2.61	1.54	2.42	10.4
Radium-228 (pCi/g)	0.513 U	0.809 J	0.898 J	1.09	0.715 J	0.874 J	1.09	1.16	1.27
Thorium-234 (pCi/g)	39.8	18.1	14.4	2.88 J	16	2.38 J	0.436 U	2.7 J	10.6
Uranium-235 (pCi/g)	2.58	1.3	1.36	0.267 U	1.54	0.0677 U	0.163 U	0.083 U	0.999 J

Phase IV IA01 Soil

Station	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0001**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**
Sample No	**LUSB0071**	**LUSB0072**	**LUSB0073**	**LUSB0074**	**LUSB0075**	**LUSB0081**	**LUSB0082**	**LUSB0083**	**LUSB0084**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**
Depth (ft)	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**3.0-4.0**	**8.0-9.0**	**10.0-11.0**	**12.0-13.0**
Duplicate ID									
Northing	**199502**	**199502**	**199502**	**199502**	**199502**	**199521**	**199521**	**199521**	**199521**
Easting	**517588**	**517588**	**517588**	**517588**	**517588**	**517565**	**517565**	**517565**	**517565**
Metals									
Beryllium (mg/kg)	65.3	0.79	0.67	0.84	1.1	29.9	16.4	1	0.65

Station	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0002**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0003**	**IA01-SB0004**
Sample No	**LUSB0085**	**LUSB0086**	**LUSB0083D**	**LUSB0091**	**LUSB0092**	**LUSB0093**	**LUSB0094**	**LUSB0095**	**LUSB0101**
Collection Date	**07/10/98**	**07/10/98**	**07/10/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/14/98**	**07/20/98**
Depth (ft)	**14.0-15.0**	**16.0-17.0**	**10.0-11.0**	**8.0-9.0**	**10.0-11.0**	**12.0-13.0**	**15.0-16.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID			**LUSB9008**						
Northing	**199521**	**199521**	**199521**	**199494**	**199494**	**199494**	**199494**	**199494**	**199554**
Easting	**517565**	**517565**	**517565**	**517528**	**517528**	**517528**	**517528**	**517528**	**517519**
Metals									
Beryllium (mg/kg)	0.41	0.17 B	32.6	1.6	2	0.69	0.24	462	127 N

Station	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0023**
Sample No	**LUSB0102**	**LUSB0103**	**LUSB0104**	**LUSB0105**	**LUSB0106**	**LUSB0102D**	**LUSB0131**	**LUSB0132**	**LUSB0134**
Collection Date	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**06/27/98**	**06/27/98**	**06/27/98**
Depth (ft)	**8.0-9.0**	**10.0-11.0**	**12.0-13.0**	**14.0-15.0**	**16.0-17.0**	**8.0-9.0**	**1.0-2.0**	**3.0-4.0**	**8.0-9.0**
Duplicate ID						**LUSB9009**			
Northing	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**	**199517**	**199517**	**199517**
Easting	**517519**	**517519**	**517519**	**517519**	**517519**	**517519**	**517591**	**517591**	**517591**
Metals									
Beryllium (mg/kg)	0.86 N	0.57 N	0.76 N	0.4 N	0.23 N	0.6 N	861	440	435

Station	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0023**	**IA01-SB0024**	**IA01-SB0024**	**IA01-SB0024**
Sample No	**LUSB0135**	**LUSB0136**	**LUSB0137**	**LUSB0138**	**LUSB0139**	**LUSB0137D**	**LUSB0141**	**LUSB0142**	**LUSB0143**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/28/98**	**06/28/98**	**06/28/98**
Depth (ft)	**10.0-11.0**	**12.0-13.0**	**14.0-15.0**	**16.0-17.0**	**19.0-20.0**	**14.0-15.0**	**1.0-2.0**	**5.0-6.0**	**7.0-8.0**
Duplicate ID						**LUSB9014**			
Northing	**199517**	**199517**	**199517**	**199517**	**199517**	**199517**	**199486**	**199486**	**199486**
Easting	**517591**	**517591**	**517591**	**517591**	**517591**	**517591**	**517599**	**517599**	**517599**
Metals									
Beryllium (mg/kg)	14.2	10.3	4.5	11.3	0.29	1.6	327	5.4	17.1

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Station	**IA01-SB0024**	**IA01-SB0024**	**IA01-SB0024**	**IA01-SB0024**	**IA01-SB0024**	**IA01-SB0025**	**IA01-SB0025**	**IA01-SB0025**	**IA01-SB0025**
Sample No	**LUSB0144**	**LUSB0145**	**LUSB0146**	**LUSB0147**	**LUSB0147D**	**LUSB0151**	**LUSB0152**	**LUSB0153**	**LUSB0154**
Collection Date	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**
Depth (ft)	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**15.0-16.0**	**1.0-2.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID					**LUSB9015**				
Northing	**199486**	**199486**	**199486**	**199486**	**199486**	**199458**	**199458**	**199458**	**199458**
Easting	**517599**	**517599**	**517599**	**517599**	**517599**	**517604**	**517604**	**517604**	**517604**
Metals									
Beryllium (mg/kg)	1.5	0.63	1.6	0.31	0.32	19.3	0.9	0.81	0.42

Station	**IA01-SB0025**	**IA01-SB0025**	**IA01-SB0025**	**IA01-SB0026**	**IA01-SB0026**	**IA01-SB0026**	**IA01-SB0026**	**IA01-SB0026**	**IA01-SB0026**
Sample No	**LUSB0155**	**LUSB0156**	**LUSB0157**	**LUSB0161**	**LUSB0162**	**LUSB0163**	**LUSB0164**	**LUSB0165**	**LUSB0166**
Collection Date	**06/29/98**	**06/29/98**	**06/29/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**
Depth (ft)	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**
Duplicate ID									
Northing	**199458**	**199458**	**199458**	**199517**	**199517**	**199517**	**199517**	**199517**	**199517**
Easting	**517604**	**517604**	**517604**	**517582**	**517582**	**517582**	**517582**	**517582**	**517582**
Metals									
Beryllium (mg/kg)	0.51	0.37	0.4	3590	1740	141	23.1	6.2	10.1

Station	**IA01-SB0026**	**IA01-SB0026**	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0027**
Sample No	**LUSB0167**	**LUSB0168**	**LUSB0171**	**LUSB0172**	**LUSB0173**	**LUSB0174**	**LUSB0175**	**LUSB0176**	**LUSB0177**
Collection Date	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**
Depth (ft)	**13.0-14.0**	**15.0-15.5**	**1.0-2.0**	**3.0-3.6**	**5.0-6.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**
Duplicate ID									
Northing	**199517**	**199517**	**199545**	**199545**	**199545**	**199545**	**199545**	**199545**	**199545**
Easting	**517582**	**517582**	**517570**	**517570**	**517570**	**517570**	**517570**	**517570**	**517570**
Metals									
Beryllium (mg/kg)	0.74	0.33	2350	1490	8570	59.7	102	3.6	7.3

Station	**IA01-SB0027**	**IA01-SB0027**	**IA01-SB0028**	**IA01-SB0028**	**IA01-SB0028**	**IA01-SB0028**	**IA01-SB0029**	**IA01-SB0029**	**IA01-SB0029**
Sample No	**LUSB0173D**	**LUSB0175D**	**LUSB0181**	**LUSB0182**	**LUSB0183**	**LUSB0184**	**LUSB0191**	**LUSB0192**	**LUSB0193**
Collection Date	**07/12/98**	**07/12/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**5.0-6.0**	**11.0-12.0**	**1.0-2.0**	**3.0-4.0**	**6.0-8.0**	**9.0-10.0**	**1.0-2.0**	**2.7-3.3**	**5.0-6.0**
Duplicate ID	**LUSB9016**	**LUSB9017**							
Northing	**199545**	**199545**	**199558**	**199558**	**199558**	**199558**	**199571**	**199571**	**199571**
Easting	**517570**	**517570**	**517562**	**517562**	**517562**	**517562**	**517568**	**517568**	**517568**
Metals									
Beryllium (mg/kg)	7330	23.4	470	16.8	206	5.1	5010	1.5	36.3

Station	**IA01-SB0029**	**IA01-SB0029**	**IA01-SB0029**	**IA01-SB0029**	**IA01-SB0030**	**IA01-SB0030**	**IA01-SB0030**	**IA01-SB0030**	**IA01-SB0030**
Sample No	**LUSB0194**	**LUSB0195**	**LUSB0196**	**LUSB0191D**	**LUSB0201**	**LUSB0202**	**LUSB0203**	**LUSB0204**	**LUSB0205**
Collection Date	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/14/98**	**07/14/98**	**07/14/98**	**07/14/98**	**07/14/98**
Depth (ft)	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**1.0-2.0**	**1.0-2.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**4.0-6.0**
Duplicate ID				**LUSB9018**					
Northing	**199571**	**199571**	**199571**	**199571**	**199570**	**199570**	**199570**	**199570**	**199570**
Easting	**517568**	**517568**	**517568**	**517568**	**517538**	**517538**	**517538**	**517538**	**517538**
Metals									
Beryllium (mg/kg)	0.67	0.61	0.41	4630	73.3	0.93	3.2	1.1	311

Station	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**	**IA01-SB0031**
Sample No	**LUSB0211**	**LUSB0212**	**LUSB0213**	**LUSB0214**	**LUSB0215**	**LUSB0216**	**LUSB0217**	**LUSB0218**	**LUSB0214D**
Collection Date	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**	**07/15/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**7.0-8.0**
Duplicate ID									**LUSB9020**
Northing	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**
Easting	**517536**	**517536**	**517536**	**517536**	**517536**	**517536**	**517536**	**517536**	**517536**
Metals									
Beryllium (mg/kg)	31.4	2.1	1.6	0.68	1.7	1.7	0.38	0.4	0.25 B

Station	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**
Sample No	**LUSB0222**	**LUSB0221**	**LUSB0223**	**LUSB0224**	**LUSB0225**	**LUSB1105**	**LUSB1106**	**LUSB1117**	**LUSB1118**
Collection Date	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**10/28/98**	**10/28/98**	**10/28/98**	**10/28/98**
Depth (ft)	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**7.0-8.0**	**10.0-12.0**	**10.0-11.0**	**11.0-12.0**	**12.0-13.0**	**13.0-14.0**
Duplicate ID									
Northing	**199569**	**199569**	**199569**	**199569**	**199569**	**199569**	**199569**	**199569**	**199569**
Easting	**517515**	**517515**	**517515**	**517515**	**517515**	**517515**	**517515**	**517515**	**517515**
Metals									
Beryllium (mg/kg)	25.9	50.7	303	90.4	111	1.4 B	2.3 B	1.8 B	0.97 B

Station	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0032**	**IA01-SB0033**	**IA01-SB0033**	**IA01-SB0033**	**IA01-SB0033**	**IA01-SB0033**	**IA01-SB0033**
Sample No	**LUSB1119**	**LUSB0225D**	**LUSB1117D**	**LUSB0231**	**LUSB0232**	**LUSB0233**	**LUSB0234**	**LUSB0235**	**LUSB0236**
Collection Date	**10/28/98**	**07/20/98**	**10/28/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**
Depth (ft)	**14.0-15.0**	**10.0-12.0**	**12.0-13.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**
Duplicate ID		**LUSB9021**	**LUSB9108**						
Northing	**199569**	**199569**	**199569**	**199465**	**199465**	**199465**	**199465**	**199465**	**199465**
Easting	**517515**	**517515**	**517515**	**517592**	**517592**	**517592**	**517592**	**517592**	**517592**
Metals									
Beryllium (mg/kg)	1.1 B	144 N	1.5 B	2200	17.9	1.2	0.67	0.84	1.1

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Station	**IA01-SB0033**	**IA01-SB0033**	**IA01-SB0034**	**IA01-SB0034**	**IA01-SB0034**	**IA01-SB0034**	**IA01-SB0034**	**IA01-SB0034**	**IA01-SB0034**
Sample No	**LUSB0237**	**LUSB0238**	**LUSB0241**	**LUSB0242**	**LUSB0243**	**LUSB0244**	**LUSB0245**	**LUSB0246**	**LUSB0247**
Collection Date	**07/20/98**	**07/20/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**
Depth (ft)	**13.0-14.0**	**15.0-16.0**	**1.0-2.0**	**3.0-3.5**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**
Duplicate ID									
Northing	**199465**	**199465**	**199510**	**199510**	**199510**	**199510**	**199510**	**199510**	**199510**
Easting	**517592**	**517592**	**517584**	**517584**	**517584**	**517584**	**517584**	**517584**	**517584**
Metals									
Beryllium (mg/kg)	0.52	0.35	3290	7.5	43.8	0.83	0.67	0.62	0.55

Station	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0035**	**IA01-SB0036**
Sample No	**LUSB1030**	**LUSB1031**	**LUSB1032**	**LUSB1033**	**LUSB1034**	**LUSB1035**	**LUSB1036**	**LUSB1037**	**LUSB1053**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**1.0-2.0**
Duplicate ID									
Northing	**199516**	**199516**	**199516**	**199516**	**199516**	**199516**	**199516**	**199516**	**199538**
Easting	**517553**	**517553**	**517553**	**517553**	**517553**	**517553**	**517553**	**517553**	**517554**
Metals									
Beryllium (mg/kg)	8760	70	4.3	1.5	2.3	0.81 B	0.58 B	0.82 B	518

Station	**IA01-SB0036**	**IA01-SB0036**	**IA01-SB0036**	**IA01-SB0036**	**IA01-SB0036**	**IA01-SB0036**	**IA01-SB0041**	**IA01-SB0042**
Sample No	**LUSB1054**	**LUSB1055**	**LUSB1056**	**LUSB1057**	**LUSB1058**	**LUSB1055D**	**LUSB1067**	**LUSB1068**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/28/98**	**07/28/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**13.5-14.0**	**5.0-6.0**	**11.0-12.0**	**11.0-11.8**
Duplicate ID						**LUSB9022**		
Northing	**199538**	**199538**	**199538**	**199538**	**199538**	**199538**	**199569**	**199569**
Easting	**517554**	**517554**	**517554**	**517554**	**517554**	**517554**	**517546**	**517507**
Metals								
Beryllium (mg/kg)	220	0.79 B	0.56 B	0.88 B	4.4 B	0.75	0.59	0.74

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Station	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**	**IA01-SB0004**
Sample No	**LUSB1112**	**LUSB1113**	**LUSB1114**	**LUSB1115**	**LUSB1116**	**LUSB1113D**
Collection Date	**10/28/98**	**10/28/98**	**10/28/98**	**10/28/98**	**10/28/98**	**10/28/98**
Depth (ft)	**10.0-11.0**	**11.0-12.0**	**12.0-13.0**	**13.0-14.0**	**14.0-15.0**	**11.0-12.0**
Duplicate ID						**LUSB9107**
Northing	**199554**	**199554**	**199554**	**199554**	**199554**	**199554**
Easting	**517519**	**517519**	**517519**	**517519**	**517519**	**517519**
Metals						
Arsenic (mg/kg)	18.1 B	8 B	11.3 B	11.2 B	8.8 B	8.3 B

Phase IV IA01 Soil

Station	**IA01-SB0023**
Sample No	**LUSB0133**
Collection Date	**06/27/98**
Depth (ft)	**5.0-6.0**
Duplicate ID	
Northing	**199517**
Easting	**517591**
Metals	
Beryllium (mg/kg)	112
Semivolatile Organics	
1,2,4-Trichlorobenzene (ug/kg)	399 U
1,2-Dichlorobenzene (ug/kg)	399 U
1,3-Dichlorobenzene (ug/kg)	399 U
1,4-Dichlorobenzene (ug/kg)	399 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	399 U
2,4,5-Trichlorophenol (ug/kg)	997 U
2,4,6-Trichlorophenol (ug/kg)	399 U
2,4-Dichlorophenol (ug/kg)	399 U
2,4-Dimethylphenol (ug/kg)	399 U
2,4-Dinitrophenol (ug/kg)	997 U
2,4-Dinitrotoluene (ug/kg)	399 U
2,6-Dinitrotoluene (ug/kg)	399 U
2-Chloronaphthalene (ug/kg)	399 U
2-Chlorophenol (ug/kg)	399 U
2-Methylnaphthalene (ug/kg)	399 U
2-Nitrophenol (ug/kg)	399 U
2-methyl-4,6-dinitrophenol (ug/kg)	399 U
3,3'-Dichlorobenzidine (ug/kg)	1990 U
4-Bromophenyl phenyl ether (ug/kg)	399 U
4-Chloroaniline (ug/kg)	399 U
4-Chlorophenylphenylether (ug/kg)	399 U
4-Nitrophenol (ug/kg)	997 U
4-chloro-3-methyl phenol (ug/kg)	399 U
Acenaphthene (ug/kg)	399 U
Acenaphthylene (ug/kg)	399 U
Anthracene (ug/kg)	399 U
Benzo(a)anthracene (ug/kg)	399 U
Benzo(a)pyrene (ug/kg)	399 U
Benzo(b)fluoranthene (ug/kg)	399 U
Benzo(ghi)perylene (ug/kg)	399 U
Benzo(k)fluoranthene (ug/kg)	399 U
Butylbenzylphthalate (ug/kg)	399 U
Carbazole (ug/kg)	399 U

Phase IV IA01 Soil

Station	**IA01-SB0023**
Sample No	**LUSB0133**
Collection Date	**06/27/98**
Depth (ft)	**5.0-6.0**
Duplicate ID	
Northing	**199517**
Easting	**517591**
Chrysene (ug/kg)	399 U
Di-n-butylphthalate (ug/kg)	399 U
Di-n-octylphthalate (ug/kg)	399 U
Dibenz(a,h)anthracene (ug/kg)	399 U
Dibenzofuran (ug/kg)	399 U
Diesel Range Organics (mg/kg)	2.8 B
Diethyl phthalate (ug/kg)	399 U
Dimethyl phthalate (ug/kg)	399 U
Fluoranthene (ug/kg)	399 U
Fluorene (ug/kg)	399 U
Hexachlorobenzene (ug/kg)	399 U
Hexachlorobutadiene (ug/kg)	399 U
Hexachlorocyclopentadiene (ug/kg)	399 U
Hexachloroethane (ug/kg)	399 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	399 U
Isophorone (ug/kg)	399 U
N-Nitrosodiphenylamine (ug/kg)	399 U
N-Nitrosodipropylamine (ug/kg)	399 U
Naphthalene (ug/kg)	399 U
Nitrobenzene (ug/kg)	399 U
Pentachlorophenol (ug/kg)	997 U
Phenanthrene (ug/kg)	399 U
Phenol (ug/kg)	399 U
Pyrene (ug/kg)	399 U
bis(2-chloroethoxy)methane (ug/kg)	399 U
bis(2-chloroethyl) ether (ug/kg)	399 U
bis(2-ethylhexyl)phthalate (ug/kg)	399 U
m,p-Cresol (ug/kg)	399 U
m-Nitroaniline (ug/kg)	997 U
o-Cresol (ug/kg)	399 U
o-Nitroaniline (ug/kg)	997 U
p-Nitroaniline (ug/kg)	399 U

Phase IV IA01 Soil

Station	**IA01-SB0003**	**IA01-SB0007**	**IA01-SB0007**	**IA01-SB0007**	**IA01-SB0007**	**IA01-SB0007**	**IA01-SB0007**	**IA01-SB0008**	**IA01-SB0008**
Sample No	**LUSB9508**	**LUSB0007**	**LUSB0008**	**LUSB0009**	**LUSB0010**	**LUSB0007D**	**LUSB9502**	**LUSB0011**	**LUSB0012**
Collection Date	**07/13/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**9.0-10.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**3.0-4.0**
Duplicate ID						**LUSB9002**			
Northing	**199494**	**199437**	**199437**	**199437**	**199437**	**199437**	**199437**	**199463**	**199463**
Easting	**517528**	**517599**	**517599**	**517599**	**517599**	**517599**	**517599**	**517605**	**517605**
Metals									
Arsenic (mg/kg)		1.5	10.6	6	5.3	3.3		10.2	12
Barium (mg/kg)		22.5	78.1	67	301	75.2		86.9	104
Beryllium (mg/kg)		1760	179	2.4	0.95	190		5.5	1
Lead (mg/kg)		42.2	14.5	8.7	8.3	10.2		13.4	10.8
Indicator Parameters									
Fluoride (mg/kg)		81.4	29.7	7.08	2.89	80.7		2.98	9.03
Nitrogen, Ammonia (mg/kg)		34.8	34.8	6.72	3.78	21.7		9.59	5.75
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.05 U	0.754 J	0.508 J	0.0685 U	-0.0215 U	1.3 J	0.04 U	0.0696 U	0.0038 U
Thorium-228 (pCi/g)	0.17	0.596 J	1.16	1.04	1.23	0.487 J	0.31	1.24	1.13
Thorium-230 (pCi/g)	7.74	18.1	8.67	1.3	1.15	19.4	1.04	2.94	1.97
Thorium-232 (pCi/g)	0.53	0.444 J	0.948 J	0.818 J	0.55 J	0.499 J	0.55	1.3	0.897 J
Uranium-233/234 (pCi/g)	3.32	21.6	9.55	0.735 J	1.11	22.2	0.59	1.34	1.35
Uranium-235 (pCi/g)		1.08	0.545 J	0.0588 U	0.0702 U	1.39		0.0463 U	0.0633 J
Uranium-235/236 (pCi/g)	0.13						0.03		
Uranium-238 (pCi/g)	3.38	20.7	9.03	0.834 J	0.942 J	22.5	0.81	1.44	1.35
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)		0.362 U	1.42	1.06	1.09	0.451 U		1.11	1.06
Cesium-137 (pCi/g)		0.006 U	-0.0072 U	-0.0076 U	0.0101 U	-0.0424 U		0 U	0.0414 J
Cobalt-60 (pCi/g)		-0.0588 U	-0.0224 U	-0.0105 U	-0.0005 U	0.073 U		-0.0307 U	-0.0035 U
Potassium-40 (pCi/g)		8	25.3	21.8	31.3	9.23		26.5	24.7
Protactinium-231 (pCi/g)		-1.79 U	0.0502 U	-0.566 U	0.747 U	-2.74 U		0.601 U	-0.156 U
Radium-226 (pCi/g)		30	13	1.33	1.44	31.5		1.63	1.83
Radium-228 (pCi/g)		0.362 U	1.42	1.06	1.09	0.451 U		1.11	1.06
Thorium-234 (pCi/g)		25.3	9.72	1.11 U	0.795 U	22		2.03 J	1.4 J
Uranium-235 (pCi/g)		1.3	0.314 U	0.147 U	0.0959 U	1.93		0.227 U	0.114 U

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Station	**IA01-SB0008**	**IA01-SB0008**	**IA01-SB0009**	**IA01-SB0009**	**IA01-SB0009**	**IA01-SB0009**	**IA01-SB0010**	**IA01-SB0010**	**IA01-SB0010**
Sample No	**LUSB0013**	**LUSB0014**	**LUSB0015**	**LUSB0016**	**LUSB0017**	**LUSB0018**	**LUSB0019**	**LUSB0020**	**LUSB0021**
Collection Date	**07/12/98**	**07/12/98**	**07/14/98**	**07/14/98**	**07/14/98**	**07/14/98**	**07/15/98**	**07/15/98**	**07/15/98**
Depth (ft)	**5.0-6.0**	**9.0-10.0**	**1.0-2.0**	**3.0-4.0**	**7.0-8.0**	**9.0-10.0**	**3.0-4.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID									
Northing	**199463**	**199463**	**199490**	**199490**	**199490**	**199490**	**199480**	**199480**	**199480**
Easting	**517605**	**517605**	**517537**	**517537**	**517537**	**517537**	**517527**	**517527**	**517527**
Metals									
Arsenic (mg/kg)	6.3	10.2	4.6 U	11.4 B	4.4 B	8.7 B	7.7 B	14.3	13.4
Barium (mg/kg)	79.6	74.3	182	71.5	78.2	109	93.4	121	75.8
Beryllium (mg/kg)	8.9	0.71	1630	5.3	11.4	0.41 B	1.8 B	0.54 B	0.36 B
Lead (mg/kg)	10	10.3	6180	38.8	66.6	15.1	13.8	16.6	15.7
Indicator Parameters									
Fluoride (mg/kg)	21.3	5.87	161	2.19	2.99	2.68	26.9	3.01	1.81
Nitrogen, Ammonia (mg/kg)	29.2	6.08	16.2	4.28	3.05	5.11	3.23	4.5	4.36
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	-0.0064 U	0.0376 U	0.541 J	0.105 U	0.0372 U	0.225 U	0.131 U	0.029 U	0.0621 U
Thorium-228 (pCi/g)	1.08	1.03	0.786 J	0.788 J	1.11	1.56	0.941 J	0.771 J	1.03
Thorium-230 (pCi/g)	1.44	2.32	21.6	1.48	1.56	1.99	1.91	2.27	2.05
Thorium-232 (pCi/g)	0.782 J	0.757 J	0.709 J	0.806 J	0.605 J	0.84 J	0.922 J	0.718 J	0.648 J
Uranium-233/234 (pCi/g)	1.06	1.28	8.03	0.853 J	0.737 J	1.3	0.923 J	1.29	1.71
Uranium-235 (pCi/g)	0.0584 U	0.0444 U	0.475 J	0.0284 U	0.0316 U	0.0314 U	0.061 U	0.0779 U	0.066 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.987 J	1.35	8.39	1.04	0.708 J	1.44	0.987 J	1.24	1.71
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.07	1.13	1.09	0.897 J	0.913 J	1	0.774 J	1.24	0.994 J
Cesium-137 (pCi/g)	-0.0144 U	0.0156 U	0.1	-0.0254 U	0.0201 U	0.0052 U	-0.0069 U	-0.0053 U	-0.0224 U
Cobalt-60 (pCi/g)	0 U	0.0083 U	0.0109 U	0.0008 U	0.0031 U	0.0075 U	-0.009 U	0.032 U	0.0164 U
Potassium-40 (pCi/g)	24	26.1	10.2	23.1	20.4	25.7	23.1	27.1	25.2
Protactinium-231 (pCi/g)	-0.292 U	0.327 U	0.388 U	-1.32 U	0.184 U	0.0753 U	-0.0836 U	1.03 U	0.284 U
Radium-226 (pCi/g)	1.18	1.58	7.28	1.34	0.971 J	1.59	1.25	1.66	1.55
Radium-228 (pCi/g)	1.07	1.13	1.09	0.897 J	0.913 J	1	0.774 J	1.24	0.994 J
Thorium-234 (pCi/g)	1.11 J	2.61 J	8.12	0.153 U	1.01 U	1.66 J	2.16 J	1.62 J	2.08 U
Uranium-235 (pCi/g)	0.3 J	0.196 U	0.986 J	0.0826 U	0.0624 U	0.16 U	0.0204 U	0.284 J	0.116 U

Station	**IA01-SB0011**	**IA01-SB0011**	**IA01-SB0011**	**IA01-SB0011**	**IA01-SB0012**	**IA01-SB0012**	**IA01-SB0012**	**IA01-SB0013**	**IA01-SB0013**
Sample No	**LUSB0023**	**LUSB0024**	**LUSB0025**	**LUSB0023D**	**LUSB0027**	**LUSB0028**	**LUSB0029**	**LUSB0031**	**LUSB0032**
Collection Date	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/14/98**	**07/14/98**
Depth (ft)	**2.0-3.5**	**4.0-5.0**	**7.0-8.0**	**2.0-3.5**	**1.0-2.0**	**4.0-5.0**	**7.0-8.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID				**LUSB9005**					
Northing	**199488**	**199488**	**199488**	**199488**	**199500**	**199500**	**199500**	**199467**	**199467**
Easting	**517514**	**517514**	**517514**	**517514**	**517528**	**517528**	**517528**	**517565**	**517565**
Metals									
Arsenic (mg/kg)	14.4	5.3	3.8	7.8	19.4	16.3	2.9	5 B	4.3 U
Barium (mg/kg)	129 *	67.3 *	47.6 *	99.9 *	151 *	79.6 *	74.1 *	103	112
Beryllium (mg/kg)	25.5 *	0.55 *	0.44 *	32.2 *	2350 *	1.1 *	0.47 *	13.1	18.4
Lead (mg/kg)	15.8 *	7.3 *	4.9 *	17.6 *	1450 *	11.3 *	5.6 *	20.9	22.4
Indicator Parameters									
Fluoride (mg/kg)	48.9	4.55	4.37	14.4	197	26	6.12	11.3	24.2
Nitrogen, Ammonia (mg/kg)	6.89	1.6	2.66	11.1	116	14.7	0 U	12.1	43.6
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0813 U	0.0513 U	0.133 U	0.115 U	0.864 J	0.0949 U	0.0884 U	0.104 U	0.21 J
Thorium-228 (pCi/g)	1.44	1.01	1.33	1.11	1.69	1.45	1.23	1.32	1.15
Thorium-230 (pCi/g)	2.17	1.88	1.06	2.12	21.6	1.35	1.17	2.21	1.72
Thorium-232 (pCi/g)	1.46	0.902 J	0.773 J	0.785 J	1.08	0.638 J	0.96 J	0.976 J	0.977 J
Uranium-233/234 (pCi/g)	1.17	1.05	1.12	1	11.2	1.02	1.03	1.14	1.47
Uranium-235 (pCi/g)	0.0978 J	0.0136 U	0.0519 U	0.0976 J	1.07	0.0867 J	0 U	0.0791 J	0.0443 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.01	0.992 J	0.935 J	1.3	10.9	1.03	1.12	1.21	1.25
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.07	1.12	0.974 J	0.973 J	1.33	1.02	0.996 J	1.23	1.11
Cesium-137 (pCi/g)	-0.0208 U	-0.0104 U	0.0059 U	-0.0109 U	0.0228 U	-0.0029 U	-0.0088 U	0.003 U	0.0363 J
Cobalt-60 (pCi/g)	-0.0034 U	0.0088 U	0.0321 U	-0.0037 U	-0.0287 U	0.0071 U	0.006 U	0.0001 U	-0.003 U
Potassium-40 (pCi/g)	26.4	23.1	23.7	23.2	16.9	23.2	23.8	26.8	23.7
Protactinium-231 (pCi/g)	-0.15 U	-0.26 U	0.471 U	0.891 U	1.09 U	-0.205 U	0.352 U	-0.999 U	0.768 U
Radium-226 (pCi/g)	1.6	1.33	1.34	1.96	6.38	1.39	1.12	2.05	1.69
Radium-228 (pCi/g)	1.07	1.12	0.974 J	0.973 J	1.33	1.02	0.996 J	1.23	1.11
Thorium-234 (pCi/g)	1.77 J	0.877 U	1.39 J	0.102 U	6.98	1.29 U	2.56 J	2.3 J	0.733 U
Uranium-235 (pCi/g)	0.0621 U	0.0257 U	0.0587 U	0.303 U	0.744 J	-0.0552 U	0.153 U	0.242 U	0.198 U

Phase IV IA01 Soil

Station	**IA01-SB0013**	**IA01-SB0014**	**IA01-SB0014**	**IA01-SB0014**	**IA01-SB0014**	**IA01-SB0015**	**IA01-SB0015**	**IA01-SB0015**	**IA01-SB0015**
Sample No	**LUSB0033**	**LUSB0035**	**LUSB0036**	**LUSB0037**	**LUSB0036D**	**LUSB0039**	**LUSB0040**	**LUSB0041**	**LUSB0042**
Collection Date	**07/14/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**	**07/20/98**
Depth (ft)	**8.0-9.0**	**1.0-2.0**	**3.0-4.5**	**5.0-5.8**	**3.0-4.5**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**
Duplicate ID					**LUSB9004**				
Northing	**199467**	**199492**	**199492**	**199492**	**199492**	**199497**	**199497**	**199497**	**199497**
Easting	**517565**	**517575**	**517575**	**517575**	**517575**	**517559**	**517559**	**517559**	**517559**
Metals									
Arsenic (mg/kg)	4.9 B	7.3	8.5	7.6	13.1	4.7	7.5	4.2	3.7
Barium (mg/kg)	76.4	106 N	108 N	106 N	107 N	76.6 N	103 N	113 N	87.7 N
Beryllium (mg/kg)	0.42 B	95.3 N	1.1 N	9.6 N	1.3 N	912 N	879 N	74.9 N	41.3 N
Lead (mg/kg)	13.2	25.9 N	13.7 N	49.1 N	15.1 N	289 N	2110 N	279 N	11.1 N
Indicator Parameters									
Fluoride (mg/kg)	4.02	24	15.9	13.2	21.3	168	187	44.2	19.7
Nitrogen, Ammonia (mg/kg)	3.28	13.9	7.92	16.6	6.69	19.8	25.9	23.7	51.1
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0761 U	0.266 U	0.0395 U	0.113 U	0.12 U	1.15 J	0.361 J	0.188 U	0.0491 U
Thorium-228 (pCi/g)	1.04	1.54	1.2	1.4	1.57	0.811 J	1.22	0.893 J	0.985 J
Thorium-230 (pCi/g)	1.76	2.72	1.95	2.13	1.95	17	5.02	2.36	1.19
Thorium-232 (pCi/g)	0.663 J	0.886 J	1	0.794 J	1.18	0.497 J	1.28	0.814 J	0.718 J
Uranium-233/234 (pCi/g)	1.05	2.11	1.16	1.11	1.26	22.8	4.84	2.02	1.04
Uranium-235 (pCi/g)	0.0556 U	0.123 J	0.0492 J	0.0631 U	0.026 U	0.991 J	0.227 J	0.0938 J	0.0967 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.02	2.14	1.37	1.49	1.15	23.6	4.94	1.92	1.22
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.873 J	1.21	1.19	1.22	1.13	1.06	1.3	1.22	1.04
Cesium-137 (pCi/g)	0.0042 U	0.0534 J	0.0092 U	-0.0018 U	0.0186 U	0.0963 U	0.0289 U	-0.0081 U	-0.0027 U
Cobalt-60 (pCi/g)	-0.0041 U	0.0077 U	-0.018 U	-0.0098 U	-0.0003 U	0.045 U	-0.0075 U	-0.0083 U	0.0107 U
Potassium-40 (pCi/g)	23.5	26.6	27.1	26.2	26.6	15	24.6	26.8	21.6
Protactinium-231 (pCi/g)	-0.993 U	-0.67 U	0.238 U	-0.0707 U	0.664 U	-1.7 U	-0.197 U	-0.293 U	-0.567 U
Radium-226 (pCi/g)	1.45	2.44	1.7	1.86	1.91	24.6	3.75	2.65	1.27
Radium-228 (pCi/g)	0.873 J	1.21	1.19	1.22	1.13	1.06	1.3	1.22	1.04
Thorium-234 (pCi/g)	2.32 J	4.22 J	1.5 U	2.86 J	2.08 J	18.3	3.16 J	2.28 J	2.27 J
Uranium-235 (pCi/g)	0.0978 U	0.268 J	0.162 U	0.0548 U	0.154 U	2.09	0.245 U	0.149 U	0.171 U

Phase IV IA01 Soil

Station	**IA01-SB0016**	**IA01-SB0017**	**IA01-SB0017**	**IA01-SB0017**	**IA01-SB0018**	**IA01-SB0018**	**IA01-SB0018**	**IA01-SB0019**	**IA01-SB0019**
Sample No	**LUSB0043**	**LUSB0047**	**LUSB0048**	**LUSB0049**	**LUSB0051**	**LUSB0052**	**LUSB0053**	**LUSB0055**	**LUSB0056**
Collection Date	**07/20/98**	**07/21/98**	**07/21/98**	**07/21/98**	**07/22/98**	**07/22/98**	**07/22/98**	**07/23/98**	**07/23/98**
Depth (ft)	**1.0-2.0**	**2.0-3.0**	**5.0-6.0**	**8.0-9.0**	**1.0-2.0**	**6.0-7.0**	**13.0-14.0**	**1.0-2.0**	**3.0-4.0**
Duplicate ID									
Northing	**199531**	**199577**	**199577**	**199577**	**199537**	**199537**	**199537**	**199543**	**199543**
Easting	**517585**	**517527**	**517527**	**517527**	**517571**	**517571**	**517571**	**517522**	**517522**
Metals									
Arsenic (mg/kg)	6	5.9 N*	5.2 N*	9.2 N*	2.1 U	5.9	6.3	5.4	10.9
Barium (mg/kg)	89.6 N	160	83.2	87	17.8 *	85.3 *	28.6 *	108	114
Beryllium (mg/kg)	588 N	243 N*	0.96 N*	1.6 N*	1420 *	22.9 *	3 *	310	47.6
Lead (mg/kg)	54.2 N	600 N*	10.7 N*	13.4 N*	120 *	8.4 *	6.3 *	21.6	18.9
Indicator Parameters									
Fluoride (mg/kg)	175	44.9	2.95	3.4	156	9.28	1.02	260	220
Nitrogen, Ammonia (mg/kg)	44.8	20.1	3.41	4.05	50.7	5.17	2.34	57.1	10.6
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.622 J	0.0627 U	0.0334 U	0.275 J	2.03 J	0.152 U	0.119 U	0.271 J	0.204 J
Thorium-228 (pCi/g)	1.08	1.63	1.51	1.13	0.534 J	1.37	1.08	1.17	1.16
Thorium-230 (pCi/g)	6.26	2.3	2.15	1.51	26.5	1.14	1.08	5.88	1.71
Thorium-232 (pCi/g)	0.74 J	0.873 J	1.28	0.743 J	0.247 J	0.913 J	0.569 J	0.853 J	0.756 J
Uranium-233/234 (pCi/g)	6.83	1.48	1.05	1.06	43.2	0.943 J	1.33	6.5	1.14
Uranium-235 (pCi/g)	0.285 J	0.121 J	0.046 U	0.0697 U	2.29	0.035 U	0 U	0.445 J	0.166 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	7.15	1.88	1.22	0.908 J	41.5	0.908 J	1.04	6.7	1.4
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.984 J	1	0.855 J	1.03	0.885 J	0.99 J	0.541 J	1.17	1.12
Cesium-137 (pCi/g)	0.0266 U	0.0476 U	0.0031 U	0 U	0.0075 U	-0.0117 U	0.0021 U	0.0457 U	0.0001 U
Cobalt-60 (pCi/g)	0.0044 U	-0.0013 U	-0.0015 U	0.0014 U	0.0134 U	0.0081 U	0.0158 U	-0.022 U	0.0053 U
Potassium-40 (pCi/g)	18.4	23.5	27.7	27	4.4	23.6	15.5	23.7	28.1
Protactinium-231 (pCi/g)	-0.846 U	-1.16 U	-0.819 U	0.0516 U	1.03 U	-0.211 U	0.535 U	0.128 U	-0.196 U
Radium-226 (pCi/g)	12	1.69	1.43	1.18	55.4	1.32	1.35	7.46	1.67
Radium-228 (pCi/g)	0.984 J	1	0.855 J	1.03	0.885 J	0.99 J	0.541 J	1.17	1.12
Thorium-234 (pCi/g)	10.9	2.12 U	0.672 U	1.14 U	43.3	1.48 U	1.39 J	6.37	0.99 U
Uranium-235 (pCi/g)	0.585 J	0.174 U	0.211 U	0.16 U	2.6	0.0832 U	0.0312 U	0.419 U	0.23 U

Phase IV IA01 Soil

Station	**IA01-SB0019**	**IA01-SB0019**	**IA01-SB0020**	**IA01-SB0020**	**IA01-SB0020**	**IA01-SB0020**	**IA01-SB0021**	**IA01-SB0021**	**IA01-SB0021**
Sample No	**LUSB0057**	**LUSB0058**	**LUSB0059**	**LUSB0060**	**LUSB0061**	**LUSB0062**	**LUSB0063**	**LUSB0064**	**LUSB0065**
Collection Date	**07/23/98**	**07/23/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**
Depth (ft)	**5.0-6.0**	**6.0-7.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**6.0-7.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID									
Northing	**199543**	**199543**	**199550**	**199550**	**199550**	**199550**	**199564**	**199564**	**199564**
Easting	**517522**	**517522**	**517551**	**517551**	**517551**	**517551**	**517546**	**517546**	**517546**
Metals									
Arsenic (mg/kg)	8	9	4.5	13.9	9.9	9.9	7.1	7.8	4.4
Barium (mg/kg)	100	87.2	99 N*	83.2 N*	60.1 N*	67.4 N*	84.4 N*	52.9 N*	63.5 N*
Beryllium (mg/kg)	93.4	108	0.54	27.6	25.1	0.62	2.6	12.1	45.2
Lead (mg/kg)	10.8	12.6	47.6 *	17.4 *	12 *	10.9 *	11.7 *	7.6 *	6.8 *
Indicator Parameters									
Fluoride (mg/kg)	83	112	184	47.4	47.5	17.2	11.1	21.7	27.6
Nitrogen, Ammonia (mg/kg)	40.7	55.4	46.4	11.8	103	135	10	8.17	16.4
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.289 J	0.143 U	0.134 U	0.0288 U	0.171 U	0.134 U	0.0772 U	0.203 J	0.21 U
Thorium-228 (pCi/g)	1.27	1.46	1.09	1.2	1.02	1.4	1.62	1.22	1.12
Thorium-230 (pCi/g)	1.85	2.47	2.05	1.76	1.51	1.34	1.65	1.31	1.08
Thorium-232 (pCi/g)	0.914 J	1.14	0.761 J	0.813 J	0.897 J	0.828 J	0.924 J	0.966 J	0.833 J
Uranium-233/234 (pCi/g)	1.36	1	1.63	1.18	1.28	1.29	0.839 J	1.07	0.9 J
Uranium-235 (pCi/g)	0.0515 U	0.0311 U	0.0359 U	0.0375 U	0.0357 U	0.106 J	0.082 U	0.0332 U	0.0505 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.37	1.07	1.54	1.57	0.976 J	1.24	1.12	0.892 J	0.913 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.14	0.972 J	1.06	0.95 J	0.945 J	0.957 J	1.01	0.984 J	1.02
Cesium-137 (pCi/g)	-0.0217 U	0 U	0.0024 U	-0.0052 U	-0.0217 U	-0.0107 U	0.0168 U	0.0114 U	-0.0049 U
Cobalt-60 (pCi/g)	0.0102 U	0.0152 U	-0.001 U	-0.0046 U	0.0122 U	-0.0154 U	-0.0032 U	-0.0032 U	0.0066 U
Potassium-40 (pCi/g)	25.6	26.2	22.7	25.9	23.5	24.7	24	23	23.7
Protactinium-231 (pCi/g)	0.42 U	-0.42 U	-0.218 U	0.278 U	-0.508 U	-0.203 U	-0.133 U	0.166 U	0.226 U
Radium-226 (pCi/g)	1.74	1.41	1.72	1.64	1.42	1.34	1.6	1.57	1.38
Radium-228 (pCi/g)	1.14	0.972 J	1.06	0.95 J	0.945 J	0.957 J	1.01	0.984 J	1.02
Thorium-234 (pCi/g)	2.46 J	2.38 J	1.16 J	0.808 U	1.1 J	0.816 U	1.54 J	1.08 J	0.536 U
Uranium-235 (pCi/g)	0.0918 U	0.102 U	0.225 J	0.143 U	0.194 J	0.0831 U	0.166 J	0.112 U	0.159 U

Station	**IA01-SB0021**	**IA01-SB0022**	**IA01-SB0022**	**IA01-SB0022**
Sample No	**LUSB0066**	**LUSB0067**	**LUSB0068**	**LUSB0069**
Collection Date	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**
Depth (ft)	**6.0-7.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID				
Northing	**199564**	**199556**	**199556**	**199556**
Easting	**517546**	**517509**	**517509**	**517509**
Metals				
Arsenic (mg/kg)	6.3	7.7	4.8	8.1
Barium (mg/kg)	65.6 N*	89.2 N*	58.3 N*	48.9 N*
Beryllium (mg/kg)	1.3	14.2	75.5	0.57
Lead (mg/kg)	8.3 *	18.1 *	8 *	6.7 *
Indicator Parameters				
Fluoride (mg/kg)	14.7	53.9	89.9	11.4
Nitrogen, Ammonia (mg/kg)	21.6	9.64	5.5	5.06
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.0781 U	0.126 U	0.0754 U	0.168 J
Thorium-228 (pCi/g)	1.12	1.38	1.08	0.963 J
Thorium-230 (pCi/g)	1.24	1.89	1.27	1.17
Thorium-232 (pCi/g)	0.791 J	1.15	0.694 J	0.543 J
Uranium-233/234 (pCi/g)	0.906 J	1.31	1.08	0.554 J
Uranium-235 (pCi/g)	0.0487 U	0.105 J	0.0476 U	0.0224 U
Uranium-235/236 (pCi/g)				
Uranium-238 (pCi/g)	1.01	1.17	1.14	0.822 J
Radiological Parameters (GammaSpec)				
Actinium-228 (pCi/g)	1.17	1.06	0.987 J	0 U
Cesium-137 (pCi/g)	0.0154 U	-0.0083 U	0.0094 U	-0.0378 U
Cobalt-60 (pCi/g)	-0.0072 U	0.0002 U	-0.0076 U	-0.0023 U
Potassium-40 (pCi/g)	24.6	24.3	22.6	15.2
Protactinium-231 (pCi/g)	0.4 U	-0.742 U	-0.349 U	-0.301 U
Radium-226 (pCi/g)	1.37	1.73	1.18	0.891 J
Radium-228 (pCi/g)	1.17	1.06	0.987 J	0 U
Thorium-234 (pCi/g)	2.2 J	0.617 U	0.493 U	2.13 J
Uranium-235 (pCi/g)	0.278 J	0.115 U	0.091 U	0.115 U

Phase II IA02 Soil

Station	**04AX00**	**04AX00**	**05BE00**	**05BE00**	**08AW00**	**08AW00**	**10AX00**	**10AX00**
Sample No	**LU00150**	**LU00151**	**LU00152**	**LU00153**	**LU00154**	**LU00155**	**LU00156**	**LU00157**
Collection Date	**10/21/97**	**10/21/97**	**10/21/97**	**10/21/97**	**10/22/97**	**10/22/97**	**10/22/97**	**10/22/97**
Depth (ft)	**2.0-3.5**	**4.0-4.5**	**2.5-3.5**	**4.0-5.5**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**2.0-3.0**
Northing	**0**	**0**	**0**	**0**	**517440**	**517440**	**517550**	**517550**
Easting	**0**	**0**	**0**	**0**	**199320**	**199320**	**199320**	**199320**
Metals								
Aluminum (mg/kg)	179000	12100	37900	41000	39300	76200	17100	16600
Antimony (mg/kg)	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	3.1 J	0.04 UJ	0.26 J
Arsenic (mg/kg)	0.08 U	4.1	10.5	12.7	2.3	98.7	12.2	10.1
Barium (mg/kg)	35.2	56.6	17.8	171	24	2250	93.5	112
Beryllium (mg/kg)	7880	145	2920	1150	2880	48.6	3.4	15.2
Boron (mg/kg)	0.48 U	10.5	4	28.3	3.2 J	56.8 J	10.7 J	5.7 J
Cadmium (mg/kg)	0.01 U	0.2	0.01 U	0.5	174	6.7	0.62	0.95
Calcium (mg/kg)	9110	33000	3400	4210	3150	24800	7290	2800
Chromium (mg/kg)	172	21.2	66.7	59.9	35.7	111	24.7	23.6
Cobalt (mg/kg)	5.5	6.2	0.99	18.5	2	59.2	14	14.1
Copper (mg/kg)	51.8	15.1	8.9	35.6	23.2 J	104 J	29.7 J	20.1 J
Iron (mg/kg)	11100	16400	3900	44700	7060 J	159000 J	34400 J	30000 J
Lead (mg/kg)	135	8.6	16.5	36.7	21.7	77.6	12	14.6
Magnesium (mg/kg)	4820	16500	1270	9040	26.8	31700	7680	5970
Manganese (mg/kg)	352	311	94.9	511	144	735	611	858
Mercury (mg/kg)	0.01 U	0.01 U	0.01 U	0.01 U	0.06	0.03	0.03	0.03
Molybdenum (mg/kg)	0.01 U	0.01 U	0.01 U	5.6	0.01 UJ	16.5 J	4.6 J	3.2 J
Nickel (mg/kg)	44.1	19.9	47.6	62.5	36.1	143	34.4	33.2
Potassium (mg/kg)	844	1690	595	4750	885	9920	2200	1560
Selenium (mg/kg)	0.04 U	0.04 U	0.59	0.04 U	2.2	5.1	0.37	0.59
Silicon (mg/kg)	1320 J	1120 J	1680 J	1650 J	1810 J	3350 J	697 J	680 J
Silver (mg/kg)	3.6	0.02 U	0.02 U	0.02 U	0.02 U	1.1	0.15	0.13
Sodium (mg/kg)	37000	5500	14100	10200	6240 J	7990 J	3260 J	2550 J
Strontium (mg/kg)	641	50.4	180	53	156	159	17.8	22.6
Thallium (mg/kg)	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	19.3	0.07 U	0.07 U
Vanadium (mg/kg)	9.2	22	2.7	64	7.3	186	33.8	33.7
Zinc (mg/kg)	127	41	17.4	129	748	339	71.6	80.5
Indicator Parameters								
% Moisture (%)	60	13	45	53	50	19	20	20
Chloride (mg/kg)	72.6 J		20.6 J		3.92 J			10.2 J
Fluoride (mg/kg)	231		53.6		22 J			0.19 J
Nitrate, as N (mg/kg)	3.6		0.05 U		1.64 J			2.56 J
Phosphorus (mg/kg)	2.44 J		0.28 R		0.33 R			0.2 R
Sulfate (mg/kg)	7785		2110		407			526
Temperature (c)	46.3	21.7	34.6	40.7	40.6			24.1
pH (ph)	8.8	10	7.78	7.47	7.14			8.22
Semivolatile Organics								

Station	**04AX00**	**04AX00**	**05BE00**	**05BE00**	**08AW00**	**08AW00**	**10AX00**	**10AX00**
Sample No	**LU00150**	**LU00151**	**LU00152**	**LU00153**	**LU00154**	**LU00155**	**LU00156**	**LU00157**
Collection Date	**10/21/97**	**10/21/97**	**10/21/97**	**10/21/97**	**10/22/97**	**10/22/97**	**10/22/97**	**10/22/97**
Depth (ft)	**2.0-3.5**	**4.0-4.5**	**2.5-3.5**	**4.0-5.5**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**2.0-3.0**
Northing	**0**	**0**	**0**	**0**	**517440**	**517440**	**517550**	**517550**
Easting	**0**	**0**	**0**	**0**	**199320**	**199320**	**199320**	**199320**
1,2,4-Trichlorobenzene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
1,2-Dichlorobenzene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
1,3-Dichlorobenzene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
1,4-Dichlorobenzene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,2'-oxybis (1-chloropropane) (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,4,5-Trichlorophenol (ug/kg)	205 UJ	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,4,6-Trichlorophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,4,6-tribromophenol (%)	50	48	73	87	68	84	75	84
2,4-Dichlorophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,4-Dimethylphenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,4-Dinitrophenol (ug/kg)	410 U	190 U	305 U	355 U	330 U	205 U	205 U	200 U
2,4-Dinitrotoluene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2,6-Dinitrotoluene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Chloronaphthalene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Chlorophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Methylnaphthalene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Methylphenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Nitroaniline (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-Nitrophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
2-fluorobiphenyl (%)	87	77	76	75	64	74	59	60
2-fluorophenol (%)	72	65	64	63	55	62	50	52
3,3'-Dichlorobenzidine (ug/kg)	205 UJ	95 UJ	150 UJ	175 UJ	165 UJ	100 UJ	100 UJ	100 UJ
3-Nitroaniline (ug/kg)	245 UJ	115 UJ	180 UJ	210 UJ	200 UJ	120 UJ	120 UJ	120 UJ
4,6-Dinitro-2-methylphenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
4-Chloroaniline (ug/kg)	245 U	115 U	180 U	210 U	200 U	120 U	120 U	120 U
4-Nitroaniline (ug/kg)	205 UJ	95 U	150 U	175 U	165 U	100 U	100 U	100 U
4-Nitrophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
4-bromophenyl phenyl ether (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
4-chloro-3-methyl phenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
4-chlorophenylphenylether (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Acenaphthene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Acenaphthylene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Anthracene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Benzo(a)anthracene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Benzo(a)pyrene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Benzo(b)fluoranthene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Benzo(ghi)perylene (ug/kg)	205 U	95 UJ	150 UJ	175 UJ	165 U	100 U	100 U	100 U
Benzo(k)fluoranthene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U

Station	**04AX00**	**04AX00**	**05BE00**	**05BE00**	**08AW00**	**08AW00**	**10AX00**	**10AX00**
Sample No	**LU00150**	**LU00151**	**LU00152**	**LU00153**	**LU00154**	**LU00155**	**LU00156**	**LU00157**
Collection Date	**10/21/97**	**10/21/97**	**10/21/97**	**10/21/97**	**10/22/97**	**10/22/97**	**10/22/97**	**10/22/97**
Depth (ft)	**2.0-3.5**	**4.0-4.5**	**2.5-3.5**	**4.0-5.5**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**2.0-3.0**
Northing	**0**	**0**	**0**	**0**	**517440**	**517440**	**517550**	**517550**
Easting	**0**	**0**	**0**	**0**	**199320**	**199320**	**199320**	**199320**
Butylbenzylphthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Carbazole (ug/kg)	205 UJ	95 UJ	150 UJ	175 UJ	165 UJ	100 UJ	100 UJ	100 UJ
Chrysene (ug/kg)	205 UJ	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Di-n-butylphthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Di-n-octylphthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Dibenz(a,h)anthracene (ug/kg)	205 U	95 UJ	150 UJ	175 UJ	165 UJ	100 UJ	100 UJ	100 UJ
Dibenzofuran (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Diethyl phthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Dimethyl phthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Fluoranthene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Fluorene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Hexachlorobenzene (ug/kg)	245 U	115 U	180 U	210 U	200 U	120 U	120 U	120 U
Hexachlorobutadiene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Hexachlorocyclopentadiene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Hexachloroethane (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	205 UJ	95 UJ	150 UJ	175 UJ	165 UJ	100 UJ	100 UJ	100 UJ
Isophorone (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
N-nitroso-di-n-propylamine (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
N-nitrosodiphenylamine (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Naphthalene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Nitrobenzene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Nitrobenzene-d5 (%)	74	67	64	63	55	62	50	51
Pentachlorophenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Phenanthrene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Phenol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Phenol-d5 (%)	76	72	69	69	60	68	55	56
Pyrene (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Terphenyl-d14 (%)	109	92	86	86	86	90	90	93
bis(2-chloroethoxy)methane (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
bis(2-chloroethyl) ether (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
bis(2-ethylhexyl)phthalate (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
m,p-cresol (ug/kg)	205 U	95 U	150 U	175 U	165 U	100 U	100 U	100 U
Volatile Organics								
1,1,1-Trichloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
1,1,2,2-Tetrachloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
1,1,2-Trichloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
1,1-Dichloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
1,1-Dichloroethene (ug/kg)	0 U	0 U	0 U	0 U	1 UJ	0.6 UJ	0.6 UJ	0.6 UJ

Station	**04AX00**	**04AX00**	**05BE00**	**05BE00**	**08AW00**	**08AW00**	**10AX00**	**10AX00**
Sample No	**LU00150**	**LU00151**	**LU00152**	**LU00153**	**LU00154**	**LU00155**	**LU00156**	**LU00157**
Collection Date	**10/21/97**	**10/21/97**	**10/21/97**	**10/21/97**	**10/22/97**	**10/22/97**	**10/22/97**	**10/22/97**
Depth (ft)	**2.0-3.5**	**4.0-4.5**	**2.5-3.5**	**4.0-5.5**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**2.0-3.0**
Northing	**0**	**0**	**0**	**0**	**517440**	**517440**	**517550**	**517550**
Easting	**0**	**0**	**0**	**0**	**199320**	**199320**	**199320**	**199320**
1,2-Dichloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
1,2-Dichloropropane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
2-Butanone (ug/kg)	0 U	0 U	0 UJ	0 U	2 UJ	1.25 UJ	1.25 UJ	1.25 UJ
2-Hexanone (ug/kg)	0 U	0 U	0 U	0 U	5 U	3.1 U	3.1 U	3.1 U
4-Methyl-2-pentanone (ug/kg)	0 U	0 U	0 U	0 U	5 U	3.1 U	3.1 U	3.1 U
Acetone (ug/kg)	0 UJ	0 UJ	0 UJ	0 UJ	5 R	3.1 R	3.1 R	3.1 R
Benzene (ug/kg)	0 U	0 U	0 U	0 U	1 UJ	0.6 UJ	0.6 UJ	0.6 UJ
Bromodichloromethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Bromofluorobenzene (%)	96	107	97	96	92	95	101	98
Bromomethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Carbon disulfide (ug/kg)	0 UJ	0 UJ	0 UJ	0 UJ	2 UJ	1.25 UJ	1.25 UJ	1.25 UJ
Carbon tetrachloride (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Chlorobenzene (ug/kg)	0 U	0 U	0 U	0 U	1 UJ	0.6 UJ	0.6 UJ	0.6 UJ
Chloroethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Chloroform (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Chloromethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Dibromochloromethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Dibromofluoromethane (%)	117	100	96	109	105	97	109	93
Ethylbenzene (ug/kg)	0 U	0.28 J	0 U	0 U	1 U	0.42 J	0.61 J	0.34 J
Methylene chloride (ug/kg)	0 UJ	0 UJ	13.7 J	0 UJ	37.1	19.1	4 J	17.7
Styrene (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Tetrachloroethene (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Toluene (ug/kg)	0 UJ	53.6	221	196	0.44 J	4.4 J	23.4 J	10.8 J
Toluene-d8 (%)	109	110	106	102	91	97	91	96
Tribromomethane (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Trichloroethene (ug/kg)	0 U	0 U	0 U	0 U	1 UJ	0.6 UJ	0.6 UJ	0.6 UJ
Vinyl chloride (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
Xylenes (total) (ug/kg)	0 UJ	0.71 J	0 UJ	0 UJ	1 UJ	1.3 J	2.1 J	1.3 J
cis-1,2-dichloroethene (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
cis-1,3-dichloropropene (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
trans-1,2-dichloroethene (ug/kg)	0 U	0 U	0 U	0 U	1 U	0.6 U	0.6 U	0.6 U
trans-1,3-dichloropropene (ug/kg)	0 UJ	0 UJ	0 UJ	0 UJ	1 UJ	0.6 UJ	0.6 UJ	0.6 UJ
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/g)	0.957 J	0.5 UJ	1.56	0.294	0.411	0.5 UJ	0.5 UJ	0.162
Radium-228 (pCi/g)	0.785 J	0.41	0.171	0.598	0.227	0.814	0.997	0.97
Thorium-227 (pCi/g)	0.957 J	0.5 UJ	1.56	0.294	0.411	0.5 UJ	0.5 UJ	0.162
Thorium-228 (pCi/g)	0.785 J	0.41	0.171	0.598	0.227	0.814	0.997	0.97
Thorium-230 (pCi/g)	25.6 J	0.876	24.6	2.41	6.14	1.03	1.2	0.872

Phase II IA02 Soil

Station	**04AX00**	**04AX00**	**05BE00**	**05BE00**	**08AW00**	**08AW00**	**10AX00**	**10AX00**
Sample No	**LU00150**	**LU00151**	**LU00152**	**LU00153**	**LU00154**	**LU00155**	**LU00156**	**LU00157**
Collection Date	**10/21/97**	**10/21/97**	**10/21/97**	**10/21/97**	**10/22/97**	**10/22/97**	**10/22/97**	**10/22/97**
Depth (ft)	**2.0-3.5**	**4.0-4.5**	**2.5-3.5**	**4.0-5.5**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**2.0-3.0**
Northing	**0**	**0**	**0**	**0**	**517440**	**517440**	**517550**	**517550**
Easting	**0**	**0**	**0**	**0**	**199320**	**199320**	**199320**	**199320**
Thorium-232 (pCi/g)	1.23 J	0.268	0.253	0.592	0.173	0.741	0.688	0.727
Uranium-234 (pCi/g)	52.3	4.86	13.1	6.8	9.43	1.46	0.738	0.792
Uranium-235 (pCi/g)	0.559 J	0.275 J	0.527 J	0.268 J	0.416	0.5 UJ	0.5 UJ	0.5 U
Uranium-238 (pCi/g)	51.1	4.72	14.6	6.53	9.39	1.32	0.658	1.18
Radiological Parameters (GammaSpec)								
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	6.23	13.6	0 UJ	22.4	6.25 J	28 J	26 J	23.1 J
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	22.4 J	1.05 J	37.4 J	6.51 J	32.1 J	2.46 J	1.91 J	2.1 J

Phase II IA02 Soil
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Station	**07AW01**	**07AW02**	**07AX02**	**07AY01**	**07AY02**	**07AZ01**	**08AV01**	**10AW02**	**10BB01**
Sample No	**LU00250**	**LU00251**	**LU00252**	**LU00253**	**LU00254**	**LU00255**	**LU00256**	**LU00257**	**LU00258**
Collection Date	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.398	0.487	0.749	0.319	0.293	0.24	0.5 U	0.5 U	0.31
Radium-228 (pCi/g)	0.682	0.889	0.652	0.566	0.518	0.709	0.613	0.631	0.692
Thorium-227 (pCi/g)	0.398	0.487	0.749	0.319	0.293	0.24	0.5 U	0.5 U	0.31
Thorium-228 (pCi/g)	0.682	0.889	0.652	0.566	0.518	0.709	0.613	0.631	0.692
Thorium-230 (pCi/g)	5.62	7.47	14.3	2.4	2.12	1.82	1.25	2.08	2.14
Thorium-232 (pCi/g)	0.513	0.765	0.82	0.52	0.604	0.723	0.605	0.65	0.651
Uranium-234 (pCi/g)	3.24	3.11	6.38	1.61	1.27	0.986	0.792	1.54	1.92
Uranium-235 (pCi/g)	0.0934	0.0935	0.227	0.0678	0.0544	0.5 UJ	0.5 U	0.046	0.0426
Uranium-238 (pCi/g)	3.18	3.34	6.66	1.82	1.38	1.2	0.857	1.72	1.77
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.213	0.213	0.447	0.0902	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	15.5	18	16.1	16.2	19.5	21.4	22.7	19.6	19.7
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	6.62 J	6.75 J	12.3 J	3.08 J	3.05 J	2.23 J	1.9 J	4.5 J	5.95 J

Station	**10BB02**	**10BG01**	**10BG02**	**10BG02**
Sample No	**LU00259**	**LU00260**	**LU00261**	**LU00281**
Collection Date	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.467	0.259	0.207	0.506
Radium-228 (pCi/g)	0.616	0.522	0.821	0.742
Thorium-227 (pCi/g)	0.467	0.259	0.207	0.506
Thorium-228 (pCi/g)	0.616	0.522	0.821	0.742
Thorium-230 (pCi/g)	3.02	1.98	2.47	2.39
Thorium-232 (pCi/g)	0.502	0.445	0.61	0.752
Uranium-234 (pCi/g)	2.3	1.82	2.57	2.38
Uranium-235 (pCi/g)	0.103	0.058	0.0856	0.0784
Uranium-238 (pCi/g)	2	1.6	2.34	2.18
Radiological Parameters (GammaSpec)				
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 U	0.128
Potassium-40 (pCi/g)	18.1	17.1	18.2	21.6
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	5.56 J	10.3 J	3.9 J	3.92 J

Phase IV IA02 Soil

Station	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0004**	**IA02-SB0005**
Sample No	**LUSB0255**	**LUSB0256**	**LUSB0256D**	**LUSB0257**	**LUSB0258**	**LUSB0259**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**07/01/98**	**06/29/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID			**LUSB9026**			
Northing	**199310**	**199310**	**199310**	**199314**	**199325**	**199315**
Easting	**517440**	**517601**	**517601**	**517310**	**517359**	**517267**
Metals						
Aluminum (mg/kg)	80900	29100	24100	12300	10500	12200
Antimony (mg/kg)	1.3 U	0.78 U	0.78 U	0.25 U	0.28 UN	0.26 U
Arsenic (mg/kg)	2.8 B	5.3	5.6	8.4	8.6	11.4
Barium (mg/kg)	26.4	86.7	85	90.7	83.2	292
Beryllium (mg/kg)	3840	311	238	178 E	1	5.5 E
Cadmium (mg/kg)	438	5.3	3.4	0.91	0.25	0.2 B
Calcium (mg/kg)	5740	20700	20300	74900	84500	81300
Chromium (mg/kg)	58.7	25.6	23.6	21.1	16.5	18.1
Cobalt (mg/kg)	3.2 B	8.7	8.8	9.2	10.3	21.4
Copper (mg/kg)	30.2	37.5	32.6	31.9	22	26.6
Iron (mg/kg)	9160	23700	24100	22100	21600	24600
Lead (mg/kg)	31.7	39.6	28.4	29	10.3	12.6
Magnesium (mg/kg)	3310	14300	14200	21700	12200	15300
Manganese (mg/kg)	166	299	403	385	1400 N	2150
Mercury (mg/kg)	0.06 B	0.04 B	0.03 B	0.12	0.02 U	0.02 B
Nickel (mg/kg)	40	33.1	30.1	31	27.1	39.2
Phosphorus (mg/kg)	243	596	535	475	441	416
Potassium (mg/kg)	808	2050	1650	2660	1780	2570
Selenium (mg/kg)	1.3 U	1.5 B	1.8 B	1.4	1.5	1.6
Silver (mg/kg)	1.1 U	0.64 U	0.64 U	0.2 U	0.23 U	0.21 U
Sodium (mg/kg)	4790	952	894	608	86.1	673
Thallium (mg/kg)	2.2 U	1.3 U	1.3 U	2.1	1.1 B	0.73 B
Vanadium (mg/kg)	7.8 B	30.3	28.8	26.7	22.5	28.4
Zinc (mg/kg)	1840	93.6	86.9	95.3	62.1 *	61.7
Indicator Parameters						
Fluoride (mg/kg)						
Nitrogen, Ammonia (mg/kg)						
Semivolatile Organics						
1,2,4-Trichlorobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
1,2-Dichlorobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
1,3-Dichlorobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
1,4-Dichlorobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2,4,5-Trichlorophenol (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
2,4,6-Trichlorophenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U

Phase IV IA02 Soil

Station	IA02-SB0001	IA02-SB0002	IA02-SB0002	IA02-SB0003	IA02-SB0004	IA02-SB0005
Sample No	LUSB0255	LUSB0256	LUSB0256D	LUSB0257	LUSB0258	LUSB0259
Collection Date	07/06/98	07/06/98	07/06/98	06/30/98	07/01/98	06/29/98
Depth (ft)	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0
Duplicate ID			LUSB9026			
Northing	199310	199310	199310	199314	199325	199315
Easting	517440	517601	517601	517310	517359	517267
2,4-Dichlorophenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2,4-Dimethylphenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2,4-Dinitrophenol (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
2,4-Dinitrotoluene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2,6-Dinitrotoluene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2-Chloronaphthalene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2-Chlorophenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2-Methylnaphthalene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2-Nitrophenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
2-methyl-4,6-dinitrophenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
3,3'-Dichlorobenzidine (ug/kg)	3620 U	2160 U	2110 U	18100 U	7710 U	7500 U
4-Bromophenyl phenyl ether (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
4-Chloroaniline (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
4-Chlorophenylphenylether (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
4-Nitrophenol (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
4-chloro-3-methyl phenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Acenaphthene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Acenaphthylene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Anthracene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Benzo(a)anthracene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Benzo(a)pyrene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Benzo(b)fluoranthene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Benzo(ghi)perylene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Benzo(k)fluoranthene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Butylbenzylphthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Carbazole (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Chrysene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Di-n-butylphthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Di-n-octylphthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Dibenz(a,h)anthracene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Dibenzofuran (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Diethyl phthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Dimethyl phthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Fluoranthene (ug/kg)	725 U	433 U	422 U	2010 J	1540 U	1500 U
Fluorene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Heneicosane (ug/kg)				3610 U		

Station	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0004**	**IA02-SB0005**
Sample No	**LUSB0255**	**LUSB0256**	**LUSB0256D**	**LUSB0257**	**LUSB0258**	**LUSB0259**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**07/01/98**	**06/29/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID			**LUSB9026**			
Northing	**199310**	**199310**	**199310**	**199314**	**199325**	**199315**
Easting	**517440**	**517601**	**517601**	**517310**	**517359**	**517267**
Hexachlorobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Hexachlorobutadiene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Hexachlorocyclopentadiene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Hexachloroethane (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Isophorone (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
N-Nitrosodiphenylamine (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
N-Nitrosodipropylamine (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Naphthalene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Nitrobenzene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Pentachlorophenol (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
Phenanthrene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Phenol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Pyrene (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
bis(2-chloroethoxy)methane (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
bis(2-chloroethyl) ether (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
bis(2-ethylhexyl)phthalate (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
m,p-Cresol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
m-Nitroaniline (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
o-Cresol (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
o-Nitroaniline (ug/kg)	1810 U	1080 U	1050 U	9040 U	3860 U	3750 U
p-Nitroaniline (ug/kg)	725 U	433 U	422 U	3610 U	1540 U	1500 U
Volatile Organics						
1,1,1-Trichloroethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,1,2,2-Tetrachloroethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,1,2-Trichloroethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,1-Dichloroethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,1-Dichloroethene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,2-Dichloroethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,2-Dichloroethylene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
1,2-Dichloropropane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
2-Butanone (ug/kg)	30.9 U	11.4 U	1.4 U	11 U	11.8 U	10 U
2-Hexanone (ug/kg)	30.9 U	11.4 U	11.4 U	11 U	11.8 U	10 U
4-Methyl-2-pentanone (ug/kg)	30.9 U	11.4 U	11.4 U	11 U	11.8 U	10 U
Acetone (ug/kg)	18 U	11.2 U	21.4 U	54.9 U	5.6 U	8.5 U
Benzene (ug/kg)	2.1 J	0.92 J	1 J	2.1 J	2.5 J	1.2 J

Phase IV IA02 Soil

Station	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0004**	**IA02-SB0005**
Sample No	**LUSB0255**	**LUSB0256**	**LUSB0256D**	**LUSB0257**	**LUSB0258**	**LUSB0259**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**07/01/98**	**06/29/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID			**LUSB9026**			
Northing	**199310**	**199310**	**199310**	**199314**	**199325**	**199315**
Easting	**517440**	**517601**	**517601**	**517310**	**517359**	**517267**
Bromoform (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Carbon disulfide (ug/kg)	15.4 U	5.7 U	5.7 U	43.2	4.5 J	14
Carbon tetrachloride (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Chlorobenzene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Chlorodibromomethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Chloroethane (ug/kg)	30.9 U	11.4 U	11.4 U	11 U	11.8 U	10 U
Chloroform (ug/kg)	1.9 J	5.7 U	0.65 J	5.5 U	5.9 U	5 U
Dichlorobromomethane (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Ethylbenzene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	0.62 J	5 U
Methyl Bromide (ug/kg)	30.9 U	11.4 U	11.4 U	11 U	11.8 U	10 U
Methyl Chloride (ug/kg)	30.9 U	11.4 U	11.4 U	11 U	11.8 U	10 U
Methylene chloride (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Styrene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Tetrachloroethene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Toluene (ug/kg)	6.2	3.3	1.7 J	3.4	3.9	1.7 J
Trichloroethene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Vinyl chloride (ug/kg)	6.2 U	2.3 U	2.3 U	2.2 U	2.4 U	2 U
Xylenes (total) (ug/kg)	15.4 U	5.7 U	5.7 U	0.96 J	1.2 J	5 U
cis-1,3-dichloropropene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
trans-1,3-Dichloropropene (ug/kg)	15.4 U	5.7 U	5.7 U	5.5 U	5.9 U	5 U
Radiological Parameters						
Radiological Parameters (AlphaSpec)						
Actinium-227 (pCi/g)	1 J	0.0181 U	0.0367 U	0.101 U	0.0384 U	0.162 J
Thorium-228 (pCi/g)	0.237 J	0.977 J	0.942 J	0.889 J	1.15	0.935 J
Thorium-230 (pCi/g)	15.2	2.12	2.11	2.14	1.64	1.42
Thorium-232 (pCi/g)	0.162 J	0.817 J	0.728 J	0.778 J	0.655 J	0.543 J
Uranium-233/234 (pCi/g)	24.2	2.42	1.86	1.46	0.889 J	1.41
Uranium-235 (pCi/g)	1.89	0.0969 J	0.152 J	0.0116 U	0.113 J	0.0522 U
Uranium-235/236 (pCi/g)						
Uranium-238 (pCi/g)	27.8	2.74	1.93	1.47	1.22	1.34
Radiological Parameters (GammaSpec)						
Actinium-228 (pCi/g)	0.325 U	0.983 J	1.04	0.63 J	0.903 J	0.929 J
Cesium-137 (pCi/g)	0.21	0.0655 J	0.112	0.0779 J	0.0005 U	0.0499 J
Cobalt-60 (pCi/g)	-0.0021 U	-0.0199 U	-0.0126 U	-0.007 U	0.0056 U	0.0024 U
Potassium-40 (pCi/g)	2.93	22.9	23.5	18.7	24.1	23.2
Protactinium-231 (pCi/g)	1.85 U	0.642 U	0.0391 U	-0.911 U	-0.566 U	-0.416 U

Phase IV IA02 Soil

Station	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0004**	**IA02-SB0005**
Sample No	**LUSB0255**	**LUSB0256**	**LUSB0256D**	**LUSB0257**	**LUSB0258**	**LUSB0259**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**07/01/98**	**06/29/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID			**LUSB9026**			
Northing	**199310**	**199310**	**199310**	**199314**	**199325**	**199315**
Easting	**517440**	**517601**	**517601**	**517310**	**517359**	**517267**
Radium-226 (pCi/g)	25.9	1.8	1.8	1.33	1.24	1.49
Radium-228 (pCi/g)	0.325 U	0.983 J	1.04	0.63 J	0.903 J	0.929 J
Thorium-234 (pCi/g)	27.6	2.65 J	2.01 J	2.01 J	1.2 J	1.26 U
Uranium-235 (pCi/g)	1.96	0.101 U	0.241 U	0.0925 U	0.131 U	0.253 U

Phase IV IA02 Soil

Station	**IA02-SB0001**	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0003**	**IA02-SB0004**	**IA02-SB0004**	**IA02-SB0004**
Sample No	**LUSB0296**	**LUSB0297**	**LUSB0298**	**LUSB0299**	**LUSB0300**	**LUSB0301**	**LUSB0302**	**LUSB0303**	**LUSB9526**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**06/30/98**	**07/01/98**	**07/01/98**	**07/01/98**
Depth (ft)	**3.0-3.5**	**3.5-4.4**	**2.0-2.5**	**2.5-3.5**	**3.5-4.5**	**4.5-5.5**	**7.0-8.0**	**8.0-9.0**	**1.0-2.0**
Duplicate ID									
Northing	**199310**	**199310**	**199310**	**199310**	**199314**	**199314**	**199325**	**199325**	**199325**
Easting	**517440**	**517440**	**517601**	**517601**	**517310**	**517310**	**517359**	**517359**	**517359**
Metals									
Arsenic (mg/kg)	3.3 B	6.2	20.4	10.4	5.1	5.9	8.7	5.4	
Barium (mg/kg)	31.3	70.8	170	101	84.9	95.7	88.8	74.3	
Beryllium (mg/kg)	2150	16.3	9.8	0.77	2.5	46.3	204	0.82	
Lead (mg/kg)	35.2	13.9	24	9	18.4	21.5	15.6	8.9	
Indicator Parameters									
Fluoride (mg/kg)	18.6	14	13.8	3.3	5.27	6.63	92.1	49.5	
Nitrogen, Ammonia (mg/kg)	12	32.6	27.2	17.3	0 U	24.3	46.2	1.17	
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.752 J	0.134 J	0.0851 U	0.091 U	0.0161 U	0.0818 U	0.204 J	0.344 U	0.04 U
Thorium-228 (pCi/g)	0.648 J	0.909 J	0.964 J	1.4	1.28	1.3	1.16	1.24	0.31
Thorium-230 (pCi/g)	11.5	1.68	1.55	2.03	1.7	1.75	3.04	2.32	0.85
Thorium-232 (pCi/g)	0.549 J	0.933 J	0.724 J	0.895 J	1.06	1.02	0.973 J	1.3	0.61
Uranium-233/234 (pCi/g)	13.5	2.31	1.97	1.57	1.93	0.956 J	3.29	1.42	0.53
Uranium-235 (pCi/g)	0.551 J	0.194 J	0.118 J	0.0172 U	0.112 J	0.0061 U	0.136 J	0.133 J	
Uranium-235/236 (pCi/g)									0.03
Uranium-238 (pCi/g)	12.9	2.17	1.83	1.67	1.96	1.12	3.37	1.56	0.6
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0 U	1.08	1.15	0.984 J	1.05	1.09	0.945 J	0.833 J	
Cesium-137 (pCi/g)	-0.0119 U	-0.0109 U	0.145	-0.0158 U	0.0146 U	0.0042 U	0.0055 U	0.0092 U	
Cobalt-60 (pCi/g)	0.0819 U	0.0032 U	0.0135 U	-0.0048 U	0.01 U	-0.0134 U	0.0034 U	-0.0053 U	
Potassium-40 (pCi/g)	9.84	26.6	27.7	27.2	23.2	23	22.2	21.4	
Protactinium-231 (pCi/g)	-2.18 U	-0.35 U	-1.29 U	0.312 U	-0.0797 U	0.0066 U	0.255 U	0.398 U	
Radium-226 (pCi/g)	16.5	1.55	2.03	2.09	1.38	1.47	4.33	1.14	
Radium-228 (pCi/g)	0.722 J	1.08	1.15	0.984 J	1.05	1.09	0.945 J	0.833 J	
Thorium-234 (pCi/g)	16.6	2.49 J	0.625 U	0.631 U	1.54 J	1.8 J	4.06 J	1.86 J	
Uranium-235 (pCi/g)	1.19	0.208 U	0.398 J	0.134 U	0.295 J	0.149 J	0.268 J	0.0749 U	

Phase IV IA02 Soil

Station	**IA02-SB0005**	**IA02-SB0005**	**IA02-SB0005**	**IA02-SB0006**	**IA02-SB0006**	**IA02-SB0006**	**IA02-SB0006**	**IA02-SB0007**	**IA02-SB0007**
Sample No	**LUSB0304**	**LUSB0305**	**LUSB0305D**	**LUSB0260**	**LUSB0261**	**LUSB0262**	**LUSB0260D**	**LUSB0264**	**LUSB0265**
Collection Date	**06/29/98**	**06/29/98**	**06/29/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**3.8-4.8**	**5.0-6.0**	**5.0-6.0**	**0.5-1.3**	**2.0-3.0**	**4.0-5.0**	**0.5-1.3**	**0.2-1.2**	**2.0-3.0**
Duplicate ID			**LUSB9031**				**LUSB9027**		
Northing	**199315**	**199315**	**199315**	**199357**	**199357**	**199357**	**199357**	**199295**	**199295**
Easting	**517267**	**517267**	**517267**	**517608**	**517608**	**517608**	**517608**	**517579**	**517579**
Metals									
Arsenic (mg/kg)	10.4	5.9	12.5	5.4	6.9	8.8	4.4	6.9	11.4
Barium (mg/kg)	108	75.5	104	89	97	62.7	93.6	102	84.6
Beryllium (mg/kg)	2 E	0.62 E	5.9 E	24.4	36.9	1.9	10.9 N	3	0.93
Lead (mg/kg)	10.6	6.3	10.5	23.8	15.3	11.2	17.8	88.5	14.3
Indicator Parameters									
Fluoride (mg/kg)	1.29	1.01	4.17	11.1	12.4	6.88	4.49	6.48	1.79
Nitrogen, Ammonia (mg/kg)	7.55	2.63	7.35	36.8	10.3	12.4	31.3	38.9	7.85
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0407 U	0.221 U	0.15 U	0.183 J	0.258 J	0.0955 U	0.211 U	0.0443 U	0.27 U
Thorium-228 (pCi/g)	1.16	1.22	0.986 J	1.04	1.4	0.871 J	1.21	1.05	1.21
Thorium-230 (pCi/g)	1.96	1.75	1.64	1.65	2.12	1.67	1.47	1.79	1.99
Thorium-232 (pCi/g)	0.926 J	0.901 J	0.885 J	0.859 J	1.03	0.739 J	1.02	1.04	0.841 J
Uranium-233/234 (pCi/g)	1.04	0.828 J	0.976 J	1.51	1.13	1.26	1.44	0.962 J	1.2
Uranium-235 (pCi/g)	0.0382 U	0.0719 J	0.0702 J	0.0673 U	0.0327 U	0.0585 U	0.0885 U	0.0672 J	0.101 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.14	0.983 J	0.979 J	1.58	1.16	0.927 J	1.17	0.965 J	1.43
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.956 J	1.2	0.938 J	1.14	1.08	1.01	0.967 J	1.13	1.35
Cesium-137 (pCi/g)	0 U	-0.0038 U	-0.0229 U	0.0171 U	-0.0147 U	0.0158 U	0 U	0.0731 J	0.0013 U
Cobalt-60 (pCi/g)	-0.0059 U	0.0057 U	-0.0241 U	0.0157 U	0.0076 U	0.0295 U	0.0067 U	-0.0113 U	-0.0034 U
Potassium-40 (pCi/g)	27.2	25.6	25.4	25.8	27.9	20.6	24.8	24.8	30.2
Protactinium-231 (pCi/g)	-0.451 U	0.105 U	0.841 U	-0.147 U	-0.0642 U	0.535 U	0.11 U	0.595 U	-0.84 U
Radium-226 (pCi/g)	1.5	1.69	1.42	1.54	1.93	1.47	1.45	1.69	1.74
Radium-228 (pCi/g)	0.956 J	1.2	0.938 J	1.14	1.08	1.01	0.967 J	1.13	1.35
Thorium-234 (pCi/g)	1.34 U	0.619 U	1.29 U	2.16 J	0.818 U	1.03 J	1.92 J	2.87 J	1.24 U
Uranium-235 (pCi/g)	0.0852 U	0.123 U	0.143 U	0.185 U	0.0231 U	0.151 U	0.176 U	0.126 U	0.0336 U

Phase IV IA02 Soil

Station	**IA02-SB0007**	**IA02-SB0008**	**IA02-SB0008**	**IA02-SB0009**	**IA02-SB0009**	**IA02-SB0009**	**IA02-SB0009**	**IA02-SB0010**	**IA02-SB0010**
Sample No	**LUSB0266**	**LUSB0268**	**LUSB0269**	**LUSB0272**	**LUSB0273**	**LUSB0274**	**LUSB0274D**	**LUSB0276**	**LUSB0277**
Collection Date	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/08/98**	**07/08/98**
Depth (ft)	**4.0-5.0**	**1.3-2.3**	**3.7-4.7**	**0.5-1.4**	**2.5-3.5**	**4.5-5.2**	**4.5-5.2**	**1.5-2.5**	**4.5-5.5**
Duplicate ID							**LUSB9028**		
Northing	**199295**	**199292**	**199292**	**199361**	**199361**	**199361**	**199361**	**199333**	**199333**
Easting	**517579**	**517429**	**517429**	**517485**	**517485**	**517485**	**517485**	**517268**	**517268**
Metals									
Arsenic (mg/kg)	26.8	9	11.3	10.9	8.1	9.9	7.8	6.7	2.1
Barium (mg/kg)	54.1	85.2	56.1	82.6	87	66.4	54.6	91.2 *	62.4 *
Beryllium (mg/kg)	0.79	16.3	1.4	108	206	1.4	3.9 N	0.96	0.46
Lead (mg/kg)	14.8	22.7	12.8	25	17.6	10.7	8.9	11.1	5.9
Indicator Parameters									
Fluoride (mg/kg)	7.72	8.11	4.23	12.3	27.4	6.06	4.84	53.2	6.66
Nitrogen, Ammonia (mg/kg)	6.51	16.3	7.49	5.75	27.4	5.26	6.24	232	37.4
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.19 U	0.412 J	0.198 U	0.165 U	0.099 J	0.27 U	-0.084 U	0.116 U	-0.0235 U
Thorium-228 (pCi/g)	1.09	1.28	1.15	0.926 J	1.25	0.841 J	1.09	1.18	0.702 J
Thorium-230 (pCi/g)	1.95	2.09	2.06	1.86	1.71	1.63	1.98	1.73	1.23
Thorium-232 (pCi/g)	0.91 J	0.948 J	0.974 J	0.72 J	0.887 J	1.04	0.666 J	0.896 J	0.74 J
Uranium-233/234 (pCi/g)	1.57	1.28	1.38	1.5	2.23	1.31	1.24	1.19	0.855 J
Uranium-235 (pCi/g)	0.0739 J	0.0814 J	0.126 J	0.103 J	0.122 J	0.0579 U	0.0595 U	0.0891 U	0.0356 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.57	1.02	1.41	1.68	3.15	1.64	1.21	1.16	1.43
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.11	1.03	0 U	0.804 J	0.863 J	1.14	1.03	1.18	1.03
Cesium-137 (pCi/g)	0.0401 U	0 U	0.0003 U	0.095 J	0.0721 J	-0.0227 U	0.043 U	-0.0168 U	0.013 U
Cobalt-60 (pCi/g)	-0.0131 U	-0.0096 U	0.0081 U	0.0128 U	0.0049 U	0.0168 U	-0.0346 U	0.0042 U	0.0193 U
Potassium-40 (pCi/g)	29.6	22.8	24.3	19.1	25.8	25.2	24.6	23.4	21.3
Protactinium-231 (pCi/g)	0.741 U	-0.0211 U	-0.238 U	0.16 U	0.168 U	-0.824 U	0.593 U	-0.571 U	-0.707 U
Radium-226 (pCi/g)	2.16	1.64	1.72	1.31	1.99	1.59	1.59	1.57	1.31
Radium-228 (pCi/g)	1.11	1.03	1.13	0.804 J	0.863 J	1.14	1.03	1.18	1.03
Thorium-234 (pCi/g)	0.986 U	1.21 U	0.333 U	1.68 J	3.51 J	2.15 J	1.3 J	1.68 J	1.46 U
Uranium-235 (pCi/g)	0.111 U	0.105 U	0.169 U	0.0231 U	0.379 J	0.0471 U	0.143 U	0.132 U	0.264 U

Phase IV IA02 Soil

Station	**IA02-SB0011**	**IA02-SB0011**	**IA02-SB0011**	**IA02-SB0012**	**IA02-SB0012**	**IA02-SB0012**	**IA02-SB0013**	**IA02-SB0013**	**IA02-SB0013**
Sample No	**LUSB0280**	**LUSB0281**	**LUSB0282**	**LUSB0284**	**LUSB0285**	**LUSB0286**	**LUSB0288**	**LUSB0289**	**LUSB0290**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**0.5-1.5**	**2.5-3.5**	**5.0-6.0**	**0.5-1.5**	**2.5-3.5**	**5.0-6.0**	**0.5-1.5**	**2.5-3.5**	**4.5-5.5**
Duplicate ID									
Northing	**199310**	**199310**	**199310**	**199311**	**199311**	**199311**	**199345**	**199345**	**199345**
Easting	**517271**	**517271**	**517271**	**517238**	**517238**	**517238**	**517309**	**517309**	**517309**
Metals									
Arsenic (mg/kg)	7.8	5.4	8.1	4.2	7	8.6	6.8	4.1	9.5
Barium (mg/kg)	99.7 *	104 *	77.2 *	92.6	69.7	79.9	88.3	81.2	98.1
Beryllium (mg/kg)	0.79	29.5	0.74	5	0.89	0.7	9.3	4.6	0.8
Lead (mg/kg)	12.5	12.5	9.1	10.1	9.2	11	11.5	122	10.5
Indicator Parameters									
Fluoride (mg/kg)	4.35	3.88	4.07	5.05	9.9	7.81	4.28	12.8	1.14
Nitrogen, Ammonia (mg/kg)	5.26	16.3	5.59	11.4	8.53	8.93	6.35	20.7	9.62
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.153 U	0.166 U	0.0556 U	-0.0249 U	0.0745 U	0.149 U	0.165 U	0.087 U	0.002 U
Thorium-228 (pCi/g)	1.52	1.32	1.67	1.15	1.14	0.891 J	1.05	0.997 J	1.2
Thorium-230 (pCi/g)	1.9	2.3	2.17	1.86	1.11	1.7	1.42	1.65	1.16
Thorium-232 (pCi/g)	0.765 J	1.16	1.18	0.759 J	0.649 J	0.844 J	0.605 J	0.784 J	0.735 J
Uranium-233/234 (pCi/g)	1.2	1.68	1.19	1.05	0.859 J	0.886 J	0.843 J	1.05	0.892 J
Uranium-235 (pCi/g)	0.0405 U	0.166 J	0.0846 J	0.0713 J	-0.013 U	0.0524 J	0.0483 U	0.106 J	0.0257 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.27	2.32	1.26	1.1	0.949 J	1.18	1.27	0.95 J	0.987 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.841 J	1.16	0 U	0.894 J	1.03	0.99 J	0.908 J	0.936 J	1.03
Cesium-137 (pCi/g)	0.0304 U	0.0008 U	-0.0316 U	0.0104 U	-0.0084 U	-0.0037 U	0.0362 J	-0.0013 U	-0.0144 U
Cobalt-60 (pCi/g)	0.0099 U	0.0016 U	-0.0192 U	0.0064 U	0.0167 U	0.0199 U	0 U	-0.0017 U	-0.0049 U
Potassium-40 (pCi/g)	21.3	28.6	22	22.3	23.8	24.6	22.7	21.3	27.4
Protactinium-231 (pCi/g)	0.329 U	0.311 U	0.192 U	0.0932 U	-0.293 U	-1.05 U	-0.552 U	1.19 U	0.291 U
Radium-226 (pCi/g)	1.29	1.73	1.34	1.55	1.18	1.39	1.51	1.24	1.61
Radium-228 (pCi/g)	0.841 J	1.16	0 U	0.894 J	1.03	0.99 J	0.908 J	0.936 J	1.03
Thorium-234 (pCi/g)	1.31 U	1.77 J	0.982 U	1.47 J	1.32 U	1.39 U	1.41 J	3.62 J	2.19 J
Uranium-235 (pCi/g)	0.133 U	0.17 U	0.167 U	0.0583 U	0.0821 U	0.178 U	0.325 J	0.193 U	0.0584 U

Station	**IA02-SB0014**	**IA02-SB0014**	**IA02-SB0014**	**IA02-SB0014**
Sample No	**LUSB0292**	**LUSB0293**	**LUSB0294**	**LUSB0295**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/09/98**
Depth (ft)	**0.5-1.5**	**4.0-5.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID				
Northing	**199296**	**199296**	**199296**	**199296**
Easting	**517369**	**517369**	**517369**	**517369**
Metals				
Arsenic (mg/kg)	7.2	6.4	6.6	3.3
Barium (mg/kg)	93	91.9	54.1	83.2
Beryllium (mg/kg)	37.3	1.7	0.54	0.64
Lead (mg/kg)	12.3	13.4	6.8	7.2
Indicator Parameters				
Fluoride (mg/kg)	7.14	0.97	3.54	4.01
Nitrogen, Ammonia (mg/kg)	6.72	5.12	2.24	2.27
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.0223 U	0.0599 U	-0.0171 U	0.0207 U
Thorium-228 (pCi/g)	1.51	1.17	0.791 J	1.09
Thorium-230 (pCi/g)	2.57	1.59	1.27	1.44
Thorium-232 (pCi/g)	1.19	0.995 J	0.697 J	0.594 J
Uranium-233/234 (pCi/g)	1.01	0.901 J	0.845 J	0.859 J
Uranium-235 (pCi/g)	0.0518 U	0.0364 U	0.019 U	0.0496 J
Uranium-235/236 (pCi/g)				
Uranium-238 (pCi/g)	1.2	1.01	0.808 J	0.949 J
Radiological Parameters (GammaSpec)				
Actinium-228 (pCi/g)	1.22	1.06	0.704 J	0.831 J
Cesium-137 (pCi/g)	0.0427 U	-0.0288 U	0.0234 U	0 U
Cobalt-60 (pCi/g)	0.0137 U	-0.0038 U	0.0099 U	-0.0064 U
Potassium-40 (pCi/g)	23.4	28.7	20.2	23.7
Protactinium-231 (pCi/g)	0.574 U	0.0195 U	0.377 U	1.04 U
Radium-226 (pCi/g)	1.41	1.53	1.1	1.08
Radium-228 (pCi/g)	1.22	1.06	0.704 J	0.831 J
Thorium-234 (pCi/g)	1.29 U	0.742 U	2.13 J	1.23 U
Uranium-235 (pCi/g)	-0.0102 U	0.2 U	0.132 U	0.0402 U

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Station	**IA02-SB0001**	**IA02-SB0001**	**IA02-SB0001**	**IA02-SB0002**	**IA02-SB0002**	**IA02-SB0003**	**IA02-SB0003**	**IA02-SB0003**	**IA02-SB0003**
Sample No	**LUSB0306**	**LUSB0307**	**LUSB0308**	**LUSB0311**	**LUSB0312**	**LUSB0316**	**LUSB0317**	**LUSB0318**	**LUSB0317D**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**
Depth (ft)	**2.0-3.0**	**6.0-7.0**	**8.0-9.0**	**4.5-5.5**	**6.5-7.5**	**3.0-3.4**	**6.5-7.5**	**9.0-10.0**	**6.5-7.5**
Duplicate ID									**LUSB9033**
Northing	**199310**	**199310**	**199310**	**199310**	**199310**	**199314**	**199314**	**199314**	**199314**
Easting	**517440**	**517440**	**517440**	**517601**	**517601**	**517310**	**517310**	**517310**	**517310**
Metals									
Beryllium (mg/kg)	3120	8.8	0.54	0.65	0.65	87.9	0.82	0.58	1.4

Station	**IA02-SB0004**	**IA02-SB0005**	**IA02-SB0005**	**IA02-SB0005**	**IA02-SB0015**	**IA02-SB0015**	**IA02-SB0015**	**IA02-SB0015**	**IA02-SB0015**
Sample No	**LUSB0321**	**LUSB0326**	**LUSB0327**	**LUSB0327D**	**LUSB0331**	**LUSB0332**	**LUSB0333**	**LUSB0334**	**LUSB0335**
Collection Date	**07/01/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**
Depth (ft)	**4.5-5.5**	**3.0-3.8**	**7.0-8.0**	**7.0-8.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**8.0-9.0**
Duplicate ID				**LUSB9032**					
Northing	**199325**	**199315**	**199315**	**199315**	**199292**	**199292**	**199292**	**199292**	**199292**
Easting	**517359**	**517267**	**517267**	**517267**	**517401**	**517401**	**517401**	**517401**	**517401**
Metals									
Beryllium (mg/kg)	2290	5.7 E	0.81 E	0.71 E	1.2	1	0.87	0.87	0.68

Station	**IA02-SB0016**	**IA02-SB0016**	**IA02-SB0016**	**IA02-SB0016**	**IA02-SB0016**	**IA02-SB0016**	**IA02-SB0017**	**IA02-SB0017**	**IA02-SB0017**
Sample No	**LUSB0336**	**LUSB0337**	**LUSB0338**	**LUSB0339**	**LUSB0340**	**LUSB0338D**	**LUSB0341**	**LUSB0342**	**LUSB0343**
Collection Date	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**	**06/30/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**7.0-8.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID						**LUSB9035**			
Northing	**199290**	**199290**	**199290**	**199290**	**199290**	**199290**	**199294**	**199294**	**199294**
Easting	**517505**	**517505**	**517505**	**517505**	**517505**	**517505**	**517636**	**517636**	**517636**
Metals									
Beryllium (mg/kg)	0.86	0.74	0.49	0.54	0.31	0.52 E	0.93	0.93	0.67

Station	**IA02-SB0017**	**IA02-SB0017**	**IA02-SB0018**	**IA02-SB0018**	**IA02-SB0018**	**IA02-SB0018**	**IA02-SB0018**	**IA02-SB0018**	**IA02-SB0019**
Sample No	**LUSB0344**	**LUSB0345**	**LUSB0346**	**LUSB0347**	**LUSB0348**	**LUSB0349**	**LUSB0350**	**LUSB0348D**	**LUSB0351**
Collection Date	**06/30/98**	**06/30/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**
Depth (ft)	**7.0-8.0**	**9.0-10.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**5.0-6.0**	**1.0-2.0**
Duplicate ID								**LUSB9036**	
Northing	**199294**	**199294**	**199377**	**199377**	**199377**	**199377**	**199377**	**199377**	**199311**
Easting	**517636**	**517636**	**517559**	**517559**	**517559**	**517559**	**517559**	**517559**	**517250**
Metals									
Beryllium (mg/kg)	0.48	0.53	76.7	1.4	0.85	0.58	0.53	0.96	3.8

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Station	**IA02-SB0019**	**IA02-SB0019**	**IA02-SB0019**	**IA02-SB0020**	**IA02-SB0020**	**IA02-SB0020**	**IA02-SB0020**	**IA02-SB0020**	**IA02-SB0021**
Sample No	**LUSB0352**	**LUSB0353**	**LUSB0354**	**LUSB0356**	**LUSB0357**	**LUSB0358**	**LUSB0359**	**LUSB0358D**	**LUSB0361**
Collection Date	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/01/98**	**07/06/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**5.0-6.0**	**1.0-2.0**
Duplicate ID								**LUSB9037**	
Northing	**199311**	**199311**	**199311**	**199321**	**199321**	**199321**	**199321**	**199321**	**199333**
Easting	**517250**	**517250**	**517250**	**517236**	**517236**	**517236**	**517236**	**517236**	**517254**
Metals									
Beryllium (mg/kg)	0.9	0.85	0.6	165	2.2	0.75	0.43	0.54	4.9

Station	**IA02-SB0021**	**IA02-SB0021**	**IA02-SB0021**	**IA02-SB0021**	**IA02-SB0022**	**IA02-SB0022**	**IA02-SB0022**	**IA02-SB0022**	**IA02-SB0022**
Sample No	**LUSB0362**	**LUSB0363**	**LUSB0364**	**LUSB0364D**	**LUSB0366**	**LUSB0367**	**LUSB0368**	**LUSB0369**	**LUSB0370**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**7.0-8.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID				**LUSB9038**					
Northing	**199333**	**199333**	**199333**	**199333**	**199324**	**199324**	**199324**	**199324**	**199324**
Easting	**517254**	**517254**	**517254**	**517254**	**517296**	**517296**	**517296**	**517296**	**517296**
Metals									
Beryllium (mg/kg)	113	69.8	0.87 B	1.5	90.7	22.2	29.3	2.2 B	0.74 B

Station	**IA02-SB0023**	**IA02-SB0023**	**IA02-SB0023**	**IA02-SB0023**	**IA02-SB0023**	**IA02-SB0024**	**IA02-SB0024**	**IA02-SB0024**	**IA02-SB0024**
Sample No	**LUSB0371**	**LUSB0372**	**LUSB0373**	**LUSB0374**	**LUSB0375**	**LUSB0376**	**LUSB0377**	**LUSB0378**	**LUSB0379**
Collection Date	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/06/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**
Duplicate ID									
Northing	**199302**	**199302**	**199302**	**199302**	**199302**	**199346**	**199346**	**199346**	**199346**
Easting	**517336**	**517336**	**517336**	**517336**	**517336**	**517346**	**517346**	**517346**	**517346**
Metals									
Beryllium (mg/kg)	0.77 B	2.8 B	4.4 B	0.92 B	0.86 B	2.3 J	1840 J	1680 J	1.7 J

Station	**IA02-SB0024**	**IA02-SB0024**	**IA02-SB0025**	**IA02-SB0025**	**IA02-SB0026**	**IA02-SB0026**
Sample No	**LUSB0380**	**LUSB0379D**	**LUSB1040**	**LUSB1041**	**LUSB1042**	**LUSB1043**
Collection Date	**07/06/98**	**07/06/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**9.0-10.0**	**7.0-8.0**	**5.0-6.0**	**7.0-8.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID		**LUSB9039**				
Northing	**199346**	**199346**	**199325**	**199325**	**199348**	**199348**
Easting	**517346**	**517346**	**517293**	**517293**	**517346**	**517346**
Metals						
Beryllium (mg/kg)	0.75 J	10.9 N	0.75 J	0.51 J	0.92 J	0.72 J

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Station	**IA02-SB0007**	**IA02-SB0007**	**IA02-SB0007**	**IA02-SB0007**	**IA02-SB0007**
Sample No	**LUSB1107**	**LUSB1108**	**LUSB1109**	**LUSB1110**	**LUSB1111**
Collection Date	**10/27/98**	**10/27/98**	**10/27/98**	**10/27/98**	**10/27/98**
Depth (ft)	**5.0-6.0**	**6.0-7.0**	**7.0-8.0**	**8.0-9.0**	**9.0-10.0**
Duplicate ID					
Northing	**199295**	**199295**	**199295**	**199295**	**199295**
Easting	**517579**	**517579**	**517579**	**517579**	**517579**
Metals					
Arsenic (mg/kg)	4.8 B	11.8 B	10.1 B	11.2 B	10.2 B

Phase II IA03 Soil

Station	**09DI00**	**09DI00**	**10DD00**
Sample No	**LU00166**	**LU00167**	**LU00168**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-1.0**	**4.0-5.0**	**0.5-1.0**
Northing	**517510**	**517510**	**517560**
Easting	**199440**	**199440**	**199430**
Metals			
Aluminum (mg/kg)	11500	14300	39500
Antimony (mg/kg)	0.04 UJ	0.04 UJ	0.04 UJ
Arsenic (mg/kg)	6.6	13.9	39.4
Barium (mg/kg)	86.7 J	107 J	218 J
Beryllium (mg/kg)	9.5	28.4	756
Boron (mg/kg)	11.9	13.3	21.5
Cadmium (mg/kg)	5.4	12.6	5.7
Calcium (mg/kg)	30400	21900	126000
Chromium (mg/kg)	17.3 J	22.5 J	153 J
Cobalt (mg/kg)	9.2	16.5	35.3
Copper (mg/kg)	30.4 J	30.7 J	420 J
Iron (mg/kg)	21800 J	31600 J	119000 J
Lead (mg/kg)	15.3	19.3	780
Magnesium (mg/kg)	8440	14700	25300
Manganese (mg/kg)	387	913	1720
Mercury (mg/kg)	0.2	0.11	0.79
Molybdenum (mg/kg)	3.7	5	15.8
Nickel (mg/kg)	28	39.4	194
Potassium (mg/kg)	1400 J	1870 J	7520 J
Selenium (mg/kg)	0.04 U	0.04 U	0.04 U
Silicon (mg/kg)	1400 J	1760 J	5150 J
Silver (mg/kg)	0.11	0.26	1.2
Sodium (mg/kg)	425	374	577
Strontium (mg/kg)	65.5	35	214
Thallium (mg/kg)	0.58	2	5.4
Vanadium (mg/kg)	21.8	31.7	71
Zinc (mg/kg)	73	74.7	262
Indicator Parameters			
% Moisture (%)	16	16	17
Chloride (mg/kg)		4.39	
Fluoride (mg/kg)		7.13	
Nitrate, as N (mg/kg)		1.37 J	
Phosphorus (mg/kg)		0.2 R	
Sulfate (mg/kg)		194	
Temperature (c)		23 J	
pH (ph)		10.3	

Station	**09DI00**	**09DI00**	**10DD00**
Sample No	**LU00166**	**LU00167**	**LU00168**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-1.0**	**4.0-5.0**	**0.5-1.0**
Northing	**517510**	**517510**	**517560**
Easting	**199440**	**199440**	**199430**
Semivolatile Organics			
1,2,4-Trichlorobenzene (ug/kg)	100 U	100 U	100 U
1,2-Dichlorobenzene (ug/kg)	100 U	100 U	100 U
1,3-Dichlorobenzene (ug/kg)	100 U	100 U	100 U
1,4-Dichlorobenzene (ug/kg)	100 U	100 U	100 U
2,2'-oxybis (1-chloropropane) (ug/kg)	100 U	100 U	100 U
2,4,5-Trichlorophenol (ug/kg)	100 U	100 U	100 U
2,4,6-Trichlorophenol (ug/kg)	100 U	100 U	100 U
2,4,6-tribromophenol (%)	84	75	56
2,4-Dichlorophenol (ug/kg)	100 U	100 U	100 U
2,4-Dimethylphenol (ug/kg)	100 U	100 U	100 U
2,4-Dinitrophenol (ug/kg)	195 UJ	195 UJ	200 UJ
2,4-Dinitrotoluene (ug/kg)	100 U	100 U	100 U
2,6-Dinitrotoluene (ug/kg)	100 U	100 U	100 U
2-Chloronaphthalene (ug/kg)	100 U	100 U	100 U
2-Chlorophenol (ug/kg)	100 U	100 U	100 U
2-Methylnaphthalene (ug/kg)	100 U	100 U	100 U
2-Methylphenol (ug/kg)	100 U	100 U	100 U
2-Nitroaniline (ug/kg)	100 UJ	100 UJ	100 UJ
2-Nitrophenol (ug/kg)	100 U	100 U	100 U
2-fluorobiphenyl (%)	81	76	82
2-fluorophenol (%)	86	76	88
3,3'-Dichlorobenzidine (ug/kg)	100 U	100 U	100 U
3-Nitroaniline (ug/kg)	120 U	120 U	120 U
4,6-Dinitro-2-methylphenol (ug/kg)	100 U	100 U	100 U
4-Chloroaniline (ug/kg)	120 UJ	120 UJ	120 UJ
4-Nitroaniline (ug/kg)	100 UJ	100 UJ	100 UJ
4-Nitrophenol (ug/kg)	100 U	100 U	100 U
4-bromophenyl phenyl ether (ug/kg)	100 U	100 U	100 U
4-chloro-3-methyl phenol (ug/kg)	100 U	100 U	100 U
4-chlorophenylphenylether (ug/kg)	100 U	100 U	100 U
Acenaphthene (ug/kg)	100 U	100 U	100 U
Acenaphthylene (ug/kg)	100 U	100 U	100 U
Anthracene (ug/kg)	100 U	100 U	100 U
Benzo(a)anthracene (ug/kg)	100 U	100 U	100 U
Benzo(a)pyrene (ug/kg)	100 U	100 U	100 U
Benzo(b)fluoranthene (ug/kg)	100 U	100 U	100 U

Station	**09DI00**	**09DI00**	**10DD00**
Sample No	**LU00166**	**LU00167**	**LU00168**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-1.0**	**4.0-5.0**	**0.5-1.0**
Northing	**517510**	**517510**	**517560**
Easting	**199440**	**199440**	**199430**
Benzo(ghi)perylene (ug/kg)	100 U	100 U	100 U
Benzo(k)fluoranthene (ug/kg)	100 U	100 U	100 U
Butylbenzylphthalate (ug/kg)	100 U	100 U	100 U
Carbazole (ug/kg)	100 U	100 U	100 U
Chrysene (ug/kg)	100 U	100 U	100 U
Di-n-butylphthalate (ug/kg)	100 U	100 U	100 U
Di-n-octylphthalate (ug/kg)	100 U	100 U	100 U
Dibenz(a,h)anthracene (ug/kg)	100 U	100 U	100 U
Dibenzofuran (ug/kg)	100 U	100 U	100 U
Diethyl phthalate (ug/kg)	100 U	100 U	100 U
Dimethyl phthalate (ug/kg)	100 U	100 U	100 U
Fluoranthene (ug/kg)	100 U	100 U	100 U
Fluorene (ug/kg)	100 U	100 U	100 U
Hexachlorobenzene (ug/kg)	120 U	120 U	120 U
Hexachlorobutadiene (ug/kg)	100 U	100 U	100 U
Hexachlorocyclopentadiene (ug/kg)	100 UJ	100 UJ	100 UJ
Hexachloroethane (ug/kg)	100 U	100 U	100 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	100 U	100 U	100 U
Isophorone (ug/kg)	100 U	100 U	100 U
N-nitroso-di-n-propylamine (ug/kg)	100 U	100 U	100 U
N-nitrosodiphenylamine (ug/kg)	100 U	100 U	100 U
Naphthalene (ug/kg)	100 U	100 U	100 U
Nitrobenzene (ug/kg)	100 U	100 U	100 U
Nitrobenzene-d5 (%)	92	81	93
Pentachlorophenol (ug/kg)	100 UJ	100 UJ	100 UJ
Phenanthrene (ug/kg)	100 U	100 U	100 U
Phenol (ug/kg)	100 U	100 U	100 U
Phenol-d5 (%)	86	80	92
Pyrene (ug/kg)	100 U	100 U	100 U
Terphenyl-d14 (%)	94	90	95
bis(2-chloroethoxy)methane (ug/kg)	100 U	100 U	100 U
bis(2-chloroethyl) ether (ug/kg)	100 U	100 U	100 U
bis(2-ethylhexyl)phthalate (ug/kg)	100 U	100 U	100 U
m,p-cresol (ug/kg)	100 U	100 U	100 U
Volatile Organics			
1,1,1-Trichloroethane (ug/kg)	5.95 U	5.95 U	6 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.95 U	5.95 U	6 U

Station	**09DI00**	**09DI00**	**10DD00**
Sample No	**LU00166**	**LU00167**	**LU00168**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-1.0**	**4.0-5.0**	**0.5-1.0**
Northing	**517510**	**517510**	**517560**
Easting	**199440**	**199440**	**199430**
1,1,2-Trichloroethane (ug/kg)	5.95 U	5.95 U	6 U
1,1-Dichloroethane (ug/kg)	5.95 U	5.95 U	6 U
1,1-Dichloroethene (ug/kg)	5.95 U	5.95 U	6 U
1,2-Dichloroethane (ug/kg)	5.95 U	5.95 U	6 U
1,2-Dichloropropane (ug/kg)	5.95 U	5.95 U	6 U
2-Butanone (ug/kg)	11.9 UJ	11.9 UJ	12.05 UJ
2-Hexanone (ug/kg)	29.75 UJ	29.75 UJ	30.1 UJ
4-Methyl-2-pentanone (ug/kg)	29.75 U	29.75 U	30.1 U
Acetone (ug/kg)	29.75 U	29.75 U	30.1 U
Benzene (ug/kg)	5.95 U	5.95 U	6 U
Bromodichloromethane (ug/kg)	5.95 U	5.95 U	6 U
Bromofluorobenzene (%)	108	98	106
Bromomethane (ug/kg)	5.95 U	5.95 U	6 U
Carbon disulfide (ug/kg)	11.9 UJ	11.9 UJ	12.05 UJ
Carbon tetrachloride (ug/kg)	5.95 U	5.95 U	6 U
Chlorobenzene (ug/kg)	5.95 U	5.95 U	6 U
Chloroethane (ug/kg)	5.95 U	5.95 U	6 U
Chloroform (ug/kg)	5.95 U	5.95 U	6 U
Chloromethane (ug/kg)	211	5.95 U	115 J
Dibromochloromethane (ug/kg)	5.95 U	5.95 U	6 U
Dibromofluoromethane (%)	116	116	121
Ethylbenzene (ug/kg)	5.95 U	5.95 U	6 U
Methylene chloride (ug/kg)	5.95 U	5.95 U	6 U
Styrene (ug/kg)	5.95 U	5.95 U	6 U
Tetrachloroethene (ug/kg)	5.95 U	5.95 U	6 U
Toluene (ug/kg)	182	405	422 J
Toluene-d8 (%)	113	111	122
Tribromomethane (ug/kg)	5.95 U	5.95 U	6 U
Trichloroethene (ug/kg)	5.95 U	5.95 U	6 U
Vinyl chloride (ug/kg)	5.95 U	5.95 U	6 U
Xylenes (total) (ug/kg)	5.95 U	5.95 U	6 U
cis-1,2-dichloroethene (ug/kg)	5.95 U	5.95 U	6 U
cis-1,3-dichloropropene (ug/kg)	5.95 U	5.95 U	6 U
trans-1,2-dichloroethene (ug/kg)	5.95 U	5.95 U	6 U
trans-1,3-dichloropropene (ug/kg)	5.95 UJ	5.95 UJ	6 UJ
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	0.144	0.5 UJ	0.163

Station	**09DI00**	**09DI00**	**10DD00**
Sample No	**LU00166**	**LU00167**	**LU00168**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-1.0**	**4.0-5.0**	**0.5-1.0**
Northing	**517510**	**517510**	**517560**
Easting	**199440**	**199440**	**199430**
Radium-228 (pCi/g)	0.671	0.736	0.583
Thorium-227 (pCi/g)	0.144	0.5 UJ	0.163
Thorium-228 (pCi/g)	0.671	0.736	0.583
Thorium-230 (pCi/g)	1.13	0.989	2.88
Thorium-232 (pCi/g)	0.606	0.589	0.513
Uranium-234 (pCi/g)	0.976	5.58	0.51
Uranium-235 (pCi/g)	0.5 UJ	0.222	0.5 UJ
Uranium-238 (pCi/g)	0.867	5.65	0.533
Radiological Parameters (GammaSpec)			
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	22.6	25.6	17.5
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.92 J	1.55 J	2.07 J

Phase II IA03 Soil

Station	**09CZ01**	**09DE00**	**09DI00**	**10CH01**	**10CI00**	**10CI01**	**10CJ00**	**10CJ01**	**10CL01**
Sample No	**LU00229**	**LU00228**	**LU00227**	**LU00235**	**LU00236**	**LU00237**	**LU00238**	**LU00239**	**LU00233**
Collection Date	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517525**	**517520**	**517510**	**517555**	**517560**	**517565**	**517570**	**517575**	**517545**
Easting	**199425**	**199430**	**199440**	**199395**	**199390**	**199390**	**199390**	**199390**	**199405**
Metals									
Aluminum (mg/kg)	16200	15100	16600	25300	17400	17600	17900	30400	15800
Arsenic (mg/kg)	10.5	10.1	16.2	31.5	6.3	6.1	5.9	7.9	10
Beryllium (mg/kg)	27.7	18	619	1990	82.5	47.7	71.6	473	100
Lead (mg/kg)	38	26.5	129	242	71.4	58.3	40.6	47.1	58.2
Magnesium (mg/kg)	12000	11100	13000	10400	5880	5860 J	6150 J	7020 J	7550

Station	**10CM00**	**10CQ01**	**10CR00**	**10CV00**
Sample No	**LU00234**	**LU00231**	**LU00232**	**LU00230**
Collection Date	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517550**	**517535**	**517540**	**517530**
Easting	**199400**	**199415**	**199410**	**199420**
Metals				
Aluminum (mg/kg)	19000	5940	16200	14000
Arsenic (mg/kg)	7.2	8.6	6.3	9.1
Beryllium (mg/kg)	97.4	27.2	27.1	34.1
Lead (mg/kg)	58.4	45.2	89.6	54.3
Magnesium (mg/kg)	6790	1710	5260	11400

Phase II IA03 Soil

Station	**09DA02**	**09DB01**	**09DC01**	**09DC02**	**09DC03**	**10CM01**	**10CS01**	**10CX01**
Sample No	**LU00265**	**LU00266**	**LU00267**	**LU00268**	**LU00269**	**LU00264**	**LU00263**	**LU00262**
Collection Date	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/04/97**	**11/05/97**	**11/04/97**	**11/04/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/g)	3.18	0.419	0.612	0.908	0.563	0.5 UJ	0.275	0.327
Radium-228 (pCi/g)	0.466	0.688	0.598	0.638	0.581	0.558	0.707	0.67
Thorium-227 (pCi/g)	3.18	0.419	0.612	0.908	0.563	0.5 UJ	0.275	0.327
Thorium-228 (pCi/g)	0.466	0.688	0.598	0.638	0.581	0.558	0.707	0.67
Thorium-230 (pCi/g)	69.4	6.47	11.2	26.9	14.2	0.827	0.862	1.09
Thorium-232 (pCi/g)	0.625	0.698	0.54	0.707	0.655	0.577	0.779	0.636
Uranium-234 (pCi/g)	51.9	3.59	9.38	16.2	8.9	0.889	0.623	1.03
Uranium-235 (pCi/g)	2.03	0.178	0.278	0.734	0.434	0.113	0.0594	0.5 U
Uranium-238 (pCi/g)	50.9	3.85	9.57	16.8	9.01	0.913	0.697	1.25
Radiological Parameters (GammaSpec)								
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.424	0.756	0.442	1.34	0.488	0.5 UJ	0.449	0.704
Potassium-40 (pCi/g)	20.3	20.4	21.1	20.3	22.6	22.8	20.5	23.3
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	58.6 J	5.76 J	14.1 J	27.7 J	14.1 J	1.55 J	1.43 J	1.87 J

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0003**
Sample No	**LUSB0381**	**LUSB1021**	**LUSB0382**	**LUSB0383**
Collection Date	**07/14/98**	**07/14/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**9.0-10.0**	**3.0-4.0**	**3.0-4.0**
Duplicate ID				
Northing	**199443**	**199443**	**199434**	**199415**
Easting	**517434**	**517434**	**517544**	**517577**
Metals				
Aluminum (mg/kg)	13300	12100	8900	13700
Antimony (mg/kg)	0.3 U	0.27 U	0.34 UN	0.3 UN
Arsenic (mg/kg)	7.5	7.3	2.6	6.8
Barium (mg/kg)	100	138	50.9 *	71 *
Beryllium (mg/kg)	15.1	0.77	193	9.3
Cadmium (mg/kg)	0.35	0.31	0.56	0.31
Calcium (mg/kg)	29400	97000	2530	31500
Chromium (mg/kg)	20.2	20.5	24.1	23.7
Cobalt (mg/kg)	12.3	14.8	10	10.7
Copper (mg/kg)	24.3	21.1	1970	63.8
Iron (mg/kg)	25200	22000	24500	36700
Lead (mg/kg)	27	10.2	34.2	16.6
Magnesium (mg/kg)	17300	14600	2870 *	7920 *
Manganese (mg/kg)	521	622	187	453
Mercury (mg/kg)	0.04	0.01 U	0.07 B	0.07 B
Nickel (mg/kg)	33.5	33.4	43.4	36.8
Phosphorus (mg/kg)	457	406 E	311	431
Potassium (mg/kg)	1580	2940	1300	1850
Selenium (mg/kg)	1.2 B	1.6	1.2 B	1.6
Silver (mg/kg)	0.36 B	0.22 U	0.28 U	0.25 U
Sodium (mg/kg)			174	193
Thallium (mg/kg)	0.48 U	0.44 U	0.64 B	0.99 B
Vanadium (mg/kg)	28.2	27.5	42.2	35.7
Zinc (mg/kg)	86.5	56	86.2	64.9
Indicator Parameters				
Fluoride (mg/kg)				
Nitrogen, Ammonia (mg/kg)				
Semivolatile Organics				
1,2,4-Trichlorobenzene (ug/kg)	395 U	388 U	467 U	418 U
1,2-Dichlorobenzene (ug/kg)	395 U	388 U	467 U	418 U
1,3-Dichlorobenzene (ug/kg)	395 U	388 U	467 U	418 U
1,4-Dichlorobenzene (ug/kg)	395 U	388 U	467 U	418 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	395 U	388 U	467 U	418 U
2,4,5-Trichlorophenol (ug/kg)	988 U	969 U	1170 U	1040 U
2,4,6-Trichlorophenol (ug/kg)	395 U	388 U	467 U	418 U

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0003**
Sample No	**LUSB0381**	**LUSB1021**	**LUSB0382**	**LUSB0383**
Collection Date	**07/14/98**	**07/14/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**9.0-10.0**	**3.0-4.0**	**3.0-4.0**
Duplicate ID				
Northing	**199443**	**199443**	**199434**	**199415**
Easting	**517434**	**517434**	**517544**	**517577**
2,4-Dichlorophenol (ug/kg)	395 U	388 U	467 U	418 U
2,4-Dimethylphenol (ug/kg)	395 U	388 U	467 U	418 U
2,4-Dinitrophenol (ug/kg)	988 U	969 U	1170 U	1040 U
2,4-Dinitrotoluene (ug/kg)	395 U	388 U	467 U	418 U
2,6-Dinitrotoluene (ug/kg)	395 U	388 U	467 U	418 U
2-Chloronaphthalene (ug/kg)	395 U	388 U	467 U	418 U
2-Chlorophenol (ug/kg)	395 U	388 U	467 U	418 U
2-Methylnaphthalene (ug/kg)	395 U	388 U	246 J	418 U
2-Nitrophenol (ug/kg)	395 U	388 U	467 U	418 U
2-methyl-4,6-dinitrophenol (ug/kg)	395 U	388 U	467 U	418 U
3,3'-Dichlorobenzidine (ug/kg)	1980 U	1940 U	2330 U	2090 U
4-Bromophenyl phenyl ether (ug/kg)	395 U	388 U	467 U	418 U
4-Chloroaniline (ug/kg)	395 U	388 U	467 U	418 U
4-Chlorophenylphenylether (ug/kg)	395 U	388 U	467 U	418 U
4-Nitrophenol (ug/kg)	988 U	969 U	1170 U	1040 U
4-chloro-3-methyl phenol (ug/kg)	395 U	388 U	467 U	418 U
Acenaphthene (ug/kg)	395 U	388 U	467 U	418 U
Acenaphthylene (ug/kg)	395 U	388 U	467 U	418 U
Anthracene (ug/kg)	395 U	388 U	467 U	418 U
Benzo(a)anthracene (ug/kg)	395 U	388 U	467 U	418 U
Benzo(a)pyrene (ug/kg)	395 U	388 U	467 U	418 U
Benzo(b)fluoranthene (ug/kg)	395 U	388 U	467 U	418 U
Benzo(ghi)perylene (ug/kg)	395 U	388 U	467 U	418 U
Benzo(k)fluoranthene (ug/kg)	395 U	388 U	467 U	418 U
Butylbenzylphthalate (ug/kg)	395 U	388 U	467 U	418 U
Carbazole (ug/kg)	395 U	388 U	467 U	418 U
Chrysene (ug/kg)	395 U	388 U	467 U	418 U
Di-n-butylphthalate (ug/kg)	395 U	388 U	467 U	418 U
Di-n-octylphthalate (ug/kg)	395 U	388 U	467 U	418 U
Dibenz(a,h)anthracene (ug/kg)	395 U	388 U	467 U	418 U
Dibenzofuran (ug/kg)	395 U	388 U	467 U	418 U
Diethyl phthalate (ug/kg)	395 U	388 U	467 U	418 U
Dimethyl phthalate (ug/kg)	395 U	388 U	467 U	418 U
Fluoranthene (ug/kg)	395 U	388 U	811	418 U
Fluorene (ug/kg)	395 U	388 U	467 U	418 U
Hexachlorobenzene (ug/kg)	395 U	388 U	467 U	418 U

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0003**
Sample No	**LUSB0381**	**LUSB1021**	**LUSB0382**	**LUSB0383**
Collection Date	**07/14/98**	**07/14/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**9.0-10.0**	**3.0-4.0**	**3.0-4.0**
Duplicate ID				
Northing	**199443**	**199443**	**199434**	**199415**
Easting	**517434**	**517434**	**517544**	**517577**
Hexachlorobutadiene (ug/kg)	395 U	388 U	467 U	418 U
Hexachlorocyclopentadiene (ug/kg)	395 U	388 U	467 U	418 U
Hexachloroethane (ug/kg)	395 U	388 U	467 U	418 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	395 U	388 U	467 U	418 U
Isophorone (ug/kg)	395 U	388 U	467 U	418 U
N-Nitrosodiphenylamine (ug/kg)	395 U	388 U	467 U	418 U
N-Nitrosodipropylamine (ug/kg)	395 U	388 U	467 U	418 U
Naphthalene (ug/kg)	395 U	388 U	467 U	418 U
Nitrobenzene (ug/kg)	395 U	388 U	467 U	418 U
Pentachlorophenol (ug/kg)	988 U	969 U	1170 U	1040 U
Phenanthrene (ug/kg)	395 U	388 U	866	418 U
Phenol (ug/kg)	395 U	388 U	467 U	418 U
Pyrene (ug/kg)	395 U	388 U	732	418 U
bis(2-chloroethoxy)methane (ug/kg)	395 U	388 U	467 U	418 U
bis(2-chloroethyl) ether (ug/kg)	395 U	388 U	467 U	418 U
bis(2-ethylhexyl)phthalate (ug/kg)	395 U	388 U	467 U	418 U
m,p-Cresol (ug/kg)	395 U	388 U	467 U	418 U
m-Nitroaniline (ug/kg)	988 U	969 U	1170 U	1040 U
o-Cresol (ug/kg)	395 U	388 U	467 U	418 U
o-Nitroaniline (ug/kg)	988 U	969 U	1170 U	1040 U
p-Nitroaniline (ug/kg)	395 U	388 U	467 U	418 U
Volatile Organics				
1,1,1-Trichloroethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,1,2-Trichloroethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,1-Dichloroethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,1-Dichloroethene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,2-Dichloroethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,2-Dichloroethylene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
1,2-Dichloropropane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
2-Butanone (ug/kg)	3.6 U	9.9 U	16.3 U	14.5 U
2-Hexanone (ug/kg)	10.8 U	9.9 U	16.3 U	14.5 U
4-Methyl-2-pentanone (ug/kg)	10.8 U	9.9 U	16.3 U	14.5 U
Acetone (ug/kg)	24.2 U	3.6 U	35.9 U	33.4 U
Benzene (ug/kg)	2.3 J	1.1 J	2 J	7.3 U
Bromoform (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0003**
Sample No	**LUSB0381**	**LUSB1021**	**LUSB0382**	**LUSB0383**
Collection Date	**07/14/98**	**07/14/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**9.0-10.0**	**3.0-4.0**	**3.0-4.0**
Duplicate ID				
Northing	**199443**	**199443**	**199434**	**199415**
Easting	**517434**	**517434**	**517544**	**517577**
Carbon disulfide (ug/kg)	6 U	0.56 U	4.2 U	2.3 U
Carbon tetrachloride (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Chlorobenzene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Chlorodibromomethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Chloroethane (ug/kg)	10.8 U	9.9 U	16.3 U	14.5 U
Chloroform (ug/kg)	5.4 U	4.9 U	0.84 J	7.3 U
Dichlorobromomethane (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Ethyl Dimethyl Benzene Isomer (ug/kg)			18.5 J	
Ethylbenzene (ug/kg)	1.3 J	4.9 U	7.3 J	7.3 U
Methyl Bromide (ug/kg)	10.8 U	9.9 U	16.3 U	14.5 U
Methyl Chloride (ug/kg)	10.8 U	9.9 U	16.3 U	14.5 U
Methyl Propenyl Benzene Isomer (ug/kg)			11.6 J	
Methylene chloride (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Styrene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Tetrachloroethene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Tirmethyl Benzene Isomer (ug/kg)			124 J	
Toluene (ug/kg)	4.9 B	1.9 JB	25.2	4.7
Trichloroethene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Vinyl chloride (ug/kg)	2.2 U	2 U	3.3 U	2.9 U
Xylenes (total) (ug/kg)	2.4 J	0.83 J	35.8	7.3 U
cis-1,3-dichloropropene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
n-Butyl Alcohol (ug/kg)				8.2 U
trans-1,3-Dichloropropene (ug/kg)	5.4 U	4.9 U	8.2 U	7.3 U
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.192 U	0.0453 U	0.0776 U	0.197 U
Thorium-228 (pCi/g)	1.04	1.03	0.255 J	1.07
Thorium-230 (pCi/g)	2.04	1.73	0.855 J	2.36
Thorium-232 (pCi/g)	0.929 J	0.617 J	0.183 J	0.731 J
Uranium-233/234 (pCi/g)	1.09	1.05	0.86 J	2.8
Uranium-235 (pCi/g)	0.0935 U	0.0728 J	0.0629 U	0.121 J
Uranium-235/236 (pCi/g)				
Uranium-238 (pCi/g)	1.19	1.23	0.781 J	2.7
Radiological Parameters (GammaSpec)				
Actinium-228 (pCi/g)	1.01	0.85 J	0.175 U	0.804 J
Cesium-137 (pCi/g)	0.0039 U	0.0201 U	0.0375 J	0.0361 U
Cobalt-60 (pCi/g)	0.0006 U	-0.0049 U	-0.0111 U	-0.0072 U

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0003**
Sample No	**LUSB0381**	**LUSB1021**	**LUSB0382**	**LUSB0383**
Collection Date	**07/14/98**	**07/14/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**9.0-10.0**	**3.0-4.0**	**3.0-4.0**
Duplicate ID				
Northing	**199443**	**199443**	**199434**	**199415**
Easting	**517434**	**517434**	**517544**	**517577**
Potassium-40 (pCi/g)	24.3	24.5	2.19	15.2
Protactinium-231 (pCi/g)	0.877 U	0.605 U	-0.26 U	0.694 U
Radium-226 (pCi/g)	1.76	1.39	1.32	1.43
Radium-228 (pCi/g)	1.01	0.85 J	0.175 U	0.804 J
Thorium-234 (pCi/g)	2.2 J	0.849 J	1.16 J	2.17 J
Uranium-235 (pCi/g)	0.568 J	0.0409 U	0.0459 U	0.0928 U

Phase IV IA03 Soil

Station	**IA03-SB0004**	**IA03-SB0004**	**IA03-SB0004**	**IA03-SB0004**	**IA03-SB0004**	**IA03-SB0004**	**IA03-SB0005**	**IA03-SB0005**	**IA03-SB0005**
Sample No	**LUSB0384**	**LUSB0385**	**LUSB0386**	**LUSB0387**	**LUSB0386D**	**LUSB9540**	**LUSB0388**	**LUSB0389**	**LUSB0390**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**1.0-2.0**	**6.0-7.0**	**12.0-13.5**	**14.0-15.0**	**12.0-13.5**	**1.0-2.0**	**1.0-2.0**	**6.0-7.0**	**12.0-13.0**
Duplicate ID					**LUSB9040**				
Northing	**199448**	**199448**	**199448**	**199448**	**199448**	**199448**	**199436**	**199436**	**199436**
Easting	**517548**	**517548**	**517548**	**517548**	**517548**	**517548**	**517537**	**517537**	**517537**
Metals									
Arsenic (mg/kg)	4.7	6	9.3	11.1	10		6.3	6	6.8
Barium (mg/kg)	76 N*	69.3 N*	34.9 N*	33.1 N*	33.6		93.8 N*	87 N*	49.7 N*
Beryllium (mg/kg)	3.9	0.72	0.36	0.43	0.3		1.2	1.1	0.34
Lead (mg/kg)	13.5 *	7.6 *	7.8 *	7.4 *	8.3		16.4 *	8 *	6.9 *
Indicator Parameters									
Fluoride (mg/kg)	8.15	4.2	1.85	1.27	1.74		1.93	2.72	1.75
Nitrogen, Ammonia (mg/kg)	37.8	2.01	1.74	3.52	2.56		9.16	1.12	3.3
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	-0.0072 U	0.162 U	0.0941 U	0.114 U	0.0685 U	0.04 U	0.0734 U	0.113 U	0.128 U
Thorium-228 (pCi/g)	1.06	1	0.937 J	0.675 J	0.654 J	0.35	1.22	0.801 J	0.933 J
Thorium-230 (pCi/g)	1.58	1.47	1.58	1.42	1.61	1.01	1.78	1.26	2.06
Thorium-232 (pCi/g)	0.699 J	0.918 J	0.748 J	0.587 J	0.6 J	0.69	1	0.734 J	0.885 J
Uranium-233/234 (pCi/g)	1.07	0.765 J	0.962 J	1.06	1.07	0.35	1.41	0.938 J	1.07
Uranium-235 (pCi/g)	0.094 U	0.107 J	0.0661 U	0.0136 U	0.0567 U		0.0077 U	0.0295 U	0.0838 J
Uranium-235/236 (pCi/g)						0.02 U			
Uranium-238 (pCi/g)	1.47	1.17	0.965 J	1.02	1.22	0.45	1.23	0.927 J	1.14
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.06	0.934 J	0.718 J	0.56 J	0.593 J		1.11	0.902 J	0.767 J
Cesium-137 (pCi/g)	-0.0004 U	-0.0132 U	0.008 U	0.0128 U	-0.0149 U		-0.02 U	0.012 U	0.0042 U
Cobalt-60 (pCi/g)	-0.0202 U	-0.0067 U	0.004 U	0.0155 U	0.001 U		0.0073 U	-0.0136 U	0.0115 U
Potassium-40 (pCi/g)	19.7	21.4	16.6	14.5	17.4		28.1	23	18.2
Protactinium-231 (pCi/g)	-0.0504 U	0.627 U	0.633 U	0.0464 U	0.118 U		-0.223 U	-0.192 U	0.221 U
Radium-226 (pCi/g)	1.29	1.2	1.35	1.19	1.56		2.12	1.29	1.38
Radium-228 (pCi/g)	1.06	0.934 J	0.718 J	0.56 J	0.593 J		1.11	0.902 J	0.767 J
Thorium-234 (pCi/g)	2.38 J	0.8 U	2.32 J	0.857 U	1.83 J		2.37 J	0.882 U	1.77 J
Uranium-235 (pCi/g)	0.0787 U	0.0706 U	0.323 J	0.203 J	0.162 U		0.0359 U	0.058 U	0.0923 U

Phase IV IA03 Soil

Station	**IA03-SB0006**	**IA03-SB0006**	**IA03-SB0006**	**IA03-SB0006**	**IA03-SB0007**	**IA03-SB0007**	**IA03-SB0007**	**IA03-SB0007**	**IA03-SB0007**
Sample No	**LUSB0392**	**LUSB0393**	**LUSB0394**	**LUSB0395**	**LUSB0396**	**LUSB0397**	**LUSB0398**	**LUSB0399**	**LUSB0398D**
Collection Date	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**	**07/28/98**
Depth (ft)	**1.0-2.0**	**6.0-6.8**	**12.0-13.0**	**14.0-15.0**	**3.0-4.0**	**6.0-7.0**	**12.0-13.5**	**14.0-15.0**	**12.0-13.5**
Duplicate ID									**LUSB9041**
Northing	**199414**	**199414**	**199414**	**199414**	**199419**	**199419**	**199419**	**199419**	**199419**
Easting	**517568**	**517568**	**517568**	**517568**	**517591**	**517591**	**517591**	**517591**	**517591**
Metals									
Arsenic (mg/kg)	5.3	7.6	8.6	9.3	8	3	6.1	16.7	9.5
Barium (mg/kg)	72.1 N	114 N	31.1 N	33.8 N	63.7 N	77 N	19.9 N	33.9 N	56 N
Beryllium (mg/kg)	0.75	0.53	0.25	0.24	0.63	0.55	0.19 B	0.25	0.67
Lead (mg/kg)	10.7 E	8 E	6.9 E	7.3 E	9 E	6.6 E	5.2 E	9.9 E	10.1 E
Indicator Parameters									
Fluoride (mg/kg)	0.93	4.66	2.93	1.36	1.06	2.77	3.05	2.02	1.59
Nitrogen, Ammonia (mg/kg)	21.8	2.98	13.1	6.72	2.53	1.8	2.85	5.25	1.92
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0053 U	0.0415 U	0.0652 U	-0.0035 U	0.134 U	0.118 U	0.186 U	0.0389 U	0.0449 U
Thorium-228 (pCi/g)	1.44	1.36	0.669 J	0.488 J	1.15	1.21	0.959 J	0.672 J	0.984 J
Thorium-230 (pCi/g)	2.3	1.27	1.43	1.2	2.31	1.6	1.65	1.67	1.54
Thorium-232 (pCi/g)	1.48	0.939 J	0.665 J	0.386 J	0.874 J	0.764 J	0.548 J	0.563 J	0.649 J
Uranium-233/234 (pCi/g)	1.21	1.3	1.16	1.38	1.12	1.21	1.31	1.19	1.03
Uranium-235 (pCi/g)	0.0572 U	0.0872 J	0.0845 J	0.065 U	0.106 J	0.0471 U	0.0741 U	0.0521 U	0.103 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.14	1.28	1.24	1.34	1.29	1.3	1.38	1.07	1.52
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.01	0.689 J	0.607 J	0.489 J	1.03	1.11	0.732 J	0.628 J	0.679 J
Cesium-137 (pCi/g)	0.0222 U	-0.0172 U	0.0092 U	-0.0063 U	-0.0179 U	-0.0319 U	-0.0656 U	-0.0159 U	-0.0139 U
Cobalt-60 (pCi/g)	-0.0002 U	0.0171 U	0.0027 U	0.0142 U	0.0166 U	0.0222 U	0.0105 U	0.0048 U	0.0008 U
Potassium-40 (pCi/g)	20	23.5	14.3	10.9	23.6	23.9	15.7	14.6	17.4
Protactinium-231 (pCi/g)	-0.61 U	0.225 U	0.0558 U	-0.0043 U	0.304 U	0.223 U	-0.657 U	-0.265 U	1.17 U
Radium-226 (pCi/g)	1.55	1.18	1.32	1.36	1.63	1.29	1.49	1.27	1.3
Radium-228 (pCi/g)	1.01	0.689 J	0.607 J	0.489 J	1.03	1.11	0.732 J	0.628 J	0.679 J
Thorium-234 (pCi/g)	1.58 U	1.41 J	1.1 U	1.72 J	0.916 U	2.05 J	3.33 J	2.1 J	0.438 U
Uranium-235 (pCi/g)	0.136 U	0.0363 U	0.104 U	0.088 U	0.137 U	0.0047 U	0.0668 U	0.146 U	0.164 U

Phase IV IA03 Soil

Station	**IA03-SB0008**	**IA03-SB0008**	**IA03-SB0008**	**IA03-SB0008**	**IA03-SB0008**	**IA03-SB0009**	**IA03-SB0009**	**IA03-SB0009**	**IA03-SB0009**
Sample No	**LUSB0400**	**LUSB0401**	**LUSB0402**	**LUSB0403**	**LUSB0401D**	**LUSB0404**	**LUSB0405**	**LUSB0406**	**LUSB0407**
Collection Date	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**	**06/28/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**6.0-7.0**	**9.0-10.0**	**3.0-4.0**	**1.0-2.0**	**3.0-4.0**	**6.0-7.0**	**9.0-10.0**
Duplicate ID					**LUSB9042**				
Northing	**199425**	**199425**	**199425**	**199425**	**199425**	**199435**	**199435**	**199435**	**199435**
Easting	**517444**	**517444**	**517444**	**517444**	**517444**	**517489**	**517489**	**517489**	**517489**
Metals									
Arsenic (mg/kg)	7.9	8.3	9.4	12.7	12.1	9.1	5.6	4.4	8.4
Barium (mg/kg)	149	89.5	89	104	74.2	67.2	102	55	67.7
Beryllium (mg/kg)	26.6	1.2	0.85	0.71	0.89	3.6	1.6	0.57	0.97
Lead (mg/kg)	51.9	10.5	10.2	12.8	11.6	9	8.8	8	10.9
Indicator Parameters									
Fluoride (mg/kg)	20.1	5.17	3.42	1.6	2.58	6.3	10.5	7.97	4.59
Nitrogen, Ammonia (mg/kg)	21.7	5.29	0.92 J	2.63	2.1	1.17 J	2.65	4.35	3.15
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	-0.0287 U	-0.149 U	-0.0224 U	0.137 U	0.0495 U	0.0257 U	0.0051 U	0.0243 U	0.0314 U
Thorium-228 (pCi/g)	1.44	1.39	0.945 J	1.08	1.27	1.81	2.1	1.51	1.02
Thorium-230 (pCi/g)	2.1	1.59	1.62	2.09	1.76	1.76	2.22	1.35	1.73
Thorium-232 (pCi/g)	1.1	1.13	0.79 J	0.84 J	1.16	1.17	1.75	0.813 J	0.622 J
Uranium-233/234 (pCi/g)	1.35	1.17	0.905 J	1.22	1.06	1.47	1.05	1.06	1.59
Uranium-235 (pCi/g)	0.0233 U	-0.0042 U	0.0633 U	0.214 J	0.0829 J	0.0252 U	0.0397 U	-0.0099 U	0.0379 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.986 J	0.862 J	0.833 J	1.6	0.991 J	1.03	0.835 J	0.957 J	1.38
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.15	1.45	1.01	1.04	1.02	1.15	1.04	1.06	0 U
Cesium-137 (pCi/g)	0.0679 J	-0.0063 U	-0.0067 U	0.0092 U	-0.0129 U	0.0116 U	-0.0191 U	-0.0014 U	-0.0302 U
Cobalt-60 (pCi/g)	0.0169 U	0.0208 U	0.0266 U	-0.0071 U	-0.0053 U	0.033 U	0.0078 U	0.0273 U	-0.0015 U
Potassium-40 (pCi/g)	24.8	26.2	24.3	28.9	25.7	25.9	27.5	22.9	25.5
Protactinium-231 (pCi/g)	-0.198 U	0.495 U	-0.653 U	-0.388 U	-0.874 U	-0.416 U	-0.0028 U	-0.432 U	-0.56 U
Radium-226 (pCi/g)	1.62	1.47	1.31	1.7	1.35	1.31	1.4	1.04	1.52
Radium-228 (pCi/g)	1.15	1.45	1.01	1.04	1.02	1.15	1.04	1.06	0 U
Thorium-234 (pCi/g)	1.5 J	0.542 J	2 U	1.5 J	1.6 J	1.54 J	1.57 J	1.64 J	2.19 J
Uranium-235 (pCi/g)	0.161 U	0.0622 U	0.262 J	0.229 U	0.0112 U	0.2 U	0.125 U	0.0755 U	0.105 U

Phase IV IA03 Soil

Station	**IA03-SB0010**	**IA03-SB0010**	**IA03-SB0010**	**IA03-SB0010**	**IA03-SB0017**	**IA03-SB0017**	**IA03-SB0017**	**IA03-SB0017**
Sample No	**LUSB0408**	**LUSB0409**	**LUSB0410**	**LUSB0411**	**LUSB1070**	**LUSB1071**	**LUSB1072**	**LUSB1073**
Collection Date	**06/29/98**	**06/29/98**	**06/29/98**	**06/29/98**	**07/29/98**	**07/29/98**	**07/29/98**	**07/29/98**
Depth (ft)	**1.0-1.5**	**3.0-4.0**	**6.0-7.0**	**9.0-10.0**	**1.0-2.0**	**6.0-7.0**	**12.0-13.0**	**14.5-15.5**
Duplicate ID								
Northing	**199389**	**199389**	**199389**	**199389**	**199389**	**199389**	**199389**	**199389**
Easting	**517568**	**517568**	**517568**	**517568**	**517581**	**517581**	**517581**	**517581**
Metals								
Arsenic (mg/kg)	6.2	11.8	5.1	5.9	5.8	4.4	8.8	5.9
Barium (mg/kg)	112	86.2	46.3	63.6	75.5 N	43.1 N	50.9 N	24 N
Beryllium (mg/kg)	1.5 E	0.8 E	0.46 E	0.57 E	1.1	2.4	0.52	0.19 B
Lead (mg/kg)	15.5	10.6	8	8.3	10.9 E	7 E	8.8 E	5.3 E
Indicator Parameters								
Fluoride (mg/kg)	6.83	1.5	4.14	6.08	6.55	9.67	2.1	2.43
Nitrogen, Ammonia (mg/kg)	9.74	1.34	5.72	2.9	48	21.2	2.34	2.62
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/g)	0.143 U	0.121 U	-0.0347 U	0.0084 U	-0.0179 U	-0.0306 U	-0.0601 U	-0.0096 U
Thorium-228 (pCi/g)	1.22	1.14	0.864 J	1.07	0.996 J	0.644 J	0.598 J	0.781 J
Thorium-230 (pCi/g)	2	1.96	1.15	1.59	2.09	1	1.57	1.41
Thorium-232 (pCi/g)	1.07	0.781 J	1.01	0.848 J	0.851 J	0.567 J	0.59 J	0.519 J
Uranium-233/234 (pCi/g)	1.07	0.988 J	0.744 J	0.824 J	1.16	0.654 J	1.17	1.48
Uranium-235 (pCi/g)	0.0565 U	0.13 J	0.0512 U	0.0356 U	0.0303 U	0.0349 U	0.052 U	0.0629 U
Uranium-235/236 (pCi/g)								
Uranium-238 (pCi/g)	1.09	1.22	0.876 J	1.04	1.16	1.02	1.36	1.27
Radiological Parameters (GammaSpec)								
Actinium-228 (pCi/g)	1.13	1.22	0.764 J	1.02	0.929 J	0.872 J	0.644 J	0.675 J
Cesium-137 (pCi/g)	0.0117 U	0.0106 U	0.005 U	-0.0095 U	0.0016 U	-0.0018 U	-0.019 U	0.008 U
Cobalt-60 (pCi/g)	0.0172 U	-0.0164 U	-0.0008 U	0.0042 U	0.0069 U	-0.0011 U	0.0239 U	-0.0039 U
Potassium-40 (pCi/g)	25.2	24.2	20	24.7	23	19.2	18.8	16.1
Protactinium-231 (pCi/g)	0.314 U	-0.267 U	0.124 U	-0.874 U	-0.383 U	1.03 U	0.102 U	-0.407 U
Radium-226 (pCi/g)	1.48	1.5	0.878 J	1.26	1.61	0.966 J	1.42	1.26
Radium-228 (pCi/g)	1.13	1.22	0.764 J	1.02	0.929 J	0.872 J	0.644 J	0.675 J
Thorium-234 (pCi/g)	1.63 J	1.57 J	0.454 U	0.676 J	0.738 U	0.0963 U	1.96 J	1.54 J
Uranium-235 (pCi/g)	0.0911 U	0.204 U	0.119 U	-0.0151 U	0.0922 U	0.146 U	0.355 J	0.0832 U

Phase IV IA03 Soil

Station	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0001**	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0002**
Sample No	**LUSB0412**	**LUSB0413**	**LUSB0414**	**LUSB0412D**	**LUSB0416**	**LUSB0417**	**LUSB0418**	**LUSB0419**	**LUSB0420**
Collection Date	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**
Duplicate ID				**LUSB9044**					
Northing	**199443**	**199443**	**199443**	**199443**	**199434**	**199434**	**199434**	**199434**	**199434**
Easting	**517434**	**517434**	**517434**	**517434**	**517544**	**517544**	**517544**	**517544**	**517544**
Metals									
Beryllium (mg/kg)	1	1.9	0.65	0.68	14.3	4.3	3.3	28.4	18.5

Station	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0002**	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0003**
Sample No	**LUSB0421**	**LUSB0422**	**LUSB0423**	**LUSB0420D**	**LUSB0426**	**LUSB0427**	**LUSB0428**	**LUSB0429**	**LUSB0430**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**13.0-14.0**	**15.0-16.0**	**17.0-18.0**	**11.0-12.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**
Duplicate ID				**LUSB9043**					
Northing	**199434**	**199434**	**199434**	**199434**	**199415**	**199415**	**199415**	**199415**	**199415**
Easting	**517544**	**517544**	**517544**	**517544**	**517577**	**517577**	**517577**	**517577**	**517577**
Metals									
Beryllium (mg/kg)	3.5	1	5.4	17.4 E	134	0.61	0.82	10.9 E	6.3

Station	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0003**	**IA03-SB0011**	**IA03-SB0011**	**IA03-SB0011**	**IA03-SB0011**	**IA03-SB0011**
Sample No	**LUSB0431**	**LUSB0432**	**LUSB0433**	**LUSB0606D**	**LUSB0446**	**LUSB0447**	**LUSB0448**	**LUSB0449**	**LUSB0450**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/14/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**13.0-14.0**	**15.0-16.0**	**17.0-18.0**	**7.5-8.5**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**
Duplicate ID				**LUSB9064**					
Northing	**199415**	**199415**	**199415**	**199415**	**199393**	**199393**	**199393**	**199393**	**199393**
Easting	**517577**	**517577**	**517577**	**517577**	**517449**	**517449**	**517449**	**517449**	**517449**
Metals									
Beryllium (mg/kg)	3.4 E	0.35 E	1.9	1.2	0.69	0.45	0.61	0.48	0.37

Station	**IA03-SB0011**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**	**IA03-SB0012**
Sample No	**LUSB0449D**	**LUSB0456**	**LUSB0457**	**LUSB0458**	**LUSB0459**	**LUSB0460**	**LUSB0461**	**LUSB0462**	**LUSB0458D**
Collection Date	**07/07/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**
Depth (ft)	**7.0-8.0**	**1.0-2.0**	**3.0-3.8**	**5.0-6.0**	**7.0-8.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**5.0-6.0**
Duplicate ID	**LUSB9047**								**LUSB9048**
Northing	**199393**	**199410**	**199410**	**199410**	**199410**	**199410**	**199410**	**199410**	**199410**
Easting	**517449**	**517583**	**517583**	**517583**	**517583**	**517583**	**517583**	**517583**	**517583**
Metals									
Beryllium (mg/kg)	0.78	2	18.6	0.6	0.57	0.24	0.35	0.27	0.64

Phase IV IA03 Soil

Station	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**	**IA03-SB0013**
Sample No	**LUSB0466**	**LUSB0467**	**LUSB0468**	**LUSB0469**	**LUSB0470**	**LUSB0471**	**LUSB0472**	**LUSB0473**	**LUSB0471D**
Collection Date	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**11.0-12.0**
Duplicate ID									**LUSB9049**
Northing	**199419**	**199419**	**199419**	**199419**	**199419**	**199419**	**199419**	**199419**	**199419**
Easting	**517541**	**517541**	**517541**	**517541**	**517541**	**517541**	**517541**	**517541**	**517541**
Metals									
Beryllium (mg/kg)	0.88	2	0.66	0.58	0.61	2.9	0.22	0.19 B	10.5

Station	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**	**IA03-SB0014**
Sample No	**LUSB0476**	**LUSB0477**	**LUSB0478**	**LUSB0479**	**LUSB0480**	**LUSB0481**	**LUSB0482**	**LUSB0483**	**LUSB0480D**
Collection Date	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**15.0-16.0**	**9.0-10.0**
Duplicate ID									**LUSB9050**
Northing	**199436**	**199436**	**199436**	**199436**	**199436**	**199436**	**199436**	**199436**	**199436**
Easting	**517566**	**517566**	**517566**	**517566**	**517566**	**517566**	**517566**	**517566**	**517566**
Metals									
Beryllium (mg/kg)	2.5	3.4	0.7	0.42	0.69	0.4	0.32	6	0.57

Station	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0015**	**IA03-SB0016**
Sample No	**LUSB0452**	**LUSB0484**	**LUSB0485**	**LUSB0486**	**LUSB0487**	**LUSB0488**	**LUSB0489**	**LUSB0490**	**LUSB0491**
Collection Date	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/26/98**	**07/08/98**
Depth (ft)	**15.0-16.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**11.0-12.0**	**13.0-14.0**	**1.0-2.0**
Duplicate ID									
Northing	**199445**	**199445**	**199445**	**199445**	**199445**	**199445**	**199445**	**199445**	**199454**
Easting	**517524**	**517524**	**517524**	**517524**	**517524**	**517524**	**517524**	**517524**	**517436**
Metals									
Beryllium (mg/kg)	0.35	489	1	0.75	0.54	0.59	0.5	0.32	0.36

Station	**IA03-SB0016**	**IA03-SB0016**	**IA03-SB0016**	**IA03-SB0016**	**IA03-TR0001**	**IA03-TR0001**	**IA03-TR0001**	**IA03-TR0001**	**IA03-TR0001**
Sample No	**LUSB0492**	**LUSB0493**	**LUSB0494**	**LUSB0495**	**LUSB0436**	**LUSB0437**	**LUSB0438**	**LUSB0439**	**LUSB0438D**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**	**07/23/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-7.0**	**5.0-6.0**
Duplicate ID									**LUSB9046**
Northing	**199454**	**199454**	**199454**	**199454**	**0**	**0**	**0**	**0**	**0**
Easting	**517436**	**517436**	**517436**	**517436**	**0**	**0**	**0**	**0**	**0**
Metals									
Beryllium (mg/kg)	0.59	0.52	0.38	0.41	11.8 *	26.6 *	1 *	0.71 *	0.66 *

Station	**IA03-TR0002**	**IA03-TR0002**	**IA03-TR0002**	**IA03-TR0002**
Sample No	**LUSB0441**	**LUSB0442**	**LUSB0443**	**LUSB0444**
Collection Date	**07/25/98**	**07/25/98**	**07/25/98**	**07/25/98**
Depth (ft)	**0.0-0.5**	**12.0-13.0**	**1.0-2.0**	**3.0-4.0**
Duplicate ID				
Northing	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**
Metals				
Beryllium (mg/kg)	22.4	274	1300	125

Phase II IA04 Soil

Station	**05DI00**
Sample No	**LU00201**
Collection Date	**10/29/97**
Depth (ft)	**0.0-0.1**
Northing	**517310**
Easting	**199440**
Metals	
Aluminum (mg/kg)	4780
Arsenic (mg/kg)	6.5
Beryllium (mg/kg)	30.2
Lead (mg/kg)	311 J
Magnesium (mg/kg)	62300 J

Phase IV IA04 Soil

Station	**IA04-SB0017**	**IA04-SB0018**	**IA04-SB0019**	**IA04-SB0020**	**IA04-SB0021**
Sample No	**LUSB0496**	**LUSB0497**	**LUSB0498**	**LUSB0499**	**LUSB0500**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/14/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**199428**	**199375**	**199396**	**199366**	**199427**
Easting	**517371**	**517368**	**517415**	**517150**	**517174**
Metals					
Aluminum (mg/kg)	14900	15500	19800	13300	8660
Antimony (mg/kg)	0.28 U	0.26 U	0.29 U	0.38 B	0.32 B
Arsenic (mg/kg)	7.2	9	4.6	5.7	5.7
Barium (mg/kg)	74.1	123	109	80.7	77.6
Beryllium (mg/kg)	1.2	57.1	1.2	0.7	18.8
Cadmium (mg/kg)	0.13 U	1.5	0.48		1.6
Calcium (mg/kg)	3610	31500	6610		132000
Chromium (mg/kg)	21.1	24.4	24.9	19.6	14.7
Cobalt (mg/kg)	9.2	8.5	7.8	7.6	4.5
Copper (mg/kg)	15.4	24.7	41.4	19.4	23.5
Iron (mg/kg)	24400	22900	22800	19500	13900
Lead (mg/kg)	8.5	66.7	17.2	21.3	106
Magnesium (mg/kg)	5440	16100	6040		77500
Manganese (mg/kg)	258	223	175	324	228
Mercury (mg/kg)	0.02 U	0.06	0.02 B	0.03 B	0.04
Nickel (mg/kg)	26.1	26.2	27.5	22.9	15.8
Phosphorus (mg/kg)	390	354	704	423	290
Potassium (mg/kg)	1640	2350	2440	2220	1930
Selenium (mg/kg)	1.6	1.6	2.1	1.4	0.97 B
Silver (mg/kg)	0.23 U	0.21 U	0.23 U	0.35 B	0.5 B
Sodium (mg/kg)	75.3	123	58.9		
Thallium (mg/kg)	1.3 B	1.7 B	1.1 B	0.45 U	0.45 U
Vanadium (mg/kg)	30.4	32.2	35.9	29.1	18.9
Zinc (mg/kg)	63.7	106	85.4	63.3	136
Semivolatile Organics					
1,2,4-Trichlorobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
1,2-Dichlorobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
1,3-Dichlorobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
1,4-Dichlorobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2,2'-Oxybis (1-cloropropane) (ug/kg)					
2,4,5-Trichlorophenol (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
2,4,6-Trichlorophenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2,4-Dichlorophenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2,4-Dimethylphenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U

Phase IV IA04 Soil

Station	IA04-SB0017	IA04-SB0018	IA04-SB0019	IA04-SB0020	IA04-SB0021
Sample No	LUSB0496	LUSB0497	LUSB0498	LUSB0499	LUSB0500
Collection Date	07/09/98	07/09/98	07/09/98	07/14/98	07/14/98
Depth (ft)	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0
Duplicate ID					
Northing	199428	199375	199396	199366	199427
Easting	517371	517368	517415	517150	517174
2,4-Dinitrophenol (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
2,4-Dinitrotoluene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2,6-Dinitrotoluene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2-Chloronaphthalene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2-Chlorophenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2-Methylnaphthalene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2-Methylphenol (ug/kg)					
2-Nitroaniline (ug/kg)					
2-Nitrophenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
2-methyl-4,6-dinitrophenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
3,3'-Dichlorobenzidine (ug/kg)	1940 U	7750 U	1960 U	1890 U	1920000 U
3-Nitroaniline (ug/kg)					
4,6-Dinitro-2-methylphenol (ug/kg)					
4-Bromophenyl phenyl ether (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
4-Chloroaniline (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
4-Chlorophenylphenylether (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
4-Nitroaniline (ug/kg)					
4-Nitrophenol (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
4-chloro-3-methyl phenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Acenaphthene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Acenaphthylene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Anthracene (ug/kg)	388 U	1910	392 U	379 U	249000 J
Benzo(a)anthracene (ug/kg)	388 U	3730	392 U	379 U	236000 J
Benzo(a)pyrene (ug/kg)	388 U	3350	392 U	379 U	195000 J
Benzo(b)fluoranthene (ug/kg)	388 U	4740	392 U	379 U	299000 J
Benzo(ghi)perylene (ug/kg)	388 U	1810	392 U	379 U	384000 U
Benzo(k)fluoranthene (ug/kg)	388 U	1750	392 U	379 U	384000 U
Benzo[e]pyrene (ug/kg)					
Butylbenzylphthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Carbazole (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Chrysene (ug/kg)	388 U	4220	392 U	379 U	237000 J
Di-n-butylphthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Di-n-octylphthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Dibenz(a,h)anthracene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Dibenzofuran (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Diethyl phthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U

Station	**IA04-SB0017**	**IA04-SB0018**	**IA04-SB0019**	**IA04-SB0020**	**IA04-SB0021**
Sample No	**LUSB0496**	**LUSB0497**	**LUSB0498**	**LUSB0499**	**LUSB0500**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/14/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**199428**	**199375**	**199396**	**199366**	**199427**
Easting	**517371**	**517368**	**517415**	**517150**	**517174**
Dimethyl phthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Diphenylamine (ug/kg)					
Fluoranthene (ug/kg)	388 U	6670	197 J	379 U	762000
Fluorene (ug/kg)	388 U	901 J	392 U	379 U	216000 J
Hexachlorobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Hexachlorobutadiene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Hexachlorocyclopentadiene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Hexachloroethane (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	388 U	2010	392 U	379 U	384000 U
Isophorone (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
N-Nitrosodiphenylamine (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
N-Nitrosodipropylamine (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Naphthalene (ug/kg)	388 U	1550 U	392 U	379 U	230000 J
Naphthalene, 1-methyl- (ug/kg)					
Nitrobenzene (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Pentachlorophenol (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
Phenanthrene (ug/kg)	388 U	5500	392 U	379 U	891000
Phenol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Pyrene (ug/kg)	388 U	5590	392 U	379 U	513000
bis(2-chloroethoxy)methane (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
bis(2-chloroethyl) ether (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
bis(2-ethylhexyl)phthalate (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
m,p-Cresol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
m-Nitroaniline (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
o-Cresol (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
o-Nitroaniline (ug/kg)	969 U	3880 U	980 U	947 U	961000 U
p-Nitroaniline (ug/kg)	388 U	1550 U	392 U	379 U	384000 U
Volatile Organics					
1,1,1-Trichloroethane (ug/kg)	5 U	5.4 U	7.3	5.6 U	5.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,1,2-Trichloroethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,1-Dichloroethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,1-Dichloroethene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,2-Dichloroethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,2-Dichloroethylene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
1,2-Dichloropropane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U

Phase IV IA04 Soil

Station	**IA04-SB0017**	**IA04-SB0018**	**IA04-SB0019**	**IA04-SB0020**	**IA04-SB0021**
Sample No	**LUSB0496**	**LUSB0497**	**LUSB0498**	**LUSB0499**	**LUSB0500**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/14/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**199428**	**199375**	**199396**	**199366**	**199427**
Easting	**517371**	**517368**	**517415**	**517150**	**517174**
2-Butanone (ug/kg)	10.1 U	10.7 U	8.1 U	13.1 U	2.3 U
2-Hexanone (ug/kg)	10.1 U	10.7 U	10.8 U	11.3 U	10.6 U
4-Methyl-2-pentanone (ug/kg)	10.1 U	10.7 U	10.8 U	11.3 U	21.4
Acetone (ug/kg)	16.2 U	32.7 U	74 U	36.4 U	9.6 U
Benzene (ug/kg)	0.57 J	2 J	0.69 J	0.84 J	4.4 J
Bromodichloromethane (ug/kg)					
Bromoform (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Bromomethane (ug/kg)					
Carbon disulfide (ug/kg)	5 U	5.4 U	5.4 U	0.69 J	1.7 J
Carbon tetrachloride (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Chlorobenzene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Chlorodibromomethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Chloroethane (ug/kg)	10.1 U	10.7 U	10.8 U	11.3 U	10.6 U
Chloroform (ug/kg)	5 U	0.62 J	5.4 U	5.6 U	5.3 U
Dibromochloromethane (ug/kg)					
Dichlorobromomethane (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Ethylbenzene (ug/kg)	5 U	1.3 J	5.4 U	5.6 U	9.1
Methyl Bromide (ug/kg)	10.1 U	10.7 U	10.8 U	11.3 U	10.6 U
Methyl Chloride (ug/kg)	10.1 U	10.7 U	10.8 U	11.3 U	10.6 U
Methyl Methylethyl Benzene Isomer (ug/kg)		11.7 J			
Methylene chloride (ug/kg)	5 U	0.56 JB	0.6 U	5.6 U	5.3 U
Styrene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Tetrachloroethene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
Toluene (ug/kg)	5.6	9	10.8	1.2 U	36.4 B
Trichloroethene (ug/kg)	5 U	5.4 U	1.3 J	5.6 U	5.3 U
Vinyl chloride (ug/kg)	2 U	2.1 U	2.2 U	2.2 U	2.1 U
Xylenes (total) (ug/kg)	5 U	2.6 U	0.96 U	5.6 U	26
cis-1,2-Dichloroethene (ug/kg)					
cis-1,3-dichloropropene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
ethyl-methyl-Benzene isomer (ug/kg)					44.6 J
methyl-Naphthalene isomer (ug/kg)				5.9 J	
n-Butyl Alcohol (ug/kg)		8.7 U	6.7 U		
trans-1,2-Dichloroethene (ug/kg)					
trans-1,3-Dichloropropene (ug/kg)	5 U	5.4 U	5.4 U	5.6 U	5.3 U
trimethyl-Benzene isomer (ug/kg)					86.4 J
Radiological Parameters (AlphaSpec)					

Phase IV IA04 Soil

Station	**IA04-SB0017**	**IA04-SB0018**	**IA04-SB0019**	**IA04-SB0020**	**IA04-SB0021**
Sample No	**LUSB0496**	**LUSB0497**	**LUSB0498**	**LUSB0499**	**LUSB0500**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/14/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**199428**	**199375**	**199396**	**199366**	**199427**
Easting	**517371**	**517368**	**517415**	**517150**	**517174**
Actinium-227 (pCi/g)	-0.0494 U	0.0643 U	0.157 U	0.0574 U	0.023 U
Thorium-228 (pCi/g)	1.12	0.921 J	1.06	0.945 J	1.12
Thorium-230 (pCi/g)	1.72	2.75	1.75	1.72	1.91
Thorium-232 (pCi/g)	0.991 J	0.813 J	0.724 J	0.721 J	0.605 J
Uranium-233/234 (pCi/g)	0.94 J	1.75	1.64	0.915 J	0.949 J
Uranium-235 (pCi/g)	0.0373 U	0.0848 J	0.0936 J	0.0883 U	0.0294 U
Uranium-238 (pCi/g)	1.18	2	1.71	1.18	0.861 J
Radiological Parameters (GammaSpec)					
Actinium-228 (pCi/g)	1.25	0.786 J	1.03	0.97 J	0.695 J
Cesium-137 (pCi/g)	0.017 U	0.0816 J	-0.0156 U	-0.0272 U	0.118
Cobalt-60 (pCi/g)	0.0006 U	0.0034 U	-0.005 U	-0.0003 U	0.0015 U
Potassium-40 (pCi/g)	26.6	15.5	22.2	23.4	17.9
Protactinium-231 (pCi/g)	-0.308 U	-0.336 U	0.416 U	0.111 U	-0.184 U
Radium-226 (pCi/g)	1.65	2.31	1.6	1.34	1.06
Radium-228 (pCi/g)	1.25	0.786 J	1.03	0.97 J	0.695 J
Thorium-234 (pCi/g)	1.88 J	3.11 J	3.22 J	1.42 J	1.55 J
Uranium-235 (pCi/g)	0.0506 U	0.361 J	0.145 U	0.0539 U	0.096 U

Station	**IA04-SB0029**	**IA04-SB0029**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0031**	**IA04-SB0031**	**IA04-SB0032**	**IA04-SB0032**
Sample No	**LUSB1158**	**LUSB1159**	**LUSB1160**	**LUSB1161**	**LUSB1160D**	**LUSB1162**	**LUSB1163**	**LUSB1164**	**LUSB1165**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**
Depth (ft)	**5.0-6.0**	**11.0-12.0**	**3.0-4.0**	**11.0-12.0**	**3.0-4.0**	**4.5-5.5**	**10.0-11.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID					**LUSB9112**				
Northing	**199425**	**199425**	**199430**	**199430**	**199430**	**199428**	**199428**	**199436**	**199436**
Easting	**517192**	**517192**	**517196**	**517196**	**517196**	**517185**	**517185**	**517189**	**517189**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
1,2-Dichlorobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
1,3-Dichlorobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
1,4-Dichlorobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,2'-Oxybis (1-cloropropane) (ug/kg)									
2,4,5-Trichlorophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,4,6-Trichlorophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,4-Dichlorophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,4-Dimethylphenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,4-Dinitrophenol (ug/kg)	803 U	775 U	833 U	775 U	855 U	833 U	784 U	794 U	775 U
2,4-Dinitrotoluene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2,6-Dinitrotoluene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2-Chloronaphthalene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2-Chlorophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2-Methylnaphthalene (ug/kg)	402 U	388 U	4100	388 U	3510	417 U	392 U	397 U	388 U
2-Methylphenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2-Nitroaniline (ug/kg)	1000 U	969 U	1040 U	969 U	1070 U	1040 U	980 U	992 U	969 U
2-Nitrophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
2-methyl-4,6-dinitrophenol (ug/kg)									
3,3'-Dichlorobenzidine (ug/kg)	803 U	775 U	833 U	775 U	855 U	833 U	784 U	794 U	775 U
3-Nitroaniline (ug/kg)	1000 U	969 U	1040 U	969 U	1070 U	1040 U	980 U	992 U	969 U
4,6-Dinitro-2-methylphenol (ug/kg)	803 U	775 U	833 U	775 U	855 U	833 U	784 U	794 U	775 U
4-Bromophenyl phenyl ether (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
4-Chloroaniline (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
4-Chlorophenylphenylether (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
4-Nitroaniline (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
4-Nitrophenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
4-chloro-3-methyl phenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Acenaphthene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Acenaphthylene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Anthracene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Benzo(a)anthracene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Benzo(a)pyrene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Benzo(b)fluoranthene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U

Station	**IA04-SB0029**	**IA04-SB0029**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0031**	**IA04-SB0031**	**IA04-SB0032**	**IA04-SB0032**
Sample No	**LUSB1158**	**LUSB1159**	**LUSB1160**	**LUSB1161**	**LUSB1160D**	**LUSB1162**	**LUSB1163**	**LUSB1164**	**LUSB1165**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**
Depth (ft)	**5.0-6.0**	**11.0-12.0**	**3.0-4.0**	**11.0-12.0**	**3.0-4.0**	**4.5-5.5**	**10.0-11.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID					**LUSB9112**				
Northing	**199425**	**199425**	**199430**	**199430**	**199430**	**199428**	**199428**	**199436**	**199436**
Easting	**517192**	**517192**	**517196**	**517196**	**517196**	**517185**	**517185**	**517189**	**517189**
Benzo(ghi)perylene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Benzo(k)fluoranthene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Benzo[e]pyrene (ug/kg)									
Butylbenzylphthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Carbazole (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Chrysene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Di-n-butylphthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Di-n-octylphthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Dibenz(a,h)anthracene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Dibenzofuran (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Diethyl phthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Dimethyl phthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Diphenylamine (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Fluoranthene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Fluorene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Hexachlorobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Hexachlorobutadiene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Hexachlorocyclopentadiene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Hexachloroethane (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Isophorone (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
N-Nitrosodiphenylamine (ug/kg)									
N-Nitrosodipropylamine (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Naphthalene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Naphthalene, 1-methyl- (ug/kg)					1380 J				
Nitrobenzene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Pentachlorophenol (ug/kg)	803 U	775 U	833 U	775 U	855 U	833 U	784 U	794 U	775 U
Phenanthrene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Phenol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
Pyrene (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
bis(2-chloroethoxy)methane (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
bis(2-chloroethyl) ether (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
bis(2-ethylhexyl)phthalate (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
m,p-Cresol (ug/kg)	402 U	388 U	417 U	388 U	427 U	417 U	392 U	397 U	388 U
m-Nitroaniline (ug/kg)									
o-Cresol (ug/kg)									

Station	**IA04-SB0029**	**IA04-SB0029**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0031**	**IA04-SB0031**	**IA04-SB0032**	**IA04-SB0032**
Sample No	**LUSB1158**	**LUSB1159**	**LUSB1160**	**LUSB1161**	**LUSB1160D**	**LUSB1162**	**LUSB1163**	**LUSB1164**	**LUSB1165**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**
Depth (ft)	**5.0-6.0**	**11.0-12.0**	**3.0-4.0**	**11.0-12.0**	**3.0-4.0**	**4.5-5.5**	**10.0-11.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID					**LUSB9112**				
Northing	**199425**	**199425**	**199430**	**199430**	**199430**	**199428**	**199428**	**199436**	**199436**
Easting	**517192**	**517192**	**517196**	**517196**	**517196**	**517185**	**517185**	**517189**	**517189**
o-Nitroaniline (ug/kg)									
p-Nitroaniline (ug/kg)									
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)			5.3 U		5.3 U				
1,1,2,2-Tetrachloroethane (ug/kg)			5.3 U		5.3 U				
1,1,2-Trichloroethane (ug/kg)			5.3 U		5.3 U				
1,1-Dichloroethane (ug/kg)			5.3 U		5.3 U				
1,1-Dichloroethene (ug/kg)			5.3 U		5.3 U				
1,2-Dichloroethane (ug/kg)			5.3 U		5.3 U				
1,2-Dichloroethylene (ug/kg)			5.3 U		5.3 U				
1,2-Dichloropropane (ug/kg)			5.3 U		5.3 U				
2-Butanone (ug/kg)			10.6 U		10.7 U				
2-Hexanone (ug/kg)			10.6 U		75.5				
4-Methyl-2-pentanone (ug/kg)			10.6 U		10.7 U				
Acetone (ug/kg)			36.4		44.3				
Benzene (ug/kg)			5.3 U		5.3 U				
Bromodichloromethane (ug/kg)			5.3 U		5.3 U				
Bromoform (ug/kg)			5.3 U		5.3 U				
Bromomethane (ug/kg)			10.6 U		10.7 U				
Carbon disulfide (ug/kg)			1.9 J		5.3 U				
Carbon tetrachloride (ug/kg)			5.3 U		5.3 U				
Chlorobenzene (ug/kg)			5.3 U		5.3 U				
Chlorodibromomethane (ug/kg)									
Chloroethane (ug/kg)			10.6 U		10.7 U				
Chloroform (ug/kg)			5.3 U		5.3 U				
Dibromochloromethane (ug/kg)			5.3 U		5.3 U				
Dichlorobromomethane (ug/kg)									
Ethylbenzene (ug/kg)			5.3 U		5.3 U				
Methyl Bromide (ug/kg)									
Methyl Chloride (ug/kg)			10.6 U		10.7 U				
Methyl Methylethyl Benzene Isomer (ug/kg)									
Methylene chloride (ug/kg)			5.3 U		5.3 U				
Styrene (ug/kg)			5.3 U		5.3 U				
Tetrachloroethene (ug/kg)			5.3 U		5.3 U				
Toluene (ug/kg)			1.2 J		1.3 J				
Trichloroethene (ug/kg)			5.3 U		5.3 U				

Station	**IA04-SB0029**	**IA04-SB0029**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0030**	**IA04-SB0031**	**IA04-SB0031**	**IA04-SB0032**	**IA04-SB0032**
Sample No	**LUSB1158**	**LUSB1159**	**LUSB1160**	**LUSB1161**	**LUSB1160D**	**LUSB1162**	**LUSB1163**	**LUSB1164**	**LUSB1165**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**
Depth (ft)	**5.0-6.0**	**11.0-12.0**	**3.0-4.0**	**11.0-12.0**	**3.0-4.0**	**4.5-5.5**	**10.0-11.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID					**LUSB9112**				
Northing	**199425**	**199425**	**199430**	**199430**	**199430**	**199428**	**199428**	**199436**	**199436**
Easting	**517192**	**517192**	**517196**	**517196**	**517196**	**517185**	**517185**	**517189**	**517189**
Vinyl chloride (ug/kg)			2.1 U		2.1 U				
Xylenes (total) (ug/kg)			22.3		12.7				
cis-1,2-Dichloroethene (ug/kg)									
cis-1,3-dichloropropene (ug/kg)			5.3 U		5.3 U				
ethyl-methyl-Benzene isomer (ug/kg)									
methyl-Naphthalene isomer (ug/kg)									
n-Butyl Alcohol (ug/kg)									
trans-1,2-Dichloroethene (ug/kg)									
trans-1,3-Dichloropropene (ug/kg)			5.3 U		5.3 U				
trimethyl-Benzene isomer (ug/kg)									
PCBs									
Aroclor-1016 (ug/kg)									
Aroclor-1221 (ug/kg)									
Aroclor-1232 (ug/kg)									
Aroclor-1242 (ug/kg)									
Aroclor-1248 (ug/kg)									
Aroclor-1254 (ug/kg)									
Aroclor-1260 (ug/kg)									
Wet Chemistry									
Total Rec. Petro. Hydrocarbons (mg/kg)	12.1 J	35.6	6190	24	6030	12.4 U	19.8 J	11.8 U	28.3

Station	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0035**	**IA04-SB0035**
Sample No	**LUSB1166**	**LUSB1167**	**LUSB1168**	**LUSB1168D**	**LUSB1169**	**LUSB1170**	**LUSB1171**	**LUSB1172**	**LUSB1173**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/23/99**	**06/23/99**
Depth (ft)	**1.5-2.5**	**9.0-10.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**1.5-2.5**	**9.0-10.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID				**LUSB9113**					
Northing	**199374**	**199374**	**199374**	**199374**	**199361**	**199361**	**199361**	**199421**	**199421**
Easting	**517359**	**517359**	**517359**	**517359**	**517358**	**517358**	**517358**	**517352**	**517352**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
1,2-Dichlorobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
1,3-Dichlorobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
1,4-Dichlorobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U		
2,2'-Oxybis (1-cloropropane) (ug/kg)								392 U	392 U
2,4,5-Trichlorophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,4,6-Trichlorophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,4-Dichlorophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,4-Dimethylphenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,4-Dinitrophenol (ug/kg)	889 U	775 U	694 U	733 U	784 U	855 U	749 U	784 U	784 U
2,4-Dinitrotoluene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2,6-Dinitrotoluene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2-Chloronaphthalene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2-Chlorophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2-Methylnaphthalene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2-Methylphenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U		
2-Nitroaniline (ug/kg)	1110 U	969 U	868 U	916 U	980 U	1070 U	936 U		
2-Nitrophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
2-methyl-4,6-dinitrophenol (ug/kg)								784 U	784 U
3,3'-Dichlorobenzidine (ug/kg)	889 U	775 U	694 U	733 U	784 U	855 U	749 U	784 U	784 U
3-Nitroaniline (ug/kg)	1110 U	969 U	868 U	916 U	980 U	1070 U	936 U		
4,6-Dinitro-2-methylphenol (ug/kg)	889 U	775 U	694 U	733 U	784 U	855 U	749 U		
4-Bromophenyl phenyl ether (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
4-Chloroaniline (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
4-Chlorophenylphenylether (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
4-Nitroaniline (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U		
4-Nitrophenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
4-chloro-3-methyl phenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Acenaphthene (ug/kg)	444 U	388 U	82.3 J	366 U	392 U	427 U	374 U	392 U	392 U
Acenaphthylene (ug/kg)	444 U	388 U	90.8 J	366 U	91.9 J	427 U	374 U	392 U	392 U
Anthracene (ug/kg)	444 U	388 U	734	75.4 J	179 J	427 U	374 U	392 U	392 U
Benzo(a)anthracene (ug/kg)	444 U	388 U	2210	395	685	427 U	374 U	392 U	392 U
Benzo(a)pyrene (ug/kg)	444 U	388 U	1790	471	1450	427 U	374 U	392 U	392 U
Benzo(b)fluoranthene (ug/kg)	444 U	388 U	2430	572	2600	427 U	374 U	392 U	392 U

Station	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0035**	**IA04-SB0035**
Sample No	**LUSB1166**	**LUSB1167**	**LUSB1168**	**LUSB1168D**	**LUSB1169**	**LUSB1170**	**LUSB1171**	**LUSB1172**	**LUSB1173**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/23/99**	**06/23/99**
Depth (ft)	**1.5-2.5**	**9.0-10.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**1.5-2.5**	**9.0-10.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID				**LUSB9113**					
Northing	**199374**	**199374**	**199374**	**199374**	**199361**	**199361**	**199361**	**199421**	**199421**
Easting	**517359**	**517359**	**517359**	**517359**	**517358**	**517358**	**517358**	**517352**	**517352**
Benzo(ghi)perylene (ug/kg)	444 U	388 U	865	341 J	1050	427 U	374 U	392 U	392 U
Benzo(k)fluoranthene (ug/kg)	444 U	388 U	1650	430	1040	427 U	374 U	392 U	392 U
Benzo[e]pyrene (ug/kg)			0 U						
Butylbenzylphthalate (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Carbazole (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Chrysene (ug/kg)	444 U	388 U	1830	428	1050	427 U	374 U	392 U	392 U
Di-n-butylphthalate (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Di-n-octylphthalate (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Dibenz(a,h)anthracene (ug/kg)	444 U	388 U	458	222 J	428	427 U	374 U	392 U	392 U
Dibenzofuran (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Diethyl phthalate (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Dimethyl phthalate (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Diphenylamine (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Fluoranthene (ug/kg)	444 U	388 U	4280 E	818	530	427 U	374 U	392 U	392 U
Fluorene (ug/kg)	444 U	388 U	160 J	366 U	392 U	427 U	374 U	392 U	392 U
Hexachlorobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Hexachlorobutadiene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Hexachlorocyclopentadiene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Hexachloroethane (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	444 U	388 U	893	334 J	891	427 U	374 U	392 U	392 U
Isophorone (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
N-Nitrosodiphenylamine (ug/kg)									
N-Nitrosodipropylamine (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Naphthalene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Naphthalene, 1-methyl- (ug/kg)									
Nitrobenzene (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Pentachlorophenol (ug/kg)	889 U	775 U	694 U	733 U	784 U	855 U	749 U	784 U	784 U
Phenanthrene (ug/kg)	444 U	388 U	2290	423	189 J	427 U	374 U	392 U	392 U
Phenol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
Pyrene (ug/kg)	444 U	388 U	4000	686	633	427 U	374 U	392 U	392 U
bis(2-chloroethoxy)methane (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
bis(2-chloroethyl) ether (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
bis(2-ethylhexyl)phthalate (ug/kg)	444 U	388 U	459	713	2360	427 U	374 U	392 U	392 U
m,p-Cresol (ug/kg)	444 U	388 U	347 U	366 U	392 U	427 U	374 U	392 U	392 U
m-Nitroaniline (ug/kg)								980 U	980 U
o-Cresol (ug/kg)								392 U	392 U

Station	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0035**	**IA04-SB0035**
Sample No	**LUSB1166**	**LUSB1167**	**LUSB1168**	**LUSB1168D**	**LUSB1169**	**LUSB1170**	**LUSB1171**	**LUSB1172**	**LUSB1173**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/23/99**	**06/23/99**
Depth (ft)	**1.5-2.5**	**9.0-10.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**1.5-2.5**	**9.0-10.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID				**LUSB9113**					
Northing	**199374**	**199374**	**199374**	**199374**	**199361**	**199361**	**199361**	**199421**	**199421**
Easting	**517359**	**517359**	**517359**	**517359**	**517358**	**517358**	**517358**	**517352**	**517352**
o-Nitroaniline (ug/kg)								980 U	980 U
p-Nitroaniline (ug/kg)								392 U	392 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)						5.6 U			
1,1,2,2-Tetrachloroethane (ug/kg)						5.6 U			
1,1,2-Trichloroethane (ug/kg)						5.6 U			
1,1-Dichloroethane (ug/kg)						5.6 U			
1,1-Dichloroethene (ug/kg)						5.6 U			
1,2-Dichloroethane (ug/kg)						5.6 U			
1,2-Dichloroethylene (ug/kg)						5.6 U			
1,2-Dichloropropane (ug/kg)						5.6 U			
2-Butanone (ug/kg)						11.2 U			
2-Hexanone (ug/kg)						11.2 U			
4-Methyl-2-pentanone (ug/kg)						11.2 U			
Acetone (ug/kg)						11.2 U			
Benzene (ug/kg)						0.61 J			
Bromodichloromethane (ug/kg)						5.6 U			
Bromoform (ug/kg)						5.6 U			
Bromomethane (ug/kg)						11.2 U			
Carbon disulfide (ug/kg)						4.1 J			
Carbon tetrachloride (ug/kg)						5.6 U			
Chlorobenzene (ug/kg)						5.6 U			
Chlorodibromomethane (ug/kg)									
Chloroethane (ug/kg)						11.2 U			
Chloroform (ug/kg)						5.6 U			
Dibromochloromethane (ug/kg)						5.6 U			
Dichlorobromomethane (ug/kg)									
Ethylbenzene (ug/kg)						5.6 U			
Methyl Bromide (ug/kg)									
Methyl Chloride (ug/kg)						11.2 U			
Methyl Methylethyl Benzene Isomer (ug/kg)									
Methylene chloride (ug/kg)						5.6 U			
Styrene (ug/kg)						5.6 U			
Tetrachloroethene (ug/kg)						5.6 U			
Toluene (ug/kg)						0.64999 J			
Trichloroethene (ug/kg)						5.6 U			

Station	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0033**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0034**	**IA04-SB0035**	**IA04-SB0035**
Sample No	**LUSB1166**	**LUSB1167**	**LUSB1168**	**LUSB1168D**	**LUSB1169**	**LUSB1170**	**LUSB1171**	**LUSB1172**	**LUSB1173**
Collection Date	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/22/99**	**06/23/99**	**06/23/99**
Depth (ft)	**1.5-2.5**	**9.0-10.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**1.5-2.5**	**9.0-10.0**	**5.0-6.0**	**9.0-10.0**
Duplicate ID				**LUSB9113**					
Northing	**199374**	**199374**	**199374**	**199374**	**199361**	**199361**	**199361**	**199421**	**199421**
Easting	**517359**	**517359**	**517359**	**517359**	**517358**	**517358**	**517358**	**517352**	**517352**
Vinyl chloride (ug/kg)						2.2 U			
Xylenes (total) (ug/kg)						5.6 U			
cis-1,2-Dichloroethene (ug/kg)									
cis-1,3-dichloropropene (ug/kg)						5.6 U			
ethyl-methyl-Benzene isomer (ug/kg)									
methyl-Naphthalene isomer (ug/kg)									
n-Butyl Alcohol (ug/kg)									
trans-1,2-Dichloroethene (ug/kg)									
trans-1,3-Dichloropropene (ug/kg)						5.6 U			
trimethyl-Benzene isomer (ug/kg)									
PCBs									
Aroclor-1016 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Aroclor-1221 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Aroclor-1232 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Aroclor-1242 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Aroclor-1248 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Aroclor-1254 (ug/kg)	10100	9.8	3200	4190	2270	4.3 U	3.7 U		
Aroclor-1260 (ug/kg)	889 U	3.9 U	347 U	366 U	196 U	4.3 U	3.7 U		
Wet Chemistry									
Total Rec. Petro. Hydrocarbons (mg/kg)	39.3	11.5 U	418	406	141	12.7 U	11.5 J	14.6 J	25

Station	**IA04-SB0035**	**IA04-SB0036**	**IA04-SB0036**	**IA04-SB0037**	**IA04-SB0037**	**IA04-SB0038**	**IA04-SB0038**
Sample No	**LUSB1173D**	**LUSB1174**	**LUSB1175**	**LUSB1176**	**LUSB1177**	**LUSB1178**	**LUSB1179**
Collection Date	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**
Depth (ft)	**9.0-10.0**	**5.0-6.0**	**11.0-12.0**	**5.0-6.0**	**10.0-11.0**	**5.0-6.0**	**11.0-12.0**
Duplicate ID	**LUSB9114**						
Northing	**199421**	**199415**	**199415**	**199422**	**199422**	**199430**	**199430**
Easting	**517352**	**517359**	**517359**	**517364**	**517364**	**517358**	**517358**
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
1,2-Dichlorobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
1,3-Dichlorobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
1,4-Dichlorobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,2'-Oxybis (1-chloropropane) (ug/kg)							
2,2'-Oxybis (1-cloropropane) (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,4,5-Trichlorophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,4,6-Trichlorophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,4-Dichlorophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,4-Dimethylphenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,4-Dinitrophenol (ug/kg)	775 U	784 U	775 U	803 U	775 U	733 U	784 U
2,4-Dinitrotoluene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2,6-Dinitrotoluene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2-Chloronaphthalene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2-Chlorophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2-Methylnaphthalene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2-Methylphenol (ug/kg)							
2-Nitroaniline (ug/kg)							
2-Nitrophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
2-methyl-4,6-dinitrophenol (ug/kg)	775 U	784 U	775 U	803 U	775 U	733 U	784 U
3,3'-Dichlorobenzidine (ug/kg)	775 U	784 U	775 U	803 U	775 U	733 U	784 U
3-Nitroaniline (ug/kg)							
4,6-Dinitro-2-methylphenol (ug/kg)							
4-Bromophenyl phenyl ether (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
4-Chloroaniline (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
4-Chlorophenylphenylether (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
4-Nitroaniline (ug/kg)							
4-Nitrophenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
4-chloro-3-methyl phenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Acenaphthene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Acenaphthylene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Anthracene (ug/kg)	24.3 J	392 U	388 U	402 U	388 U	366 U	392 U
Benzo(a)anthracene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Benzo(a)pyrene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Benzo(b)fluoranthene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U

Station	**IA04-SB0035**	**IA04-SB0036**	**IA04-SB0036**	**IA04-SB0037**	**IA04-SB0037**	**IA04-SB0038**	**IA04-SB0038**
Sample No	**LUSB1173D**	**LUSB1174**	**LUSB1175**	**LUSB1176**	**LUSB1177**	**LUSB1178**	**LUSB1179**
Collection Date	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**
Depth (ft)	**9.0-10.0**	**5.0-6.0**	**11.0-12.0**	**5.0-6.0**	**10.0-11.0**	**5.0-6.0**	**11.0-12.0**
Duplicate ID	**LUSB9114**						
Northing	**199421**	**199415**	**199415**	**199422**	**199422**	**199430**	**199430**
Easting	**517352**	**517359**	**517359**	**517364**	**517364**	**517358**	**517358**
Benzo(ghi)perylene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Benzo(k)fluoranthene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Benzo[e]pyrene (ug/kg)							
Butylbenzylphthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Carbazole (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Chrysene (ug/kg)	388 U	392 U	388 U	402 U	31.5 J	366 U	392 U
Di-n-butylphthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Di-n-octylphthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Dibenz(a,h)anthracene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Dibenzofuran (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Diethyl phthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Dimethyl phthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Diphenylamine (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Fluoranthene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Fluorene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Hexachlorobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Hexachlorobutadiene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Hexachlorocyclopentadiene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Hexachloroethane (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Isophorone (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
N-Nitrosodiphenylamine (ug/kg)							
N-Nitrosodipropylamine (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Naphthalene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Naphthalene, 1-methyl- (ug/kg)							
Nitrobenzene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Pentachlorophenol (ug/kg)	775 U	784 U	775 U	803 U	775 U	733 U	784 U
Phenanthrene (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Phenol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Pyrene (ug/kg)	388 U	392 U	388 U	402 U	44.7 J	366 U	392 U
bis(2-chloroethoxy)methane (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
bis(2-chloroethyl) ether (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
bis(2-ethylhexyl)phthalate (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
m,p-Cresol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
m-Nitroaniline (ug/kg)	969 U	980 U	969 U	1000 U	969 U	916 U	980 U
o-Cresol (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U

Station	**IA04-SB0035**	**IA04-SB0036**	**IA04-SB0036**	**IA04-SB0037**	**IA04-SB0037**	**IA04-SB0038**	**IA04-SB0038**
Sample No	**LUSB1173D**	**LUSB1174**	**LUSB1175**	**LUSB1176**	**LUSB1177**	**LUSB1178**	**LUSB1179**
Collection Date	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**
Depth (ft)	**9.0-10.0**	**5.0-6.0**	**11.0-12.0**	**5.0-6.0**	**10.0-11.0**	**5.0-6.0**	**11.0-12.0**
Duplicate ID	**LUSB9114**						
Northing	**199421**	**199415**	**199415**	**199422**	**199422**	**199430**	**199430**
Easting	**517352**	**517359**	**517359**	**517364**	**517364**	**517358**	**517358**
o-Nitroaniline (ug/kg)	969 U	980 U	969 U	1000 U	969 U	916 U	980 U
p-Nitroaniline (ug/kg)	388 U	392 U	388 U	402 U	388 U	366 U	392 U
Volatile Organics							
1,1,1-Trichloroethane (ug/kg)		5.4 U					
1,1,2,2-Tetrachloroethane (ug/kg)		5.4 U					
1,1,2-Trichloroethane (ug/kg)		5.4 U					
1,1-Dichloroethane (ug/kg)		5.4 U					
1,1-Dichloroethene (ug/kg)		5.4 U					
1,2-Dichloroethane (ug/kg)		5.4 U					
1,2-Dichloroethylene (ug/kg)							
1,2-Dichloropropane (ug/kg)		5.4 U					
2-Butanone (ug/kg)		10.8 U					
2-Hexanone (ug/kg)		10.8 U					
4-Methyl-2-pentanone (ug/kg)		10.8 U					
Acetone (ug/kg)		10.8 U					
Benzene (ug/kg)		5.4 U					
Bromodichloromethane (ug/kg)		5.4 U					
Bromoform (ug/kg)		5.4 U					
Bromomethane (ug/kg)		10.8 U					
Carbon disulfide (ug/kg)		5.4 U					
Carbon tetrachloride (ug/kg)		5.4 U					
Chlorobenzene (ug/kg)		5.4 U					
Chlorodibromomethane (ug/kg)							
Chloroethane (ug/kg)		10.8 U					
Chloroform (ug/kg)		5.4 U					
Dibromochloromethane (ug/kg)		5.4 U					
Dichlorobromomethane (ug/kg)							
Ethylbenzene (ug/kg)		5.4 U					
Methyl Bromide (ug/kg)							
Methyl Chloride (ug/kg)		10.8 U					
Methyl Methylethyl Benzene Isomer (ug/kg)							
Methylene chloride (ug/kg)		5.4 U					
Styrene (ug/kg)		5.4 U					
Tetrachloroethene (ug/kg)		5.4 U					
Toluene (ug/kg)		2.2 U					
Trichloroethene (ug/kg)		5.4 U					

Phase IV IA04 Soil

Station	**IA04-SB0035**	**IA04-SB0036**	**IA04-SB0036**	**IA04-SB0037**	**IA04-SB0037**	**IA04-SB0038**	**IA04-SB0038**
Sample No	**LUSB1173D**	**LUSB1174**	**LUSB1175**	**LUSB1176**	**LUSB1177**	**LUSB1178**	**LUSB1179**
Collection Date	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**	**06/23/99**
Depth (ft)	**9.0-10.0**	**5.0-6.0**	**11.0-12.0**	**5.0-6.0**	**10.0-11.0**	**5.0-6.0**	**11.0-12.0**
Duplicate ID	**LUSB9114**						
Northing	**199421**	**199415**	**199415**	**199422**	**199422**	**199430**	**199430**
Easting	**517352**	**517359**	**517359**	**517364**	**517364**	**517358**	**517358**
Vinyl chloride (ug/kg)		3.8					
Xylenes (total) (ug/kg)		5.4 U					
cis-1,2-Dichloroethene (ug/kg)		3.9 J					
cis-1,3-dichloropropene (ug/kg)		5.4 U					
ethyl-methyl-Benzene isomer (ug/kg)							
methyl-Naphthalene isomer (ug/kg)							
n-Butyl Alcohol (ug/kg)							
trans-1,2-Dichloroethene (ug/kg)		5.4 U					
trans-1,3-Dichloropropene (ug/kg)		5.4 U					
trimethyl-Benzene isomer (ug/kg)							
PCBs							
Aroclor-1016 (ug/kg)							
Aroclor-1221 (ug/kg)							
Aroclor-1232 (ug/kg)							
Aroclor-1242 (ug/kg)							
Aroclor-1248 (ug/kg)							
Aroclor-1254 (ug/kg)							
Aroclor-1260 (ug/kg)							
Wet Chemistry							
Total Rec. Petro. Hydrocarbons (mg/kg)	20.3 J	11.6 U	39.9	11.9 U	31.6	10.9 U	69.5

Phase IV IA04 Soil

Station	**IA04-SB0026**	**IA04-SB0026**	**IA04-SB0026**	**IA04-SB0027**	**IA04-SB0027**	**IA04-SB0027**	**IA04-SB0028**	**IA04-SB0028**	**IA04-SB0028**
Sample No	**LUSB0505**	**LUSB0506**	**LUSB0507**	**LUSB0508**	**LUSB0509**	**LUSB0510**	**LUSB0511**	**LUSB0512**	**LUSB0513**
Collection Date	**07/09/98**	**07/09/98**	**07/09/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**6.0-7.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**199433**	**199433**	**199433**	**199373**	**199373**	**199373**
Easting	**0**	**0**	**0**	**517380**	**517380**	**517380**	**517400**	**517400**	**517400**
Metals									
Arsenic (mg/kg)	0.43 U	0.43 U	9.6	6.8	5.7	7.8	1.6	4.6	13.8
Barium (mg/kg)	1.6	1.9	53	79.4	56.9	74.9	563	147	92.8
Beryllium (mg/kg)	11.2	1.1	19.4	0.79	0.47	0.58	13.3	1.7	0.82
Lead (mg/kg)	6.5	7.8	13.6	10.3	7.6	10.6	24.5	11.4	13.1
Indicator Parameters									
Fluoride (mg/kg)	1.62	0.75	4.22	3.63	1.81	1.42	2.43	0.78	1.36
Nitrogen, Ammonia (mg/kg)	0.21 U	0 U	29.8	7.25	3.17	3.86	6.46	24.2	9.43
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.148 U	0.0119 U	0.191 U	0.0354 U	0.113 U	0.0511 U	0.19 U	0.322 J	0.286 J
Thorium-228 (pCi/g)	0.155 U	0.0378 U	1.21	1.06	1.15	1.01	0.176 U	0.629 J	1.21
Thorium-230 (pCi/g)	0.522 J	0.209 U	1.65	1.62	1.58	2.28	0.772 J	1.01	1.97
Thorium-232 (pCi/g)	0.031 U	0.11 U	0.609 J	0.853 J	0.666 J	0.696 J	0.176 U	0.382 J	0.798 J
Uranium-233/234 (pCi/g)	0.137 J	0.067 U	1.25	1.23	1.03	0.946 J	0.43 J	0.581 J	1.1
Uranium-235 (pCi/g)	0.0104 U	0.0139 U	0.0053 U	0.0452 U	0.0852 J	0.104 J	-0.0084 U	0.027 U	0.122 J
Uranium-238 (pCi/g)	0.208 J	0.181 J	0.988 J	1.13	0.844 J	1.46	0.489 J	0.566 J	1.13
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.0273 U	0.0699 U	0.643 J	1.05	0.768 J	0.848 J	0.116 U	0.589 J	1.19
Cesium-137 (pCi/g)	0.0026 U	0.0141 U	0.0189 U	-0.0236 U	0.0378 U	-0.0166 U	0.0029 U	0.015 U	0 U
Cobalt-60 (pCi/g)	0.0166 U	-0.0094 U	0 U	0.0335 U	-0.0026 U	0.0029 U	0.0045 U	-0.0016 U	-0.0035 U
Potassium-40 (pCi/g)	0.879 J	0.627 J	20.6	26.5	21.4	25.5	0.797 J	11.6	27.6
Protactinium-231 (pCi/g)	0.254 U	-0.0157 U	-0.762 U	-0.476 U	1.37 U	-0.865 U	-0.278 U	0.286 U	0.155 U
Radium-226 (pCi/g)	0.217 J	0.0887 J	1.22	1.45	1.17	1.29	0.272 J	0.81 J	1.56
Radium-228 (pCi/g)	0.0273 U	0.0699 U	0.643 J	1.05	0.768 J	0.848 J	0.116 U	0.589 J	1.19
Thorium-234 (pCi/g)	0.393 J	0.262 U	1.64 J	1.3 U	0.561 U	2.28 J	0.776 U	0.379 U	1.43 U
Uranium-235 (pCi/g)	0.0337 U	0.0295 U	0.109 U	0.197 U	0.154 U	0.132 U	0.0606 U	-0.0009 U	0.238 J

Phase IV IA04 Soil

Station	**IA04-SB0028**
Sample No	**LUSB0511D**
Collection Date	**07/10/98**
Depth (ft)	**1.0-2.0**
Duplicate ID	**LUSB9054**
Northing	**199373**
Easting	**517400**
Metals	
Arsenic (mg/kg)	1.3
Barium (mg/kg)	362
Beryllium (mg/kg)	13.4
Lead (mg/kg)	26.9
Indicator Parameters	
Fluoride (mg/kg)	2.19
Nitrogen, Ammonia (mg/kg)	5.95
Radiological Parameters (AlphaSpec)	
Actinium-227 (pCi/g)	-0.0316 U
Thorium-228 (pCi/g)	0.378 J
Thorium-230 (pCi/g)	0.69 J
Thorium-232 (pCi/g)	0.0285 U
Uranium-233/234 (pCi/g)	0.622 J
Uranium-235 (pCi/g)	0.07 U
Uranium-238 (pCi/g)	0.526 J
Radiological Parameters (GammaSpec)	
Actinium-228 (pCi/g)	0.0788 U
Cesium-137 (pCi/g)	0.0157 U
Cobalt-60 (pCi/g)	0.008 U
Potassium-40 (pCi/g)	1.5
Protactinium-231 (pCi/g)	-0.0407 U
Radium-226 (pCi/g)	0.365 J
Radium-228 (pCi/g)	0.0788 U
Thorium-234 (pCi/g)	1.07 J
Uranium-235 (pCi/g)	0.0785 U

Phase IV IA04 Soil

Station	IA04-SB0017	IA04-SB0017	IA04-SB0017	IA04-SB0018	IA04-SB0018	IA04-SB0018	IA04-SB0019	IA04-SB0019	IA04-SB0019
Sample No	LUSB0514	LUSB0515	LUSB0516	LUSB0517	LUSB0518	LUSB0519	LUSB0520	LUSB0521	LUSB0522
Collection Date	07/09/98	07/09/98	07/09/98	07/09/98	07/09/98	07/09/98	07/09/98	07/09/98	07/09/98
Depth (ft)	2.0-3.0	3.0-4.0	4.0-5.0	2.0-3.0	3.0-4.0	4.0-5.0	2.0-3.0	3.0-4.0	4.0-5.0
Duplicate ID									
Northing	199428	199428	199428	199375	199375	199375	199396	199396	199396
Easting	517371	517371	517371	517368	517368	517368	517415	517415	517415
Metals									
Beryllium (mg/kg)	0.9	0.55	0.64	0.75	0.86	0.65	0.97	0.95	0.78

Station	IA04-SB0019	IA04-SB0020	IA04-SB0020	IA04-SB0020	IA04-SB0021	IA04-SB0021	IA04-SB0021	IA04-SB0021	IA04-SB0022
Sample No	LUSB0521D	LUSB0523	LUSB0524	LUSB0525	LUSB0526	LUSB0527	LUSB0528	LUSB0527D	LUSB0529
Collection Date	07/09/98	07/10/98	07/10/98	07/10/98	07/10/98	07/10/98	07/10/98	07/10/98	07/11/98
Depth (ft)	3.0-4.0	2.0-3.0	3.0-4.0	4.0-5.0	2.0-3.0	3.0-4.0	4.0-5.0	3.0-4.0	2.0-3.0
Duplicate ID	LUSB9055							LUSB9056	
Northing	199396	199366	199366	199366	199427	199427	199427	199427	199356
Easting	517415	517150	517150	517150	517174	517174	517174	517174	517216
Metals									
Beryllium (mg/kg)	0.73	1	1.5	0.87	0.82	0.86	0.7	0.81	0.87

Station	IA04-SB0022	IA04-SB0022	IA04-SB0023	IA04-SB0023	IA04-SB0023	IA04-SB0024	IA04-SB0024	IA04-SB0024	IA04-SB0025
Sample No	LUSB0530	LUSB0531	LUSB0532	LUSB0533	LUSB0534	LUSB0535	LUSB0536	LUSB0537	LUSB0538
Collection Date	07/11/98	07/11/98	07/11/98	07/11/98	07/11/98	07/11/98	07/11/98	07/11/98	07/12/98
Depth (ft)	3.0-4.0	4.0-5.0	1.0-2.0	3.0-4.0	4.0-5.0	1.0-2.0	2.0-3.0	4.0-5.0	1.0-2.0
Duplicate ID									
Northing	199356	199356	199346	199346	199346	199353	199353	199353	199362
Easting	517216	517216	517222	517222	517222	517230	517230	517230	517222
Metals									
Beryllium (mg/kg)	0.71	0.63	4.2	6.4	2.2	0.84	0.88	1.2	55.6

Station	IA04-SB0025	IA04-SB0025	IA04-SB0025	IA04-SB0025	IA04-SB0025
Sample No	LUSB0539	LUSB0540	LUSB1091	LUSB1092	LUSB0538D
Collection Date	07/12/98	07/12/98	10/28/98	10/28/98	07/12/98
Depth (ft)	2.0-3.0	3.0-4.0	4.0-5.0	5.0-6.0	1.0-2.0
Duplicate ID					LUSB9057
Northing	199362	199362	199362	199362	199362
Easting	517222	517222	517222	517222	517222
Metals					
Beryllium (mg/kg)	13.1	22.2	26.7	49.1	62.5

Phase IV IA04 Soil
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Station	**IA04-SB0022**	**IA04-SB0023**	**IA04-SB0023**	**IA04-SB0024**	**IA04-SB0025**
Sample No	**LUSB0501**	**LUSB0502**	**LUSB0503D**	**LUSB0503**	**LUSB0504**
Collection Date	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/12/98**
Depth (ft)	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**3.0-4.0**	**4.0-5.0**
Duplicate ID			**LUSB9053**		
Northing	**199356**	**199346**	**199346**	**199353**	**199362**
Easting	**517216**	**517222**	**517222**	**517230**	**517222**
PCBs					
Aroclor-1016 (ug/kg)	3.9 U	3.9 U	6.5 P	14.1 P	4.2 U
Aroclor-1221 (ug/kg)	3.9 U	3.9 U	4.1 U	290 EP	4.2 U
Aroclor-1232 (ug/kg)	3.9 U	3.9 U	4.1 U	4 U	4.2 U
Aroclor-1242 (ug/kg)	3.9 U	3.9 U	4.1 U	4 U	4.2 U
Aroclor-1248 (ug/kg)	3.9 U	3.9 U	8.2 P	15.6 P	15.4 P
Aroclor-1254 (ug/kg)	3.9 U	3.9 U	10.4	23.6	23.8 P
Aroclor-1260 (ug/kg)	23.1 P	3.9 U	6.8 P	13.3	14.6 P

Phase II IA05 Soil

Station	**07FR00**	**08EX00**	**08FE00**	**08FS01**	**08FS02**	**BH0015**
Sample No	**LU00158**	**LU00159**	**LU00160**	**LU00162**	**LU00163**	**LU00161**
Collection Date	**10/23/97**	**10/23/97**	**10/23/97**	**10/27/97**	**10/27/97**	**10/23/97**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**1.0-2.0**	**2.0-2.5**	**2.0-2.5**	**0.5-1.0**
Northing	**517390**	**517450**	**517470**	**0**	**0**	**0**
Easting	**199560**	**199520**	**199530**	**0**	**0**	**0**
Metals						
Aluminum (mg/kg)	4990	11300	12800	18800	13700	9600
Antimony (mg/kg)	0.04 R	0.42 J	0.04 R	0.04 U	1.3 J	0.04 R
Arsenic (mg/kg)	3.3	7.8	6.3	10.4	13.8	6.6
Barium (mg/kg)	75	59.2	112	150	105	234
Beryllium (mg/kg)	9.2	7.6	23.9	35.7	178	32.3
Boron (mg/kg)	11.4	9.8	13.5	11 J	15.3 J	11.2
Cadmium (mg/kg)	0.35	0.33	1.3	0.77	1	4.8
Calcium (mg/kg)	203000	28400	18200	33100	39800	98200
Chromium (mg/kg)	8.5	18.5	20.5	26.7	26.1	18.9
Cobalt (mg/kg)	2.8	7.1	6.8	19	16.3	5.9
Copper (mg/kg)	13.4 J	19.6 J	40.8 J	29.1 J	97.4 J	31.7 J
Iron (mg/kg)	8650	21300	20100	32500 J	72100 J	15100
Lead (mg/kg)	36.2	6.9	99.5	27.3	45.6	215
Magnesium (mg/kg)	50100	16400	9490	10700	10000	53700
Manganese (mg/kg)	131	294	218	864	641	307
Mercury (mg/kg)	0.06	0.04	0.19	0.07	0.06	1.8
Molybdenum (mg/kg)	1.4 J	2.4 J	1.3 J	5.3	6.7 J	2.7 J
Nickel (mg/kg)	8.6	21.9	26.5	38.3	55.2	19.4
Potassium (mg/kg)	1080	1690	2220	2340	2650	1740
Selenium (mg/kg)	0.04 U	0.35	0.74	0.04 U	0.04 U	0.04 U
Silicon (mg/kg)	1540 J	865 J	1460 J	884 J	892 J	1080 J
Silver (mg/kg)	0.02 U	0.08	0.02 U	0.26	0.02 U	0.02 U
Sodium (mg/kg)	147 J	447 J	136 J	164 J	183 J	210 J
Strontium (mg/kg)	947	25.3	102	136	102	1180
Thallium (mg/kg)	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
Vanadium (mg/kg)	9.3	23.1	23.7	37.8	29.5	19
Zinc (mg/kg)	44.5	44.3	143	89.8 J	91.5	539
Indicator Parameters						
% Moisture (%)	16	18	16	33	15	10
Chloride (mg/kg)	0.03 U		0.04 U		0.04 U	
Fluoride (mg/kg)	3.9 J		17.1 J		30.3	
Nitrate, as N (mg/kg)	0.03 U		2.98		0.769 J	
Phosphorus (mg/kg)	0.14 U		0.19 UJ		1.84 J	
Sulfate (mg/kg)	82.2		0.23 U		36.8	
Temperature (c)	24.5		24.3		20.8	
pH (ph)	9.47		7.63		8.1	

Phase II IA05 Soil

Station	**07FR00**	**08EX00**	**08FE00**	**08FS01**	**08FS02**	**BH0015**
Sample No	**LU00158**	**LU00159**	**LU00160**	**LU00162**	**LU00163**	**LU00161**
Collection Date	**10/23/97**	**10/23/97**	**10/23/97**	**10/27/97**	**10/27/97**	**10/23/97**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**1.0-2.0**	**2.0-2.5**	**2.0-2.5**	**0.5-1.0**
Northing	**517390**	**517450**	**517470**	**0**	**0**	**0**
Easting	**199560**	**199520**	**199530**	**0**	**0**	**0**
Semivolatile Organics						
1,2,4-Trichlorobenzene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
1,2-Dichlorobenzene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
1,3-Dichlorobenzene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
1,4-Dichlorobenzene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2,2'-oxybis (1-chloropropane) (ug/kg)	1000 R	100 U	395 UJ	120 U	100 U	365 UJ
2,4,5-Trichlorophenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2,4,6-Trichlorophenol (ug/kg)	1000 UJ	100 U	395 UJ	120 U	100 U	365 UJ
2,4,6-tribromophenol (%)	0	78	72	66	71	68
2,4-Dichlorophenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2,4-Dimethylphenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2,4-Dinitrophenol (ug/kg)	2000 UJ	200 U	800 U	245 UJ	195 UJ	700 U
2,4-Dinitrotoluene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2,6-Dinitrotoluene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2-Chloronaphthalene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2-Chlorophenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2-Methylnaphthalene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2-Methylphenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2-Nitroaniline (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
2-Nitrophenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
2-fluorobiphenyl (%)	0	59	109	75	92	104
2-fluorophenol (%)	62	48	84	76	94	67
3,3'-Dichlorobenzidine (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
3-Nitroaniline (ug/kg)	1200 R	120 R	475 R	145 UJ	115 UJ	435 R
4,6-Dinitro-2-methylphenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
4-Chloroaniline (ug/kg)	1200 R	120 U	475 U	145 UJ	115 UJ	435 U
4-Nitroaniline (ug/kg)	1000 R	100 U	395 U	120 UJ	100 UJ	365 U
4-Nitrophenol (ug/kg)	1000 UJ	100 U	395 UJ	120 U	100 U	365 UJ
4-bromophenyl phenyl ether (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
4-chloro-3-methyl phenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
4-chlorophenylphenylether (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Acenaphthene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Acenaphthylene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Anthracene (ug/kg)	7220 J	100 U	395 U	120 U	100 U	1100 J
Benzo(a)anthracene (ug/kg)	10200 J	100 U	395 U	120 U	100 U	3170
Benzo(a)pyrene (ug/kg)	9190 J	100 U	395 U	120 U	100 U	3230
Benzo(b)fluoranthene (ug/kg)	10000 J	100 U	395 U	120 U	100 U	4050

Station	**07FR00**	**08EX00**	**08FE00**	**08FS01**	**08FS02**	**BH0015**
Sample No	**LU00158**	**LU00159**	**LU00160**	**LU00162**	**LU00163**	**LU00161**
Collection Date	**10/23/97**	**10/23/97**	**10/23/97**	**10/27/97**	**10/27/97**	**10/23/97**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**1.0-2.0**	**2.0-2.5**	**2.0-2.5**	**0.5-1.0**
Northing	**517390**	**517450**	**517470**	**0**	**0**	**0**
Easting	**199560**	**199520**	**199530**	**0**	**0**	**0**
Benzo(ghi)perylene (ug/kg)	4470 J	100 UJ	395 U	120 U	100 U	1680
Benzo(k)fluoranthene (ug/kg)	5530 J	100 U	395 U	120 U	100 U	1630
Butylbenzylphthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Carbazole (ug/kg)	4440 J	100 UJ	395 UJ	120 U	100 U	365 UJ
Chrysene (ug/kg)	9590 J	100 U	395 UJ	120 U	100 U	2890 J
Di-n-butylphthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Di-n-octylphthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Dibenz(a,h)anthracene (ug/kg)	1000 R	100 UJ	395 U	120 U	100 U	365 U
Dibenzofuran (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Diethyl phthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Dimethyl phthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Fluoranthene (ug/kg)	23400 J	100 U	395 U	120 U	100 U	6980
Fluorene (ug/kg)	3160 J	100 U	395 U	120 U	100 U	365 U
Hexachlorobenzene (ug/kg)	1200 R	120 U	475 U	145 U	115 U	435 U
Hexachlorobutadiene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Hexachlorocyclopentadiene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Hexachloroethane (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	5510 J	100 UJ	395 UJ	120 U	100 U	1980 J
Isophorone (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
N-nitroso-di-n-propylamine (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
N-nitrosodiphenylamine (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Naphthalene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Nitrobenzene (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
Nitrobenzene-d5 (%)	0	49	85	80	103	78
Pentachlorophenol (ug/kg)	1000 UJ	100 U	395 U	120 UJ	100 UJ	365 U
Phenanthrene (ug/kg)	21400 J	100 U	395 U	120 U	100 U	3870
Phenol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
Phenol-d5 (%)	71	53	92	79	96	81
Pyrene (ug/kg)	19400 J	100 U	395 U	120 U	100 U	6920
Terphenyl-d14 (%)	108	94	116	94	105	129
bis(2-chloroethoxy)methane (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
bis(2-chloroethyl) ether (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
bis(2-ethylhexyl)phthalate (ug/kg)	1000 R	100 U	395 U	120 U	100 U	365 U
m,p-cresol (ug/kg)	1000 UJ	100 U	395 U	120 U	100 U	365 U
Volatile Organics						
1,1,1-Trichloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
1,1,2,2-Tetrachloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U

Station	**07FR00**	**08EX00**	**08FE00**	**08FS01**	**08FS02**	**BH0015**
Sample No	**LU00158**	**LU00159**	**LU00160**	**LU00162**	**LU00163**	**LU00161**
Collection Date	**10/23/97**	**10/23/97**	**10/23/97**	**10/27/97**	**10/27/97**	**10/23/97**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**1.0-2.0**	**2.0-2.5**	**2.0-2.5**	**0.5-1.0**
Northing	**517390**	**517450**	**517470**	**0**	**0**	**0**
Easting	**199560**	**199520**	**199530**	**0**	**0**	**0**
1,1,2-Trichloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
1,1-Dichloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
1,1-Dichloroethene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
1,2-Dichloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
1,2-Dichloropropane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
2-Butanone (ug/kg)	1.2 U	1.2 UJ	11.9 UJ	1.5 UJ	1.2 UJ	1.1 UJ
2-Hexanone (ug/kg)	3 U	3.05 UJ	29.75 U	3.75 UJ	2.95 UJ	2.8 U
4-Methyl-2-pentanone (ug/kg)	3 U	3.05 UJ	29.75 U	3.75 U	2.95 U	2.8 U
Acetone (ug/kg)	3 U	3.05 UJ	29.75 UJ	3.75 UJ	2.95 UJ	2.8 UJ
Benzene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Bromodichloromethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Bromofluorobenzene (%)	108	121	9	119	127	98
Bromomethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Carbon dioxide (ug/kg)	74.4 R	411 R				63.1 R
Carbon disulfide (ug/kg)	1.2 U	1.2 UJ	11.9 UJ	1.5 UJ	1.2 UJ	1.1 UJ
Carbon tetrachloride (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Chlorobenzene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Chloroethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Chloroform (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Chloromethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 UJ	0.6 UJ	0.55 U
Dibromochloromethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Dibromofluoromethane (%)	106	96	10	122	108	111
Ethylbenzene (ug/kg)	3.3 J	3.8 J	2.4 J	0.75 U	0.6 U	0.72 J
Methylene chloride (ug/kg)	4 J	4 J	5.95 U	4.4 J	5 J	4.7 J
Styrene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Tetrachloroethene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Toluene (ug/kg)	88.2	79.3 J	16.6 J	0.46 J	0.6 U	29
Toluene-d8 (%)	108	106	10	129	133	113
Tribromomethane (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Trichloroethene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Vinyl chloride (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
Xylenes (total) (ug/kg)	13.6	16.4 J	9.1 J	0.75 U	0.6 U	7.6 J
cis-1,2-dichloroethene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
cis-1,3-dichloropropene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
trans-1,2-dichloroethene (ug/kg)	0.6 U	0.6 UJ	5.95 U	0.75 U	0.6 U	0.55 U
trans-1,3-dichloropropene (ug/kg)	0.6 U	0.6 UJ	5.95 UJ	0.75 UJ	0.6 UJ	0.55 UJ
Radiological Parameters (AlphaSpec)						

Phase II IA05 Soil

Station	**07FR00**	**08EX00**	**08FE00**	**08FS01**	**08FS02**	**BH0015**
Sample No	**LU00158**	**LU00159**	**LU00160**	**LU00162**	**LU00163**	**LU00161**
Collection Date	**10/23/97**	**10/23/97**	**10/23/97**	**10/27/97**	**10/27/97**	**10/23/97**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**1.0-2.0**	**2.0-2.5**	**2.0-2.5**	**0.5-1.0**
Northing	**517390**	**517450**	**517470**	**0**	**0**	**0**
Easting	**199560**	**199520**	**199530**	**0**	**0**	**0**
Actinium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.185
Radium-228 (pCi/g)	0.161	0.665	0.798	0.648	0.612	0.519
Thorium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.185
Thorium-228 (pCi/g)	0.161	0.665	0.798	0.648	0.612	0.519
Thorium-230 (pCi/g)	0.42	0.874	1.03	1.42	0.959	1.09
Thorium-232 (pCi/g)	0.091	0.874	0.443	0.571	0.558	0.448
Uranium-234 (pCi/g)	0.609	0.606	0.475	0.742	0.968	0.498
Uranium-235 (pCi/g)	0.0377	0.5 UJ	0.0425	0.5 U	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	0.636	0.396	0.552	0.912	0.996	0.703
Radiological Parameters (GammaSpec)						
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.164 J	0.5 UJ	0.364 J	0.5 UJ	0.5 UJ	0.178 J
Potassium-40 (pCi/g)	7.47 J	23.7 J	19.4 J	21.4	22.9	16.4 J
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.518 J	1.79 J	1.38 J	1.1 J	1.85 J	1.34 J
Radium-228 (pCi/g)						
Thorium-228 (pCi/g)						
Thorium-230 (pCi/g)						
Thorium-232 (pCi/g)						
Uranium-235 (pCi/g)						
Uranium-238 (pCi/g)						

Phase II IA05 Soil

Station	**08ED01**	**08ED02**	**08FI00**	**08FI01**	**08FI01**	**08FN00**	**08FN01**	**08FT00**	**08FT01**
Sample No	**LU00270**	**121347**	**LU00226**	**LU00217**	**LU00219**	**LU00225**	**LU00224**	**LU00223**	**LU00221**
Collection Date	**11/04/97**	**11/12/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**	**10/30/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**0**	**0**	**517460**	**517460**	**517460**	**517460**	**517460**	**517460**	**517460**
Easting	**0**	**0**	**199540**	**199585**	**199585**	**199550**	**199545**	**199560**	**199565**
Metals									
Aluminum (mg/kg)			7080	19200	13200	13700	13100	11400	14900
Arsenic (mg/kg)			13.7	8.3	9.7	7.6	9.6	10.6	10.9
Beryllium (mg/kg)			905	68.4	25.1	84.8	93.4	20	81.9
Lead (mg/kg)			362	54.3	38.9	188	88.7	30	39.3
Magnesium (mg/kg)			6200	5930	10000	14100	11700	13000	15000
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	1.45								
Radium-228 (pCi/g)	0.592								
Thorium-227 (pCi/g)	1.45								
Thorium-228 (pCi/g)	0.592								
Thorium-230 (pCi/g)	28.9								
Thorium-232 (pCi/g)	0.582								
Uranium-234 (pCi/g)	10.2								
Uranium-235 (pCi/g)	0.431								
Uranium-238 (pCi/g)	11.4								
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0.47							
Cesium-137 (pCi/g)	0.452	0.05							
Potassium-40 (pCi/g)	16.6	3.07							
Protactinium-231 (pCi/g)	0 UJ								
Radium-226 (pCi/g)	25.7 J	0.35							
Radium-228 (pCi/g)		0.19							
Thorium-228 (pCi/g)		0.19							
Thorium-230 (pCi/g)		31.9							
Thorium-232 (pCi/g)		0.19							
Uranium-235 (pCi/g)		0.45							
Uranium-238 (pCi/g)		3.87							

Phase II IA05 Soil
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Station	**08FT01**	**08FY00**	**08GD00**	**08EH01**	**08EI01**	**08EI02**
Sample No	**LU00222**	**LU00220**	**LU00218**	**LU00273**	**LU00271**	**LU00272**
Collection Date	**10/30/97**	**10/30/97**	**10/30/97**	**11/04/97**	**11/04/97**	**11/04/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**517460**	**517460**	**517460**	**0**	**0**	**0**
Easting	**199565**	**199570**	**199580**	**0**	**0**	**0**
Metals						
Aluminum (mg/kg)	15100	15800	17100			
Arsenic (mg/kg)	10.9	15.1	9			
Beryllium (mg/kg)	67.6	123	61.9			
Lead (mg/kg)	33.8	69.2	47.8			
Magnesium (mg/kg)	12100	10200	7920			
Radiological Parameters (AlphaSpec)						
Actinium-227 (pCi/g)				0.167	0.325	0.275
Radium-228 (pCi/g)				0.65	0.483	0.505
Thorium-227 (pCi/g)				0.167	0.325	0.275
Thorium-228 (pCi/g)				0.65	0.483	0.505
Thorium-230 (pCi/g)				1.54	5.76	6.45
Thorium-232 (pCi/g)				0.493	0.416	0.497
Uranium-234 (pCi/g)				1 J	5.06	3.84
Uranium-235 (pCi/g)				0.5 UJ	0.236	0.09
Uranium-238 (pCi/g)				1.12 J	5.42	3.81
Radiological Parameters (GammaSpec)						
Americium-241 (pCi/g)				0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)				0.219	0.621	0.316
Potassium-40 (pCi/g)				21.9	17.4	15.9
Protactinium-231 (pCi/g)				0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)				2.04 J	10.9 J	6.56 J
Radium-228 (pCi/g)						
Thorium-228 (pCi/g)						
Thorium-230 (pCi/g)						
Thorium-232 (pCi/g)						
Uranium-235 (pCi/g)						
Uranium-238 (pCi/g)						

Phase IV IA05 Soil

Station	IA05-SB0001	IA05-SB0002	IA05-SB0003	IA05-SB0004	IA05-SB0005	IA05-SB0006	IA05-SB0006	IA05-SB0007	IA05-SB0007
Sample No	**LUSB0541**	**LUSB0542**	**LUSB0543**	**LUSB0544**	**LUSB0545**	**LUSB0546**	**LUSB9058D**	**LUSB0547**	**LUSB0548**
Collection Date	**06/24/98**	**07/01/98**	**07/14/98**	**07/22/98**	**08/03/98**	**08/04/98**	**08/04/98**	**07/07/98**	**07/07/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**5.5-6.5**
Duplicate ID							**LUSB9058**		
Northing	**199560**	**199515**	**199522**	**199535**	**199488**	**199557**	**199557**	**199565**	**199565**
Easting	**517417**	**517403**	**517473**	**517488**	**517453**	**517493**	**517493**	**517447**	**517447**
Metals									
Aluminum (mg/kg)	14200	4940	12800	8090	10900	17000	15600	12300	13900
Antimony (mg/kg)	0.62 BN	0.24 UN	0.27 J	0.3 U	0.25 U	0.55 BN	0.27 UN	0.47 B	9.1
Arsenic (mg/kg)	8.4	2.8	6.7	4.5 N*	6.3	8.3	8.1	10.7	10.8
Barium (mg/kg)	94.5	48.6	129	102	322	108	109	82.8	131
Beryllium (mg/kg)	11.5	1.7	39	215 N*	22	1.9	1.8	4 N	520 N
Cadmium (mg/kg)	0.13 U	0.23	1.7	14.5	5.1	0.12 U	0.13 U	0.45	0.77
Calcium (mg/kg)	64000	61700	25800	206000	95500	61200	60000	41600	22600
Chromium (mg/kg)	22.5	8	23.1	42.2	15.2	23.6	22.1	19.7	61.8
Cobalt (mg/kg)	10.3	3	6.9	6.2	5.6	10.7	12.2	11.1	9.6
Copper (mg/kg)	25	8	55.3	48.1	22.9	27.9	25.7	24.9	154
Iron (mg/kg)	24600	7990	21700	13900	15100	27200	26200	26700	26000
Lead (mg/kg)	21.2 *	11.1	132	345 N*	89.3	13.3	13.3	14.1	627
Magnesium (mg/kg)	12600 N	29600	12700 J	14200	51800	13200	13400	11700	5810
Manganese (mg/kg)	432	169 N	265	278	295	469	581	368	222
Mercury (mg/kg)	0.03 B	0.02 U	0.21	1.6	0.04	0.02 U	0.02 U	0.02 U	0.35
Nickel (mg/kg)	31.5	8.9	35.7	62.4	16.6	30.8	32.3	31.6	61.2
Phosphorus (mg/kg)	490	197	866	249	296	461	442	456	600
Potassium (mg/kg)	2700	978	2200	1310	2370	3620	3260	1780	1900
Selenium (mg/kg)	0.27 U	0.73 B	1.1	0.66 B	0.54 B	1.6	1.7	0.28 U	0.7 B
Silver (mg/kg)	0.22 U	0.2 U	0.21 U	0.24 U	0.21 U	0.22 U	0.22 U	0.23 U	0.37 B
Sodium (mg/kg)	133	75.7	60.3 J	162	141	166 E	138 E	102	234
Thallium (mg/kg)	0.49 B	0.89 B	1.1 B	2.2 B	0.44 B	1 B	0.44 U	0.46 U	0.5 U
Vanadium (mg/kg)	28.4	12.1	22.9	19.1	21.8	34.4	31.3	26.8	32.7
Zinc (mg/kg)	68.7	30.5 *	197	519	141	70.8	66.7	70	266
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
1,2-Dichlorobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
1,3-Dichlorobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
1,4-Dichlorobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2,4,5-Trichlorophenol (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
2,4,6-Trichlorophenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2,4-Dichlorophenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2,4-Dimethylphenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U

Phase IV IA05 Soil

Station	IA05-SB0001	IA05-SB0002	IA05-SB0003	IA05-SB0004	IA05-SB0005	IA05-SB0006	IA05-SB0006	IA05-SB0007	IA05-SB0007
Sample No	LUSB0541	LUSB0542	LUSB0543	LUSB0544	LUSB0545	LUSB0546	LUSB9058D	LUSB0547	LUSB0548
Collection Date	06/24/98	07/01/98	07/14/98	07/22/98	08/03/98	08/04/98	08/04/98	07/07/98	07/07/98
Depth (ft)	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	5.5-6.5
Duplicate ID							LUSB9058		
Northing	199560	199515	199522	199535	199488	199557	199557	199565	199565
Easting	517417	517403	517473	517488	517453	517493	517493	517447	517447
2,4-Dinitrophenol (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
2,4-Dinitrotoluene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2,6-Dinitrotoluene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2-Chloronaphthalene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2-Chlorophenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2-Methylnaphthalene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2-Nitrophenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
2-methyl-4,6-dinitrophenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
3,3'-Dichlorobenzidine (ug/kg)	1840 U	6710 U	3580 U	8120 U	7090 U	1890 U	1870 U	1940 U	2200 U
4-Bromophenyl phenyl ether (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
4-Chloroaniline (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
4-Chlorophenylphenylether (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
4-Nitrophenol (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
4-chloro-3-methyl phenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Acenaphthene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Acenaphthylene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Anthracene (ug/kg)	368 U	1340 U	717 U	1620 U	975 J	379 U	374 U	388 U	75.3 J
Benzo(a)anthracene (ug/kg)	368 U	1250 J	499 J	1620 U	2040	379 U	374 U	388 U	211 J
Benzo(a)pyrene (ug/kg)	368 U	1510	572 J	1620 U	2160	379 U	374 U	388 U	232 J
Benzo(b)fluoranthene (ug/kg)	368 U	1830	1000	1620 U	3510	379 U	374 U	388 U	461
Benzo(ghi)perylene (ug/kg)	368 U	714 J	717 U	1620 U	1330 J	379 U	374 U	388 U	176 J
Benzo(k)fluoranthene (ug/kg)	368 U	944 J	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Butylbenzylphthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Carbazole (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Chrysene (ug/kg)	368 U	1230 J	679 J	1620 U	1840	379 U	374 U	388 U	316 J
Di-n-butylphthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Di-n-octylphthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Dibenz(a,h)anthracene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	51.6 J
Dibenzofuran (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Diethyl phthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Dimethyl phthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Fluoranthene (ug/kg)	368 U	2350	1480	1620 U	4630	379 U	374 U	388 U	422 J
Fluorene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Hexachlorobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Hexachlorobutadiene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Hexachlorocyclopentadiene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Hexachloroethane (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	368 U	690 J	421 J	1620 U	1370 J	379 U	374 U	388 U	183 J

Station	IA05-SB0001	IA05-SB0002	IA05-SB0003	IA05-SB0004	IA05-SB0005	IA05-SB0006	IA05-SB0006	IA05-SB0007	IA05-SB0007
Sample No	**LUSB0541**	**LUSB0542**	**LUSB0543**	**LUSB0544**	**LUSB0545**	**LUSB0546**	**LUSB9058D**	**LUSB0547**	**LUSB0548**
Collection Date	**06/24/98**	**07/01/98**	**07/14/98**	**07/22/98**	**08/03/98**	**08/04/98**	**08/04/98**	**07/07/98**	**07/07/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**5.5-6.5**
Duplicate ID							**LUSB9058**		
Northing	**199560**	**199515**	**199522**	**199535**	**199488**	**199557**	**199557**	**199565**	**199565**
Easting	**517417**	**517403**	**517473**	**517488**	**517453**	**517493**	**517493**	**517447**	**517447**
Isophorone (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
N-Nitrosodiphenylamine (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
N-Nitrosodipropylamine (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Naphthalene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Nitrobenzene (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Pentachlorophenol (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
Phenanthrene (ug/kg)	368 U	1040 J	801	1620 U	2870	379 U	374 U	388 U	271 J
Phenol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Pyrene (ug/kg)	368 U	1830	1050	1620 U	3590	379 U	374 U	388 U	385 J
bis(2-chloroethoxy)methane (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
bis(2-chloroethyl) ether (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
bis(2-ethylhexyl)phthalate (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	219 J
m,p-Cresol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
m-Nitroaniline (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
o-Cresol (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
o-Nitroaniline (ug/kg)	921 U	3360 U	1790 U	4060 U	3550 U	947 U	936 U	969 U	1100 U
p-Nitroaniline (ug/kg)	368 U	1340 U	717 U	1620 U	1420 U	379 U	374 U	388 U	440 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,1,2-Trichloroethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,1-Dichloroethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,1-Dichloroethene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,2-Dichloroethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,2-Dichloroethylene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
1,2-Dichloropropane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
2-Butanone (ug/kg)	1.7 U	10.2 U	9.6 U	2.7 U	10.1 U	9.6 U	10.4 U	13.4 U	13.3 U
2-Hexanone (ug/kg)	11.2 U	10.2 U	10.2 U	17.8 U	10.1 U	9.6 U	1.4 J	13.4 U	13.3 U
4-Methyl-2-pentanone (ug/kg)	11.2 U	10.2 U	10.2 U	17.8 U	10.1 U	9.6 U	10.4 U	13.4 U	13.3 U
Acetone (ug/kg)	21.4 U	27 U	30 U	25 U	10.1 U	9.6 U	10.4 U	22.5 U	23.8 U
Benzene (ug/kg)	3.3 J	3.4 J	3.5 J	8.9 U	5 U	1.5 J	1.8 J	5.7 J	0.7 J
Bromoform (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	1.3 U
Carbon disulfide (ug/kg)	16.9	5.1 U	2.1 U	8.9 U	5 U	4.8 U	5.2 U	3 U	6.7 U
Carbon tetrachloride (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Chlorobenzene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Chlorodibromomethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Chloroethane (ug/kg)	11.2 U	10.2 U	10.2 U	17.8 U	10.1 U	9.6 U	10.4 U	13.4 U	13.3 U
Chloroform (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U

Phase IV IA05 Soil

Station	**IA05-SB0001**	**IA05-SB0002**	**IA05-SB0003**	**IA05-SB0004**	**IA05-SB0005**	**IA05-SB0006**	**IA05-SB0006**	**IA05-SB0007**	**IA05-SB0007**
Sample No	**LUSB0541**	**LUSB0542**	**LUSB0543**	**LUSB0544**	**LUSB0545**	**LUSB0546**	**LUSB9058D**	**LUSB0547**	**LUSB0548**
Collection Date	**06/24/98**	**07/01/98**	**07/14/98**	**07/22/98**	**08/03/98**	**08/04/98**	**08/04/98**	**07/07/98**	**07/07/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.0**	**5.5-6.5**
Duplicate ID							**LUSB9058**		
Northing	**199560**	**199515**	**199522**	**199535**	**199488**	**199557**	**199557**	**199565**	**199565**
Easting	**517417**	**517403**	**517473**	**517488**	**517453**	**517493**	**517493**	**517447**	**517447**
Dichlorobromomethane (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Ethylbenzene (ug/kg)	1.1 J	3.4 J	1 J	8.9 U	2.4 J	0.52 J	0.75 J	1.4 J	0.81 J
Methyl Bromide (ug/kg)	11.2 U	10.2 U	10.2 U	17.8 U	10.1 U	9.6 U	10.4 U	13.4 U	13.3 U
Methyl Chloride (ug/kg)	11.2 U	10.2 U	10.2 U	17.8 U	10.1 U	9.6 U	10.4 U	13.4 U	13.3 U
Methylene chloride (ug/kg)	5.6 U	0.9 JB	5.1 U	1.2 U	5 U	4.8 U	5.2 U	1.1 BJ	0.7 BJ
Styrene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Tetrachloroethene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Toluene (ug/kg)	6.8	17.4	8.8 B	3.6 U	9.6	1.3 J	2.5	18.9	2 J
Trichloroethene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Vinyl chloride (ug/kg)	2.2 U	2 U	2 U	3.6 U	2 U	1.9 U	2.1 U	2.7 U	2.7 U
Xylenes (total) (ug/kg)	4 J	8.1	2.9 J	8.9 U	4.7 J	1.1 J	2.3 J	4.3 U	1.7 U
cis-1,3-dichloropropene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
n-Butyl Alcohol (ug/kg)	15.6 U								
trans-1,3-Dichloropropene (ug/kg)	5.6 U	5.1 U	5.1 U	8.9 U	5 U	4.8 U	5.2 U	6.7 U	6.7 U
Radiological Parameters									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.172 UJ	0.112 U	0.0637 U	0.017 U	0.269 U	0.0671 U	0.2 U	0.108 U	0.487 J
Thorium-228 (pCi/g)	1.56 J	0.615 J	0.819 J	0.878 J	1.01	0.99 J	0.925 J	1.18	0.94 J
Thorium-230 (pCi/g)	2.1 J	0.727 J	1.51	1.19	2.36	1.45	1.23	1.67	14.5
Thorium-232 (pCi/g)	1.06 J	0.154 U	0.701 J	1.02	0.508 J	0.971 J	0.966 J	0.84 J	0.699 J
Uranium-233/234 (pCi/g)	0.895 J	0.7 J	0.792 J	0.69 J	0.829 J	1.16	0.953 J	1.65	5.47
Uranium-235 (pCi/g)	0.0951 U	0.0607 U	0.0495 U	0.0776 U	0.0142 U	0.0393 U	0.0558 U	0.143 J	0.186 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.42	0.7 J	0.991 J	0.642 J	0.857 J	0.771 J	1.28	1.73	4.9
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.1	0.314 J	0.772 J	0.957 J	0.508 J	0.968 J	0.985 J	0.988 J	0.954 J
Cesium-137 (pCi/g)	0.0076 U	0.0057 U	0.304	0.0626 J	0.0558 J	0.0521 J	-0.0195 U	0.0015 U	0.0431 U
Cobalt-60 (pCi/g)	-0.0117 U	0.0089 U	-0.0174 U	-0.0037 U	0.0022 U	-0.0125 U	0.0133 U	0.0055 U	-0.0169 U
Potassium-40 (pCi/g)	22.7	9.31	19.2	6.48	12.2	23.9	22.6	24.6	18.3
Protactinium-231 (pCi/g)	-0.592 U	0.103 U	-0.0686 U	-0.191 U	-0.408 U	-0.0416 U	-0.24 U	-1.19 U	-1.06 U
Radium-226 (pCi/g)	1.48	0.504 J	1.06	1.03	1.2	1.48	1.65	1.58	9.71
Radium-228 (pCi/g)	1.1	0.314 J	0.772 J	0.957 J	0.508 J	0.968 J	0.985 J	0.988 J	0.954 J
Thorium-234 (pCi/g)	1.13 U	0.66 U	2.31 J	0.493 U	0.413 U	1.19 J	0.396 U	1.05 U	5.22
Uranium-235 (pCi/g)	0.16 U	0.104 U	0.301 J	0.127 U	0.0197 U	0.0818 U	0.127 U	0.105 U	0.671 J

Station	IA05-SB0008	IA05-SB0008	IA05-SB0009
Sample No	LUSB1023	LUSB1024	LUSB0549
Collection Date	07/06/98	07/06/98	07/13/98
Depth (ft)	1.0-2.0	2.5-4.0	0.0-1.0
Duplicate ID			
Northing	199568	199568	199491
Easting	517465	517465	517466
Metals			
Aluminum (mg/kg)	14300	24300	18000
Antimony (mg/kg)	0.7 U	0.78 U	1.3 UJ
Arsenic (mg/kg)	8.9	15.9	10.3
Barium (mg/kg)	97.4	151	202
Beryllium (mg/kg)	8.5	379	566
Cadmium (mg/kg)	0.33 U	0.51 B	4
Calcium (mg/kg)	50900	31800	25800
Chromium (mg/kg)	25	41.9	41.9
Cobalt (mg/kg)	12.3	13.5	19.3
Copper (mg/kg)	27.1	86.7	57.6
Iron (mg/kg)	27100	80600	34900
Lead (mg/kg)	16.8	406	1230
Magnesium (mg/kg)	12400	7950	11900 J
Manganese (mg/kg)	444	745	2670
Mercury (mg/kg)	0.02 U	0.7	0.54
Nickel (mg/kg)	33.1	61.2	63.6
Phosphorus (mg/kg)	423	477	466
Potassium (mg/kg)	2790	5060	3770
Selenium (mg/kg)	1.5 B	3.4	2.7 B
Silver (mg/kg)	0.58 U	0.64 U	1.1 U
Sodium (mg/kg)	128	308	213 J
Thallium (mg/kg)	1.1 U	1.3 U	2.2 U
Vanadium (mg/kg)	27.5	51.1	33
Zinc (mg/kg)	87.7	363	273
Indicator Parameters			
Fluoride (mg/kg)			
Nitrogen, Ammonia (mg/kg)			
Semivolatile Organics			
1,2,4-Trichlorobenzene (ug/kg)	392 U	443 U	1370 U
1,2-Dichlorobenzene (ug/kg)	392 U	443 U	1370 U
1,3-Dichlorobenzene (ug/kg)	392 U	443 U	1370 U
1,4-Dichlorobenzene (ug/kg)	392 U	443 U	1370 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	392 U	443 U	1370 U
2,4,5-Trichlorophenol (ug/kg)	980 U	1110 U	3440 U
2,4,6-Trichlorophenol (ug/kg)	392 U	443 U	1370 U
2,4-Dichlorophenol (ug/kg)	392 U	443 U	1370 U
2,4-Dimethylphenol (ug/kg)	392 U	443 U	1370 U

Station	IA05-SB0008	IA05-SB0008	IA05-SB0009
Sample No	LUSB1023	LUSB1024	LUSB0549
Collection Date	07/06/98	07/06/98	07/13/98
Depth (ft)	1.0-2.0	2.5-4.0	0.0-1.0
Duplicate ID			
Northing	199568	199568	199491
Easting	517465	517465	517466
2,4-Dinitrophenol (ug/kg)	980 U	1110 U	3440 U
2,4-Dinitrotoluene (ug/kg)	392 U	443 U	1370 U
2,6-Dinitrotoluene (ug/kg)	392 U	443 U	1370 U
2-Chloronaphthalene (ug/kg)	392 U	443 U	1370 U
2-Chlorophenol (ug/kg)	392 U	443 U	1370 U
2-Methylnaphthalene (ug/kg)	392 U	443 U	1370 U
2-Nitrophenol (ug/kg)	392 U	443 U	1370 U
2-methyl-4,6-dinitrophenol (ug/kg)	392 U	443 U	1370 U
3,3'-Dichlorobenzidine (ug/kg)	1960 U	2210 U	6870 U
4-Bromophenyl phenyl ether (ug/kg)	392 U	443 U	1370 U
4-Chloroaniline (ug/kg)	392 U	443 U	1370 U
4-Chlorophenylphenylether (ug/kg)	392 U	443 U	1370 U
4-Nitrophenol (ug/kg)	980 U	1110 U	3440 U
4-chloro-3-methyl phenol (ug/kg)	392 U	443 U	1370 U
Acenaphthene (ug/kg)	392 U	443 U	1370 U
Acenaphthylene (ug/kg)	392 U	443 U	1370 U
Anthracene (ug/kg)	392 U	443 U	1370 U
Benzo(a)anthracene (ug/kg)	392 U	443 U	864 J
Benzo(a)pyrene (ug/kg)	392 U	443 U	899 J
Benzo(b)fluoranthene (ug/kg)	392 U	443 U	1240 J
Benzo(ghi)perylene (ug/kg)	392 U	443 U	1370 U
Benzo(k)fluoranthene (ug/kg)	392 U	443 U	1370 U
Butylbenzylphthalate (ug/kg)	392 U	443 U	1370 U
Carbazole (ug/kg)	392 U	443 U	1370 U
Chrysene (ug/kg)	392 U	443 U	1100 J
Di-n-butylphthalate (ug/kg)	392 U	443 U	1370 U
Di-n-octylphthalate (ug/kg)	392 U	443 U	1370 U
Dibenz(a,h)anthracene (ug/kg)	392 U	443 U	1370 U
Dibenzofuran (ug/kg)	392 U	443 U	1370 U
Diethyl phthalate (ug/kg)	392 U	443 U	1370 U
Dimethyl phthalate (ug/kg)	392 U	443 U	1370 U
Fluoranthene (ug/kg)	392 U	443 U	2380
Fluorene (ug/kg)	392 U	443 U	1370 U
Hexachlorobenzene (ug/kg)	392 U	443 U	1370 U
Hexachlorobutadiene (ug/kg)	392 U	443 U	1370 U
Hexachlorocyclopentadiene (ug/kg)	392 U	443 U	1370 U
Hexachloroethane (ug/kg)	392 U	443 U	1370 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	392 U	443 U	1370 U

Station	IA05-SB0008	IA05-SB0008	IA05-SB0009
Sample No	LUSB1023	LUSB1024	LUSB0549
Collection Date	07/06/98	07/06/98	07/13/98
Depth (ft)	1.0-2.0	2.5-4.0	0.0-1.0
Duplicate ID			
Northing	199568	199568	199491
Easting	517465	517465	517466
Isophorone (ug/kg)	392 U	443 U	1370 U
N-Nitrosodiphenylamine (ug/kg)	392 U	443 U	1370 U
N-Nitrosodipropylamine (ug/kg)	392 U	443 U	1370 U
Naphthalene (ug/kg)	392 U	443 U	1370 U
Nitrobenzene (ug/kg)	392 U	443 U	1370 U
Pentachlorophenol (ug/kg)	980 U	1110 U	3440 U
Phenanthrene (ug/kg)	392 U	443 U	1240 J
Phenol (ug/kg)	392 U	443 U	1370 U
Pyrene (ug/kg)	392 U	443 U	1710
bis(2-chloroethoxy)methane (ug/kg)	392 U	443 U	1370 U
bis(2-chloroethyl) ether (ug/kg)	392 U	443 U	1370 U
bis(2-ethylhexyl)phthalate (ug/kg)	392 U	443 U	1370 U
m,p-Cresol (ug/kg)	392 U	443 U	1370 U
m-Nitroaniline (ug/kg)	980 U	1110 U	3440 U
o-Cresol (ug/kg)	392 U	443 U	1370 U
o-Nitroaniline (ug/kg)	980 U	1110 U	3440 U
p-Nitroaniline (ug/kg)	392 U	443 U	1370 U
Volatile Organics			
1,1,1-Trichloroethane (ug/kg)	5.2 U	5.7 U	4.8 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.2 U	5.7 U	4.8 U
1,1,2-Trichloroethane (ug/kg)	5.2 U	5.7 U	4.8 U
1,1-Dichloroethane (ug/kg)	5.2 U	5.7 U	4.8 U
1,1-Dichloroethene (ug/kg)	5.2 U	5.7 U	4.8 U
1,2-Dichloroethane (ug/kg)	5.2 U	5.7 U	4.8 U
1,2-Dichloroethylene (ug/kg)	5.2 U	5.7 U	4.8 U
1,2-Dichloropropane (ug/kg)	5.2 U	5.7 U	4.8 U
2-Butanone (ug/kg)	10.3 U	3.4 U	10.5 U
2-Hexanone (ug/kg)	10.3 U	11.4 U	9.7 U
4-Methyl-2-pentanone (ug/kg)	10.3 U	11.4 U	9.7 U
Acetone (ug/kg)	20.2 U	22.2 U	71.4 U
Benzene (ug/kg)	3.7 J	1.5 J	2.2 J
Bromoform (ug/kg)	5.2 U	5.7 U	4.8 U
Carbon disulfide (ug/kg)	5 U	5.7 U	4.8 U
Carbon tetrachloride (ug/kg)	5.2 U	5.7 U	4.8 U
Chlorobenzene (ug/kg)	5.2 U	5.7 U	4.8 U
Chlorodibromomethane (ug/kg)	5.2 U	5.7 U	4.8 U
Chloroethane (ug/kg)	10.3 U	11.4 U	9.7 U
Chloroform (ug/kg)	5.2 U	5.7 U	4.8 U

Station	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0009**
Sample No	**LUSB1023**	**LUSB1024**	**LUSB0549**
Collection Date	**07/06/98**	**07/06/98**	**07/13/98**
Depth (ft)	**1.0-2.0**	**2.5-4.0**	**0.0-1.0**
Duplicate ID			
Northing	**199568**	**199568**	**199491**
Easting	**517465**	**517465**	**517466**
Dichlorobromomethane (ug/kg)	5.2 U	5.7 U	4.8 U
Ethylbenzene (ug/kg)	0.78 J	1.8 J	2.2 J
Methyl Bromide (ug/kg)	10.3 U	6.7 J	9.7 U
Methyl Chloride (ug/kg)	10.3 U	5.9 J	9.7 U
Methylene chloride (ug/kg)	0.73 BJ	5.7 U	0.55 BJ
Styrene (ug/kg)	5.2 U	5.7 U	4.8 U
Tetrachloroethene (ug/kg)	5.2 U	1.2 U	4.8 U
Toluene (ug/kg)	8.8	3	32.1 B
Trichloroethene (ug/kg)	5.2 U	5.7 U	4.8 U
Vinyl chloride (ug/kg)	2.1 U	2.3 U	1.9 U
Xylenes (total) (ug/kg)	2.3 U	6.7 U	12.9
cis-1,3-dichloropropene (ug/kg)	5.2 U	5.7 U	4.8 U
n-Butyl Alcohol (ug/kg)			5.2 U
trans-1,3-Dichloropropene (ug/kg)	5.2 U	5.7 U	4.8 U
Radiological Parameters			
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	0.0948 U	0.0983 U	3.37 J
Thorium-228 (pCi/g)	1.12	0.857 J	1.32
Thorium-230 (pCi/g)	1.75	1.72	88.5
Thorium-232 (pCi/g)	0.915 J	0.773 J	0.973 J
Uranium-233/234 (pCi/g)	1.44	2.09	30.3 J
Uranium-235 (pCi/g)	0.0442 U	0.0832 J	2.88 J
Uranium-235/236 (pCi/g)			
Uranium-238 (pCi/g)	1.26	1.88	28.7 J
Radiological Parameters (GammaSpec)			
Actinium-228 (pCi/g)	0.993 J	1.21	1.6
Cesium-137 (pCi/g)	-0.0097 U	0.0552 J	0.581
Cobalt-60 (pCi/g)	0.0246 U	0.0166 U	0.0046 U
Potassium-40 (pCi/g)	23	21	17.3
Protactinium-231 (pCi/g)	-0.745 U	0.78 U	0.806 U
Radium-226 (pCi/g)	1.48	1.6	41.4
Radium-228 (pCi/g)	0.993 J	1.21	1.6
Thorium-234 (pCi/g)	1.36 U	1.34 U	25.3
Uranium-235 (pCi/g)	0.274 U	0.113 U	2.43

Phase IV IA05 Soil

Station	**IA05-SB0007**	**IA05-SB0007**	**IA05-SB0007**	**IA05-SB0007**	**IA05-SB0007**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0010**
Sample No	**LUSB0574**	**LUSB0575**	**LUSB0576**	**LUSB0577**	**LUSB0576D**	**LUSB0578**	**LUSB0579**	**LUSB0580**	**LUSB0550**
Collection Date	**07/06/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/06/98**	**07/06/98**	**07/06/98**	**07/12/98**
Depth (ft)	**0.0-1.0**	**3.0-4.0**	**7.5-8.5**	**8.5-9.5**	**7.5-8.5**	**0.0-1.0**	**5.0-6.0**	**6.0-7.0**	**1.0-2.0**
Duplicate ID					**LUSB9061**				
Northing	**199565**	**199565**	**199565**	**199565**	**199565**	**199568**	**199568**	**199568**	**199548**
Easting	**517447**	**517447**	**517447**	**517447**	**517447**	**517465**	**517465**	**517465**	**517476**
Metals									
Arsenic (mg/kg)	8.5	4	7.6	11.3	10.4	8.9	5.8	4.8	4.5
Barium (mg/kg)	110	62.1	25.8	23.1	32.6	102	789	82	90.5 N*
Beryllium (mg/kg)	10.7	8620 N	97.6 N	109 N	122 N	59	3.7	13.5	48.8
Lead (mg/kg)	30	73.9	9.8	9.2	8.8	67.9	14.4	10.5	19.1
Indicator Parameters									
Fluoride (mg/kg)	12.8	47.5	17.2	17.8	22.1	41.5	32.9	41.7	14.2
Nitrogen, Ammonia (mg/kg)	7.26	28.4	3.34	0.65 J	0.65 J	9.95	12.1	30.3	11.9
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0687 U	1.34 J	0.108 U	-0.0426 U	0.118 U	0.0715 U	0.122 J	0.166 J	0.0349 U
Thorium-228 (pCi/g)	1.07	0.737 J	0.51 J	0.524 J	0.547 J	1.14	1.11	1.38	1.08
Thorium-230 (pCi/g)	1.48	15.7	1.8	1.24	2.41	1.94	1.56	1.69	2
Thorium-232 (pCi/g)	0.8 J	0.416 J	0.34 J	0.237 J	0.343 J	1.23	0.834 J	0.996 J	0.995 J
Uranium-233/234 (pCi/g)	1.46	7.98	1.29	1.37	1.71	1.42	1.07	1.18	1.13
Uranium-235 (pCi/g)	0.0681 U	0.545 J	0.0925 J	0.0747 U	0.0159 U	0.0795 U	0.0371 U	0.0638 U	0.0341 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.35	8.11	1.31	1.76	1.48	1.59	0.99 J	1.32	1.32
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.03	0.579 J	0.679 J	0.293 J	0.591 J	0.791 J	0.951 J	1.03	1.25
Cesium-137 (pCi/g)	0.0322 U	0.01 U	0.0178 U	-0.0035 U	-0.0031 U	0.19	0.0259 U	0.0026 U	0.058 J
Cobalt-60 (pCi/g)	-0.0204 U	0.0129 U	0.017 U	0.0006 U	0.0052 U	0.0101 U	-0.0026 U	-0.0046 U	0.002 U
Potassium-40 (pCi/g)	22.7	12.2	12.9	8.51	14.9	22.6	27.2	26.9	24.7
Protactinium-231 (pCi/g)	1.03 U	0.224 U	0.827 U	0.248 U	1.13 U	-0.463 U	-0.18 U	-0.369 U	0.0256 U
Radium-226 (pCi/g)	1.37	9.55	3.02	1.06	5	1.64	1.24	1.57	1.67
Radium-228 (pCi/g)	1.03	0.579 J	0.679 J	0.293 J	0.591 J	0.791 J	0.951 J	1.03	1.25
Thorium-234 (pCi/g)	1.26 U	6.61	2.18 J	2.04 J	1.38 U	2.11 J	1.02 U	1.8 J	1.39 U
Uranium-235 (pCi/g)	0.199 U	0.692 J	0.169 U	0.12 U	0.462 J	0.119 U	0.193 U	0.0854 U	0.0282 U

Phase IV IA05 Soil

Station	IA05-SB0010	IA05-SB0010	IA05-SB0010	IA05-SB0011	IA05-SB0011	IA05-SB0011	IA05-SB0011	IA05-SB0012	IA05-SB0012
Sample No	**LUSB0551**	**LUSB0552**	**LUSB9559**	**LUSB0553**	**LUSB0554**	**LUSB0555**	**LUSB0554D**	**LUSB0556**	**LUSB0557**
Collection Date	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**	**07/12/98**
Depth (ft)	**3.0-4.0**	**4.0-5.0**	**1.0-2.0**	**1.0-2.0**	**3.0-4.0**	**4.0-5.0**	**3.0-4.0**	**1.0-2.0**	**3.0-4.0**
Duplicate ID							**LUSB9059**		
Northing	**199548**	**199548**	**199548**	**199535**	**199535**	**199535**	**199535**	**199498**	**199498**
Easting	**517476**	**517476**	**517476**	**517455**	**517455**	**517455**	**517455**	**517475**	**517475**
Metals									
Arsenic (mg/kg)	18.1	13.4		7.8	2.5	5.9	5	5.1	13.3
Barium (mg/kg)	84.8 N*	300 N*		130 N*	80.1 N*	56.6 N*	54.7	104 N*	72.5 N*
Beryllium (mg/kg)	31.1	122		3.8	1.4	0.72	5.5	0.96	0.61
Lead (mg/kg)	13	17.9		10.8	7.4	8	8.4	12	9.5
Indicator Parameters									
Fluoride (mg/kg)	28.4	24.7		2.45	3.51	2.14	2.24	8.88	3.1
Nitrogen, Ammonia (mg/kg)	12.4	13.7		11.1	10.2	5.88	7.81	13.9	3.29
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.2 J	0.132 J	0.04 U	0.104 U	0.0611 U	0.0927 U	0.103 U	0.0736 U	0.0236 U
Thorium-228 (pCi/g)	1.2	1.03	0.71	1.07	0.738 J	0.952 J	1.11	1.04	0.72 J
Thorium-230 (pCi/g)	2.26	1.61	1.17	1.93	1.08	1.8	1.43	2.03	1.27
Thorium-232 (pCi/g)	0.799 J	0.997 J	0.8	0.999 J	0.405 J	1.02	0.704 J	1.19	0.652 J
Uranium-233/234 (pCi/g)	1.29	1.21	0.54	1.1	0.819 J	0.983 J	0.836 J	0.912 J	0.853 J
Uranium-235 (pCi/g)	0.0781 J	0.0216 U		0.0789 J	0.0136 U	0.045 U	0.0076 U	0.0734 J	0.0318 U
Uranium-235/236 (pCi/g)			0.03						
Uranium-238 (pCi/g)	1.23	1.11	0.61	1.07	0.774 J	1.12	0.987 J	1.2	0.745 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.04	1.16		0.439 J	1.07	1.01	0.829 J	0.969 J	0.929 J
Cesium-137 (pCi/g)	-0.0164 U	-0.016 U		0.0261 U	0.0166 U	-0.0074 U	-0.0027 U	0.0124 U	-0.0056 U
Cobalt-60 (pCi/g)	-0.0164 U	0.0191 U		0.0038 U	-0.0011 U	0.0054 U	-0.045 U	0.003 U	-0.0117 U
Potassium-40 (pCi/g)	26.4	27.7		10.7	20.3	23.9	23.5	25.4	22.4
Protactinium-231 (pCi/g)	-0.109 U	-0.751 U		-0.914 U	0.336 U	-0.902 U	-0.786 U	0.48 U	0.175 U
Radium-226 (pCi/g)	1.69	1.64		1.67	1.14	1.2	1.23	1.83	1.31
Radium-228 (pCi/g)	1.04	1.16		0.439 J	1.07	1.01	0.829 J	0.969 J	0.929 J
Thorium-234 (pCi/g)	1.13 U	0.562 U		-0.194 U	1.26 J	2.22 J	0.0955 U	1.28 U	1.42 J
Uranium-235 (pCi/g)	0.105 U	0.0031 U		0.0482 U	0.0645 U	0.244 U	-0.0496 U	0.161 U	0.148 U

Phase IV IA05 Soil

Station	**IA05-SB0012**	**IA05-SB0013**	**IA05-SB0013**	**IA05-SB0013**	**IA05-SB0014**	**IA05-SB0014**	**IA05-SB0014**	**IA05-SB0015**	**IA05-SB0015**
Sample No	**LUSB0558**	**LUSB0559**	**LUSB0560**	**LUSB0561**	**LUSB0562**	**LUSB0563**	**LUSB0564**	**LUSB0565**	**LUSB0566**
Collection Date	**07/12/98**	**07/13/98**	**07/13/98**	**07/12/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Depth (ft)	**4.0-5.0**	**1.0-2.0**	**3.0-4.0**	**4.0-5.0**	**1.0-2.0**	**3.0-4.0**	**4.0-5.0**	**1.0-2.0**	**3.0-4.0**
Duplicate ID									
Northing	**199498**	**199506**	**199506**	**199506**	**199500**	**199500**	**199500**	**199550**	**199550**
Easting	**517475**	**517422**	**517422**	**517422**	**517405**	**517405**	**517405**	**517487**	**517487**
Metals									
Arsenic (mg/kg)	8	6.5	7.6 *	5.8 *	7.9 *	13 *	9.5 *	7.1 *	11.3 *
Barium (mg/kg)	79.8 N*	82.9 N*	75.3 N	64.7 N	185 N	88.1 N	76.9 N	98.7 N	75.4 N
Beryllium (mg/kg)	4.9	0.79	21.7 *	94.9 *	68.9 *	1.7 *	0.8 *	2.9 *	0.68 *
Lead (mg/kg)	15	9.8	9.7	8.4	80.3	16	10.8	15.5	10.8
Indicator Parameters									
Fluoride (mg/kg)	2.73	8.42	15.5	46.7	14.6	10.9	0.97	11.1	4.65
Nitrogen, Ammonia (mg/kg)	3.38	6.05	6.19	6.58	24	11.8	5.02	10.2	5.65
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.171 U	0.146 U	0.173 J	0 U	0.184 J	0.129 U	0.102 U	0.0384 U	0.13 J
Thorium-228 (pCi/g)	1.44	1.16	1.44	1.34	0.691 J	1.4	1.21	0.96 J	0.697 J
Thorium-230 (pCi/g)	2.15	2.41	1.99	1.53	2.9	2.1	2.13	1.6	1.68
Thorium-232 (pCi/g)	0.462 J	0.991 J	0.734 J	0.542 J	0.671 J	1.05	0.911 J	0.923 J	0.56 J
Uranium-233/234 (pCi/g)	1.46	1.08	1.04	1	2.48	1.06	1.15	1.13	1.15
Uranium-235 (pCi/g)	0.0705 U	0.119 J	0.0465 U	0.032 U	0.148 J	0.105 J	0.0677 J	0.11 J	0.0268 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.58	1.25	1.31	0.957 J	2.16	1.38	1.32	1.04	1.27
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.865 J	1.15	1.16	0.927 J	1.19	0.944 J	1.05	1.04	1.05
Cesium-137 (pCi/g)	0.0456 J	-0.0334 U	-0.0101 U	-0.0412 U	0.207	0.0025 U	0 U	0.0435 U	-0.0024 U
Cobalt-60 (pCi/g)	-0.004 U	0.0177 U	0.0249 U	-0.0064 U	0.0256 U	0.0037 U	0.0083 U	0.0017 U	-0.0316 U
Potassium-40 (pCi/g)	22.1	26.3	26.2	27.1	23	26.6	27.5	25.2	26
Protactinium-231 (pCi/g)	-0.281 U	-0.0729 U	-0.23 U	0.89 U	-0.854 U	-0.698 U	-0.447 U	-0.295 U	0.0878 U
Radium-226 (pCi/g)	1.42	1.75	1.54	1.34	2.86	1.83	1.55	1.77	1.6
Radium-228 (pCi/g)	0.865 J	1.15	1.16	0.927 J	1.19	0.944 J	1.05	1.04	1.05
Thorium-234 (pCi/g)	2.09 J	0.986 U	1.35 U	1.83 J	2.82 J	1.64 U	0.18 U	1.29 J	0.926 U
Uranium-235 (pCi/g)	0.164 U	0.0779 U	0.153 U	0.121 U	0.354 J	0.228 U	0.166 U	0.261 J	0.451 J

Phase IV IA05 Soil

Station	**IA05-SB0015**	**IA05-SB0015**	**IA05-SB0016**	**IA05-SB0016**	**IA05-SB0016**	**IA05-SB0017**	**IA05-SB0017**	**IA05-SB0017**	**IA05-SB0018**
Sample No	**LUSB0567**	**LUSB0565D**	**LUSB0568**	**LUSB0569**	**LUSB0570**	**LUSB0571**	**LUSB0572**	**LUSB0573**	**LUSB0582**
Collection Date	**07/13/98**	**07/13/98**	**07/21/98**	**07/21/98**	**07/21/98**	**07/21/98**	**07/21/98**	**07/21/98**	**07/10/98**
Depth (ft)	**4.0-5.0**	**1.0-2.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**1.0-2.0**
Duplicate ID		**LUSB9060**							
Northing	**199550**	**199550**	**199509**	**199509**	**199509**	**199520**	**199520**	**199520**	**199577**
Easting	**517487**	**517487**	**517488**	**517488**	**517488**	**517485**	**517485**	**517485**	**517438**
Metals									
Arsenic (mg/kg)	7.9 *	8.7	8.1 N*	7.5 N*	7.3 N*	5.3 N*	9.3 N*	16.1 N*	4.5
Barium (mg/kg)	61.5 N	97.8	128	317	162	82.6	161	244	98.3
Beryllium (mg/kg)	0.56 *	1.2	293 N*	149 N*	46.8 N*	460 N*	1640 N*	24.1 N*	104
Lead (mg/kg)	9	31.5	101 N*	315 N*	99 N*	181 N*	2670 N*	97.8 N*	21.9
Indicator Parameters									
Fluoride (mg/kg)	3.72	7.9	59.9	27.7	44.7	99.2	126	11.4	68.4
Nitrogen, Ammonia (mg/kg)	5.01	62.1	17.2	16.5	27.8	23	64	18.6	19.6
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0771 U	0.068 U	0.255 U	0.368 J	0.0919 U	0.101 U	0.708 J	0.259 J	0.104 U
Thorium-228 (pCi/g)	0.877 J	1.06	1.21	0.784 J	1.5	0.792 J	1.3	0.972 J	1.17
Thorium-230 (pCi/g)	1.56	2.17	2.94	2.75	3.19	1.33	11.4	1.74	1.41
Thorium-232 (pCi/g)	0.714 J	0.71 J	0.764 J	0.588 J	0.942 J	0.626 J	1.03	0.787 J	0.627 J
Uranium-233/234 (pCi/g)	1.05	1.34	2	2.03	1.36	1.38	6.79	0.969 J	1.14
Uranium-235 (pCi/g)	0.0234 U	0.141 J	0.158 J	0.129 J	0.0814 J	0.0621 J	0.543 J	0.0756 J	0.0332 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.91 J	1.29	2.33	1.84	1.48	1.65	6.91	1.24	1.22
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.821 J	1.16	0.91 J	0.819 J	1.04	0.684 J	1.42	1.25	0.761 J
Cesium-137 (pCi/g)	-0.0183 U	0.0016 U	0.0084 U	0.254	0.212	0.055 J	0.218	0.137	-0.0081 U
Cobalt-60 (pCi/g)	0.0248 U	0 U	0.0059 U	0.0037 U	-0.0054 U	-0.0005 U	0.0593 U	-0.0205 U	-0.0482 U
Potassium-40 (pCi/g)	21.4	26.9	21.9	10.3	19.7	18.5	20.3	24.8	20.6
Protactinium-231 (pCi/g)	-0.16 U	-0.196 U	-0.368 U	0.107 U	0.12 U	0.0098 U	2.62 U	0.0018 U	-0.613 U
Radium-226 (pCi/g)	1.26	1.66	2.78	3.4	1.71	1.28	10.9	1.75	1.59
Radium-228 (pCi/g)	0.821 J	1.16	0.91 J	0.819 J	1.04	0.684 J	1.42	1.25	0.761 J
Thorium-234 (pCi/g)	0.628 U	2.24 J	1.14 U	3.53 J	1.46 J	0.91 U	7.78	1.31 J	1.06 U
Uranium-235 (pCi/g)	0.166 U	0.0322 U	0.227 U	0.202 U	0.122 U	0.0337 U	0.479 J	0 U	0.372 U

Phase IV IA05 Soil

Station	**IA05-SB0018**	**IA05-SB0018**	**IA05-SB0018**	**IA05-SB0019**	**IA05-SB0019**	**IA05-SB0019**	**IA05-SB0019**	**IA05-SB0019**	**IA05-SB0020**
Sample No	**LUSB0583**	**LUSB0584**	**LUSB0585**	**LUSB0586**	**LUSB0587**	**LUSB0588**	**LUSB0589**	**LUSB0586D**	**LUSB0590**
Collection Date	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/10/98**	**07/11/98**	**07/10/98**	**07/10/98**	**07/11/98**
Depth (ft)	**3.0-3.8**	**3.8-4.6**	**9.0-10.0**	**1.0-2.0**	**3.0-4.0**	**4.0-5.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID								**LUSB9062**	
Northing	**199577**	**199577**	**199577**	**199578**	**199578**	**199578**	**199578**	**199578**	**199549**
Easting	**517438**	**517438**	**517438**	**517474**	**517474**	**517474**	**517474**	**517474**	**517444**
Metals									
Arsenic (mg/kg)	12.9	6.2	10.7	11.9 *	8.7 *	8.7 *	7.9 *	5.2	10.1 *
Barium (mg/kg)	72.3	78.4	91.4	62.7 N	76.4 N	83.2 N	56.3 N	101	78.6 N
Beryllium (mg/kg)	21.2	5	1.9	69.6 *	195 *	13.2 *	1.7 *	27.3	225 *
Lead (mg/kg)	13.7	10.9	11.6	11.7	12.9	11.3	11.8	16.9	51.9
Indicator Parameters									
Fluoride (mg/kg)	18.4	18	3.57	10.9	22.6	31.5	1.77	12.5	6.42
Nitrogen, Ammonia (mg/kg)	8.3	4.7	19.5	24.7	9.62	5.34	10.9	18.9	31.8
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.18 J	0.155 U	0.347 J	-0.0072 U	0.0713 U	0.157 U	0.0339 U	0.121 U	0.0269 U
Thorium-228 (pCi/g)	0.858 J	1.46	1.33	1.32	1.03	1.04	0.901 J	1.37	0.796 J
Thorium-230 (pCi/g)	1.57	1.73	1.94	1.56	1.74	1.67	1.55	2.33	1.83
Thorium-232 (pCi/g)	0.743 J	1.11	1.27	0.809 J	0.761 J	0.681 J	0.967 J	0.994 J	0.502 J
Uranium-233/234 (pCi/g)	1.1	0.847 J	1.24	1.2	1.19	0.934 J	1.72	1.2	1.31
Uranium-235 (pCi/g)	0.0657 U	0.0449 U	0.0741 J	0.0279 U	0.11 J	0.0077 U	0.168 J	0.102 J	0.0324 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.35	1.01	1.32	0.898 J	1.05	0.978 J	1.54	1.26	1.44
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.15	1.18	1.11	1.12	0.801 J	1	1.12	1.16	0.747 J
Cesium-137 (pCi/g)	-0.0125 U	-0.0258 U	-0.0116 U	0.0008 U	0.017 U	-0.002 U	-0.017 U	-0.0087 U	0.103
Cobalt-60 (pCi/g)	0.0074 U	0.0102 U	0.012 U	0.0258 U	-0.023 U	0.0111 U	0.0005 U	0.0041 U	0.0357 U
Potassium-40 (pCi/g)	24.6	24.8	26.7	26.8	25.3	23.6	28.4	28.6	16.6
Protactinium-231 (pCi/g)	0.0076 U	-0.0061 U	0.521 U	-1.11 U	-0.107 U	-0.606 U	-0.245 U	-0.346 U	-0.0318 U
Radium-226 (pCi/g)	1.66	1.34	1.48	1.75	1.79	1.28	1.86	1.63	1.8
Radium-228 (pCi/g)	1.15	1.18	1.11	1.12	0.801 J	1	1.12	1.16	0.747 J
Thorium-234 (pCi/g)	1.51 J	1.03 U	1.84 J	2.01 J	2.37 J	0.435 U	2.41 J	2.05 J	2.22 J
Uranium-235 (pCi/g)	0.0858 U	0.0886 U	0.272 U	0.175 U	0.218 U	0.0708 U	-0.0103 U	0.256 U	0.0492 U

Phase IV IA05 Soil

Station	**IA05-SB0020**	**IA05-SB0020**	**IA05-SB0020**	**IA05-SB0020**	**IA05-SB0021**	**IA05-SB0021**	**IA05-SB0021**	**IA05-SB0021**
Sample No	**LUSB0591**	**LUSB0592**	**LUSB0593**	**LUSB0590D**	**LUSB0594**	**LUSB0595**	**LUSB0596**	**LUSB0597**
Collection Date	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**
Depth (ft)	**3.0-4.0**	**4.0-5.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**3.0-4.0**	**4.0-5.0**	**9.0-10.0**
Duplicate ID				**LUSB9063**				
Northing	**199549**	**199549**	**199549**	**199549**	**199564**	**199564**	**199564**	**199564**
Easting	**517444**	**517444**	**517444**	**517444**	**517480**	**517480**	**517480**	**517480**
Metals								
Arsenic (mg/kg)	8.6 *	20.8 *	7.6 *	7.8	8.1 *	7.7 *	11.6 *	7.3 *
Barium (mg/kg)	90.1 N	98.1 N	103 N	65.6	110 N	98.1 N	83.8 N	94 N
Beryllium (mg/kg)	5.6 *	0.96 *	0.75 *	54.3	6.1 *	2.5 *	6.1 *	0.57 *
Lead (mg/kg)	12.5	13.3	9.6	26.1	16.9	12.7	15	9.2
Indicator Parameters								
Fluoride (mg/kg)	8.33	10.5	6.11	3.87	20.2	17.8	19.8	2.37
Nitrogen, Ammonia (mg/kg)	8.95	8.26	4.01	36.4	15.8	10.4	5.52	4.09
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/g)	0.169 U	0.105 U	0.141 U	0.061 U	0.0365 U	0.0327 U	0.0574 U	0.0419 U
Thorium-228 (pCi/g)	1.47	1.14	1.02	0.908 J	0.696 J	0.873 J	1.02	0.613 J
Thorium-230 (pCi/g)	1.79	1.98	2.02	2.24	1.79	1.4	1.77	0.928 J
Thorium-232 (pCi/g)	0.944 J	1.08	0.742 J	0.556 J	0.712 J	1.02	1.03	0.469 J
Uranium-233/234 (pCi/g)	1.04	1.26	1.1	1.52	0.54 J	1.24	1.25	1.1
Uranium-235 (pCi/g)	0.0446 U	0.0614 U	0.0984 J	0.101 U	0.0122 U	0.0299 U	0.0699 J	0.0672 J
Uranium-235/236 (pCi/g)								
Uranium-238 (pCi/g)	0.816 J	1.36	1.28	1.46	0.829 J	1.12	1.2	1.05
Radiological Parameters (GammaSpec)								
Actinium-228 (pCi/g)	1.33	1.15	0.828 J	0.689 J	1.05	1.01	1.22	1.19
Cesium-137 (pCi/g)	-0.0002 U	0.0034 U	-0.0068 U	0.125	0.0558 J	0.0483 J	0.0111 U	-0.0121 U
Cobalt-60 (pCi/g)	0 U	-0.0027 U	0.0204 U	-0.0132 U	-0.0154 U	0.0009 U	-0.0016 U	0.0096 U
Potassium-40 (pCi/g)	24.2	27.6	22.4	17.1	21.5	25	26.2	23.9
Protactinium-231 (pCi/g)	0.0595 U	-0.402 U	0.223 U	0.169 U	0.755 U	0.2 U	0.419 U	-0.293 U
Radium-226 (pCi/g)	1.46	1.43	1.49	1.69	1.61	1.56	1.6	1.26
Radium-228 (pCi/g)	1.33	1.15	0.828 J	0.689 J	1.05	1.01	1.22	1.19
Thorium-234 (pCi/g)	1.13 U	0.875 U	1.35 J	1.62 U	0.295 U	0.471 U	1.08 J	2.21 J
Uranium-235 (pCi/g)	0.401 J	0.109 U	0.136 U	0.246 J	0.166 U	0.119 U	0.169 U	0.0858 U

Phase IV IA05 Soil

Station	**IA05-SB0001**	**IA05-SB0001**	**IA05-SB0002**	**IA05-SB0003**	**IA05-SB0003**	**IA05-SB0003**	**IA05-SB0005**	**IA05-SB0005**	**IA05-SB0006**
Sample No	**LUSB0598**	**LUSB0599**	**LUSB0601**	**LUSB0604**	**LUSB0605**	**LUSB0606**	**LUSB0610**	**LUSB0611**	**LUSB0613**
Collection Date	**06/24/98**	**06/24/98**	**07/01/98**	**07/14/98**	**07/14/98**	**07/14/98**	**08/03/98**	**08/03/98**	**08/04/98**
Depth (ft)	**5.0-6.0**	**7.0-8.0**	**3.0-4.0**	**3.0-4.0**	**5.0-5.5**	**7.5-8.5**	**3.0-4.0**	**7.0-7.0**	**3.0-4.0**
Duplicate ID									
Northing	**199560**	**199560**	**199515**	**199522**	**199522**	**199522**	**199488**	**199488**	**199557**
Easting	**517417**	**517417**	**517403**	**517473**	**517473**	**517473**	**517453**	**517453**	**517493**
Metals									
Beryllium (mg/kg)	0.07 B	0.86	0.94	41.2	22.6	1	52.7	254	2.7
Lead (mg/kg)									

Station	**IA05-SB0006**	**IA05-SB0006**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0008**	**IA05-SB0009**	**IA05-SB0009**
Sample No	**LUSB0614**	**LUSB0615**	**LUSB0625**	**LUSB1101**	**LUSB1102**	**LUSB0625D**	**LUSB1102D**	**LUSB0616**	**LUSB0617**
Collection Date	**08/04/98**	**08/04/98**	**07/06/98**	**10/27/98**	**10/27/98**	**07/06/98**	**10/27/98**	**07/13/98**	**07/13/98**
Depth (ft)	**5.0-6.0**	**6.5-7.5**	**6.0-7.0**	**8.0-9.0**	**9.0-10.0**	**6.0-7.0**	**9.0-10.0**	**2.0-3.0**	**3.0-4.0**
Duplicate ID						**LUSB9066**	**LUSB9105**		
Northing	**199557**	**199557**	**199568**	**199568**	**199568**	**199568**	**199568**	**199491**	**199491**
Easting	**517493**	**517493**	**517465**	**517465**	**517465**	**517465**	**517465**	**517466**	**517466**
Metals									
Beryllium (mg/kg)	9.5	10.7	30.8	64.7	40.5	21.7	34.4	2600	2400
Lead (mg/kg)									

Station	**IA05-SB0009**	**IA05-SB0009**	**IA05-SB0009**	**IA05-SB0009**	**IA05-SB0010**	**IA05-SB0010**	**IA05-SB0022**	**IA05-SB0022**	**IA05-SB0022**
Sample No	**LUSB0618**	**LUSB1103**	**LUSB1104**	**LUSB1104D**	**LUSB1093**	**LUSB1094**	**LUSB0629**	**LUSB0630**	**LUSB0631**
Collection Date	**07/13/98**	**10/28/98**	**10/28/98**	**10/28/98**	**10/27/98**	**10/27/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**4.0-5.0**	**8.0-9.0**	**9.0-10.0**	**9.0-10.0**	**5.0-6.0**	**6.0-7.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**
Duplicate ID				**LUSB9106**					
Northing	**199491**	**199491**	**199491**	**199491**	**199548**	**199548**	**199563**	**199563**	**199563**
Easting	**517466**	**517466**	**517466**	**517466**	**517476**	**517476**	**517440**	**517440**	**517440**
Metals									
Beryllium (mg/kg)	13300	285	167	156	0.59 B	0.67 B	9.8	0.8	0.39
Lead (mg/kg)		8.4 B	7.5 B	6.9 B					

Phase IV IA05 Soil

Station	**IA05-SB0022**	**IA05-SB0022**	**IA05-SB0022**	**IA05-SB0023**	**IA05-SB0023**	**IA05-SB0023**	**IA05-SB0023**	**IA05-SB0023**	**IA05-SB0024**
Sample No	**LUSB0632**	**LUSB0633**	**LUSB0630D**	**LUSB0639**	**LUSB0640**	**LUSB0641**	**LUSB0642**	**LUSB0643**	**LUSB0649**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**7.0-8.0**	**9.0-10.0**	**3.0-4.0**	**1.0-2.0**	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**1.0-2.0**
Duplicate ID			**LUSB9067**						
Northing	**199563**	**199563**	**199563**	**199571**	**199571**	**199571**	**199571**	**199571**	**199577**
Easting	**517440**	**517440**	**517440**	**517459**	**517459**	**517459**	**517459**	**517459**	**517457**
Metals									
Beryllium (mg/kg)	0.38	0.3	1.3 E	20.1	125	2.9	0.83	0.53	35.3
Lead (mg/kg)									

Station	**IA05-SB0024**	**IA05-SB0024**	**IA05-SB0024**	**IA05-SB0024**	**IA05-SB0024**	**IA05-SB0025**	**IA05-SB0025**	**IA05-SB0025**	**IA05-SB0025**
Sample No	**LUSB0650**	**LUSB0651**	**LUSB0652**	**LUSB0653**	**LUSB0652D**	**LUSB0659**	**LUSB0660**	**LUSB0661**	**LUSB0662**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/11/98**	**07/11/98**	**07/11/98**	**07/11/98**
Depth (ft)	**3.0-4.0**	**5.0-6.0**	**7.0-8.0**	**9.0-10.0**	**7.0-8.0**	**1.0-2.0**	**3.0-3.5**	**5.0-6.0**	**6.0-7.0**
Duplicate ID					**LUSB9068**				
Northing	**199577**	**199577**	**199577**	**199577**	**199577**	**199498**	**199498**	**199498**	**199498**
Easting	**517457**	**517457**	**517457**	**517457**	**517457**	**517426**	**517426**	**517426**	**517426**
Metals									
Beryllium (mg/kg)	54	0.76	0.64	0.63	0.62	147	52.2	74.2	22.8
Lead (mg/kg)									

Station	**IA05-SB0025**	**IA05-SB0026**	**IA05-SB0026**	**IA05-SB0026**	**IA05-SB0026**
Sample No	**LUSB0659D**	**LUSB0669**	**LUSB0670**	**LUSB0671**	**LUSB0672**
Collection Date	**07/11/98**	**07/11/98**	**07/11/98**	**07/12/98**	**07/12/98**
Depth (ft)	**1.0-2.0**	**1.0-2.0**	**3.0-3.3**	**4.0-5.0**	**5.0-6.0**
Duplicate ID	**LUSB9069**				
Northing	**199498**	**199483**	**199483**	**199483**	**199483**
Easting	**517426**	**517479**	**517479**	**517479**	**517479**
Metals					
Beryllium (mg/kg)	85.7	226	251	59.1	11.7
Lead (mg/kg)					

Phase II IA07 Soil

Station	**03EQ01**	**03EQ01**	**03EQ01**	**05EI00**	**06FD00**
Sample No	**LU00174**	**LU00175**	**LU00176**	**LU00172**	**LU00177**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**2.5-3.0**	**2.5-3.0**	**3.0-3.5**	**4.0-4.3**	**0.0-0.5**
Northing	**0**	**0**	**0**	**517310**	**517360**
Easting	**0**	**0**	**0**	**199490**	**199530**
Metals					
Aluminum (mg/kg)	7310	11400	10500	12000	13200
Antimony (mg/kg)	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	5.1 J
Arsenic (mg/kg)	5.1	7.9	6.1	7.4	18
Barium (mg/kg)	83.1 J	90.1 J	110 J	84.7 J	2440 J
Beryllium (mg/kg)	0.96	0.92	0.65	3.5	2510
Boron (mg/kg)	0.48 UJ	12.2	15.9	11.4	43.1
Cadmium (mg/kg)	0.57	0.5	0.5	0.51	3.2
Calcium (mg/kg)	86200	78300	87800	58800	68300
Chromium (mg/kg)	14.3 J	18.5 J	17.5 J	18.7 J	91.5 J
Cobalt (mg/kg)	6.8	9.3	8.3	10	15.4
Copper (mg/kg)	25.7 J	25 J	29.1 J	23.5 J	133 J
Iron (mg/kg)	15500 J	21600 J	20100 J	22200 J	118000 J
Lead (mg/kg)	58.9	14.3	11.8	28.4	9380
Magnesium (mg/kg)	22600	10800	12200	14300	34800
Manganese (mg/kg)	247	337	358	439	751
Mercury (mg/kg)	0.08	0.04	0.04	0.04	0.22
Molybdenum (mg/kg)	2.8	4.1	4.1	4.2	9.2
Nickel (mg/kg)	22.8	25.6	26	27.7	160
Potassium (mg/kg)	1290 J	2430 J	1920 J	2160 J	3450 J
Selenium (mg/kg)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Silicon (mg/kg)	1050 J	2500 J	1800 J	1880 J	4580 J
Silver (mg/kg)	0.24	0.17	0.25	0.2	0.7
Sodium (mg/kg)	153	173	169	0.75 U	564
Strontium (mg/kg)	1650	2980	444	122	141
Thallium (mg/kg)	0.07 U	0.07 U	0.49	0.84	3
Vanadium (mg/kg)	15.3	26.5	21.5	25.9	28.5
Zinc (mg/kg)	68.5	57.9	57.8	63.3	295
Indicator Parameters					
% Moisture (%)	24	19	20	19	15
Chloride (mg/kg)	43.3	43			0.04 U
Fluoride (mg/kg)	2.79	2.74			215
Nitrate, as N (mg/kg)	0.173 J	0.214 J			9.22 J
Phosphorus (mg/kg)	0.22 R	0.2 R			0.391 J
Sulfate (mg/kg)	149	348			124
Temperature (c)	25.2 J	22.1 J			21.5 J
pH (ph)	8.18	8.1			8.18

Station	03EQ01	03EQ01	03EQ01	05EI00	06FD00
Sample No	LU00174	LU00175	LU00176	LU00172	LU00177
Collection Date	10/29/97	10/29/97	10/29/97	10/29/97	10/29/97
Depth (ft)	2.5-3.0	2.5-3.0	3.0-3.5	4.0-4.3	0.0-0.5
Northing	0	0	0	517310	517360
Easting	0	0	0	199490	199530
Semivolatile Organics					
1,2,4-Trichlorobenzene (ug/kg)	110 U	100 U	100 U	100 U	385 U
1,2-Dichlorobenzene (ug/kg)	110 U	100 U	100 U	100 U	385 U
1,3-Dichlorobenzene (ug/kg)	110 U	100 U	100 U	100 U	385 U
1,4-Dichlorobenzene (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,2'-oxybis (1-chloropropane) (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,4,5-Trichlorophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,4,6-Trichlorophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,4,6-tribromophenol (%)	67	60	64	62	61
2,4-Dichlorophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,4-Dimethylphenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,4-Dinitrophenol (ug/kg)	220 UJ	200 UJ	205 UJ	200 UJ	750 UJ
2,4-Dinitrotoluene (ug/kg)	110 U	100 U	100 U	100 U	385 U
2,6-Dinitrotoluene (ug/kg)	110 U	100 U	100 U	100 U	385 U
2-Chloronaphthalene (ug/kg)	110 U	100 U	100 U	100 U	385 U
2-Chlorophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2-Methylnaphthalene (ug/kg)	110 U	100 U	100 U	887	385 U
2-Methylphenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2-Nitroaniline (ug/kg)	110 UJ	100 UJ	100 UJ	100 UJ	385 UJ
2-Nitrophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
2-fluorobiphenyl (%)	65	72	70	69	65
2-fluorophenol (%)	62	72	70	69	50
3,3'-Dichlorobenzidine (ug/kg)	110 U	100 U	100 U	100 U	385 U
3-Nitroaniline (ug/kg)	130 U	120 U	120 U	120 U	460 U
4,6-Dinitro-2-methylphenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
4-Chloroaniline (ug/kg)	130 UJ	120 UJ	120 UJ	120 UJ	460 UJ
4-Nitroaniline (ug/kg)	110 UJ	100 UJ	100 UJ	100 UJ	385 UJ
4-Nitrophenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
4-bromophenyl phenyl ether (ug/kg)	110 U	100 U	100 U	100 U	385 U
4-chloro-3-methyl phenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
4-chlorophenylphenylether (ug/kg)	110 U	100 U	100 U	100 U	385 U
Acenaphthene (ug/kg)	110 U	100 U	100 U	377 J	385 U
Acenaphthylene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Anthracene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Benzo(a)anthracene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Benzo(a)pyrene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Benzo(b)fluoranthene (ug/kg)	110 U	100 U	100 U	100 U	385 U

Station	**03EQ01**	**03EQ01**	**03EQ01**	**05EI00**	**06FD00**
Sample No	**LU00174**	**LU00175**	**LU00176**	**LU00172**	**LU00177**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**2.5-3.0**	**2.5-3.0**	**3.0-3.5**	**4.0-4.3**	**0.0-0.5**
Northing	**0**	**0**	**0**	**517310**	**517360**
Easting	**0**	**0**	**0**	**199490**	**199530**
Benzo(ghi)perylene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Benzo(k)fluoranthene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Butylbenzylphthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
Carbazole (ug/kg)	110 U	100 U	100 U	100 U	385 U
Chrysene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Di-n-butylphthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
Di-n-octylphthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
Dibenz(a,h)anthracene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Dibenzofuran (ug/kg)	110 U	100 U	100 U	100 U	385 U
Diethyl phthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
Dimethyl phthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
Fluoranthene (ug/kg)	110 U	100 U	100 U	565	385 U
Fluorene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Hexachlorobenzene (ug/kg)	130 U	120 U	120 U	120 U	460 U
Hexachlorobutadiene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Hexachlorocyclopentadiene (ug/kg)	110 UJ	100 UJ	100 UJ	100 UJ	385 UJ
Hexachloroethane (ug/kg)	110 U	100 U	100 U	100 U	385 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Isophorone (ug/kg)	110 U	100 U	100 U	100 U	385 U
N-nitroso-di-n-propylamine (ug/kg)	110 U	100 U	100 U	100 U	385 U
N-nitrosodiphenylamine (ug/kg)	110 U	100 U	100 U	100 U	385 U
Naphthalene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Nitrobenzene (ug/kg)	110 U	100 U	100 U	100 U	385 U
Nitrobenzene-d5 (%)	67	77	76	69	58
Pentachlorophenol (ug/kg)	110 UJ	100 UJ	100 UJ	100 UJ	385 UJ
Phenanthrene (ug/kg)	110 U	100 U	100 U	1330	385 U
Phenol (ug/kg)	110 U	100 U	100 U	100 U	385 U
Phenol-d5 (%)	68	77	74	73	62
Pyrene (ug/kg)	110 U	100 U	100 U	907	385 U
Terphenyl-d14 (%)	84	90	93	85	104
bis(2-chloroethoxy)methane (ug/kg)	110 U	100 U	100 U	100 U	385 U
bis(2-chloroethyl) ether (ug/kg)	110 U	100 U	100 U	100 U	385 U
bis(2-ethylhexyl)phthalate (ug/kg)	110 U	100 U	100 U	100 U	385 U
m,p-cresol (ug/kg)	110 U	100 U	100 U	100 U	385 U
Volatile Organics					
1,1,1-Trichloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
1,1,2,2-Tetrachloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	

Station	**03EQ01**	**03EQ01**	**03EQ01**	**05EI00**	**06FD00**
Sample No	**LU00174**	**LU00175**	**LU00176**	**LU00172**	**LU00177**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**2.5-3.0**	**2.5-3.0**	**3.0-3.5**	**4.0-4.3**	**0.0-0.5**
Northing	**0**	**0**	**0**	**517310**	**517360**
Easting	**0**	**0**	**0**	**199490**	**199530**
1,1,2-Trichloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
1,1-Dichloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
1,1-Dichloroethene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
1,2-Dichloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
1,2-Dichloropropane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
2-Butanone (ug/kg)	13.15 UJ	12.35 UJ	12.5 UJ	12.35 UJ	
2-Hexanone (ug/kg)	32.9 UJ	30.85 UJ	31.25 U	30.85 UJ	
4-Methyl-2-pentanone (ug/kg)	32.9 U	30.85 U	31.25 U	30.85 U	
Acetone (ug/kg)	32.9 R	30.85 R	31.25 R	493 J	
Benzene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Bromodichloromethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Bromofluorobenzene (%)	108	102	95	110	
Bromomethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Carbon disulfide (ug/kg)	13.15 UJ	12.35 UJ	12.5 UJ	12.35 UJ	
Carbon tetrachloride (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Chlorobenzene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Chloroethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Chloroform (ug/kg)	6.6 U	6.15 U	2.7 J	6.15 U	
Chloromethane (ug/kg)	6.6 U	6.15 U	60.6 J	6.15 U	
Dibromochloromethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Dibromofluoromethane (%)	115	108	108	118	
Ethylbenzene (ug/kg)	6.6 U	6.15 U	6.25 U	14.4 J	
Methylene chloride (ug/kg)	4.4 J	6.15 U	2.8 J	6 J	
Styrene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Tetrachloroethene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Toluene (ug/kg)	127	33.2 J	77.4	586 J	
Toluene-d8 (%)	115	107	108	118	
Tribromomethane (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Trichloroethene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Vinyl chloride (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
Xylenes (total) (ug/kg)	6.6 U	6.15 U	6.25 U	5 J	
cis-1,2-dichloroethene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
cis-1,3-dichloropropene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
trans-1,2-dichloroethene (ug/kg)	6.6 U	6.15 U	6.25 U	6.15 U	
trans-1,3-dichloropropene (ug/kg)	6.6 UJ	6.15 UJ	6.25 U	6.15 UJ	
Radiological Parameters (AlphaSpec)					
Actinium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.879

Phase II IA07 Soil

Station	**03EQ01**	**03EQ01**	**03EQ01**	**05EI00**	**06FD00**
Sample No	**LU00174**	**LU00175**	**LU00176**	**LU00172**	**LU00177**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**2.5-3.0**	**2.5-3.0**	**3.0-3.5**	**4.0-4.3**	**0.0-0.5**
Northing	**0**	**0**	**0**	**517310**	**517360**
Easting	**0**	**0**	**0**	**199490**	**199530**
Radium-228 (pCi/g)	0.601	0.428	0.711	0.601	0.636
Thorium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.879
Thorium-228 (pCi/g)	0.601	0.428	0.711	0.601	0.636
Thorium-230 (pCi/g)	0.761	0.648	0.887	0.588	30.6
Thorium-232 (pCi/g)	0.404	0.481	0.68	0.362	0.53
Uranium-234 (pCi/g)	0.394	0.359	0.553	0.35	9.27
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.0679	0.5 UJ	0.429
Uranium-238 (pCi/g)	0.437	0.417	0.484	0.493	8.5
Radiological Parameters (GammaSpec)					
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.827
Potassium-40 (pCi/g)	20	16.8	23.9	19.5	10.9
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.49 J	1.5 J	1.32 J	1.1 J	6.96 J

Phase II IA07 Soil

Station	**04EY00**	**04EZ00**	**05DN00**	**05DT00**	**05DY00**	**05EB00**	**05EC00**	**05EC00**	**05ED00**
Sample No	**LU00178**	**LU00179**	**LU00200**	**LU00199**	**LU00198**	**LU00189**	**LU00190**	**LU00213**	**LU00191**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517260**	**517270**	**517310**	**517310**	**517310**	**517290**	**517300**	**517300**	**517310**
Easting	**199520**	**199520**	**199450**	**199460**	**199470**	**199480**	**199480**	**199480**	**199480**
Metals									
Aluminum (mg/kg)	16900	14400	1200	1330	1030	12800	11800	14000	10100
Arsenic (mg/kg)	30.3	5	7.3	2.5	8.9	5.8	8.8	8.8	5.2
Beryllium (mg/kg)	1.6	2.7	4.7	2.7	0.94	8.1	16.1	15.6	16.7
Lead (mg/kg)	27.6 J	28.3 J	114 J	61 J	35.9 J	89.5 J	128 J	174 J	88.6 J
Magnesium (mg/kg)	4770 J	4470 J	98900 J	106000 J	1030 J	47300 J	15900 J	14400 J	23700 J

Station	**05EE00**	**05EI00**	**05EV00**	**05EV01**	**05EW00**	**05EW01**	**05EX00**	**05EX01**	**05EY00**
Sample No	**LU00192**	**LU00240**	**LU00180**	**LU00181**	**LU00182**	**LU00183**	**LU00184**	**LU00185**	**LU00186**
Collection Date	**10/29/97**	**10/30/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517320**	**517310**	**517280**	**517285**	**517290**	**517295**	**517300**	**517305**	**517310**
Easting	**199480**	**199490**	**199520**	**199520**	**199520**	**199520**	**199520**	**199520**	**199520**
Metals									
Aluminum (mg/kg)	7590	8080	14700	19600	16600	12700	14900	11100	10300
Arsenic (mg/kg)	4.6	5.4	5.4	5.8	5.7	7	5.9	4.7	4.9
Beryllium (mg/kg)	106	27.2	14.9	58.4	97.6	129	72.5	49	49.7
Lead (mg/kg)	797 J	72.8	74.9 J	139 J	206 J	155 J	421 J	304 J	153 J
Magnesium (mg/kg)	36100 J	42400 J	5840 J	8140 J	9030 J	9470 J	11400 J	9870 J	36500 J

Station	**05EZ00**	**06EA00**	**06EB00**	**06EC00**	**06ED00**	**06EE00**	**06EV00**
Sample No	**LU00187**	**LU00193**	**LU00194**	**LU00195**	**LU00196**	**LU00197**	**LU00188**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517320**	**517330**	**517340**	**517350**	**517360**	**517370**	**517330**
Easting	**199520**	**199480**	**199480**	**199480**	**199480**	**199480**	**199520**
Metals							
Aluminum (mg/kg)	14100	9670	15000	11700	8790	14000	12700
Arsenic (mg/kg)	5.4	6.6	6.3	11.9	20.6	12.6	6.8
Beryllium (mg/kg)	123	58.6	22.2	61.9	64.7	271	695
Lead (mg/kg)	545 J	263 J	140 J	157 J	154 J	566 J	964 J
Magnesium (mg/kg)	20600 J	32100 J	17800 J	11000 J	6690 J	17100 J	18600 J

Phase II IA07 Soil

Station	03FW01	05EN01	05FL02	05FR01	05FS00	06EU01	07EV01	07FA00	07FF00
Sample No	**LU00304**	**LU00244**	**LU00243**	**LU00241**	**LU00242**	**LU00245**	**LU00246**	**LU00247**	**LU00248**
Collection Date	**11/12/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Northing	**0**	**0**	**0**	**0**	**517300**	**0**	**0**	**517380**	**517380**
Easting	**0**	**0**	**0**	**0**	**199560**	**0**	**0**	**199530**	**199540**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.172	1.44	0.679	1.07	0.37	1.07	0.212	0.5 UJ	0.5 UJ
Radium-228 (pCi/g)	0.558	0.739	0.654	0.5	0.643	0.556	0.45	0.568	0.6
Thorium-227 (pCi/g)	0.172	1.44	0.679	1.07	0.37	1.07	0.212	0.5 UJ	0.5 UJ
Thorium-228 (pCi/g)	0.558	0.739	0.654	0.5	0.643	0.556	0.45	0.568	0.6
Thorium-230 (pCi/g)	0.82	4.77	12.4	19.2	8.39	34.7	13.5	2.2	2.74
Thorium-232 (pCi/g)	0.586	0.671	0.528	0.691	0.605	0.573	0.411	0.611	0.528
Uranium-234 (pCi/g)	0.45	0.654	25.8	25.3	14.2	23.7	19.6	3.63	3.35
Uranium-235 (pCi/g)	0.0517	0.5 UJ	1.02	0.822	0.633	0.763	0.729	0.153	0.148
Uranium-238 (pCi/g)	0.61	0.675	26.1	26.6	13.8	23.3	21.4	3.65	3.5
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.303	0.5 UJ	0.5 UJ	0.39	0.315	0.5 UJ	0.291	0.5 UJ	0.201
Potassium-40 (pCi/g)	19.6	23.8	22.2	24.1	22	20.2	16.1	15.2	19.3
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.22 J	43.3 J	12.1 J	21 J	8.09 J	21.1 J	5.26 J	1.66 J	1.76 J

Station	07FK00
Sample No	**LU00249**
Collection Date	**11/03/97**
Depth (ft)	**0.0-0.5**
Northing	**517380**
Easting	**199550**
Radiological Parameters (AlphaSpec)	
Actinium-227 (pCi/g)	0.5 UJ
Radium-228 (pCi/g)	0.561
Thorium-227 (pCi/g)	0.5 UJ
Thorium-228 (pCi/g)	0.561
Thorium-230 (pCi/g)	1.32
Thorium-232 (pCi/g)	0.695
Uranium-234 (pCi/g)	0.754
Uranium-235 (pCi/g)	0.0425
Uranium-238 (pCi/g)	0.996
Radiological Parameters (GammaSpec)	
Americium-241 (pCi/g)	0 UJ
Cesium-137 (pCi/g)	0.5 UJ
Potassium-40 (pCi/g)	18.4
Protactinium-231 (pCi/g)	0 UJ
Radium-226 (pCi/g)	1.72 J

Phase IV IA07 Soil

Station	**IA07-SB0001**	**IA07-SB0001**	**IA07-SB0001**	**IA07-SB0001**	**IA07-SB0002**	**IA07-SB0002**	**IA07-SB0002**	**IA07-SB0002**	**IA07-SB0002**
Sample No	**LUSB0707**	**LUSB0708**	**LUSB0709**	**LUSB0710**	**LUSB0711**	**LUSB0712**	**LUSB0713**	**LUSB0714**	**LUSB0715**
Collection Date	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**1.0-2.0**	**3.0-3.8**	**6.0-7.0**	**8.0-9.0**	**1.0-1.5**	**3.0-3.6**	**5.0-6.0**	**7.0-8.0**	**11.0-12.0**
Duplicate ID									
Northing	**199488**	**199488**	**199488**	**199488**	**199493**	**199493**	**199493**	**199493**	**199493**
Easting	**517308**	**517308**	**517308**	**517308**	**517315**	**517315**	**517315**	**517315**	**517315**
Metals									
Beryllium (mg/kg)	20.1	6	6.8	2.2	4.6	2.6	2.7	2.8	0.62

Station	**IA07-SB0002**	**IA07-SB0002**	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0003**	**IA07-SB0003**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0004**
Sample No	**LUSB0716**	**LUSB0717**	**LUSB0718**	**LUSB0727**	**LUSB0728**	**LUSB1095**	**LUSB1096**	**LUSB0729**	**LUSB0730**
Collection Date	**06/24/98**	**06/24/98**	**06/24/98**	**06/19/98**	**06/19/98**	**10/26/98**	**10/26/98**	**06/22/98**	**06/22/98**
Depth (ft)	**13.0-14.0**	**15.0-16.0**	**17.0-18.0**	**5.0-5.6**	**6.0-7.0**	**8.0-9.0**	**9.0-10.0**	**5.0-6.0**	**6.0-6.8**
Duplicate ID									
Northing	**199493**	**199493**	**199493**	**199545**	**199545**	**199545**	**199545**	**199526**	**199526**
Easting	**517315**	**517315**	**517315**	**517346**	**517346**	**517346**	**517346**	**517341**	**517341**
Metals									
Beryllium (mg/kg)	0.57	0.41	0.25	495	435	1.9 B	0.98 B	215	141

Station	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0007**
Sample No	**LUSB1097**	**LUSB1098**	**LUSB0730D**	**LUSB0731**	**LUSB0732**	**LUSB0733**	**LUSB0734**	**LUSB0735**	**LUSB0736**
Collection Date	**10/26/98**	**10/26/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**8.0-9.0**	**9.0-10.0**	**6.0-6.8**	**5.0-6.0**	**6.0-7.0**	**5.0-6.0**	**6.0-7.0**	**5.0-6.0**	**6.0-7.0**
Duplicate ID			**LUSB9075**						
Northing	**199526**	**199526**	**199526**	**199532**	**199532**	**199563**	**199563**	**199561**	**199561**
Easting	**517341**	**517341**	**517341**	**517362**	**517362**	**517288**	**517288**	**517338**	**517338**
Metals									
Beryllium (mg/kg)	0.73 B	0.92 B	152	114	0.66	4.7	0.92	24	0.61

Station	**IA07-SB0008**	**IA07-SB0008**	**IA07-SB0008**	**IA07-SB0011**	**IA07-SB0011**	**IA07-SB0011**	**IA07-SB0011**	**IA07-SB0011**	**IA07-SB0011**
Sample No	**LUSB0737**	**LUSB0738**	**LUSB0738D**	**LUSB0739**	**LUSB0740**	**LUSB0741**	**LUSB0742**	**LUSB0743**	**LUSB0741D**
Collection Date	**06/25/98**	**06/25/98**	**06/25/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**
Depth (ft)	**5.0-6.0**	**6.0-7.0**	**6.0-7.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**2.0-3.0**
Duplicate ID			**LUSB9076**						**LUSB9078**
Northing	**199565**	**199565**	**199565**	**199512**	**199512**	**199512**	**199512**	**199512**	**199512**
Easting	**517242**	**517242**	**517242**	**517311**	**517311**	**517311**	**517311**	**517311**	**517311**
Metals									
Beryllium (mg/kg)	0.96	0.64	0.66	61.6	1	0.63	0.7	0.66	2.7

Phase IV IA07 Soil

Station	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0013**
Sample No	**LUSB0744**	**LUSB0745**	**LUSB0746**	**LUSB0747**	**LUSB0748**	**LUSB0749**	**LUSB0750**	**LUSB0751**	**LUSB0752**
Collection Date	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**
Duplicate ID									
Northing	**199520**	**199520**	**199520**	**199520**	**199520**	**199543**	**199543**	**199543**	**199543**
Easting	**517381**	**517381**	**517381**	**517381**	**517381**	**517373**	**517373**	**517373**	**517373**
Metals									
Beryllium (mg/kg)	93.7	1.1 B	1.2 B	1.1 B	0.5 B	2850	17.2	8.9 B	9.2 B

Station	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**
Sample No	**LUSB0753**	**LUSB0750D**	**LUSB0754**	**LUSB0755**	**LUSB0756**	**LUSB0757**	**LUSB0758**
Collection Date	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**4.0-5.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**
Duplicate ID		**LUSB9079**					
Northing	**199543**	**199543**	**199570**	**199570**	**199570**	**199570**	**199570**
Easting	**517373**	**517373**	**517320**	**517320**	**517320**	**517320**	**517320**
Metals							
Beryllium (mg/kg)	1.4 B	24.3	64.7	3.6 B	5.1 B	4.9 B	0.58 B

Phase IV IA07 Soil

Station	IA07-SB0001	IA07-SB0002	IA07-SB0003	IA07-SB0004	IA07-SB0005	IA07-SB0005	IA07-SB0006	IA07-SB0007	IA07-SB0008
Sample No	**LUSB0679**	**LUSB0680**	**LUSB0681**	**LUSB0684**	**LUSB0685**	**LUSB0685D**	**LUSB0682**	**LUSB0683**	**LUSB0686**
Collection Date	**06/23/98**	**06/24/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**9.0-10.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.5**	**0.1-2.5**	**1.0-2.0**	**1.0-2.0**	**1.0-1.5**
Duplicate ID						**LUSB9072**			
Northing	**199488**	**199493**	**199545**	**199526**	**199532**	**199532**	**199563**	**199561**	**199565**
Easting	**517308**	**517315**	**517346**	**517341**	**517362**	**517362**	**517288**	**517338**	**517242**
Metals									
Aluminum (mg/kg)	1730	14100	25000	22000	21200	23000	13700 J	17200 J	15000 J
Antimony (mg/kg)	0.28 UN	0.29 UJ	0.29 UN	0.3 UN	0.6 UJ	0.27 UJ	0.28 UJ	0.29 UJ	0.3 J
Arsenic (mg/kg)	1.3	6	12.1	21.8	15 B	9.2 B	5.6	8.2	10.1
Barium (mg/kg)	25.7 N	216	126 N	213 N	142 J	124 J	69.9 J	112 J	99.9 J
Beryllium (mg/kg)	1.9	0.75	299	425	17	164	25.3	53.4	1.2
Cadmium (mg/kg)	0.13 U	0.35	0.13 U	0.14 U	0.13 U	0.13 U	0.24	0.41	0.51
Calcium (mg/kg)	26900	94900	7170	5530	5520	3840	5260	4340	4170
Chromium (mg/kg)	5.2 *	22.2	33.6 *	30.9 *	32.4 B	32.3 B	20.3	23.6	22.5
Cobalt (mg/kg)	1.2	9.6	16.2	29.4	17.6 B	12.9 B	7.7	12.6	12.9
Copper (mg/kg)	3.7 *	23.4	26.8 *	23.4 *	28.4 B	22.4 B	9.6	19	20.6
Iron (mg/kg)	4230	24700	33500	40200	40000	31400	22100	28700	28200
Lead (mg/kg)	14.3 *N	10.1 J	39.3 *N	33.5 *N	44.8 J	31.6 J	19.7	15.7	12.6
Magnesium (mg/kg)	4200	16000 J	8600	6980	8300	7310	5260	6140	5770
Manganese (mg/kg)	99 *	411	754 *	2030 *	888 J	489 J	194 J	611 J	677 J
Mercury (mg/kg)	0.02 UN	0.02 U	0.05 BN	0.05 BN	0.03 B	0.05 B	0.03 B	0.03 B	0.04 B
Nickel (mg/kg)	4.3 *	29.7	41.2 *	48.1 *	45.5 B	36.5 B	22.6	33.2	34.9
Phosphorus (mg/kg)	221	484	584	570	525 B	477 B	409	424	450
Potassium (mg/kg)	235	3200	4860	3590	3450	3250	1450	1710	1560
Selenium (mg/kg)	0.28 U	0.28 U	0.28 U	0.29 U	1.8 B	1.7 B	0.27 U	0.29 U	0.27 U
Silver (mg/kg)	0.23 U	0.24 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.24 U	0.23 U
Sodium (mg/kg)	69.2 N	175	277 N	103 N	98.9 B	86.3 B	76.4 J	120 J	53.5 J
Thallium (mg/kg)	0.46 U	1.2 B	4.8	4.5	2 B	2.2 B	0.45 U	0.47 U	0.45 U
Vanadium (mg/kg)	6.3	28.9	53.8	55.1	50.8 B	49.5 B	27.5	34.5	33.3
Zinc (mg/kg)	12.7 *	63.8	87.2 *	88.6 *	85.5 B	88.7 B	72.1	84	78.7
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
1,2-Dichlorobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
1,3-Dichlorobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
1,4-Dichlorobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2,4,5-Trichlorophenol (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
2,4,6-Trichlorophenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U

Station	**IA07-SB0001**	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0008**
Sample No	**LUSB0679**	**LUSB0680**	**LUSB0681**	**LUSB0684**	**LUSB0685**	**LUSB0685D**	**LUSB0682**	**LUSB0683**	**LUSB0686**
Collection Date	**06/23/98**	**06/24/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**9.0-10.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.5**	**0.1-2.5**	**1.0-2.0**	**1.0-2.0**	**1.0-1.5**
Duplicate ID						**LUSB9072**			
Northing	**199488**	**199493**	**199545**	**199526**	**199532**	**199532**	**199563**	**199561**	**199565**
Easting	**517308**	**517315**	**517346**	**517341**	**517362**	**517362**	**517288**	**517338**	**517242**
2,4-Dichlorophenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2,4-Dimethylphenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2,4-Dinitrophenol (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
2,4-Dinitrotoluene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2,6-Dinitrotoluene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2-Chloronaphthalene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2-Chlorophenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2-Methylnaphthalene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2-Nitrophenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
2-methyl-4,6-dinitrophenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
3,3'-Dichlorobenzidine (ug/kg)	2040 U	1920 U	2030 U	2030 U	2030 U	2030 U	1920 U	1990 U	1920 U
4-Bromophenyl phenyl ether (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
4-Chloroaniline (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
4-Chlorophenylphenylether (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
4-Nitrophenol (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
4-chloro-3-methyl phenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Acenaphthene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Acenaphthylene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Anthracene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Benzo(a)anthracene (ug/kg)	407 U	384 U	73.3 J	406 U	406 U	406 U	383 U	399 U	384 U
Benzo(a)pyrene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Benzo(b)fluoranthene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Benzo(ghi)perylene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Benzo(k)fluoranthene (ug/kg)	407 U	384 U	94.1 J	406 U	406 U	406 U	383 U	399 U	384 U
Butylbenzylphthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Carbazole (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Chrysene (ug/kg)	407 U	384 U	66.7 J	406 U	406 U	406 U	383 U	399 U	384 U
Di-n-butylphthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Di-n-octylphthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Dibenz(a,h)anthracene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Dibenzofuran (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Diesel Range Organics (mg/kg)	5.3 B	2.3 B							
Diethyl phthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Dimethyl phthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Fluoranthene (ug/kg)	407 U	384 U	181 J	406 U	406 U	406 U	383 U	399 U	384 U
Fluorene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U

Station	**IA07-SB0001**	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0008**
Sample No	**LUSB0679**	**LUSB0680**	**LUSB0681**	**LUSB0684**	**LUSB0685**	**LUSB0685D**	**LUSB0682**	**LUSB0683**	**LUSB0686**
Collection Date	**06/23/98**	**06/24/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**9.0-10.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.5**	**0.1-2.5**	**1.0-2.0**	**1.0-2.0**	**1.0-1.5**
Duplicate ID						**LUSB9072**			
Northing	**199488**	**199493**	**199545**	**199526**	**199532**	**199532**	**199563**	**199561**	**199565**
Easting	**517308**	**517315**	**517346**	**517341**	**517362**	**517362**	**517288**	**517338**	**517242**
Hexachlorobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Hexachlorobutadiene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Hexachlorocyclopentadiene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Hexachloroethane (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Isophorone (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
N-Nitrosodiphenylamine (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
N-Nitrosodipropylamine (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Naphthalene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Nitrobenzene (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Pentachlorophenol (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
Phenanthrene (ug/kg)	407 U	384 U	129 J	406 U	406 U	406 U	383 U	399 U	384 U
Phenol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Pyrene (ug/kg)	407 U	384 U	147 J	406 U	406 U	406 U	383 U	399 U	384 U
bis(2-chloroethoxy)methane (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
bis(2-chloroethyl) ether (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
bis(2-ethylhexyl)phthalate (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
m,p-Cresol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
m-Nitroaniline (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
o-Cresol (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
o-Nitroaniline (ug/kg)	1020 U	961 U	1020 U	1020 U	1020 U	1020 U	958 U	997 U	959 U
p-Nitroaniline (ug/kg)	407 U	384 U	406 U	406 U	406 U	406 U	383 U	399 U	384 U
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	6.2 U	5.9 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	6 U	5.8 U
1,1,2,2-Tetrachloroethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
1,1,2-Trichloroethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
1,1-Dichloroethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
1,1-Dichloroethene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
1,2-Dichloroethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
1,2-Dichloroethylene (ug/kg)	6.2 U	5.9 U					5.9 U	6 U	5.8 U
1,2-Dichloropropane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
2-Butanone (ug/kg)	2.7 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	6.2 U
2-Hexanone (ug/kg)	12.5 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	11.6 U
4-Methyl-2-pentanone (ug/kg)	12.5 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	11.6 U
Acetone (ug/kg)	16.2 U	4 U	15.2 U	2.8 U	9 J	11.4 J	22.3 U	13.9 U	57.4 U
Benzene (ug/kg)	4.4 J	1.1 J	1.5 J	3.6 J	1.3 J	1.8 J	0.83 J	0.69 J	1 J

Station	**IA07-SB0001**	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0008**
Sample No	**LUSB0679**	**LUSB0680**	**LUSB0681**	**LUSB0684**	**LUSB0685**	**LUSB0685D**	**LUSB0682**	**LUSB0683**	**LUSB0686**
Collection Date	**06/23/98**	**06/24/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**9.0-10.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.5**	**0.1-2.5**	**1.0-2.0**	**1.0-2.0**	**1.0-1.5**
Duplicate ID						**LUSB9072**			
Northing	**199488**	**199493**	**199545**	**199526**	**199532**	**199532**	**199563**	**199561**	**199565**
Easting	**517308**	**517315**	**517346**	**517341**	**517362**	**517362**	**517288**	**517338**	**517242**
Bromoform (ug/kg)	6.2 U	5.9 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	6 U	5.8 U
Carbon disulfide (ug/kg)	20.7	26	34.2	15	22.4	40.9	55	14.5	61.5
Carbon tetrachloride (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Chlorobenzene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Chlorodibromomethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Chloroethane (ug/kg)	12.5 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	11.6 U
Chloroform (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Dichlorobromomethane (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Ethylbenzene (ug/kg)	3.3 J	5.9 U	6.1 U	3.1 J	6.1 U	6 U	5.9 U	6 U	5.8 U
Methyl Bromide (ug/kg)	12.5 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	11.6 U
Methyl Chloride (ug/kg)	12.5 U	11.8 U	12.2 U	12.2 U	12.2 U	11.9 U	11.8 U	12 U	11.6 U
Methyl Pentane Isomer (ug/kg)	8.8 J			12 J					
Methylene chloride (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Styrene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Tetrachloroethene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Toluene (ug/kg)	10.7	2.3 U	1.8 J	9.6	2 J	2.3 J	0.99 U	2.4 U	1.1 U
Trichloroethene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Vinyl chloride (ug/kg)	2.5 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.3 U
Xylenes (total) (ug/kg)	10.4	1.1 J	0.91 J	5.3 J	6.1 U	0.66 J	5.9 U	6 U	5.8 U
cis-1,3-dichloropropene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
n-Butyl Alcohol (ug/kg)	16.4 U	15 U	38.6 U	41.4 U				9 U	8.6 U
trans-1,3-Dichloropropene (ug/kg)	6.2 U	5.9 U	6.1 U	6.1 U	6.1 U	6 U	5.9 U	6 U	5.8 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0262 U	-0.0092 U	0.335 U	0.737 J	0.364 J	0.493 J	0.0816 UJ	0.249 UJ	0.338 UJ
Thorium-228 (pCi/g)	0.316 J	0.655 J	1.46	1.59	1.63	1.26 J	1.04 J	1.29 J	1.56 J
Thorium-230 (pCi/g)	0.759 J	0.889 J	2.25	2.69	2.77	1.37 J	1.51 J	2.33 J	2.59 J
Thorium-232 (pCi/g)	0.325 J	0.714 J	1.44	1.11	1.18	0.981 J	1.03 J	1.07 J	0.922 J
Uranium-233/234 (pCi/g)	1.16	0.856 J	2.11	2.36	1.97	2	0.963 J	1.48 J	1.09 J
Uranium-235 (pCi/g)	0.332 J	0.0414 U	0.23 J	0.278 J	0.242 J	0.085 U	0.119 UJ	0.0254 UJ	0.0645 UJ
Uranium-238 (pCi/g)	0.932 J	0.492 J	2.19	2.42	2	2.31	1.46 J	1.61 J	1.42 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.338 J	0.735 J	1.13	0.978 J	1.01	1.12	0.915 J	1.02	1.18
Cesium-137 (pCi/g)	0.0783 J	0.0153 U	0.0084 U	0.0084 U	0 U	0.0249 U	0.0194 U	-0.0002 U	0.0146 U
Cobalt-60 (pCi/g)	0.0164 U	-0.006 U	0.0033 U	0.0241 U	-0.016 U	0 U	0.0494 U	-0.0054 U	0.0103 U
Potassium-40 (pCi/g)	11.1	22.7	25.4	25.5	26.8	28.6	27.6	25.9	24.8
Protactinium-231 (pCi/g)	-0.143 U	0.625 U	0.384 U	0.135 U	-0.269 U	-0.901 U	0.312 U	0.115 U	-0.218 U

Phase IV IA07 Soil

Station	**IA07-SB0001**	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0008**
Sample No	**LUSB0679**	**LUSB0680**	**LUSB0681**	**LUSB0684**	**LUSB0685**	**LUSB0685D**	**LUSB0682**	**LUSB0683**	**LUSB0686**
Collection Date	**06/23/98**	**06/24/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**9.0-10.0**	**9.0-10.0**	**1.0-2.0**	**1.0-2.0**	**1.0-2.5**	**0.1-2.5**	**1.0-2.0**	**1.0-2.0**	**1.0-1.5**
Duplicate ID						**LUSB9072**			
Northing	**199488**	**199493**	**199545**	**199526**	**199532**	**199532**	**199563**	**199561**	**199565**
Easting	**517308**	**517315**	**517346**	**517341**	**517362**	**517362**	**517288**	**517338**	**517242**
Radium-226 (pCi/g)	0.551 J	1.28	1.58	1.71	1.72	1.73	1.59	1.68	1.73
Radium-228 (pCi/g)	0.338 J	0.735 J	1.13	0.978 J	1.01	1.12	0.915 J	1.02	1.18
Thorium-234 (pCi/g)	0.524 J	0.0958 U	1.49 J	2.41 J	2.44 J	0.622 U	1.58 U	1.11 U	0.913 U
Uranium-235 (pCi/g)	0.0786 U	0.285 U	0.0164 U	0.0582 U	0.137 U	0.3 J	0.238 U	0.0249 U	0.0804 U

Phase IV IA07 Soil

Station	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**
Sample No	**LUSB0714D**	**LUSB0687**	**LUSB0688**	**LUSB0689**	**LUSB0690**	**LUSB0689D**	**LUSB0691**	**LUSB0692**	**LUSB0693**
Collection Date	**06/24/98**	**06/19/98**	**06/19/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**
Depth (ft)	**7.0-8.0**	**2.6-3.6**	**4.0-5.0**	**3.0-4.0**	**4.0-5.0**	**3.0-4.0**	**3.0-4.0**	**4.0-5.0**	**3.0-4.0**
Duplicate ID	**LUSB9077**					**LUSB9073**			
Northing	**199493**	**199545**	**199545**	**199526**	**199526**	**199526**	**199532**	**199532**	**199563**
Easting	**517315**	**517346**	**517346**	**517341**	**517341**	**517341**	**517362**	**517362**	**517288**
Metals									
Aluminum (mg/kg)	5750 J								
Antimony (mg/kg)	0.3 UJ								
Arsenic (mg/kg)	4.5	16.2 B	8.4 B	8.4 B	9.9 B	7.2 B	7.9	13.8	6.7
Barium (mg/kg)	61.9 J	70.3 J	78.1 J	56.8 J	62.3 J	64.5 J	79.9 N	55.1 N	69.2 J
Beryllium (mg/kg)	2.5	381	331	113	79.7	169	90.2	7.7	1.9
Cadmium (mg/kg)	0.45								
Calcium (mg/kg)	35000								
Chromium (mg/kg)	8.4								
Cobalt (mg/kg)	3.6								
Copper (mg/kg)	10.8								
Iron (mg/kg)	11500								
Lead (mg/kg)	25.1	12.1 J	10.1 J	13.1 J	10.8 J	11.7 J	15.9 *N	11.8 *N	11.7
Magnesium (mg/kg)	9360								
Manganese (mg/kg)	197 J								
Mercury (mg/kg)									
Nickel (mg/kg)	10.7								
Phosphorus (mg/kg)	268								
Potassium (mg/kg)	1110								
Selenium (mg/kg)	0.29 U								
Silver (mg/kg)	0.24 U								
Sodium (mg/kg)	94.3 J								
Thallium (mg/kg)	0.48 U								
Vanadium (mg/kg)	14.1								
Zinc (mg/kg)	30.1								
Indicator Parameters									
Fluoride (mg/kg)		238	302	209	136	93.5	38.7	15.6	12.3
Nitrogen, Ammonia (mg/kg)		765	520	106	107	114	26.1	20.4	4.14
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)		0.486 J	0.26 U	0.592 J	0.42 J	0.223 UJ	0.355 J	0.561 J	0.156 UJ
Thorium-228 (pCi/g)		1.43	1.06	1.3 J	1.13 J	1.7 J	1.26	1.47 J	1.18 J
Thorium-230 (pCi/g)		2.13	1.83	1.82 J	2.05 J	1.75 J	2.03	2.52 J	1.85 J
Thorium-232 (pCi/g)		1.01	1.06	0.831 J	1.09 J	0.969 J	1.16	1.24 J	1.13 J
Uranium-233/234 (pCi/g)		1.86	1.84	1.94	1.89	2.37	2.49	3.14	0.779 J
Uranium-235 (pCi/g)		0.0847 U	0.0774 U	0.167 J	0.269 J	0.0958 J	0.105 U	0.195 J	0.0585 U
Uranium-238 (pCi/g)		2.32	1.86	2.21	2.01	1.99	2.6	2.24	0.738 J

Phase IV IA07 Soil

Station	**IA07-SB0002**	**IA07-SB0003**	**IA07-SB0003**	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0004**	**IA07-SB0005**	**IA07-SB0005**	**IA07-SB0006**
Sample No	**LUSB0714D**	**LUSB0687**	**LUSB0688**	**LUSB0689**	**LUSB0690**	**LUSB0689D**	**LUSB0691**	**LUSB0692**	**LUSB0693**
Collection Date	**06/24/98**	**06/19/98**	**06/19/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/22/98**	**06/25/98**
Depth (ft)	**7.0-8.0**	**2.6-3.6**	**4.0-5.0**	**3.0-4.0**	**4.0-5.0**	**3.0-4.0**	**3.0-4.0**	**4.0-5.0**	**3.0-4.0**
Duplicate ID	**LUSB9077**					**LUSB9073**			
Northing	**199493**	**199545**	**199545**	**199526**	**199526**	**199526**	**199532**	**199532**	**199563**
Easting	**517315**	**517346**	**517346**	**517341**	**517341**	**517341**	**517362**	**517362**	**517288**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)		1.17	0.857 J	0.974 J	0.957 J	0.755 J	1.03	1.13	0.989 J
Cesium-137 (pCi/g)		-0.019 U	-0.003 U	-0.0012 U	-0.0143 U	0.0042 U	-0.0018 U	-0.0223 U	-0.0094 U
Cobalt-60 (pCi/g)		-0.0007 U	-0.0165 U	0.0172 U	-0.015 U	-0.0031 U	-0.0084 U	-0.0016 U	-0.0328 U
Potassium-40 (pCi/g)		26.8	23.3	20.8	23	19.5	25.3	21.9	24.2
Protactinium-231 (pCi/g)		0.723 U	-0.114 U	0.349 U	0.692 U	0.173 U	-0.268 U	-0.6 U	0.576 U
Radium-226 (pCi/g)		1.61	1.14	1.13	1.53	1.34	1.51	1.36	1.15
Radium-228 (pCi/g)		1.17	0.857 J	0.974 J	0.957 J	0.755 J	1.03	1.13	0.989 J
Thorium-234 (pCi/g)		1.38 U	1.67 J	0.841 U	1.49 J	0.757 U	1.16 U	0.747 U	0.814 U
Uranium-235 (pCi/g)		0.016 U	0.125 U	0.0815 U	0.238 J	0.187 U	0.142 U	0.23 U	0.0673 U

Station	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0007**	**IA07-SB0008**	**IA07-SB0008**	**IA07-SB0009**	**IA07-SB0009**	**IA07-SB0009**	**IA07-SB0009**
Sample No	**LUSB0694**	**LUSB0695**	**LUSB0696**	**LUSB0697**	**LUSB0698**	**LUSB0699**	**LUSB0700**	**LUSB0701**	**LUSB0702**
Collection Date	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**
Depth (ft)	**4.0-5.0**	**3.0-4.0**	**4.0-4.5**	**3.0-4.0**	**4.0-5.0**	**0.5-1.5**	**3.0-4.0**	**4.0-5.0**	**6.5-7.5**
Duplicate ID									
Northing	**199563**	**199561**	**199561**	**199565**	**199565**	**199494**	**199494**	**199494**	**199494**
Easting	**517288**	**517338**	**517338**	**517242**	**517242**	**517182**	**517182**	**517182**	**517182**
Metals									
Aluminum (mg/kg)									
Antimony (mg/kg)									
Arsenic (mg/kg)	8.6	7	15.2	4.3	9.3	11.1	1 B	8.8	7.3
Barium (mg/kg)	66.2 J	78.6 J	89.6 J	62	115	243	110	93.1	47.9
Beryllium (mg/kg)	4	70.1	25.2	0.76	0.68	9.8	0.26 B	0.85	0.61
Cadmium (mg/kg)									
Calcium (mg/kg)									
Chromium (mg/kg)									
Cobalt (mg/kg)									
Copper (mg/kg)									
Iron (mg/kg)									
Lead (mg/kg)	9.3	10.9	14.8	7.4 J	9.7 J	242	2.2	14	8.8
Magnesium (mg/kg)									
Manganese (mg/kg)									
Mercury (mg/kg)									
Nickel (mg/kg)									
Phosphorus (mg/kg)									
Potassium (mg/kg)									
Selenium (mg/kg)									
Silver (mg/kg)									
Sodium (mg/kg)									
Thallium (mg/kg)									
Vanadium (mg/kg)									
Zinc (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)	12.3	40.4	16.5	4.51	4.04	2.82	2.28	4.85	6.83
Nitrogen, Ammonia (mg/kg)	6.13	4.8	3.07	2.7	1.62	7.58	3.05	35.5	1.77
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.333 R	0.189 UJ	0.0565 UJ	-0.0823 U	-0.045 U	0.199 UJ	0 UJ	0.0089 UJ	-0.0043 U
Thorium-228 (pCi/g)	1.04 J	1.09 J	1.56 J	1.2	1.11	0.852 J	0.0762 UJ	1.07 J	1.61
Thorium-230 (pCi/g)	1.88 J	2.44 J	2.03 J	1.93	1.55	1.74 J	0.162 J	1.95 J	2.33
Thorium-232 (pCi/g)	0.738 J	1.13 J	1.27 J	1.24	0.909 J	0.77 J	0.0655 UJ	0.881 J	1.08
Uranium-233/234 (pCi/g)	1.08 J	1.07	1.05	0.707 J	0.998 J	0.683 J	0.122 J	1.08	1
Uranium-235 (pCi/g)	0.0733 UJ	0.05 U	0.0453 U	0.0538 U	0.0548 U	0.0728 U	0.0246 U	0.0889 U	-0.005 U
Uranium-238 (pCi/g)	0.986 J	1.37	1	0.986 J	1.11	0.799 J	0.0977 J	0.915 J	1.41

Phase IV IA07 Soil

Station	**IA07-SB0006**	**IA07-SB0007**	**IA07-SB0007**	**IA07-SB0008**	**IA07-SB0008**	**IA07-SB0009**	**IA07-SB0009**	**IA07-SB0009**	**IA07-SB0009**
Sample No	**LUSB0694**	**LUSB0695**	**LUSB0696**	**LUSB0697**	**LUSB0698**	**LUSB0699**	**LUSB0700**	**LUSB0701**	**LUSB0702**
Collection Date	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**
Depth (ft)	**4.0-5.0**	**3.0-4.0**	**4.0-4.5**	**3.0-4.0**	**4.0-5.0**	**0.5-1.5**	**3.0-4.0**	**4.0-5.0**	**6.5-7.5**
Duplicate ID									
Northing	**199563**	**199561**	**199561**	**199565**	**199565**	**199494**	**199494**	**199494**	**199494**
Easting	**517288**	**517338**	**517338**	**517242**	**517242**	**517182**	**517182**	**517182**	**517182**
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.787 J	1.11	1.15	1.01	0.805 J	1.11	0.075 U	1.17	0.914 J
Cesium-137 (pCi/g)	0 U	0.0212 U	-0.0182 U	0.0497 J	-0.0085 U	0.14	0.0042 U	-0.0439 U	0.0162 U
Cobalt-60 (pCi/g)	0.0141 U	0.0039 U	-0.002 U	0 U	-0.0069 U	-0.0301 U	0.0123 U	-0.0244 U	-0.0083 U
Potassium-40 (pCi/g)	19.7	25.9	26.3	22	19.8	15	0.297 U	29.6	23.3
Protactinium-231 (pCi/g)	0.39 U	0.131 U	-0.0618 U	-0.433 U	-0.0728 U	-0.517 U	0.545 U	0.797 U	0.267 U
Radium-226 (pCi/g)	1.07	1.32	1.37	1.4	1.11	1.25	0.884 J	1.67	1.33
Radium-228 (pCi/g)	0.787 J	1.11	1.15	1.01	0.805 J	1.11	0.075 U	1.17	0.914 J
Thorium-234 (pCi/g)	1.34 J	1.82 J	0.925 J	1.46 J	1.64 U	1.18 J	0.724 U	0.752 U	0.862 U
Uranium-235 (pCi/g)	0.0711 U	0.196 U	0.106 U	0.183 J	0.0166 U	0.2 J	0.0165 U	0.138 U	0.067 U

Station	**IA07-SB0009**	**IA07-SB0010**	**IA07-SB0010**	**IA07-SB0010**
Sample No	**LUSB0700D**	**LUSB0703**	**LUSB0704**	**LUSB0705**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**
Depth (ft)	**3.0-4.0**	**0.5-1.5**	**2.2-3.3**	**5.0-6.0**
Duplicate ID	**LUSB9074**			
Northing	**199494**	**199502**	**199502**	**199502**
Easting	**517182**	**517186**	**517186**	**517186**
Metals				
Aluminum (mg/kg)				
Antimony (mg/kg)				
Arsenic (mg/kg)	0.65 U	8.2	2	8.3
Barium (mg/kg)	102	225	115	52.8
Beryllium (mg/kg)	0.21 B	13.7	1.9	0.66
Cadmium (mg/kg)				
Calcium (mg/kg)				
Chromium (mg/kg)				
Cobalt (mg/kg)				
Copper (mg/kg)				
Iron (mg/kg)				
Lead (mg/kg)	1.9	442	8.6	11.9
Magnesium (mg/kg)				
Manganese (mg/kg)				
Mercury (mg/kg)				
Nickel (mg/kg)				
Phosphorus (mg/kg)				
Potassium (mg/kg)				
Selenium (mg/kg)				
Silver (mg/kg)				
Sodium (mg/kg)				
Thallium (mg/kg)				
Vanadium (mg/kg)				
Zinc (mg/kg)				
Indicator Parameters				
Fluoride (mg/kg)	4.92	6.11	5.99	3.74
Nitrogen, Ammonia (mg/kg)	0 U	18.9	5.49	1.82
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	-0.0553 UJ	0.202 U	0.0194 U	0.0945 U
Thorium-228 (pCi/g)	-0.0016 UJ	1.36	0.645 J	1.67
Thorium-230 (pCi/g)	0.221 J	1.24	0.277 J	1.87
Thorium-232 (pCi/g)	0.0637 UJ	1.11	0.119 U	1.47
Uranium-233/234 (pCi/g)	0.083 J	0.665 J	0.142 J	1.4
Uranium-235 (pCi/g)	0.0139 U	0.0242 U	0 U	0.0413 U
Uranium-238 (pCi/g)	0.163 J	0.881 J	0.367 J	1.05

Station	**IA07-SB0009**	**IA07-SB0010**	**IA07-SB0010**	**IA07-SB0010**
Sample No	**LUSB0700D**	**LUSB0703**	**LUSB0704**	**LUSB0705**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**
Depth (ft)	**3.0-4.0**	**0.5-1.5**	**2.2-3.3**	**5.0-6.0**
Duplicate ID	**LUSB9074**			
Northing	**199494**	**199502**	**199502**	**199502**
Easting	**517182**	**517186**	**517186**	**517186**
Radiological Parameters (GammaSpec)				
Actinium-228 (pCi/g)	0.0887 U	0.649 J	0.045 U	0.984 J
Cesium-137 (pCi/g)	-0.0059 U	0.151	0.14	0.0103 U
Cobalt-60 (pCi/g)	0.0062 U	0.0049 U	0.0004 U	0.0224 U
Potassium-40 (pCi/g)	0.476 U	15.9	2.24	27.5
Protactinium-231 (pCi/g)	-0.0694 U	-0.0795 U	0.202 U	-0.361 U
Radium-226 (pCi/g)	0.889 J	1.09	0.968 J	1.13
Radium-228 (pCi/g)	0.0887 U	0.649 J	0.045 U	0.984 J
Thorium-234 (pCi/g)	0.252 U	1.78 J	0.546 U	1.04 U
Uranium-235 (pCi/g)	-0.0759 U	0.0069 U	0.0985 U	0.0438 U

Phase IV IA07 Soil

Station	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0012**	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0013**
Sample No	**LUSB0744**	**LUSB0745**	**LUSB0746**	**LUSB0747**	**LUSB0748**	**LUSB0749**	**LUSB0750**	**LUSB0751**	**LUSB0752**
Collection Date	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/23/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**
Duplicate ID									
Northing	**199520**	**199520**	**199520**	**199520**	**199520**	**199543**	**199543**	**199543**	**199543**
Easting	**517381**	**517381**	**517381**	**517381**	**517381**	**517373**	**517373**	**517373**	**517373**
Metals									
Beryllium (mg/kg)	93.7	1.1 B	1.2 B	1.1 B	0.5 B	2850	17.2	8.9 B	9.2 B

Station	**IA07-SB0013**	**IA07-SB0013**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**	**IA07-SB0014**
Sample No	**LUSB0753**	**LUSB0750D**	**LUSB0754**	**LUSB0755**	**LUSB0756**	**LUSB0757**	**LUSB0758**
Collection Date	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**4.0-5.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**
Duplicate ID		**LUSB9079**					
Northing	**199543**	**199543**	**199570**	**199570**	**199570**	**199570**	**199570**
Easting	**517373**	**517373**	**517320**	**517320**	**517320**	**517320**	**517320**
Metals							
Beryllium (mg/kg)	1.4 B	24.3	64.7	3.6 B	5.1 B	4.9 B	0.58 B

Phase II IA08 Soil

Station	**01AX00**	**01BD00**	**01BJ00**
Sample No	**LU00210**	**LU00211**	**LU00212**
Collection Date	**10/29/97**	**10/29/97**	**10/29/97**
Depth (ft)	**0.0-0.1**	**0.0-0.1**	**0.0-0.1**
Northing	**517100**	**517100**	**517120**
Easting	**199320**	**199330**	**199340**
Metals			
Aluminum (mg/kg)	14800	20700	17800
Arsenic (mg/kg)	8.5	8.9	8.8
Beryllium (mg/kg)	2.6	2.3	4.6
Lead (mg/kg)	62.8 J	47.3 J	142 J
Magnesium (mg/kg)	7420 J	8450 J	8780 J

Phase IV IA08 Soil

Station	**IA08-SB0001**	**IA08-SB0002**	**IA08-TR0001**
Sample No	**LUSB0760**	**LUSB0761**	**LUSB0759**
Collection Date	**08/03/98**	**08/03/98**	**07/27/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**6.0-6.0**
Duplicate ID			
Northing	**199584**	**199521**	**199350**
Easting	**517173**	**517128**	**517117**
Metals			
Aluminum (mg/kg)	22100	14100	9510
Antimony (mg/kg)	0.29 U	0.71 B	0.31 BN
Arsenic (mg/kg)	11.2	6.5	4.1
Barium (mg/kg)	122	116	87 N*
Beryllium (mg/kg)	7.3	0.81	0.47
Cadmium (mg/kg)	0.39	0.28	0.35
Calcium (mg/kg)	26600	79500	7200
Chromium (mg/kg)	27	17.8	13.4
Cobalt (mg/kg)	10.3	4.9	4.9
Copper (mg/kg)	22.5	30.5	26.8
Iron (mg/kg)	30500	16500	12500
Lead (mg/kg)	14.5	55.8	42.1 *
Magnesium (mg/kg)	18900	44900	3940
Manganese (mg/kg)	244	127	96.1 N*
Mercury (mg/kg)	0.02 U	0.02 U	2.7
Nickel (mg/kg)	26.3	16	15.9 N
Phosphorus (mg/kg)	418	723	1160 *
Potassium (mg/kg)	3860	3040	1710
Selenium (mg/kg)	1.1 B	1 B	1.3
Silver (mg/kg)	0.26 B	0.24 U	0.22 B
Sodium (mg/kg)	161	188	340 E
Thallium (mg/kg)	0.47 U	0.98 B	0.36 U
Vanadium (mg/kg)	51.1	27.1	18.2 N
Zinc (mg/kg)	77.9	85.3	152 *
Indicator Parameters			
Fluoride (mg/kg)			
Nitrogen, Ammonia (mg/kg)			
Semivolatile Organics			
1,2,4-Trichlorobenzene (ug/kg)	406 U	427 U	14600 U
1,2-Dichlorobenzene (ug/kg)	406 U	427 U	14600 U
1,3-Dichlorobenzene (ug/kg)	406 U	427 U	14600 U
1,4-Dichlorobenzene (ug/kg)	406 U	427 U	14600 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	406 U	427 U	14600 U
2,4,5-Trichlorophenol (ug/kg)	1020 U	1070 U	36500 U
2,4,6-Trichlorophenol (ug/kg)	406 U	427 U	14600 U

Station	IA08-SB0001	IA08-SB0002	IA08-TR0001
Sample No	LUSB0760	LUSB0761	LUSB0759
Collection Date	08/03/98	08/03/98	07/27/98
Depth (ft)	0.0-1.0	0.0-1.0	6.0-6.0
Duplicate ID			
Northing	199584	199521	199350
Easting	517173	517128	517117
2,4-Dichlorophenol (ug/kg)	406 U	427 U	14600 U
2,4-Dimethylphenol (ug/kg)	406 U	427 U	14600 U
2,4-Dinitrophenol (ug/kg)	1020 U	1070 U	36500 U
2,4-Dinitrotoluene (ug/kg)	406 U	427 U	14600 U
2,6-Dinitrotoluene (ug/kg)	406 U	427 U	14600 U
2-Chloronaphthalene (ug/kg)	406 U	427 U	14600 U
2-Chlorophenol (ug/kg)	406 U	427 U	14600 U
2-Methylnaphthalene (ug/kg)	406 U	427 U	14600 U
2-Nitrophenol (ug/kg)	406 U	427 U	14600 U
2-methyl-4,6-dinitrophenol (ug/kg)	406 U	427 U	14600 U
3,3'-Dichlorobenzidine (ug/kg)	2030 U	2140 U	73100 U
3-Eicosene, (E)- (ug/kg)			14600 U
4-Bromophenyl phenyl ether (ug/kg)	406 U	427 U	14600 U
4-Chloroaniline (ug/kg)	406 U	427 U	14600 U
4-Chlorophenylphenylether (ug/kg)	406 U	427 U	14600 U
4-Nitrophenol (ug/kg)	1020 U	1070 U	36500 U
4-chloro-3-methyl phenol (ug/kg)	406 U	427 U	14600 U
Acenaphthene (ug/kg)	406 U	427 U	14600 U
Acenaphthylene (ug/kg)	406 U	427 U	14600 U
Acetamide, N-methyl-N-[4-[4-methoxy-1-he (ug/kg)			14600 U
Anthracene (ug/kg)	406 U	427 U	14600 U
Benzo(a)anthracene (ug/kg)	406 U	427 U	14600 U
Benzo(a)pyrene (ug/kg)	406 U	427 U	14600 U
Benzo(b)fluoranthene (ug/kg)	406 U	427 U	14600 U
Benzo(ghi)perylene (ug/kg)	406 U	427 U	14600 U
Benzo(k)fluoranthene (ug/kg)	406 U	427 U	14600 U
Butylbenzylphthalate (ug/kg)	406 U	427 U	14600 U
Carbazole (ug/kg)	406 U	427 U	14600 U
Cholestane, 4,5-epoxy-, (4.alpha.,5.alph (ug/kg)			14600 U
Cholestanol (ug/kg)			14600 U
Chrysene (ug/kg)	406 U	427 U	14600 U
Cyclohexane, hexyl- (ug/kg)			14600 U
Di-n-butylphthalate (ug/kg)	406 U	427 U	14600 U
Di-n-octylphthalate (ug/kg)	406 U	427 U	14600 U
Dibenz(a,h)anthracene (ug/kg)	406 U	427 U	14600 U
Dibenzofuran (ug/kg)	406 U	427 U	14600 U

Station	IA08-SB0001	IA08-SB0002	IA08-TR0001
Sample No	LUSB0760	LUSB0761	LUSB0759
Collection Date	08/03/98	08/03/98	07/27/98
Depth (ft)	0.0-1.0	0.0-1.0	6.0-6.0
Duplicate ID			
Northing	199584	199521	199350
Easting	517173	517128	517117
Diethyl phthalate (ug/kg)	406 U	427 U	14600 U
Dimethyl phthalate (ug/kg)	406 U	427 U	14600 U
Dodecane, 2,6,10-trimethyl- (ug/kg)			14600 U
Fluoranthene (ug/kg)	406 U	427 U	14600 U
Fluorene (ug/kg)	406 U	427 U	14600 U
Hexachlorobenzene (ug/kg)	406 U	427 U	14600 U
Hexachlorobutadiene (ug/kg)	406 U	427 U	14600 U
Hexachlorocyclopentadiene (ug/kg)	406 U	427 U	14600 U
Hexachloroethane (ug/kg)	406 U	427 U	14600 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	406 U	427 U	14600 U
Isophorone (ug/kg)	406 U	427 U	14600 U
N-Nitrosodiphenylamine (ug/kg)	406 U	427 U	14600 U
N-Nitrosodipropylamine (ug/kg)	406 U	427 U	14600 U
Naphthalene (ug/kg)	406 U	427 U	14600 U
Nitrobenzene (ug/kg)	406 U	427 U	14600 U
Pentachlorophenol (ug/kg)	1020 U	1070 U	36500 U
Phenanthrene (ug/kg)	406 U	427 U	14600 U
Phenol (ug/kg)	406 U	427 U	14600 U
Pyrene (ug/kg)	406 U	427 U	14600 U
Undecane, 2,6-dimethyl- (ug/kg)			14600 U
bis(2-chloroethoxy)methane (ug/kg)	406 U	427 U	14600 U
bis(2-chloroethyl) ether (ug/kg)	406 U	427 U	14600 U
bis(2-ethylhexyl)phthalate (ug/kg)	406 U	408 J	14600 U
m,p-Cresol (ug/kg)	406 U	427 U	14600 U
m-Nitroaniline (ug/kg)	1020 U	1070 U	36500 U
o-Cresol (ug/kg)	406 U	427 U	14600 U
o-Nitroaniline (ug/kg)	1020 U	1070 U	36500 U
p-Nitroaniline (ug/kg)	406 U	427 U	14600 U
Volatile Organics			
1,1,1-Trichloroethane (ug/kg)	4.9 U	5.3 U	15600 U
1,1,2,2-Tetrachloroethane (ug/kg)	4.9 U	5.3 U	15600 U
1,1,2-Trichloroethane (ug/kg)	4.9 U	5.3 U	15600 U
1,1-Dichloroethane (ug/kg)	4.9 U	5.3 U	15600 U
1,1-Dichloroethene (ug/kg)	4.9 U	5.3 U	15600 U
1,2-Dichloroethane (ug/kg)	4.9 U	5.3 U	15600 U
1,2-Dichloroethylene (ug/kg)	4.9 U	5.3 U	15600 U

Station	**IA08-SB0001**	**IA08-SB0002**	**IA08-TR0001**
Sample No	**LUSB0760**	**LUSB0761**	**LUSB0759**
Collection Date	**08/03/98**	**08/03/98**	**07/27/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**6.0-6.0**
Duplicate ID			
Northing	**199584**	**199521**	**199350**
Easting	**517173**	**517128**	**517117**
1,2-Dichloropropane (ug/kg)	4.9 U	5.3 U	15600 U
2-Butanone (ug/kg)	9.8 U	10.7 U	15600 U
2-Hexanone (ug/kg)	9.8 U	10.7 U	15600 U
4-Methyl-2-pentanone (ug/kg)	9.8 U	10.7 U	15600 U
Acetone (ug/kg)	11.7	22.8 U	15600 U
Benzene (ug/kg)	4.9 U	2.3 J	15600 U
Bromoform (ug/kg)	4.9 U	5.3 U	15600 U
Carbon disulfide (ug/kg)	4.9 U	5.3 U	15600 U
Carbon tetrachloride (ug/kg)	4.9 U	5.3 U	15600 U
Chlorobenzene (ug/kg)	4.9 U	5.3 U	15600 U
Chlorodibromomethane (ug/kg)	4.9 U	5.3 U	15600 U
Chloroethane (ug/kg)	9.8 U	10.7 U	15600 U
Chloroform (ug/kg)	1.2 JB	5.3 U	343 J
Dichlorobromomethane (ug/kg)	4.9 U	5.3 U	15600 U
Ethylbenzene (ug/kg)	4.9 U	5.3 U	15600 U
Methyl Bromide (ug/kg)	9.8 U	10.7 U	15600 U
Methyl Chloride (ug/kg)	9.8 U	10.7 U	15600 U
Methylene chloride (ug/kg)	4.9 U	5.3 U	498 J
Styrene (ug/kg)	4.9 U	5.3 U	15600 U
Tetrachloroethene (ug/kg)	4.9 U	5.3 U	15600 U
Toluene (ug/kg)	1.1 J	1.9 J	1780 J
Trichloroethene (ug/kg)	4.9 U	5.3 U	15600 U
Vinyl chloride (ug/kg)	2 U	2.1 U	15600 U
Xylenes (total) (ug/kg)	4.9 U	1.2 J	15600 U
cis-1,3-dichloropropene (ug/kg)	4.9 U	5.3 U	15600 U
trans-1,3-Dichloropropene (ug/kg)	4.9 U	5.3 U	15600 U
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	0.0445 U	-0.0201 U	0.0393 U
Thorium-228 (pCi/g)	0.868 J	0.798 J	0.8 J
Thorium-230 (pCi/g)	1.65	1.03	1.48
Thorium-232 (pCi/g)	0.939 J	0.775 J	0.806 J
Uranium-233/234 (pCi/g)	0.818 J	1.19	1.01
Uranium-235 (pCi/g)	0.0544 U	0.104 J	0.0611 J
Uranium-235/236 (pCi/g)			
Uranium-238 (pCi/g)	0.922 J	1.27	1.1
Radiological Parameters (GammaSpec)			

Phase IV IA08 Soil

Station	**IA08-SB0001**	**IA08-SB0002**	**IA08-TR0001**
Sample No	**LUSB0760**	**LUSB0761**	**LUSB0759**
Collection Date	**08/03/98**	**08/03/98**	**07/27/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**6.0-6.0**
Duplicate ID			
Northing	**199584**	**199521**	**199350**
Easting	**517173**	**517128**	**517117**
Actinium-228 (pCi/g)	0.994 J	0.832 J	0.941 J
Cesium-137 (pCi/g)	0.0257 U	0.0335 U	0.0122 U
Cobalt-60 (pCi/g)	-0.0302 U	-0.0086 U	0.01 U
Potassium-40 (pCi/g)	24.6	15.3	22.5
Protactinium-231 (pCi/g)	-0.0194 U	-0.126 U	-0.0698 U
Radium-226 (pCi/g)	1.57	1.3	1.38
Radium-228 (pCi/g)	0.994 J	0.832 J	0.941 J
Thorium-234 (pCi/g)	0.787 U	2.27 J	1.62 U
Uranium-235 (pCi/g)	0.136 U	0.152 U	0.0777 U

Phase IV IA08 Soil

Station	**IA08-SB0003**	**IA08-SB0003**	**IA08-SB0003**	**IA08-SB0003**	**IA08-SB0003**	**IA08-SB0004**	**IA08-SB0004**	**IA08-SB0004**
Sample No	**LUSB0762**	**LUSB0763**	**LUSB0764**	**LUSB0762D**	**LUSB9580**	**LUSB0977**	**LUSB0978**	**LUSB0979**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/29/98**	**06/29/98**	**06/29/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**4.0-5.0**	**0.5-1.5**	**0.5-1.5**	**0.5-1.5**	**1.5-2.5**	**4.0-5.0**
Duplicate ID				**LUSB9080**				
Northing	**199434**	**199434**	**199434**	**199434**	**199434**	**199340**	**199340**	**199340**
Easting	**517120**	**517120**	**517120**	**517120**	**517120**	**517163**	**517163**	**517163**
Metals								
Arsenic (mg/kg)	5.3	11.3	7	7.4		7.2	7.1	8.2
Barium (mg/kg)	99.6	112	88.9	100		156	135	92.1
Beryllium (mg/kg)	1.6	0.94	0.79	1.2		54.8 E	29.2 E	1.1 E
Lead (mg/kg)	72.9	31.2	13.4	28.2		20.4	30.9	9.9
Indicator Parameters								
Fluoride (mg/kg)	3.85	3.74	3.57	2.21		8.04	6.66	3.77
Nitrogen, Ammonia (mg/kg)	31.1	11.8	7.25	38.8		11	13.6	5.17
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/g)	-0.0255 U	0.187 U	0.0027 U	0.17 U	0.04 U	-0.0048 U	0.0703 U	0.091 U
Thorium-228 (pCi/g)	1.8	2.72	1.26	1.07	0.42	0.678 J	1.48	0.806 J
Thorium-230 (pCi/g)	1.6	2.41	2.13	1.96	0.95	1.37	1.93	1.44
Thorium-232 (pCi/g)	1.07	1.5	1.12	1.01	0.79	0.621 J	1.07	0.714 J
Uranium-233/234 (pCi/g)	1.46	1.12	0.866 J	1.28	0.38	1.08	1.14	0.91 J
Uranium-235 (pCi/g)	0.0219 U	0.0686 U	0.0857 J	0.113 J		0.105 J	0.0293 U	0.0437 U
Uranium-235/236 (pCi/g)					0.02 U			
Uranium-238 (pCi/g)	1.28	1.31	1.19	1.54	0.5	0.968 J	1.18	0.935 J
Radiological Parameters (GammaSpec)								
Actinium-228 (pCi/g)	1.05	1.15	1.04	1.24		1.06	1.21	1.05
Cesium-137 (pCi/g)	0.118	0.0986 J	0.023 U	0.0858 J		0.0698 J	0.0053 U	0 U
Cobalt-60 (pCi/g)	0.0054 U	-0.0014 U	-0.0029 U	-0.0035 U		0.0175 U	-0.0186 U	0.0107 U
Potassium-40 (pCi/g)	25	24.6	24.8	23.7		25.7	28.7	24.3
Protactinium-231 (pCi/g)	-0.4 U	-0.0025 U	0.0318 U	0.111 U		-0.713 U	-1.52 U	-0.725 U
Radium-226 (pCi/g)	1.48	1.34	1.35	1.38		1.4	1.58	1.61
Radium-228 (pCi/g)	1.05	1.15	1.04	1.24		1.06	1.21	1.05
Thorium-234 (pCi/g)	1.18 U	1.08 U	1.77 J	1.93 J		2.17 J	1.8 J	1.82 J
Uranium-235 (pCi/g)	0.15 U	0.212 U	0.258 U	0.0547 U		0.192 U	0.207 U	0.126 U

Phase IV IA08 Soil

Station	**IA08-SB0005**	**IA08-SB0005**	**IA08-SB0005**
Sample No	**LUSB0980**	**LUSB0981**	**LUSB0982**
Collection Date	**07/01/98**	**07/01/98**	**07/01/98**
Depth (ft)	**0.5-1.5**	**1.5-2.5**	**4.0-5.0**
Duplicate ID			
Northing	**199396**	**199396**	**199396**
Easting	**517133**	**517133**	**517133**
Metals			
Arsenic (mg/kg)	5.6	7.9	6.9
Barium (mg/kg)	106	128	51.8
Beryllium (mg/kg)	1	0.81	0.47
Lead (mg/kg)	48.6	13.7	7.3
Indicator Parameters			
Fluoride (mg/kg)	5.82	1.67	1.76
Nitrogen, Ammonia (mg/kg)	31.5	19.8	40.4
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	0.127 U	0.192 U	0.268 U
Thorium-228 (pCi/g)	1.36	0.916 J	1.07
Thorium-230 (pCi/g)	1.76	1.45	1.6
Thorium-232 (pCi/g)	0.893 J	0.62 J	0.896 J
Uranium-233/234 (pCi/g)	1.01	0.923 J	1.16
Uranium-235 (pCi/g)	0.0961 U	0.181 U	0.0715 U
Uranium-235/236 (pCi/g)			
Uranium-238 (pCi/g)	1.15	1.06	0.641 J
Radiological Parameters (GammaSpec)			
Actinium-228 (pCi/g)	0.979 J	1.12	0.964 J
Cesium-137 (pCi/g)	0.0713 J	0.0081 U	-0.0078 U
Cobalt-60 (pCi/g)	-0.0046 U	-0.0184 U	-0.0209 U
Potassium-40 (pCi/g)	23.1	25.8	23.5
Protactinium-231 (pCi/g)	-0.158 U	-0.248 U	0.0299 U
Radium-226 (pCi/g)	1.49	1.53	0.938 J
Radium-228 (pCi/g)	0.979 J	1.12	0.964 J
Thorium-234 (pCi/g)	1.04 J	0.911 U	1.12 J
Uranium-235 (pCi/g)	0.0912 U	0.152 U	0.0452 U

Phase IV IA08 Soil
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Station	**IA08-SB0001**	**IA08-SB0001**	**IA08-SB0002**	**IA08-SB0002**
Sample No	**LUSB0765**	**LUSB0766**	**LUSB0768**	**LUSB0769**
Collection Date	**08/03/98**	**08/03/98**	**08/03/98**	**08/03/98**
Depth (ft)	**1.0-2.0**	**2.0-3.0**	**1.0-2.0**	**2.0-3.0**
Duplicate ID				
Northing	**199584**	**199584**	**199521**	**199521**
Easting	**517173**	**517173**	**517128**	**517128**
Metals				
Beryllium (mg/kg)	6.6	4.2	0.71	0.85

Phase IV IA09 Offsite Soil

Station	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**	**IA09-OMW-29(I)**	**IA09-OMW-30(B)**	**IA09-OMW-31(I)**	**IA09-OMW-32(B)**	**IA09-OMW-33(I)**
Sample No	**LUSB1076**	**LUSB1077**	**LUSB1078**	**LUSB1079**	**LUSB1080**	**LUSB1081**	**LUSB1082**
Collection Date	**10/29/98**	**10/28/98**	**10/22/98**	**10/21/98**	**10/20/98**	**10/19/98**	**10/27/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**2.0-0.0**	**2.5-0.0**	**0.0-0.5**
Duplicate ID							
Northing	**199593**	**199593**	**199684**	**199687**	**199712**	**199712**	**199801**
Easting	**517330**	**517327**	**517109**	**517109**	**517305**	**517308**	**517203**
Metals							
Beryllium (mg/kg)	1.7 B	1.6 B	2.9 B	2.2 B	0.96 B	0.63 B	0.9 B

Station	**IA09-OMW-34(B)**	**IA09-OMW-35(I)**	**IA09-OMW-36(B)**	**IA09-OMW-37(I)**	**IA09-OMW-38(B)**
Sample No	**LUSB1083**	**LUSB1084**	**LUSB1085**	**LUSB1086**	**LUSB1087**
Collection Date	**10/26/98**	**10/21/98**	**10/20/98**	**10/26/98**	**10/22/98**
Depth (ft)	**0.0-0.5**	**2.0-0.0**	**2.3-2.4**	**0.0-0.5**	**0.0-0.5**
Duplicate ID					
Northing	**199801**	**199796**	**199799**	**199914**	**199915**
Easting	**517206**	**517506**	**517506**	**517179**	**517182**
Metals					
Beryllium (mg/kg)	0.89 B	0.84 B	0.96 B	3.1 B	1.7 B

Phase IV IA10 Soil

Station	**IA10-SB0008**	**IA10-SB0015**	**IA10-SB0020**	**IA10-SB0024**	**IA10-SB0025**
Sample No	**LUSB0771**	**LUSB0772**	**LUSB0773**	**LUSB0816**	**LUSB0819**
Collection Date	**08/11/98**	**08/21/98**	**08/21/98**	**08/27/98**	**08/28/98**
Depth (ft)	**2.0-2.6**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**0**	**200812**	**200771**	**199563**	**199235**
Easting	**0**	**519371**	**520593**	**517045**	**517430**
Metals					
Aluminum (mg/kg)	8210	15500	15300	19900	
Antimony (mg/kg)	0.25 UN	1.5 BN	0.76 UN	0.31 UN	
Arsenic (mg/kg)	12	6.6	6.2	10	2.3
Barium (mg/kg)	69.9	88.4	83.2	114 *	15.8
Beryllium (mg/kg)	1.4	55.5	18.5	1	0.14 B
Cadmium (mg/kg)	0.19 B	2.1	1.6	0.14 U	
Calcium (mg/kg)	64100	42800	39000	4650	
Chromium (mg/kg)	13.4	22	21.2	28.8	
Cobalt (mg/kg)	10.2	10.1	9.7	12.9 *	
Copper (mg/kg)	24.5	23.3	25.4	25.4	
Iron (mg/kg)	24600	22100	22600	33600	
Lead (mg/kg)	11.4	28	27.4	14.5	12.2
Magnesium (mg/kg)	15800 *	10900	12000	6400	
Manganese (mg/kg)	480	550	514	371 *	
Mercury (mg/kg)	0.04 B*	0.08 B*	0.06 B*	0.03 B	
Nickel (mg/kg)	28.1	26.6	26.6	34.6 *	
Phosphorus (mg/kg)	430	630	703	514	
Potassium (mg/kg)	1540	2700	2780	2600	
Selenium (mg/kg)	1.8	1.5 B	1.4 B	2.7	
Silver (mg/kg)	0.21 U	0.58 U	0.62 U	0.25 U	
Sodium (mg/kg)	133 E	143 E	133 E	77.2 E	
Thallium (mg/kg)	0.41 U	2.3 B	1.2 U	0.84 B	
Vanadium (mg/kg)	17.5	31.9	32.2	41.2	
Zinc (mg/kg)	72.3	96.2	98.7	91.2	
Indicator Parameters					
Fluoride (mg/kg)					4.32
Nitrogen, Ammonia (mg/kg)					
Semivolatile Organics					
1,2,4-Trichlorobenzene (ug/kg)	370 U	406 U	427 U	414 U	
1,2-Dichlorobenzene (ug/kg)	370 U	406 U	427 U	414 U	
1,3-Dichlorobenzene (ug/kg)	370 U	406 U	427 U	414 U	
1,4-Dichlorobenzene (ug/kg)	370 U	406 U	427 U	414 U	
2,2'-Oxybis (1-chloropropane) (ug/kg)	370 U	406 U	427 U	414 U	
2,4,5-Trichlorophenol (ug/kg)	926 U	1020 U	1070 U	1030 U	
2,4,6-Trichlorophenol (ug/kg)	370 U	406 U	427 U	414 U	
2,4-Dichlorophenol (ug/kg)	370 U	406 U	427 U	414 U	
2,4-Dimethylphenol (ug/kg)	370 U	406 U	427 U	414 U	

Phase IV IA10 Soil

Station	**IA10-SB0008**	**IA10-SB0015**	**IA10-SB0020**	**IA10-SB0024**	**IA10-SB0025**
Sample No	**LUSB0771**	**LUSB0772**	**LUSB0773**	**LUSB0816**	**LUSB0819**
Collection Date	**08/11/98**	**08/21/98**	**08/21/98**	**08/27/98**	**08/28/98**
Depth (ft)	**2.0-2.6**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**0**	**200812**	**200771**	**199563**	**199235**
Easting	**0**	**519371**	**520593**	**517045**	**517430**
2,4-Dinitrophenol (ug/kg)	926 U	1020 U	1070 U	1030 U	
2,4-Dinitrotoluene (ug/kg)	370 U	406 U	427 U	414 U	
2,6-Dinitrotoluene (ug/kg)	370 U	406 U	427 U	414 U	
2-Chloronaphthalene (ug/kg)	370 U	406 U	427 U	414 U	
2-Chlorophenol (ug/kg)	370 U	406 U	427 U	414 U	
2-Methylnaphthalene (ug/kg)	370 U	406 U	427 U	414 U	
2-Nitrophenol (ug/kg)	370 U	406 U	427 U	414 U	
2-methyl-4,6-dinitrophenol (ug/kg)	370 U	406 U	427 U	414 U	
3,3'-Dichlorobenzidine (ug/kg)	1850 U	2030 U	2140 U	2070 U	
4-Bromophenyl phenyl ether (ug/kg)	370 U	406 U	427 U	414 U	
4-Chloroaniline (ug/kg)	370 U	406 U	427 U	414 U	
4-Chlorophenylphenylether (ug/kg)	370 U	406 U	427 U	414 U	
4-Nitrophenol (ug/kg)	926 U	1020 U	1070 U	1030 U	
4-chloro-3-methyl phenol (ug/kg)	370 U	406 U	427 U	414 U	
Acenaphthene (ug/kg)	370 U	406 U	427 U	414 U	
Acenaphthylene (ug/kg)	370 U	406 U	427 U	414 U	
Anthracene (ug/kg)	370 U	406 U	427 U	414 U	
Benzo(a)anthracene (ug/kg)	370 U	406 U	427 U	414 U	
Benzo(a)pyrene (ug/kg)	370 U	406 U	427 U	414 U	
Benzo(b)fluoranthene (ug/kg)	370 U	406 U	427 U	414 U	
Benzo(ghi)perylene (ug/kg)	370 U	406 U	427 U	414 U	
Benzo(k)fluoranthene (ug/kg)	370 U	406 U	427 U	414 U	
Butylbenzylphthalate (ug/kg)	370 U	406 U	427 U	414 U	
Carbazole (ug/kg)	370 U	406 U	427 U	414 U	
Chrysene (ug/kg)	370 U	406 U	427 U	414 U	
Di-n-butylphthalate (ug/kg)	370 U	406 U	427 U	414 U	
Di-n-octylphthalate (ug/kg)	370 U	406 U	427 U	414 U	
Dibenz(a,h)anthracene (ug/kg)	370 U	406 U	427 U	414 U	
Dibenzofuran (ug/kg)	370 U	406 U	427 U	414 U	
Diethyl phthalate (ug/kg)	370 U	406 U	427 U	414 U	
Dimethyl phthalate (ug/kg)	370 U	406 U	427 U	414 U	
Fluoranthene (ug/kg)	370 U	406 U	427 U	414 U	
Fluorene (ug/kg)	370 U	406 U	427 U	414 U	
Hexachlorobenzene (ug/kg)	370 U	406 U	427 U	414 U	
Hexachlorobutadiene (ug/kg)	370 U	406 U	427 U	414 U	
Hexachlorocyclopentadiene (ug/kg)	370 U	406 U	427 U	414 U	
Hexachloroethane (ug/kg)	370 U	406 U	427 U	414 U	
Indeno(1,2,3-c,d)pyrene (ug/kg)	370 U	406 U	427 U	414 U	

Station	**IA10-SB0008**	**IA10-SB0015**	**IA10-SB0020**	**IA10-SB0024**	**IA10-SB0025**
Sample No	**LUSB0771**	**LUSB0772**	**LUSB0773**	**LUSB0816**	**LUSB0819**
Collection Date	**08/11/98**	**08/21/98**	**08/21/98**	**08/27/98**	**08/28/98**
Depth (ft)	**2.0-2.6**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**0**	**200812**	**200771**	**199563**	**199235**
Easting	**0**	**519371**	**520593**	**517045**	**517430**
Isophorone (ug/kg)	370 U	406 U	427 U	414 U	
N-Nitrosodiphenylamine (ug/kg)	370 U	406 U	427 U	414 U	
N-Nitrosodipropylamine (ug/kg)	370 U	406 U	427 U	414 U	
Naphthalene (ug/kg)	370 U	406 U	427 U	414 U	
Nitrobenzene (ug/kg)	370 U	406 U	427 U	414 U	
Pentachlorophenol (ug/kg)	926 U	1020 U	1070 U	1030 U	
Phenanthrene (ug/kg)	370 U	406 U	427 U	414 U	
Phenol (ug/kg)	370 U	406 U	427 U	414 U	
Pyrene (ug/kg)	370 U	406 U	427 U	414 U	
bis(2-chloroethoxy)methane (ug/kg)	370 U	406 U	427 U	414 U	
bis(2-chloroethyl) ether (ug/kg)	370 U	406 U	427 U	414 U	
bis(2-ethylhexyl)phthalate (ug/kg)	370 U	406 U	427 U	414 U	
m,p-Cresol (ug/kg)	370 U	406 U	427 U	414 U	
m-Nitroaniline (ug/kg)	926 U	1020 U	1070 U	1030 U	
o-Cresol (ug/kg)	370 U	406 U	427 U	414 U	
o-Nitroaniline (ug/kg)	926 U	1020 U	1070 U	1030 U	
p-Nitroaniline (ug/kg)	370 U	406 U	427 U	414 U	
Volatile Organics					
1,1,1-Trichloroethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,1,2,2-Tetrachloroethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,1,2-Trichloroethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,1-Dichloroethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,1-Dichloroethene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,2-Dichloroethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,2-Dichloroethylene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
1,2-Dichloropropane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
2-Butanone (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	8.8 U
2-Hexanone (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	9.9 J
4-Methyl-2-pentanone (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	8.8 U
Acetone (ug/kg)	9.4 U	10.9 U	11.9 U	19.3 B	8.8 U
Benzene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	1.4 J
Bromoform (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Carbon disulfide (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Carbon tetrachloride (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Chlorobenzene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Chlorodibromomethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Chloroethane (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	8.8 U
Chloroform (ug/kg)	4.7 U	5.5 U	5.9 U	0.58 JB	4.4 U

Phase IV IA10 Soil

Station	**IA10-SB0008**	**IA10-SB0015**	**IA10-SB0020**	**IA10-SB0024**	**IA10-SB0025**
Sample No	**LUSB0771**	**LUSB0772**	**LUSB0773**	**LUSB0816**	**LUSB0819**
Collection Date	**08/11/98**	**08/21/98**	**08/21/98**	**08/27/98**	**08/28/98**
Depth (ft)	**2.0-2.6**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**
Duplicate ID					
Northing	**0**	**200812**	**200771**	**199563**	**199235**
Easting	**0**	**519371**	**520593**	**517045**	**517430**
Cyclohexane, methyl- (ug/kg)			5 U		5 U
Dichlorobromomethane (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Ethylbenzene (ug/kg)	4.7 U	1 J	0.76 J	5.6 U	1 J
Methyl Bromide (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	8.8 U
Methyl Chloride (ug/kg)	9.4 U	10.9 U	11.9 U	11.3 U	8.8 U
Methylene chloride (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Styrene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Tetrachloroethene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Toluene (ug/kg)	0.86 J	1.7 J	2.6	0.9 J	3 J
Trichloroethene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Vinyl chloride (ug/kg)	1.9 U	2.2 U	2.4 U	2.2 U	1.8 U
Xylenes (total) (ug/kg)	0.52 J	2.7 J	1.4 J	5.6 U	2.8 J
cis-1,3-dichloropropene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
trans-1,3-Dichloropropene (ug/kg)	4.7 U	5.5 U	5.9 U	5.6 U	4.4 U
Radiological Parameters (AlphaSpec)					
Actinium-227 (pCi/g)	0.0107 U	0.0572 U	0.11 U	0.0873 U	-0.135 U
Thorium-228 (pCi/g)	1.27	0.902 J	0.936 J	1.51	0.506 J
Thorium-230 (pCi/g)	2.42	2.08	1.53	1.67	0.752 J
Thorium-232 (pCi/g)	0.587 J	0.633 J	0.686 J	1.17	0.095 U
Uranium-233/234 (pCi/g)	1.39	0.946 J	0.939 J	1.05	0.349 J
Uranium-235 (pCi/g)	0.129 J	0.077 U	-0.0049 U	0.0951 J	0.046 U
Uranium-235/236 (pCi/g)					
Uranium-238 (pCi/g)	1.48	1.5	1.02	1.05	0.23 J
Radiological Parameters (GammaSpec)					
Actinium-228 (pCi/g)	0.734 J	1.05	0 U	1.33	0.173 J
Cesium-137 (pCi/g)	0.0395 J	0.33	0.272	-0.0037 U	0.0591 J
Cobalt-60 (pCi/g)	-0.0008 U	0.0323 U	-0.0172 U	-0.0025 U	-0.0032 U
Potassium-40 (pCi/g)	19.5	20.9	21	27.7	4.08
Protactinium-231 (pCi/g)	0.105 U	-0.11 U	-0.512 U	-0.32 U	0.167 U
Radium-226 (pCi/g)	1.55	1.73	1.36	1.62	0.35 J
Radium-228 (pCi/g)	0.734 J	1.05	0.896 J	1.33	0.173 J
Thorium-234 (pCi/g)	2.23 J	1.56 U	0.833 U	0.85 U	0.569 U
Uranium-235 (pCi/g)	0.157 U	0.0136 U	0.178 U	0.0041 U	0.036 U

Phase IV IA10 Soil

Station	IA10-SB0006	IA10-SB0006	IA10-SB0006	IA10-SB0007	IA10-SB0007	IA10-SB0007	IA10-SB0008	IA10-SB0008	IA10-SB0009
Sample No	**LUSB0776**	**LUSB0777**	**LUSB0827**	**LUSB0778**	**LUSB0779**	**LUSB0778D**	**LUSB0780**	**LUSB0781**	**LUSB0782**
Collection Date	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**
Duplicate ID						**LUSB9083**			
Northing	**200465**	**200465**	**200465**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**514500**	**514500**	**514500**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Arsenic (mg/kg)	6.7	7.2		6.6	10.8	6	8	10.2	10.4
Barium (mg/kg)	73.7 N	69.7 N		72 N	58.9 N	82.5	91.7 N	78.7 N	86.3 N
Beryllium (mg/kg)	11.3	7.5	17.3	24	0.95	24.6	17.8	24.2	11.2
Lead (mg/kg)	22.8	16.5		27.5	10.4	28.6	31.2	25.5	24
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.111 U	0.684 J		0.528 J	0.147 U	0.367 J	0.708 J	0.527 J	0.222 U
Thorium-228 (pCi/g)	1.03	0.674 J		1.14	0.567 J	0.821 J	1.2	0.656 J	0.795 J
Thorium-230 (pCi/g)	1.47	1.63		1.85	1.4	1.13	1.87	1.64	1.37
Thorium-232 (pCi/g)	0.708 J	0.774 J		0.722 J	0.604 J	0.457 J	1.01	0.674 J	0.857 J
Uranium-233/234 (pCi/g)	1.04	0.971 J		1.15	1.1	1.03	0.949 J	1.11	1.04
Uranium-235 (pCi/g)	0.0221 U	0.0275 U		0.0896 J	0.053 U	0.0876 J	0.0355 U	0.0486 U	0.125 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.31	1.15		1.3	1.19	0.966 J	1.19	1.09	1.31
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.84 J	0.972 J		0.862 J	0.82 J	0.981 J	0.809 J	0.65 J	0.838 J
Cesium-137 (pCi/g)	0.303	0.486		0.334	0.0198 U	0.337	0.255	0.0416 J	0.344
Cobalt-60 (pCi/g)	0 U	0.0114 U		0.0339 U	-0.0362 U	0.0081 U	0.0245 U	0.0214 U	0.0035 U
Potassium-40 (pCi/g)	22.6	23.3		21.7	20.8	23	21.8	21	23.3
Protactinium-231 (pCi/g)	1.18 U	0.759 U		0.734 U	-0.217 U	0.338 U	-0.524 U	-0.492 U	-0.59 U
Radium-226 (pCi/g)	1.82	1.59		1.39	1.39	1.57	1.45	1.24	1.56
Radium-228 (pCi/g)	0.84 J	0.972 J		0.862 J	0.82 J	0.981 J	0.809 J	0.65 J	0.838 J
Thorium-234 (pCi/g)	1.54 J	1.32 U		1.98 J	1.81 J	0.949 U	1.7 J	1.57 J	1.28 U
Uranium-235 (pCi/g)	0.17 U	0.181 U		0.159 U	0.129 U	0.0159 U	0.129 U	0.0561 U	0.0453 U

Station	**IA10-SB0009**	**IA10-SB0010**	**IA10-SB0010**	**IA10-SB0011**	**IA10-SB0011**	**IA10-SB0012**	**IA10-SB0012**	**IA10-SB0013**	**IA10-SB0013**
Sample No	**LUSB0783**	**LUSB0784**	**LUSB0785**	**LUSB0786**	**LUSB0787**	**LUSB0788**	**LUSB0789**	**LUSB0790**	**LUSB0791**
Collection Date	**08/11/98**	**08/11/98**	**08/11/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**1.0-1.9**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID									
Northing	**0**	**0**	**0**	**200803**	**200803**	**200815**	**200815**	**200813**	**200813**
Easting	**0**	**0**	**0**	**519407**	**519407**	**519430**	**519430**	**519385**	**519385**
Metals									
Arsenic (mg/kg)	9.6	7.9	11.7	5.6	6.6	6.8	6.6	6.4	5.5
Barium (mg/kg)	92.7 N	80.4 N	68.8 N	77.5	81.8	86.2	78.6	67	73.2
Beryllium (mg/kg)	10.1	14.5	43.9	24.5	89.7	10.9	26.4	11.1	2.4
Lead (mg/kg)	16.5	29.2	34.7	26.5	24.6	25.3	18.8	13.5	11.1
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.109 U	0.215 U	0.198 U	0.0318 U	0.118 U	-0.0397 U	-0.0737 U	0.0571 U	0.0255 U
Thorium-228 (pCi/g)	0.716 J	1.09	0.766 J	0.879 J	0.599 J	0.817 J	0.81 J	0.429 J	0.684 J
Thorium-230 (pCi/g)	1.29	1.57	1.3	1.16	1.27	1.32	1.28	1.26	1.42
Thorium-232 (pCi/g)	0.504 J	0.93 J	0.501 J	0.467 J	0.532 J	1.02	0.639 J	0.63 J	0.525 J
Uranium-233/234 (pCi/g)	0.891 J	1.31	1.15	0.732 J	0.749 J	1.46	1.65	1.45	0.693 J
Uranium-235 (pCi/g)	0.109 J	0.0804 J	0.0805 U	0.0615 U	-0.0065 U	0.0562 U	0.0525 U	0.0751 U	0.0191 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.938 J	1.33	1	0.674 J	0.837 J	1.11	1.33	0.594 J	1.02
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.801 J	0.717 J	0.943 J	0.775 J	0.739 J	0.886 J	1.01	0.736 J	0.607 J
Cesium-137 (pCi/g)	0.142	0.271	0.4	0.417	0.125	0.307	0.124	0.102	0.0374 J
Cobalt-60 (pCi/g)	0.0041 U	0.0158 U	-0.0133 U	0.0048 U	-0.0006 U	-0.0041 U	0.051 U	-0.008 U	-0.0109 U
Potassium-40 (pCi/g)	21.7	16.7	21.2	18.8	17.8	23.4	22.2	21.1	20.1
Protactinium-231 (pCi/g)	0.607 U	-0.0124 U	0.542 U	0.865 U	-0.668 U	-0.342 U	0.486 U	0.706 U	1.15 U
Radium-226 (pCi/g)	1.35	1.34	1.73	1.56	1.44	1.51	1.46	1.37	1.33
Radium-228 (pCi/g)	0.801 J	0.717 J	0.943 J	0.775 J	0.739 J	0.886 J	1.01	0.736 J	0.607 J
Thorium-234 (pCi/g)	1.38 J	0.907 J	1.56 J	0.921 U	0.8 J	1.74 J	1.84 J	1.22 J	1.74 J
Uranium-235 (pCi/g)	0.0409 U	0.113 U	0.296 J	0.109 U	0.307 J	0.0942 U	0.0258 U	0.141 U	0.13 U

Station	**IA10-SB0014**	**IA10-SB0014**	**IA10-SB0014**	**IA10-SB0015**	**IA10-SB0016**	**IA10-SB0016**	**IA10-SB0017**	**IA10-SB0017**	**IA10-SB0018**
Sample No	**LUSB0792**	**LUSB0793**	**LUSB0792D**	**LUSB0794**	**LUSB0796**	**LUSB0797**	**LUSB0798**	**LUSB0801**	**LUSB0799**
Collection Date	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**
Depth (ft)	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**
Duplicate ID			**LUSB9084**						
Northing	**200825**	**200825**	**200825**	**200812**	**200768**	**200768**	**200771**	**200771**	**200771**
Easting	**519470**	**519470**	**519470**	**519371**	**520581**	**520581**	**520599**	**520599**	**520577**
Metals									
Arsenic (mg/kg)	6.1	6.3	7.2	5.9	5.8	5.6	5.6	5.1	5.5
Barium (mg/kg)	92.4	82.4	98.4	78.1	82.3	68.8	83.1	90	82.8
Beryllium (mg/kg)	9.8	41.5	10.4	38.2	15.9	27.6	12.9	40	14.4
Lead (mg/kg)	24.5	24.4	26.4	16	23.7	17.1	27.6	27.2	23.1
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.106 U	0.133 U	0.108 U	0.0126 U	-0.0692 U	0.0631 U	0.0143 U	0.0879 U	0.0556 U
Thorium-228 (pCi/g)	0.898 J	0.841 J	1.53	0.544 J	0.891 J	0.72 J	1.1	0.905 J	0.711 J
Thorium-230 (pCi/g)	1.32	1.92	1.71	0.937 J	1.82	1.35	1.82	1.51	1.3
Thorium-232 (pCi/g)	0.659 J	0.671 J	0.511 J	0.399 J	0.64 J	0.608 J	0.866 J	0.783 J	0.736 J
Uranium-233/234 (pCi/g)	0.962 J	1.33	1.04	1.18	1.05	1.09	1.77	0.791 J	0.782 J
Uranium-235 (pCi/g)	0.0208 U	0.107 U	0.0208 U	-0.0043 U	0.0199 U	0.0263 U	0.0812 U	0.11 J	0.0586 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.962 J	1.21	1.18	0.667 J	1.15	1.17	0.752 J	1.23	0.928 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.93 J	1.04	1.04	0.595 J	0.898 J	0.624 J	1.19	1.03	1.22
Cesium-137 (pCi/g)	0.237	0.562	0.243	0.0628 J	0.304	0.291	0.334	0.482	0.222
Cobalt-60 (pCi/g)	0.0056 U	-0.0105 U	-0.0058 U	0.0181 U	0.0283 U	0.0044 U	0.0193 U	0.0027 U	0.0087 U
Potassium-40 (pCi/g)	24.4	25.4	22.6	20.4	22.4	20	24.4	20.6	20.1
Protactinium-231 (pCi/g)	0.103 U	0.0923 U	-0.41 U	0.213 U	0.195 U	0.0087 U	-0.432 U	0.45 U	0.799 U
Radium-226 (pCi/g)	1.54	1.62	1.48	1.82	1.49	1.29	1.82	1.71	1.3
Radium-228 (pCi/g)	0.93 J	1.04	1.04	0.595 J	0.898 J	0.624 J	1.19	1.03	1.22
Thorium-234 (pCi/g)	1.7 J	1.62 J	1.33 U	1.66 J	1.33 U	0.963 U	1.23 J	1.96 J	1.2 U
Uranium-235 (pCi/g)	0.18 U	0.121 U	0.173 U	0.112 U	0.266 U	0.0459 U	0.337 J	0.249 U	0.106 U

Station	**IA10-SB0018**	**IA10-SB0018**	**IA10-SB0019**	**IA10-SB0019**	**IA10-SB0023**	**IA10-SB0023**	**IA10-SB0023**	**IA10-SB0024**	**IA10-SB0024**
Sample No	**LUSB0800**	**LUSB0799D**	**LUSB0802**	**LUSB0803**	**LUSB0913**	**LUSB0914**	**LUSB0915**	**LUSB0815**	**LUSB0817**
Collection Date	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**07/28/98**	**07/28/98**	**07/28/98**	**08/27/98**	**08/27/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.5**	**2.0-3.0**
Duplicate ID		**LUSB9085**							
Northing	**200771**	**200771**	**200771**	**200771**	**199598**	**199598**	**199598**	**199563**	**199563**
Easting	**520577**	**520577**	**520589**	**520589**	**517508**	**517508**	**517508**	**517045**	**517045**
Metals									
Arsenic (mg/kg)	5.9	6.8	6.6	6.3	8.6	7	14.8	6.1	14.1
Barium (mg/kg)	81.9	85.4	90.6	92.9	121	129	121	113 *	99.5 *
Beryllium (mg/kg)	21.2	14.3	27.7	29	447	18.5	81.2	1	0.95
Lead (mg/kg)	28.2	22.9	30.5	30.9	168	17.2	39.6	16.9	15.8
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0281 U	0.128 U	0.0465 U	0.165 U	0.243 J	0.0697 U	0.226 J	0.0281 U	0.0589 U
Thorium-228 (pCi/g)	0.929 J	0.671 J	0.984 J	0.772 J	1.1	1.32	1.44	1.36	0.941 J
Thorium-230 (pCi/g)	1.39	1.21	1.51	1.59	9	3.03	3.54	2.27	1.63
Thorium-232 (pCi/g)	0.958 J	0.742 J	0.652 J	0.769 J	1.08	1.07	1.23	1.03	1.46
Uranium-233/234 (pCi/g)	1.31	1.15	0.954 J	1.02	5.83	1.42	2.17	1.53	1.12
Uranium-235 (pCi/g)	0.0744 U	0.0529 U	0 U	0.0244 U	0.374 J	0.0703 J	0.0663 J	0.0128 U	0.0131 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.03	1.11	1.2	1.07	5.75	1.62	2.37	1.52	1.29
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.917 J	0.872 J	0.917 J	1.08	1.03	1.4	0.975 J	1.01	1.12
Cesium-137 (pCi/g)	0.326	0.258	0.257	0.681	0.193	-0.0219 U	0.0279 U	0.146	0.0063 U
Cobalt-60 (pCi/g)	-0.0202 U	-0.0157 U	0.0283 U	0.0074 U	0.0091 U	-0.0169 U	0.0088 U	-0.0126 U	0.0233 U
Potassium-40 (pCi/g)	22.5	21.9	20.8	25.1	25	25.2	26.1	26	26.3
Protactinium-231 (pCi/g)	0.959 U	-0.29 U	0.564 U	0.126 U	0.524 U	-0.25 U	0.0893 U	-0.0161 U	-0.271 U
Radium-226 (pCi/g)	1.49	1.44	1.44	1.82	6.56	2.42	2.61	1.5	1.57
Radium-228 (pCi/g)	0.917 J	0.872 J	0.917 J	1.08	1.03	1.4	0.975 J	1.01	1.12
Thorium-234 (pCi/g)	1.28 U	0.677 U	3 J	2.35 J	4.17 J	1.3 U	2.43 J	1.61 J	2.69 J
Uranium-235 (pCi/g)	0.115 U	0.0947 U	0.182 U	0.424 J	0.559 J	0.209 U	0.128 U	0.201 U	0.119 U

Station	**IA10-SB0024**	**IA10-SB0025**	**IA10-SB0025**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0027**	**IA10-SB0027**
Sample No	**LUSB9582**	**LUSB0818**	**LUSB0820**	**LUSB0821**	**LUSB0822**	**LUSB0823**	**LUSB0824**	**LUSB0825**	**LUSB0826**
Collection Date	**08/27/98**	**08/28/98**	**08/28/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**2.0-3.0**	**2.0-3.0**	**13.0-14.0**	**17.0-18.0**	**26.0-27.0**	**3.0-4.0**	**11.0-12.0**
Duplicate ID									
Northing	**199563**	**199235**	**199235**	**199182**	**199182**	**199182**	**199182**	**199174**	**199174**
Easting	**517045**	**517430**	**517430**	**517707**	**517707**	**517707**	**517707**	**517753**	**517753**
Metals									
Arsenic (mg/kg)		1.7	7.2	10	2	2.6	0.32 U	5	3.7
Barium (mg/kg)		11.3	52.1	75.9	49	47.9	63.8	30.4	1220
Beryllium (mg/kg)		0.17 B	0.37	19	0.11 B	0.11 B	0.01 U	0.32	0.21 B
Lead (mg/kg)		9.2	9.3	114	1.4	2	2.5	33.6	1.1
Indicator Parameters									
Fluoride (mg/kg)		2.11	3.33	9.83	0.89	0.8	3.96	3.89	7.74
Nitrogen, Ammonia (mg/kg)				14.4	16.4	81.7	2.38	9.18	13.5
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.05 U	0.393 UJ	0.0976 U	0.165 U	0.075 U	0.0495 U	0.0281 U	-0.0307 U	0.0522 U
Thorium-228 (pCi/g)	0.78	0.231 UJ	0.66 J	0.756 J	0.234 U	0.335 U	0.173 U	0.17 J	0.272 J
Thorium-230 (pCi/g)	1.14	0.35 J	0.771 J	1.39	0.532 J	0.616 J	0.195 U	0.446 J	0.187 J
Thorium-232 (pCi/g)	0.78	0.167 UJ	0.28 J	0.482 J	0.109 U	0.0717 U	-0.0184 U	0.261 J	0.141 U
Uranium-233/234 (pCi/g)	0.4	0.372 J	0.818 J	0.908 J	0.173 J	0.28 J	0.0198 U	0.389 J	0.148 J
Uranium-235 (pCi/g)		0.0203 U	0.0504 U	0.0357 U	0 U	0.0608 U	0.0131 U	0.0082 U	0.0138 U
Uranium-235/236 (pCi/g)	0.02								
Uranium-238 (pCi/g)	0.51	0.0556 U	0.797 J	0.999 J	0.266 J	0.315 J	0.0131 U	0.267 J	0.186 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)		0.131 U	0.478 J	0.806 J	0 U	0.321 J	0.0348 U	0.493 J	0.133 U
Cesium-137 (pCi/g)		0.0571 J	0 U	0.177	0.044 U	0.0589 J	0.0193 U	0.1	0.0166 U
Cobalt-60 (pCi/g)		0 U	0.0136 U	0.0123 U	0.0111 U	0 U	-0.0017 U	-0.0186 U	0.0088 U
Potassium-40 (pCi/g)		2.28	12.4	19.7	0.39 U	0 U	0.196 U	7.74	0.0488 U
Protactinium-231 (pCi/g)		-0.187 U	0.46 U	-0.157 U	-0.228 U	0.401 U	-0.0439 U	-0.436 U	0.509 U
Radium-226 (pCi/g)		0.253 J	1.04	1.49	0.0456 U	0.0744 J	0.0806 J	0.663 J	0.102 J
Radium-228 (pCi/g)		0.131 U	0.478 J	0.806 J	0 U	0.321 J	0.0348 U	0.493 J	0.133 U
Thorium-234 (pCi/g)		1.13 J	1.02 U	1.75 J	0.637 U	0.116 U	0.266 U	1.55 J	0.97 J
Uranium-235 (pCi/g)		0.0045 U	0.0425 U	0.0841 U	-0.0154 U	0.0606 U	0.0265 U	0.129 U	0.094 U

Station	**IA10-SB0027**	**IA10-SB0027**	**IA10-SB0028**	**IA10-SB0028**	**IA10-SB0028**	**IA10-SB0029**	**IA10-SB0029**	**IA10-SB0030**	**IA10-SB0030**
Sample No	**LUSB1074**	**LUSB1075**	**LUSB0893**	**LUSB0894**	**LUSB0893D**	**LUSB0895**	**LUSB0896**	**LUSB0897**	**LUSB0898**
Collection Date	**08/11/98**	**08/11/98**	**08/10/98**	**08/10/98**	**08/10/98**	**08/10/98**	**08/10/98**	**08/12/98**	**08/12/98**
Depth (ft)	**15.0-16.0**	**22.0-23.0**	**13.0-14.0**	**24.0-25.0**	**13.0-14.0**	**3.0-4.0**	**23.5-24.8**	**3.0-4.0**	**8.0-9.0**
Duplicate ID					**LUSB9095**				
Northing	**199174**	**199174**	**199182**	**199182**	**199182**	**199131**	**199131**	**199236**	**199236**
Easting	**517753**	**517753**	**517790**	**517790**	**517790**	**517764**	**517764**	**517748**	**517748**
Metals									
Arsenic (mg/kg)	2.1	3	4.6 B	0.96 B	1.5	6.5	2.5 B	10.1	12
Barium (mg/kg)	1920	2640	2740	39.2	2530	87.1	3460	38.2 N	53.4 N
Beryllium (mg/kg)	0.23 B	0.21 B	0.31 B	0.1 B	0.28 B	0.47	0.14 B	0.39	0.4
Lead (mg/kg)	3.3	2.4	1.9 B	9.2	0.74 B	61.3	1.2 U	8.7	10.3
Indicator Parameters									
Fluoride (mg/kg)	6.4	10.7	10.9	4.77	9.68	2.42	0 U	1.36	1.87
Nitrogen, Ammonia (mg/kg)	17.9	28	28.7	3.02	25	17.6	45.6	3.88	2.5
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0099 U	0.0623 U	0.0421 U	-0.0302 U	0.0859 U	-0.0066 U	0.0347 U	0.47 J	0.301 U
Thorium-228 (pCi/g)	0.353 J	0.183 J	0.247 J	0.189 U	0.388 J	0.489 J	0.141 U	0.549 J	0.68 J
Thorium-230 (pCi/g)	0.535 J	0.361 J	0.212 J	0.23 J	0.2 J	0.785 J	0.109 U	1.56	1.39
Thorium-232 (pCi/g)	0.183 U	0.213 J	0.0943 J	0.173 J	0.214 J	0.391 J	0.0702 U	0.536 J	0.674 J
Uranium-233/234 (pCi/g)	0.416 J	0.278 J	0.0967 J	0.329 J	0.264 J	0.585 J	0.13 J	1.27	1.11
Uranium-235 (pCi/g)	0.0242 U	-0.0031 U	0.0243 U	-0.004 U	0.0413 U	0.0196 U	0 U	0.0337 U	0.0859 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.202 J	0.24 J	0.283 J	0.177 J	0.247 J	0.663 J	0.167 J	1.12	1.17
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.299 J	0.283 J	0 U	0.0652 U	0.361 J	0.519 J	0.0824 U	0.855 J	0.758 J
Cesium-137 (pCi/g)	0.0351 U	0.0242 U	-0.003 U	0 U	0.0003 U	0.349	0.0137 U	-0.0051 U	0.0256 U
Cobalt-60 (pCi/g)	0.0091 U	-0.0054 U	-0.0011 U	0.0165 U	0.0022 U	-0.0005 U	0.0183 U	-0.0045 U	0.0226 U
Potassium-40 (pCi/g)	0.321 U	0.249 U	0 U	1.01	0.188 J	12.5	0.486 J	20.6	17.9
Protactinium-231 (pCi/g)	-0.14 U	-0.534 U	-0.585 U	0.0986 U	-0.254 U	-0.148 U	0.0822 U	0.541 U	0.616 U
Radium-226 (pCi/g)	0.245 J	0.291 J	0.268 J	0.215 J	0.289 J	0.937 J	0.166 J	1.53	1.6
Radium-228 (pCi/g)	0.299 J	0.283 J	0.339 J	0.0652 U	0.361 J	0.519 J	0.0824 U	0.855 J	0.758 J
Thorium-234 (pCi/g)	1.86 J	0.0424 U	0.275 U	0 U	0.211 U	0.614 U	0.248 U	0.689 U	1.29 J
Uranium-235 (pCi/g)	0.0027 U	0.288 J	0.147 U	0.0358 U	0.0754 U	0.0431 U	0.0118 U	0.0881 U	0.0848 U

Station	**IA10-SB0030**	**IA10-SB0031**	**IA10-SB0032**	**IA10-SB0033**	**IA10-SB0033**	**IA10-SB0034**	**IA10-SB0035**	**IA10-SB0036**	**IA10-SB0037**
Sample No	**LUSB0897D**	**LUSB0899**	**LUSB0900**	**LUSB0901**	**LUSB0901D**	**LUSB0902**	**LUSB0903**	**LUSB0904**	**LUSB0905**
Collection Date	**08/12/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**3.0-4.0**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**
Duplicate ID	**LUSB9003**				**LUSB9096**				
Northing	**199236**	**199710**	**199612**	**199683**	**199683**	**199688**	**199696**	**199645**	**199702**
Easting	**517748**	**517202**	**517209**	**517280**	**517280**	**517305**	**517315**	**517317**	**517365**
Metals									
Arsenic (mg/kg)	13.6	5	6.2	5.6	5.5	7.9	5.4	5.5	5.9
Barium (mg/kg)	50.4 N	82.6 N*	104	79.8	95.7	105	90.2	89	97.8
Beryllium (mg/kg)	0.56	0.94	1.2	0.92	1	0.99	0.99	1.1	1
Lead (mg/kg)	14	12.9 *	17.7	13.3	15.5	18.4	16.2	16.5	15.5
Indicator Parameters									
Fluoride (mg/kg)	2.32								
Nitrogen, Ammonia (mg/kg)	4.89								
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.62 J	0.0247 U	0.136 U	0.0462 U	0.173 U	0.124 U	-0.009 U	0.0987 U	0.0761 U
Thorium-228 (pCi/g)	0.597 J	0.984 J	1.18	1.21	1.25	0.878 J	1.11	1.18	1.44
Thorium-230 (pCi/g)	1.26	1.78	2.05	1.64	1.89	1.67	1.39	1.96	2.2
Thorium-232 (pCi/g)	0.652 J	0.929 J	0.844 J	0.889 J	0.701 J	0.885 J	1.06	0.6 J	1.32
Uranium-233/234 (pCi/g)	1.09	1.26	1.04	1.11	1.02	1.09	1.27	0.939 J	1.19
Uranium-235 (pCi/g)	0.0672 U	0.0427 U	0.0154 U	0.0149 U	0.087 J	0.0604 J	0.0737 J	0.0113 U	0.0212 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.982 J	1.16	0.98 J	0.918 J	1.14	0.994 J	1.06	0.961 J	1.21
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.887 J	1.21	1.3	1.1	1.01	0.942 J	1.01	1.07	1.15
Cesium-137 (pCi/g)	-0.0116 U	0.109	0.133	0.145	0.135	0.176	0.198	0.192	0.105
Cobalt-60 (pCi/g)	-0.0009 U	-0.0011 U	0.0312 U	0.0218 U	-0.0028 U	0.0044 U	-0.0159 U	0.0163 U	0.0181 U
Potassium-40 (pCi/g)	20.3	23.4	24.5	24.9	25.3	23.9	22.5	24.8	25.2
Protactinium-231 (pCi/g)	0.131 U	-0.124 U	0.523 U	-0.769 U	-0.407 U	0.0782 U	-0.534 U	0.432 U	-0.546 U
Radium-226 (pCi/g)	1.54	1.56	1.73	1.52	1.51	1.54	1.45	1.58	1.7
Radium-228 (pCi/g)	0.887 J	1.21	1.3	1.1	1.01	0.942 J	1.01	1.07	1.15
Thorium-234 (pCi/g)	1.31 J	1.26 J	1.89 J	1.03 U	1.73 J	2.37 J	1.65 J	1.56 J	0.772 U
Uranium-235 (pCi/g)	0.119 U	0.35 J	0.0998 U	0.0946 U	0.101 U	0.102 U	0.176 U	0.249 J	0.155 U

Station	**IA10-SB0038**	**IA10-SB0039**	**IA10-SB0040**	**IA10-SB0040**	**IA10-SB0041**	**IA10-SB0042**	**IA10-SB0042**	**IA10-SB0043**	**IA10-SB0044**
Sample No	**LUSB0906**	**LUSB0907**	**LUSB0908**	**LUSB9596**	**LUSB0909**	**LUSB0910**	**LUSB0910D**	**LUSB0911**	**LUSB0912**
Collection Date	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Depth (ft)	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**
Duplicate ID							**LUSB9097**		
Northing	**199670**	**199611**	**199632**	**199632**	**199718**	**199626**	**199626**	**199640**	**199595**
Easting	**517389**	**517417**	**517461**	**517461**	**517481**	**517510**	**517510**	**517511**	**517206**
Metals									
Arsenic (mg/kg)	6.7	7.3	6.5		6.7	11.3	11.4	11.4	6.7
Barium (mg/kg)	108	112	113		115	112	101	110	112
Beryllium (mg/kg)	1.2	1.5	1.5		1.3	683	860	744	21.2
Lead (mg/kg)	18.1	19.1	19.6		17.7	115	132	174	40.7
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.174 U	0.0466 U	0.185 U	0.05 U	0.142 U	0.15 U	0.217 U	0.263 U	0.207 J
Thorium-228 (pCi/g)	1.01	1.26	1.5	0.86	1.01	1.07	1.29	1.14	0.988 J
Thorium-230 (pCi/g)	2.04	1.71	1.93	1.19	1.9	4.57	6.03	6.02	1.72
Thorium-232 (pCi/g)	1.32	0.982 J	1.2	0.84	0.935 J	0.781 J	1.18	0.919 J	0.841 J
Uranium-233/234 (pCi/g)	1.19	0.937 J	1.31	0.56	1.11	3.77	4.08	4.88	1.37
Uranium-235 (pCi/g)	0.0245 U	0.0516 J	0.0254 U		0.0663 U	0.0712 J	0.216 J	0.238 J	0.0307 U
Uranium-235/236 (pCi/g)				0.03					
Uranium-238 (pCi/g)	1.17	1.12	1.18	0.65	1.28	2.92	4.32	4.95	1.38
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.25	1.22	1.26		0.942 J	1.04	1.12	1.31	0.919 J
Cesium-137 (pCi/g)	0.221	0.108	0.24		0.211	0.254	0.289	0.322	0.173
Cobalt-60 (pCi/g)	0.0057 U	0.0226 U	0.0405 U		0 U	-0.0138 U	-0.0122 U	0.0049 U	-0.0008 U
Potassium-40 (pCi/g)	24.7	26	25.1		25.4	23.3	23.9	23.1	25.2
Protactinium-231 (pCi/g)	-0.0402 U	0.0002 U	0.593 U		1.27 U	-0.217 U	0.0192 U	0.0713 U	-0.0727 U
Radium-226 (pCi/g)	1.62	1.59	1.79		1.6	4.06	5.31	6.37	1.59
Radium-228 (pCi/g)	1.25	1.22	1.26		0.942 J	1.04	1.12	1.31	0.919 J
Thorium-234 (pCi/g)	2.91 J	1.33 J	1.29 J		0.517 U	4.11 J	4.99 J	6.18	2.1 J
Uranium-235 (pCi/g)	0.193 U	0.067 U	0.102 U		0.0965 U	0.312 U	0.411 J	0.336 U	0.0751 U

Station	**IA10-SB0045**	**IA10-SB0046**	**IA10-SB0046**	**IA10-SB0047**	**IA10-SB0048**	**IA10-SB0049**	**IA10-SB0050**	**IA10-SB0051**	**IA10-SB0052**
Sample No	**LUSB0812**	**LUSB0813**	**LUSB0813D**	**LUSB0814**	**LUSB0916**	**LUSB0917**	**LUSB0918**	**LUSB0919**	**LUSB0920**
Collection Date	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**	**08/06/98**
Depth (ft)	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID			**LUSB9098**						
Northing	**199333**	**199367**	**199367**	**199451**	**199491**	**199527**	**199530**	**199538**	**199556**
Easting	**517652**	**517657**	**517657**	**517615**	**517632**	**517604**	**517600**	**517604**	**517594**
Metals									
Arsenic (mg/kg)	15.6 N	7.2 N	4.1 N	11.1 N	6.6 N	6.3 N	6.1 N	2.4 N	4.7 N
Barium (mg/kg)	479	102	64.6	93.2	103	54	69	40.7	88.4
Beryllium (mg/kg)	5.4 N	2.2 N	2.1 N	88.4 N	25.9 N	130 N	148 N	2560 N	56.7 N
Lead (mg/kg)	8.9 N	21.6 N	16.1 N	223 N	48.2 N	66.3 N	338 N	288 N	155 N
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.207 U	0.171 J	0.0678 U	0.205 J	0.0841 U	0.273 J	0.218 U	1.05 J	0.0754 U
Thorium-228 (pCi/g)	1.12	0.912 J	0.945 J	1.14	0.877 J	0.788 J	0.686 J	0.614 J	1.1
Thorium-230 (pCi/g)	3.37	1.31	1.13	3.12	1.47	5.37	3.18	14.8	2.01
Thorium-232 (pCi/g)	1.15	0.626 J	0.779 J	0.896 J	0.913 J	0.635 J	0.759 J	0.666 J	0.707 J
Uranium-233/234 (pCi/g)	3.48	1.16	0.949 J	2.72	1.55	4.81	4.88	17.8	1.9
Uranium-235 (pCi/g)	0.148 J	0.0813 J	0.112 J	0.125 J	0.0421 U	0.407 J	0.139 J	1.42	0.0865 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	3.22	0.908 J	0.911 J	2.89	1.53	5.04	3.99	16.6	1.89
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.33	1.12	0.873 J	0.992 J	0.85 J	0.527 J	0.823 J	0.623 J	1.13
Cesium-137 (pCi/g)	0.0071 U	0.213	0.292	0.984	0.545	0.354	0.287	0.738	0.15
Cobalt-60 (pCi/g)	0.0019 U	0.0353 U	-0.02 U	0.026 U	-0.0037 U	0.0019 U	0.0068 U	-0.0303 U	0.0236 U
Potassium-40 (pCi/g)	5.22	20.9	20.3	19.8	21.3	15	21.7	14.6	18.3
Protactinium-231 (pCi/g)	0.315 U	0.794 U	-0.301 U	-0.561 U	-0.326 U	-1.09 U	0.703 U	-1.85 U	0.456 U
Radium-226 (pCi/g)	3.66	1.09	1.25	4.08	1.82	3.98	2.68	24.7	1.98
Radium-228 (pCi/g)	1.33	1.12	0.873 J	0.992 J	0.85 J	0.527 J	0.823 J	0.623 J	1.13
Thorium-234 (pCi/g)	3.42 J	1.09 U	1.16 U	2.78 J	1.58 U	5.41	4.17 J	16.3	2.35 U
Uranium-235 (pCi/g)	0.27 U	0.0391 U	0.162 U	0.357 U	0.0979 U	0.385 U	0.244 U	1.65	0.287 U

Station	**IA10-SB0052**	**IA10-SB0053**	**IA10-SB0055**	**IA10-SB0056**	**IA10-SB0056**	**IA10-SB0057**	**IA10-SB0058**	**IA10-SB0059**	**IA10-SB0060**
Sample No	**LUSB0922**	**LUSB0921**	**LUSB0923**	**LUSB0924**	**LUSB0924D**	**LUSB0925**	**LUSB0926**	**LUSB0927**	**LUSB0928**
Collection Date	**08/06/98**	**08/06/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**
Depth (ft)	**1.0-1.5**	**0.0-0.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**
Duplicate ID					**LUSB9099**				
Northing	**199556**	**199543**	**199473**	**199567**	**199567**	**199554**	**199530**	**199491**	**199462**
Easting	**517594**	**517611**	**517066**	**517016**	**517016**	**516946**	**516901**	**516932**	**516979**
Metals									
Arsenic (mg/kg)	5.5 N	9.7 N	6.6	6.9	3.7	6.8	7.1	5.8	7.2
Barium (mg/kg)	91.3	25.4	111 *	116 *	63 *	114 *	117 *	106 *	113 *
Beryllium (mg/kg)	3.8 N	42.1 N	1	1	0.72	1.1	1	0.98	1
Lead (mg/kg)	19.2 N	48.5 N	16	18.7	12	18	13.7	17.6	18.3
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.168 U	0.0273 U	0.0603 U	-0.0764 U	0.139 U	0.187 U	0.0996 U	0.158 U	0.142 U
Thorium-228 (pCi/g)	1.13	0.248 J	1.02	1	0.795 J	1.02	0.876 J	1.03	0.766 J
Thorium-230 (pCi/g)	1.88	1.75	1.77	1.77	1.64	1.86	1.66	1.53	1.91
Thorium-232 (pCi/g)	1.11	0.0825 U	1.16	0.998 J	1.01	1.02	0.97 J	0.881 J	0.744 J
Uranium-233/234 (pCi/g)	1.41	1.29	0.996 J	1.21	1.6	1.3	1.23	1.39	1.15
Uranium-235 (pCi/g)	0.089 U	0.0533 U	0.0643 U	0.0605 U	0.0643 U	0.12 J	0.0711 U	-0.0064 U	0.0909 J
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.5	1.45	1.17	1.26	1.42	1.07	1.11	1.01	1.29
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.21	0.128 U	1.01	1.06	1.1	1	1.42	1.04	1.22
Cesium-137 (pCi/g)	0.0377 U	0.533	0.104	0.214	0.135	0.182	0.147	0.126	0.146
Cobalt-60 (pCi/g)	0.0003 U	0.014 U	-0.0073 U	-0.0176 U	-0.0037 U	0.0049 U	-0.0083 U	-0.0052 U	0.0261 U
Potassium-40 (pCi/g)	26.2	2.1	25.4	23.7	25	26.2	28.1	26.7	25.5
Protactinium-231 (pCi/g)	0.636 U	-0.182 U	-0.723 U	1.31 U	0.19 U	0.71 U	-0.0522 U	0.587 U	0.363 U
Radium-226 (pCi/g)	1.63	2.18	1.53	1.75	1.51	1.69	1.75	1.58	1.62
Radium-228 (pCi/g)	1.21	0.128 U	1.01	1.06	1.1	1	1.42	1.04	1.22
Thorium-234 (pCi/g)	3.36 J	2.05 J	1.32 U	2.76 J	1.29 U	2.94 J	1.33 U	1.13 U	2.13 J
Uranium-235 (pCi/g)	0.307 J	0.409 J	0.125 U	0.305 U	0.116 U	0.0639 U	0.177 U	0.24 J	0.27 J

Station	**IA10-SB0061**	**IA10-SB0062**	**IA10-SB0062**	**IA10-SB0063**	**IA10-SB0064**	**IA10-SB0065**	**IA10-SB0066**	**IA10-SB0067**	**IA10-SB0068**
Sample No	**LUSB0929**	**LUSB0930**	**LUSB0930D**	**LUSB0931**	**LUSB0932**	**LUSB0933**	**LUSB0934**	**LUSB0935**	**LUSB0936**
Collection Date	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/27/98**	**08/28/98**
Depth (ft)	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-1.5**	**0.0-0.5**
Duplicate ID			**LUSB9100**						
Northing	**199434**	**199393**	**199393**	**199386**	**199367**	**199411**	**199443**	**199536**	**198979**
Easting	**516977**	**516922**	**516922**	**517022**	**517076**	**517052**	**517032**	**517065**	**517570**
Metals									
Arsenic (mg/kg)	8.6	7.7	5.9	6.4	6.3	7.2	6.4	7.3	1.4
Barium (mg/kg)	126 *	116 *	97 *	113 *	116 *	133 *	111 *	117 *	9.3
Beryllium (mg/kg)	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1	0.14 B
Lead (mg/kg)	19.2	18.6	18.1	20.8	23.6	19.3	18.2	18	27.4
Indicator Parameters									
Fluoride (mg/kg)									0.5 J
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0789 U	0.0084 U	0.173 U	0.15 U	0.0007 U	0.0457 U	0.159 U	0.116 U	0.193 UJ
Thorium-228 (pCi/g)	1.1	0.942 J	1.74	1.28	1.01	0.928 J	1.03	4.09	-0.0044 UJ
Thorium-230 (pCi/g)	1.84	1.92	2.22	2.01	1.55	1.49	2.24	2.96	0.365 J
Thorium-232 (pCi/g)	1.06	1.11	0.984 J	0.926 J	0.768 J	0.932 J	0.919 J	1.06	0.0451 UJ
Uranium-233/234 (pCi/g)	1	1.2	1.13	1.36	1.05	1.27	1.12	1.28	0.166 J
Uranium-235 (pCi/g)	0.0431 U	0.0472 U	0.111 J	0.0236 U	0.0465 U	0.055 U	0.0677 U	0.0467 U	0.0238 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.01	1.13	1.13	0.982 J	1.34	1.45	1.24	1.38	0.213 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	1.28	1.2	0.974 J	1.26	1.23	1.14	1.04	1.21	0 U
Cesium-137 (pCi/g)	0.117	0.134	0.166	0.146	0.0872 J	0.142	0.149	0.212	0.0481 J
Cobalt-60 (pCi/g)	0.006 U	0.0013 U	0.0007 U	-0.0034 U	0.0123 U	-0.0107 U	-0.0135 U	0.0449 U	0.0178 U
Potassium-40 (pCi/g)	27.6	27.4	27.4	27.1	28.7	25.6	24.6	26.3	1.97
Protactinium-231 (pCi/g)	-0.745 U	0.63 U	-0.695 U	0.458 U	0.544 U	-0.425 U	-0.578 U	0.642 U	0.189 U
Radium-226 (pCi/g)	1.65	1.56	1.75	1.76	1.86	1.68	1.46	1.66	0.278 J
Radium-228 (pCi/g)	1.28	1.2	0.974 J	1.26	1.23	1.14	1.04	1.21	0 U
Thorium-234 (pCi/g)	2.21 J	2.09 J	4.76 J	3.18 J	1.06 U	2.17 J	0.836 U	2.42 J	0.463 U
Uranium-235 (pCi/g)	0.142 U	0.217 U	0.302 J	0.229 U	0.167 U	0.316 J	0.15 U	0.163 U	-0.0281 U

Station	**IA10-SB0069**	**IA10-SB0070**	**IA10-SB0071**	**IA10-SB0072**	**IA10-SB0073**	**IA10-SB0074**	**IA10-SB0075**	**IA10-SB0076**	**IA10-SB0077**
Sample No	**LUSB0937**	**LUSB0938**	**LUSB0939**	**LUSB0940**	**LUSB0941**	**LUSB0942**	**LUSB0943**	**LUSB0944**	**LUSB0945**
Collection Date	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**	**0.0-0.4**	**0.0-1.0**	**0.0-1.0**
Duplicate ID									
Northing	**198996**	**199073**	**198969**	**199154**	**199212**	**199154**	**199164**	**199212**	**199241**
Easting	**517578**	**517619**	**517682**	**517692**	**517628**	**517577**	**517457**	**517510**	**517393**
Metals									
Arsenic (mg/kg)	3	2.4	1.4	12.5	4.8	7.7	2.2	1.4 B	9.2
Barium (mg/kg)	27.8	26.3	37.8	160	67.5	61.8	16.9	8.4	51.3
Beryllium (mg/kg)	0.37	0.31	0.11 B	2.5	0.95	0.64	0.34	0.2 B	0.76
Lead (mg/kg)	25.4	59.8	45.9	233	21.4	25	21.6	14	9.9
Indicator Parameters									
Fluoride (mg/kg)	1.25	0.91	0 U	1.84	1.41	2.66	0.63	5.47	3.4
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.112 U	0.0638 U	-0.448 UJ	0.182 U	0.041 U	0.0209 U	-0.0389 U	-0.0278 UJ	0.151 U
Thorium-228 (pCi/g)	0.166 J	0.816 J	0.0797 UJ	1.06	0.53 J	0.525 J	0.411 J	0.148 UJ	0.563 J
Thorium-230 (pCi/g)	0.584 J	1.35	0.231 J	1.72	0.834 J	1.12	0.617 J	0.24 UJ	1.33
Thorium-232 (pCi/g)	0.154 J	0.781 J	0.0842 UJ	1.04	0.253 J	0.637 J	0.224 J	0 UJ	0.552 J
Uranium-233/234 (pCi/g)	0.527 J	1.15	0.107 U	1.74	0.945 J	0.651 J	0.281 J	0.204 J	0.775 J
Uranium-235 (pCi/g)	0.0481 U	0.0807 U	0.0224 U	0.3 J	-0.0027 U	0.0246 U	0.0112 U	0.044 U	0.0117 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	0.359 J	1.31	0.199 J	1.76	0.762 J	1.13	0.515 J	0.129 U	0.93 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.354 J	0.136 U	0.0295 U	1.04	0 U	0.611 J	0 U	0.12 U	0 U
Cesium-137 (pCi/g)	0.044 J	0.214	0.0783 J	0.106	0.316	0.18	0.364	0.145	0.114
Cobalt-60 (pCi/g)	0.0105 U	-0.008 U	-0.0064 U	0.0137 U	0.0063 U	0.0236 U	0.0268 U	-0.0089 U	-0.0545 U
Potassium-40 (pCi/g)	5.59	0.927 J	1.31	8.47	7.97	14.9	5.86	0.227 U	13.6
Protactinium-231 (pCi/g)	-0.168 U	0.0407 U	0.201 U	-0.724 U	0.348 U	1.01 U	0.797 U	0.117 U	-1.59 U
Radium-226 (pCi/g)	0.414 J	0.134 J	0.148 J	2.31	0.718 J	1.31	0.523 J	0.0861 J	1.3
Radium-228 (pCi/g)	0.354 J	0.136 U	0.0295 U	1.04	0 U	0.611 J	0 U	0.12 U	0.482 J
Thorium-234 (pCi/g)	2.29 J	0.492 U	0.662 J	2.57 J	0.796 U	2.95 J	0.31 U	0.223 U	1.71 U
Uranium-235 (pCi/g)	0.0903 U	-0.0219 U	0.0179 U	0.119 U	0.0535 U	0.0777 U	0.151 U	0.116 U	0.15 U

Station	**IA10-SB0078**	**IA10-SB0078**	**IA10-SB0079**	**IA10-SB0080**	**IA10-SB0087**	**IA10-SB0087**	**IA10-SB0088**	**IA10-SB0088**	**IA10-SB0089**
Sample No	**LUSB0946**	**LUSB0947D**	**LUSB0947**	**LUSB0948**	**LUSB1026**	**LUSB1027**	**LUSB1028**	**LUSB1029**	**LUSB1120**
Collection Date	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**	**08/12/98**	**08/12/98**	**08/12/98**	**08/12/98**	**11/20/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**2.0-3.0**	**3.0-4.0**	**6.0-7.0**	**7.0-8.0**	**0.0-0.5**
Duplicate ID		**LUSB9101**							
Northing	**199233**	**199233**	**199268**	**199208**	**199261**	**199261**	**199215**	**199215**	**199593**
Easting	**517224**	**517224**	**517237**	**517099**	**517733**	**517733**	**517717**	**517717**	**517614**
Metals									
Arsenic (mg/kg)	5.6	5.2	11.2	11.2	14	13.8	18.3	13.1	
Barium (mg/kg)	89.9	87.7	80.5	70.1	79.2 N	83.6 N	37.1 N	127 N	
Beryllium (mg/kg)	2.1	1.7	0.75	0.58	0.75	0.62	0.56	0.7	8.4 B
Lead (mg/kg)	16.8	15	10.9	12.2	12.8	13.6	14.8	17.3	
Indicator Parameters									
Fluoride (mg/kg)	1.3	1.07	1.06	2.06	1.51	0.7	1.05	1.71	
Nitrogen, Ammonia (mg/kg)					8.73	5.88	8.19	33	
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0651 U	0.0952 U	0.054 U	0.0914 U	0.212 U	0.605 J	1.15 J	0.362 J	0.0835 U
Thorium-228 (pCi/g)	0.775 J	1.06	0.609 J	0.263 U	0.894 J	1.03	0.666 J	1.04	0.906 J
Thorium-230 (pCi/g)	1.97	1.37	1.35	0.149 U	1.72	1.9	2.21	1.98	1.08
Thorium-232 (pCi/g)	0.907 J	0.833 J	0.339 J	0.219 J	0.873 J	1.23	0.731 J	0.935 J	0.59 J
Uranium-233/234 (pCi/g)	1.54	0.797 J	0.92 J	0.137 U	1.35	1.11	1.08	1.27	1.18
Uranium-235 (pCi/g)	0.113 U	0.0969 J	0.0241 U	0.0445 U	0.122 J	0.0354 U	0.0342 U	0.0882 J	0.0195 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.69	0.674 J	1.2	0.233 J	1.39	1.27	1.75	1.21	0.991 J
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.903 J	0.962 J	0.599 J	0.714 J	1.19	1.16	0.991 J	1.12	0.968 J
Cesium-137 (pCi/g)	0.233	0.273	0.0322 U	0.026 U	0.008 U	0.0057 U	0.0138 U	0.0249 U	0.199
Cobalt-60 (pCi/g)	-0.0115 U	0.012 U	-0.0087 U	0.0097 U	-0.0085 U	-0.0053 U	-0.005 U	-0.0061 U	-0.0059 U
Potassium-40 (pCi/g)	19.6	20.3	20.5	17	27.2	29.9	23.3	22.9	20.7
Protactinium-231 (pCi/g)	-0.555 U	-0.222 U	-0.523 U	-0.314 U	0.0965 U	-0.158 U	-0.422 U	0.219 U	0.206 U
Radium-226 (pCi/g)	1.09	1.14	1.62	1.46	2.04	2.22	1.8	1.99	1.73
Radium-228 (pCi/g)	0.903 J	0.962 J	0.599 J	0.714 J	1.19	1.16	0.991 J	1.12	0.968 J
Thorium-234 (pCi/g)	0.992 J	1.51 J	1.36 U	2.51 J	0.46 U	1.53 J	2.42 J	2.41 J	1.07 U
Uranium-235 (pCi/g)	0.195 J	-0.0096 U	0.202 U	0.149 U	0.0177 U	0.0875 U	0.0494 U	0.0822 U	0.11 U

Phase IV IA10 Soil

Station	**IA10-SB0089**	**IA10-SB0090**	**IA10-SB0091**	**IA10-SB0092**	**IA10-SB0093**	**IA10-SB0094**	**IA10-SB0095**	**IA10-SB0096**	**IA10-SB0097**
Sample No	**LUSB1120D**	**LUSB1121**	**LUSB1122**	**LUSB1123**	**LUSB1124**	**LUSB1125**	**LUSB1126**	**LUSB1127**	**LUSB1128**
Collection Date	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**	**11/20/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID	**LUSB9109**								
Northing	**199593**	**199555**	**199547**	**199505**	**199480**	**199443**	**199410**	**199331**	**199293**
Easting	**517614**	**517623**	**517624**	**517631**	**517635**	**517645**	**517645**	**517664**	**517671**
Metals									
Arsenic (mg/kg)									
Barium (mg/kg)									
Beryllium (mg/kg)	7.8 B	32.3	38.1	31.7	20.7	8.5 B	3.8 B	6.6 B	4.2 B
Lead (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)									
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.125 U	0.173 J	0.0572 U	0.159 J	0.18 J	0.0577 U	0.0173 U	-0.0055 U	0.0639 UJ
Thorium-228 (pCi/g)	1.14	1.08	1.01	0.86 J	0.959 J	1.27	0.795 J	0.813 J	0.484 J
Thorium-230 (pCi/g)	1.63	1.54	1.9	1.38	1.69	1.68	1.63	1.2	0.951 J
Thorium-232 (pCi/g)	1.23	0.754 J	0.749 J	0.731 J	0.867 J	0.877 J	0.769 J	0.644 J	0.508 J
Uranium-233/234 (pCi/g)	1.17	1.25	1.82	1.51	1.68	1.1	0.761 J	0.819 J	1.43
Uranium-235 (pCi/g)	0.0392 U	0.0889 J	0.262 J	0.0843 J	0.0564 U	0.0472 U	-0.0049 U	0.047 U	0.068 U
Uranium-235/236 (pCi/g)									
Uranium-238 (pCi/g)	1.13	1.34	1.75	1.63	1.48	1.44	0.912 J	1.06	1.18
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.958 J	0.927 J	0.919 J	0.631 J	1.07	1.01	0.949 J	1.05	0.598 J
Cesium-137 (pCi/g)	0.173	0.34	0.304	0.546	0.462	0.48	0.229	0.665	0.678
Cobalt-60 (pCi/g)	0.0073 U	-0.0085 U	-0.0167 U	0.0301 U	0.0071 U	0.0054 U	0.0269 U	0.0047 U	0.0008 U
Potassium-40 (pCi/g)	22.7	19.1	18.9	18.9	20.2	19	21	18.1	11.3
Protactinium-231 (pCi/g)	0.121 U	-0.581 U	0.326 U	-0.337 U	0.547 U	-0.436 U	0.705 U	0.147 U	0.198 U
Radium-226 (pCi/g)	1.75	1.85	1.65	1.73	1.67	1.5	1.55	1.36	1.54
Radium-228 (pCi/g)	0.958 J	0.927 J	0.919 J	0.631 J	1.07	1.01	0.949 J	1.05	0.598 J
Thorium-234 (pCi/g)	1.4 J	1.28 J	1.69 J	2.2 J	1.49 J	0.541 U	1.3 J	1.1 U	1.7 J
Uranium-235 (pCi/g)	0.155 U	0.0854 U	0.137 U	0.192 U	0.0878 U	0.0573 U	0.244 J	0.154 U	0.23 J

Phase IV IA10 Soil

Station	**IA10-SB0006**	**IA10-SB0009**	**IA10-SB0009**	**IA10-SB0009**	**IA10-SB0011**	**IA10-SB0011**	**IA10-SB0011**	**IA10-SB0012**	**IA10-SB0012**
Sample No	**LUSB0827**	**LUSB0829**	**LUSB0830**	**LUSB0829D**	**LUSB0832**	**LUSB0833**	**LUSB0834**	**LUSB0835**	**LUSB0836**
Collection Date	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**
Depth (ft)	**1.0-2.0**	**2.0-3.0**	**3.0-4.0**	**2.0-3.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**2.0-3.0**	**3.0-4.0**
Duplicate ID				**LUSB9088**					
Northing	**200465**	**0**	**0**	**0**	**200803**	**200803**	**200803**	**200815**	**200815**
Easting	**514500**	**0**	**0**	**0**	**519407**	**519407**	**519407**	**519430**	**519430**
Metals									
Beryllium (mg/kg)	17.3	0.96	0.59	0.99	3.2	0.46	0.29	1.7	0.67

Station	**IA10-SB0012**	**IA10-SB0013**	**IA10-SB0014**	**IA10-SB0014**	**IA10-SB0014**	**IA10-SB0015**	**IA10-SB0015**	**IA10-SB0017**	**IA10-SB0018**
Sample No	**LUSB0837**	**LUSB0838**	**LUSB0839**	**LUSB0840**	**LUSB0841**	**LUSB0842**	**LUSB0843**	**LUSB0845**	**LUSB0844**
Collection Date	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**	**08/21/98**
Depth (ft)	**4.0-5.0**	**2.0-3.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**2.0-3.0**	**3.0-4.0**	**2.0-3.0**	**2.0-3.0**
Duplicate ID									
Northing	**200815**	**200813**	**200825**	**200825**	**200825**	**200812**	**200812**	**200771**	**200771**
Easting	**519430**	**519385**	**519470**	**519470**	**519470**	**519371**	**519371**	**520599**	**520577**
Metals									
Beryllium (mg/kg)	1.8	0.75	6.2	1	0.9	3.5	1.9	13.2	31.8

Station	**IA10-SB0018**	**IA10-SB0018**	**IA10-SB0023**	**IA10-SB0023**	**IA10-SB0024**	**IA10-SB0024**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**
Sample No	**LUSB0844D**	**LUSB0844D**	**LUSB0861**	**LUSB0862**	**LUSB0863**	**LUSB0864**	**LUSB0867**	**LUSB0868**	**LUSB0869**
Collection Date	**08/21/98**	**08/21/98**	**07/28/98**	**07/28/98**	**08/27/98**	**08/27/98**	**08/11/98**	**08/11/98**	**08/11/98**
Depth (ft)	**2.0-3.0**	**2.0-3.0**	**3.0-4.0**	**4.0-5.0**	**4.0-5.0**	**3.0-4.0**	**1.0-2.0**	**3.0-4.0**	**8.0-9.0**
Duplicate ID	**LUSB9089**	**LUSB9090**							
Northing	**200771**	**200771**	**199598**	**199598**	**199563**	**199563**	**199182**	**199182**	**199182**
Easting	**520577**	**520577**	**517508**	**517508**	**517045**	**517045**	**517707**	**517707**	**517707**
Metals									
Beryllium (mg/kg)	74.3	1.3	4.9	14.7	0.73	0.77	1.9	46.7	0.17 B

Station	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0026**	**IA10-SB0027**	**IA10-SB0027**	**IA10-SB0027**
Sample No	**LUSB0870**	**LUSB0871**	**LUSB0872**	**LUSB0873**	**LUSB0874**	**LUSB0869D**	**LUSB0880**	**LUSB0881**	**LUSB0882**
Collection Date	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**
Depth (ft)	**10.0-11.0**	**15.0-16.0**	**19.0-20.0**	**21.0-22.0**	**23.0-24.0**	**8.0-9.0**	**1.0-2.0**	**5.0-5.5**	**9.0-10.0**
Duplicate ID						**LUSB9093**			
Northing	**199182**	**199182**	**199182**	**199182**	**199182**	**199182**	**199174**	**199174**	**199174**
Easting	**517707**	**517707**	**517707**	**517707**	**517707**	**517707**	**517753**	**517753**	**517753**
Metals									
Beryllium (mg/kg)	0.11 B	0.08	0.13	0.17	0.17	0.12 B	0.33	1.5	0.2

Phase IV IA10 Soil

Station	**IA10-SB0027**	**IA10-SB0027**	**IA10-SB0027**	**IA10-SB0027**	**IA10-SB0109**	**IA10-SB0109**	**IA10-SB0110**	**IA10-SB0111**	**IA10-SB0112**
Sample No	**LUSB0883**	**LUSB0884**	**LUSB0885**	**LUSB0882D**	**LUSB1137**	**LUSB1137D**	**LUSB1138**	**LUSB1139**	**LUSB1140**
Collection Date	**08/11/98**	**08/11/98**	**08/11/98**	**08/11/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**
Depth (ft)	**13.0-14.0**	**17.0-18.0**	**20.0-21.0**	**9.0-10.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID				**LUSB9094**		**LUSB9110**			
Northing	**199174**	**199174**	**199174**	**199174**	**199597**	**199597**	**199595**	**199596**	**199595**
Easting	**517753**	**517753**	**517753**	**517753**	**517103**	**517103**	**517230**	**517290**	**517306**
Metals									
Beryllium (mg/kg)	0.21	0.28	0.18 B	0.18 B	3.8 B	3.5 B	14.5	2.1 B	1.8 B

Station	**IA10-SB0113**	**IA10-SB0114**	**IA10-SB0115**	**IA10-SB0116**	**IA10-SB0117**	**IA10-SB0118**	**IA10-SB0119**	**IA10-SB0120**	**IA10-SB0120**
Sample No	**LUSB1141**	**LUSB1142**	**LUSB1143**	**LUSB1144**	**LUSB1145**	**LUSB1146**	**LUSB1147**	**LUSB1148**	**LUSB1148D**
Collection Date	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/29/98**	**10/30/98**	**10/30/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID									**LUSB9111**
Northing	**199594**	**199593**	**199593**	**199594**	**199594**	**199592**	**199609**	**199665**	**199665**
Easting	**517369**	**517419**	**517461**	**517508**	**517527**	**517579**	**517585**	**517513**	**517513**
Metals									
Beryllium (mg/kg)	1.5 B	1.4 B	3.9 B	237	47.9	8 B	49.3	416	460

Station	**IA10-SB0121**	**IA10-SB0122**	**IA10-SB0123**	**IA10-SB0124**	**IA10-SB0125**	**IA10-SB0126**
Sample No	**LUSB1149**	**LUSB1150**	**LUSB1151**	**LUSB1152**	**LUSB1153**	**LUSB1154**
Collection Date	**10/30/98**	**10/30/98**	**10/30/98**	**10/30/98**	**10/30/98**	**10/30/98**
Depth (ft)	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID						
Northing	**199715**	**199765**	**199815**	**199864**	**199913**	**199943**
Easting	**517513**	**517514**	**517517**	**517508**	**517498**	**517492**
Metals						
Beryllium (mg/kg)	414	376	282	363	166	12

Phase II Offsite Soil

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Metals									
Aluminum (mg/kg)	6280	6970	11400	8090	12500	14200	5350	5720	13100
Antimony (mg/kg)	0.2 UJ	0.2 UJ	0.64 J	0.7 J	0.68 J	0.47 J	0.15 UJ	0.15 UJ	0.15 UJ
Arsenic (mg/kg)	4	4.4	7	3.7	7.1	11.2	2.7	3	11.3
Barium (mg/kg)	32	23.9	66.3	35.2	58.6	100	30.4	22.2	74.7
Beryllium (mg/kg)	0.3	0.34	0.6	0.35	0.73	0.84	0.29	0.26	0.76
Boron (mg/kg)	3.9	3.4	6.6	4.7	4.9	6.9	13 U	13 U	5.9
Cadmium (mg/kg)	0.3	0.22	0.35	0.34	0.32	0.51	0.15	0.02 U	0.02 U
Calcium (mg/kg)	3060	1540	15900	2920	2210	3030	2560	1280	8040
Chromium (mg/kg)	7	10	15.6	9.2	18.1	19.9	7.6	6.8	19.1
Cobalt (mg/kg)	2.8	3.3	8.1	3.4	9.1	11.8	2.3	3.2	12.3
Copper (mg/kg)	11.5	18.9	29.9	9.2	22.3	31.5	7.5	7.4	26.6
Iron (mg/kg)	8840	10100	19000	9740	21400	25300	6470	6520	24200
Lead (mg/kg)	18.3	5.2	7.7	12.3	10	11.8	10 J	5.1 J	12.1 J
Magnesium (mg/kg)	1100	1100	4480	1490	3330	3880	990	1150	4310
Manganese (mg/kg)	105	117	372	119	196	348	82.4 J	51.1 J	567 J
Mercury (mg/kg)	0 U	0 U	0 U	0 U	0 U	0 U	0.02 UJ	0.02 UJ	0.02 UJ
Molybdenum (mg/kg)	1.3	1.3	2.3	1.5	2.3	3.9	1.1	1.3	4.5
Nickel (mg/kg)	6.8	7.9	22.9	7.8	20	28.8	6.8	7.7	31.5
Potassium (mg/kg)	321	342	1090	471	872	1100	257 J	296 J	1190 J
Selenium (mg/kg)	0.94	0.73	0.9	0.63	1.1	0.68	0.78	0.29	0.87
Silicon (mg/kg)	376 J	329 J	387 J	429 J	295 J	325 J	495	287	489
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sodium (mg/kg)	155	195	227	208	184	194	214	184	247
Strontium (mg/kg)	28.3	15.2	44.2	25.2	18.1	21.6	23.7	11.4	31.1
Thallium (mg/kg)	0.61 J	0.25 U	0.77 J	0.25 U	1.1 J	1.5 J	2.3 U	2.3 U	1.4
Tin (mg/kg)	1 U	1 U	1 U	1 U	1 U	1 U			
Vanadium (mg/kg)	12.7	14.6	23.6	15.5	24.7	29.7	10.3	11.3	29.2
Zinc (mg/kg)	32.2	27.9	43.7	37.7	50.9	61.7	31.9	20.1	56.1
Indicator Parameters									
% Moisture (%)							11.8	5.63	11.8
Chloride (mg/kg)	0 U	1.36 R	0 R	1.98 R	1.45 R	2.22 R	2.38	0.6 U	0.6 U
Fluoride (mg/kg)	1.82 J	1.09 J	3 J	1.29 R	1.2 R	3.21 R	0.4 U	0.4 U	2.49
Nitrate, as N (mg/kg)	5.19	0 R	0 R	13.2 R	0 U	0 R	2.95	0.2 U	0.2 U
Phosphorus (mg/kg)	0 R	0 UJ	0 UJ	0 R	0 R	0 R	0.8 U	0.8 U	0.8 U
Sulfate (mg/kg)	5.84	6.18 R	16.8 R	6.06 R	7.25	25.1 R	7.37	3.81	31.8
pH (ph)	6.28	6.49	7.88	6.3	6.13	6.33	6.18	6.37	7.61

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Semivolatile Organics									
-heptadien-one, -dimethyl- (ug/kg)									
1,2,4-Trichlorobenzene (ug/kg)	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	55 U	55 U	55 U
2,4,6-tribromophenol (%)	79	78	76	81	80	77	63.6	72.8	60.9
2,4-Dichlorophenol (ug/kg)	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	132.8 UJ	50 UJ	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	49.5 U	49.5 U	49.5 U
2-Pentanone, 4-hydroxy-4-methyl- (ug/kg)							1000 R	930 R	1300 R
2-fluorobiphenyl (%)	73	70	72	73	70	74	71.5	66.6	74.7
2-fluorophenol (%)	72	70	71	72	72	76	86.6	47.9	88.2
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 UJ	86 UJ	86 UJ	86 UJ	86 UJ	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	75 U	75 U	75 U
3-Penten-2-one, 4-methyl- (ug/kg)							4100 R	2600 R	4100 R
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	60 U	60 U	60 U

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Anthracene (ug/kg)	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	73.35 U	73.35 U	73.35 U	73.35 U	73.35 U	73.35 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	72.2 U	72.2 U	72.2 U	72.2 U	72.2 U	72.2 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	65.9 U	65.9 U	65.9 U	65.9 U	65.9 U	65.9 U	60 U	60 U	60 U
Benzo(ghi)perylene (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	122 U	122 U	122 U	122 U	122 U	122 U	50 U	50 U	50 U
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	145 U	145 U	145 U	145 U	145 U	145 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	68.8 U	68.8 U	68.8 U	68.8 U	68.8 U	68.8 U	50 U	50 U	50 U
Cyclohexane, -dimethyl- (ug/kg)									
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	42.55 U	42.55 U	42.55 U	42.55 U	42.55 U	42.55 U	50 U	50 U	50 U
Fluorene (ug/kg)	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	50 U	50 U	50 U
Heptane, 2,5-dimethyl- (ug/kg)									
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U	38.95 U	38.95 U	38.95 U	38.95 U	55 U	55 U	55 U
Isophorone (ug/kg)	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	55 U	55 U	55 U
Naphthalene (ug/kg)	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	50 U	50 U	50 U
Nitrobenzene-d5 (%)	70	68	70	71	68	75	84.8	68.2	85.8
Pentachlorophenol (ug/kg)	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)	22.05 U	22.05 U	22.05 U	22.05 U	22.05 U	22.05 U	55 U	55 U	55 U
Phenol (ug/kg)	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	50 U	50 U	50 U
Phenol-d5 (%)	77	76	76	79	78	81	86.6	59.2	87.4
Pyrene (ug/kg)	64.25 U	64.25 U	64.25 U	64.25 U	64.25 U	64.25 U	60 U	60 U	60 U
Terphenyl-d14 (%)	86	87	89	88	88	90	90.1	89.1	90.1

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	70 UJ	70 UJ	70 UJ
trans--dimethyl--hexene (ug/kg)									
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)		1.28 UJ			1.28 UJ			1.3 U	1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)		0.6 UJ			0.6 UJ			1.45 U	1.45 U
1,1,2-Trichloroethane (ug/kg)		1.35 UJ			1.35 UJ			1.35 U	1.35 U
1,1-Dichloroethane (ug/kg)		0.26 UJ			0.26 UJ			0.65 U	0.65 U
1,1-Dichloroethene (ug/kg)		0.31 UJ			0.31 UJ			0.7 U	0.7 U
1,2-Dichloroethane (ug/kg)		0.12 UJ			0.12 UJ			0.85 U	0.85 U
1,2-Dichloroethane-d4 (ug/kg)								11 R	12 R
1,2-Dichloropropane (ug/kg)		0.24 UJ			0.24 UJ			1.1 U	1.1 U
1,2-dichloroethylene(total) (ug/kg)		0 UJ			0 UJ			1.4 U	1.4 U
2-Butanone (ug/kg)		0.7 UJ			0.7 UJ			2.6 UJ	2.6 UJ
2-Hexanone (ug/kg)		0.7 UJ			0.7 UJ			1.9 U	1.9 UJ
4-Methyl-2-pentanone (ug/kg)		0.27 UJ			0.27 UJ			2.15 U	2.15 U
Acetone (ug/kg)		0.8 R			180 R			3.4 UJ	3.4 UJ
Benzene (ug/kg)		0.22 UJ			0.22 UJ			0.55 U	0.55 U
Bromodichloromethane (ug/kg)		0.36 UJ			0.36 UJ			1.2 U	1.2 U
Bromofluorobenzene (%)		74			124			86.9	97.7
Bromomethane (ug/kg)		0.32 UJ			0.32 UJ			1.1 U	1.1 U
Carbon disulfide (ug/kg)		0.3 UJ			0.3 UJ			0.9 U	3 J
Carbon tetrachloride (ug/kg)		0.16 UJ			0.16 UJ			1.55 U	1.55 U
Chlorobenzene (ug/kg)		0.35 UJ			0.35 UJ			0.9 U	0.9 U
Chloroethane (ug/kg)		0.55 UJ			0.55 UJ			1.45 U	1.45 U
Chloroform (ug/kg)		0.24 UJ			0.24 UJ			0.7 U	0.7 U
Chloromethane (ug/kg)		0.5 UJ			0.5 UJ			1.45 U	1.45 U
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)		0.44 UJ			0.44 UJ			1.55 U	1.55 U
Dibromofluoromethane (%)		105			169			104.5	110
Ethylbenzene (ug/kg)		0.33 UJ			0.33 UJ			0.7 U	0.7 U
Methylene chloride (ug/kg)		0.95 UJ			0.95 UJ			0.65 UJ	0.65 UJ
Styrene (ug/kg)		1.2 UJ			1.2 UJ			0.75 U	0.75 U
Tetrachloroethene (ug/kg)		0.3 UJ			0.3 UJ			1 U	1 U
Toluene (ug/kg)		0.13 UJ			12 J			0.6 U	0.6 U
Toluene-d8 (%)		94			151			95.7	99.6

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Tribromomethane (ug/kg)		0.75 UJ			0.75 UJ			1.65 U	1.65 U
Trichloroethene (ug/kg)		0.35 UJ			0.35 UJ			1.1 U	1.1 U
Vinyl chloride (ug/kg)		0.49 UJ			0.49 UJ			1.35 U	1.35 U
Xylenes (total) (ug/kg)		0 UJ			0 UJ			5 J	1.8 U
cis-1,3-dichloropropene (ug/kg)		0.18 UJ			0.18 UJ			0.9 U	0.9 U
trans-1,3-dichloropropene (ug/kg)		0.22 UJ			0.22 UJ			1.05 U	1.05 U
Pesticides									
4,4'-DDD (ug/kg)				0.16 U					
4,4'-DDE (ug/kg)				0.04 U					
4,4'-DDT (ug/kg)				0.15 U					
Aldrin (ug/kg)				0.03 U					
Alpha-bhc (ug/kg)				0.03 U					
Alpha-chlordane (ug/kg)				0.03 UJ					
Aroclor-1016 (ug/kg)				0.93 U					
Aroclor-1221 (ug/kg)				0.93 U					
Aroclor-1232 (ug/kg)				0.93 U					
Aroclor-1242 (ug/kg)				0.93 U					
Aroclor-1248 (ug/kg)				0.93 U					
Aroclor-1254 (ug/kg)				0.67 U					
Aroclor-1260 (ug/kg)				0.67 U					
Beta-BHC (ug/kg)				2.8 J					
Decachlorobiphenyl (%)				69					
Delta-BHC (ug/kg)				0.02 U					
Dieldrin (ug/kg)				0.05 U					
Endosulfan sulfate (ug/kg)				0.03 U					
Endosulfan-i (ug/kg)				0.07 UJ					
Endosulfan-ii (ug/kg)				0.03 UJ					
Endrin (ug/kg)				0.06 UJ					
Endrin aldehyde (ug/kg)				0.06 U					
Endrin ketone (ug/kg)				0.02 UJ					
Gamma-chlordane (ug/kg)				0.04 UJ					
Heptachlor (ug/kg)				0.06 UJ					
Heptachlor epoxide (ug/kg)				0.02 U					
Lindane (ug/kg)				0.04 U					
Methoxychlor (ug/kg)				0.55 U					
T.chlordane (ug/kg)									
Tetrachloro-m-xylene (%)				60					

Station	**BH0001**	**BH0001**	**BH0001**	**BH0002**	**BH0002**	**BH0002**	**BH0003**	**BH0003**	**BH0003**
Sample No	**LU00001**	**LU00002**	**LU00003**	**LU00004**	**LU00005**	**LU00006**	**LU00007**	**LU00008**	**LU00009**
Collection Date	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**05/14/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**513529**	**513529**	**513529**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**195520**	**195520**	**195520**
Toxaphene (ug/kg)				1.83 U					
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.5 UJ	0.21	0.16	0.17	0.4	0.12	0.5 U	0.4	0.34
Radium-226 (pCi/g)	0.89	0.56	1.3	0.5	0.62	0.87	0.58	0.53	1.02
Radium-228 (pCi/g)	0.39	0.38	0.89	0.74	0.93	1.05	0.39	0.49	0.9
Thorium-227 (pCi/g)	0.5 UJ	0.21	0.16	0.17	0.4	0.12	0.5 U	0.4	0.34
Thorium-228 (pCi/g)	0.39	0.38	0.89	0.74	0.93	1.05	0.39	0.49	0.9
Thorium-230 (pCi/g)	0.5 U	1.17	1.77	1.33	2	2.23	0.83	0.83	2.59
Thorium-232 (pCi/g)	0.32	0.6	0.79	0.53	0.82	0.87	0.5 U	0.55	1.14
Uranium-234 (pCi/g)	0.94	1.15	1.66	1.04	1.41	1.4	0.64	0.98	1.21
Uranium-235 (pCi/g)	0.09 J	0.5 UJ	0.1 J	0.07 J	0.5 UJ	0.5 UJ	0.1 R	0.08 R	0.03 R
Uranium-238 (pCi/g)	0.84	0.86	1.99	1.24	1.7	1.68	0.91	0.89	1.66
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0.68	0 UJ	0 UJ	0 UJ	0.63	0.59	0 UJ	0 UJ	1.35
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.14	0.5 UJ	0.5 UJ	0.23	0.27	0.5 UJ	0.12	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	10.58	10.11	11.84	10.97	14.22	14.73	10.2	10.49	14.45
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.34 J	0.22 J	0.39 J	0.36 J	0.62 J	0.64 J	0.35 J	0.23 J	0.77 J
Radium-228 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57	0 UJ	0.19	0.67
Thorium-228 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57			
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.22	0.24	0.38	0.29	0.54	0.57	0 UJ	0.19	0.67
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 U	0 UJ	0 UJ

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
Metals									
Aluminum (mg/kg)	16000	15000	14100	14100	14800	13200	13300	14000	12500
Antimony (mg/kg)	0.78 J	0.75 J	0.86 J	0.6 J	0.86 J	0.73 J	0.15 UJ	0.15 UJ	0.15 UJ
Arsenic (mg/kg)	8.7	12.4	13	8.4	12.9	14.9	8.2	11.5	15.1
Barium (mg/kg)	99.4	135	125	81.6	128	85.7	84.4	99.9	85.8
Beryllium (mg/kg)	0.9	0.92	0.83	0.82	0.92	0.79	0.78	0.86	0.75
Boron (mg/kg)	13.2	9.9	9.1	10.4	10.3	10.7	9.5	7.5	9.8
Cadmium (mg/kg)	0.59	0.82	0.79	0.56	0.96	0.52	0.23	0.11	0.02 U
Calcium (mg/kg)	6180	6500	3920	5700	4820	6860	25000	4830	27500
Chromium (mg/kg)	21.3	20.1	21.4	19.4	19.7	19.1	16.8	18.7	17.7
Cobalt (mg/kg)	10.6	14.6	17	9.4	19.1	14.9	8.3	10.9	13.4
Copper (mg/kg)	26	25.6	27.4	24	26.1	30.2	23.8	26.6	30.2
Iron (mg/kg)	26300	28900	30500	25100	29900	31500	22200	27300	28200
Lead (mg/kg)	17.6	19.2	14.2	15.5	18.3	14.7	16.3 J	17.2 J	13.6 J
Magnesium (mg/kg)	5480	5010	5270	5220	4460	6630	17100	4460	11000
Manganese (mg/kg)	424	711	1450	362	1130	789	369 J	404 J	572 J
Mercury (mg/kg)	0 U	0 U	0 U	0 U	0 U	0 U	0.02 UJ	0.02 UJ	0.02 UJ
Molybdenum (mg/kg)	2.5	4.7	4.2	2	4	5.6	2.5	3.9	5.9
Nickel (mg/kg)	26.3	30	46.9	25.7	36.3	40.9	23	27.6	34.9
Potassium (mg/kg)	2290	1740	1590	1780	1720	1740	1820 J	1650 J	1780 J
Selenium (mg/kg)	2	1.3	1.8	1.4	1.5	1.5	1.1	1.5	1.1
Silicon (mg/kg)	431 J	303 J	337 J	364 J	314 J	483 J	465	427	324
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sodium (mg/kg)	218	196	209	197	204	203	285	253	271
Strontium (mg/kg)	20.9	18.1	11.4	16.3	15.2	12.2	20	14.3	23.1
Thallium (mg/kg)	2.1 J	1.4 J	1.5 J	1.4 J	1.6 J	2.1 J	1.3	1.4	1.7
Tin (mg/kg)	1 U	1 U	1 U	1 U	1 U	1 U			
Vanadium (mg/kg)	32.6	30.7	30.2	27.5	31.2	28	26.1	28.6	26.8
Zinc (mg/kg)	94.4	96.9	87.2	86.9	93.8	92.2	82.4	95.7	83.5
Indicator Parameters									
% Moisture (%)							14.3	14.8	13.6
Chloride (mg/kg)	1.72 R	0 R	0 R	2 R	0 R	1.43 R	0.6 U	0.6 U	0.6 U
Fluoride (mg/kg)	3.83 R	4.09 R	3.81 R	3.74 R	6.54 R	5.96 R	2.68	3.99	6.94
Nitrate, as N (mg/kg)	4.23	3.97 R	1.43 R	6.86 R	3.27 R	1.43 R	2.45	1.88	0.2 U
Phosphorus (mg/kg)	0 R	0 R	0 R	0 R	0 R	0 R	0.8 U	0.8 U	0.8 U
Sulfate (mg/kg)	3.7 R	4.69 R	10.6 R	5.11 R	6.18 R	18.1 R	3.15	2.93	11.7
pH (ph)	7.42	7.96	7.98	7.61	7.68	8.08	7.56	7.68	8.22

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
Semivolatile Organics									
-heptadien-one, -dimethyl- (ug/kg)	220 R								
1,2,4-Trichlorobenzene (ug/kg)	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	35.5 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	24.55 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	34.65 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	47.05 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	42.15 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	42.85 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U	55 U	55 U	55 U
2,4,6-tribromophenol (%)	77	73	77	78	75	78	56	59.4	64.5
2,4-Dichlorophenol (ug/kg)	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	47.9 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 U	132.8 U	132.8 U	132.8 U	132.8 U	50 UJ	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	93.2 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	48.35 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.05 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	46.7 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	73.05 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	37.15 U	49.5 U	49.5 U	49.5 U
2-Pentanone, 4-hydroxy-4-methyl- (ug/kg)							1100 R	990 R	960 R
2-fluorobiphenyl (%)	74	73	76	75	74	77	67.1	77.3	75.5
2-fluorophenol (%)	72	71	76	73	71	71	71.2	82.1	96.5
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 U	86 U	86 U	86 U	86 U	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	66.75 U	75 U	75 U	75 U
3-Penten-2-one, 4-methyl- (ug/kg)							3400 R	3900 R	4000 R
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	75.1 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	85.05 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	50.75 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	118.45 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	128.75 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	32.05 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	60.65 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	37.2 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	18.9 U	60 U	60 U	60 U

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
Anthracene (ug/kg)	29.1 U	29.1 U	29.1 U	47 J	29.1 U	29.1 U	46 J	50 U	50 U
Benzo(a)anthracene (ug/kg)	45 J	73.35 U	73.35 U	88 J	73.35 U	73.35 U	120 J	50 U	50 U
Benzo(a)pyrene (ug/kg)	72.2 U	72.2 U	72.2 U	86 J	72.2 U	72.2 U	100 J	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	65.9 U	65.9 U	65.9 U	88 J	65.9 U	65.9 U	170 J	60 U	60 U
Benzo(ghi)perylene (ug/kg)	45 U	45 U	45 U	45 J	45 U	45 U	61 J	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	45 J	122 U	122 U	84 J	122 U	122 U	50 U	50 U	50 U
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	145 U	145 U	145 U	48 J	145 U	145 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	50 J	68.8 U	68.8 U	96 J	68.8 U	68.8 U	130 J	50 U	50 U
Cyclohexane, -dimethyl- (ug/kg)	200 R								
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	51.75 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	40.2 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	41.7 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	110 J	42.55 U	42.55 U	240 J	42.55 U	42.55 U	270 J	50 U	50 U
Fluorene (ug/kg)	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U	50 U	50 U	50 U
Heptane, 2,5-dimethyl- (ug/kg)									
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	27.75 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	78.9 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	37.65 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U	38.95 U	44 J	38.95 U	38.95 U	58 J	55 U	55 U
Isophorone (ug/kg)	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	28.95 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	38.85 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	33.95 U	55 U	55 U	55 U
Naphthalene (ug/kg)	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	37.1 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	35.85 U	50 U	50 U	50 U
Nitrobenzene-d5 (%)	70	71	74	69	69	71	69.7	86	74
Pentachlorophenol (ug/kg)	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	68.25 U	38 U	38 U	38 U
Perylene (ug/kg)	380 R								
Phenanthrene (ug/kg)	91 J	22.05 U	22.05 U	240 J	22.05 U	22.05 U	360 J	55 U	55 U
Phenol (ug/kg)	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	36.55 U	50 U	50 U	50 U
Phenol-d5 (%)	77	78	82	80	80	80	73	83.9	86.8
Pyrene (ug/kg)	90 J	64.25 U	64.25 U	190 J	64.25 U	64.25 U	210 J	60 U	60 U
Terphenyl-d14 (%)	94	89	94	91	90	97	79.5	92.1	87.6

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	44.85 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	32.85 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	63.6 UJ	70 U	70 UJ	70 U
trans--dimethyl--hexene (ug/kg)									
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)		1.28 UJ			1.28 UJ			1.3 R	1.3 UJ
1,1,2,2-Tetrachloroethane (ug/kg)		0.6 UJ			0.6 UJ			1.45 R	1.45 UJ
1,1,2-Trichloroethane (ug/kg)		1.35 UJ			1.35 UJ			1.35 R	1.35 UJ
1,1-Dichloroethane (ug/kg)		0.26 UJ			0.26 UJ			0.65 R	0.65 UJ
1,1-Dichloroethene (ug/kg)		0.31 UJ			0.31 UJ			0.7 R	0.7 UJ
1,2-Dichloroethane (ug/kg)		0.12 UJ			0.12 UJ			0.85 R	0.85 UJ
1,2-Dichloroethane-d4 (ug/kg)								21 R	20 R
1,2-Dichloropropane (ug/kg)		0.24 UJ			0.24 UJ			1.1 R	1.1 UJ
1,2-dichloroethylene(total) (ug/kg)		0 UJ			0 UJ			1.4 R	1.4 UJ
2-Butanone (ug/kg)		0.7 UJ			0.7 UJ			2.6 R	2.6 UJ
2-Hexanone (ug/kg)		0.7 UJ			0.7 UJ			1.9 R	1.9 UJ
4-Methyl-2-pentanone (ug/kg)		0.27 UJ			0.27 UJ			2.15 R	2.15 UJ
Acetone (ug/kg)		0.8 R			0.8 R			3.4 R	3.4 UJ
Benzene (ug/kg)		0.22 UJ			0.22 UJ			0.55 R	0.55 UJ
Bromodichloromethane (ug/kg)		0.36 UJ			0.36 UJ			1.2 R	1.2 UJ
Bromofluorobenzene (%)		57			64			68.2 R	65
Bromomethane (ug/kg)		0.32 UJ			0.32 UJ			1.1 R	1.1 UJ
Carbon disulfide (ug/kg)		0.3 UJ			0.3 UJ			0.9 R	0.9 UJ
Carbon tetrachloride (ug/kg)		0.16 UJ			0.16 UJ			1.55 R	1.55 UJ
Chlorobenzene (ug/kg)		0.35 UJ			0.35 UJ			0.9 R	0.9 UJ
Chloroethane (ug/kg)		0.55 UJ			0.55 UJ			1.45 R	1.45 UJ
Chloroform (ug/kg)		0.24 UJ			0.24 UJ			0.7 R	0.7 UJ
Chloromethane (ug/kg)		0.5 UJ			0.5 UJ			1.45 R	1.45 UJ
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)		0.44 UJ			0.44 UJ			1.55 R	1.55 UJ
Dibromofluoromethane (%)		92			85			120.2 R	114.9
Ethylbenzene (ug/kg)		0.33 UJ			0.33 UJ			0.7 R	0.7 UJ
Methylene chloride (ug/kg)		0.95 UJ			0.95 UJ			30 R	79 J
Styrene (ug/kg)		1.2 UJ			1.2 UJ			0.75 R	0.75 UJ
Tetrachloroethene (ug/kg)		0.3 UJ			0.3 UJ			1 R	1 UJ
Toluene (ug/kg)		0.13 UJ			0.13 UJ			0.6 R	0.6 UJ
Toluene-d8 (%)		82			87			91.5 R	89.1

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
Tribromomethane (ug/kg)		0.75 UJ			0.75 UJ			1.65 R	1.65 UJ
Trichloroethene (ug/kg)		0.35 UJ			0.35 UJ			1.1 R	1.1 UJ
Vinyl chloride (ug/kg)		0.49 UJ			0.49 UJ			1.35 R	1.35 UJ
Xylenes (total) (ug/kg)		0 UJ			0 UJ			1.8 R	1.8 UJ
cis-1,3-dichloropropene (ug/kg)		0.18 UJ			0.18 UJ			0.9 R	0.9 UJ
trans-1,3-dichloropropene (ug/kg)		0.22 UJ			0.22 UJ			1.05 R	1.05 UJ
Pesticides									
4,4'-DDD (ug/kg)	0.16 R								
4,4'-DDE (ug/kg)	0.12 R								
4,4'-DDT (ug/kg)	0.15 R								
Aldrin (ug/kg)	0.07 R								
Alpha-bhc (ug/kg)	0.03 R								
Alpha-chlordane (ug/kg)	0.09 R								
Aroclor-1016 (ug/kg)	1.19 R								
Aroclor-1221 (ug/kg)	0.11 R								
Aroclor-1232 (ug/kg)	0 R								
Aroclor-1242 (ug/kg)	0.55 R								
Aroclor-1248 (ug/kg)	1.15 R								
Aroclor-1254 (ug/kg)	0 R								
Aroclor-1260 (ug/kg)	0 R								
Beta-BHC (ug/kg)	0.05 R								
Decachlorobiphenyl (%)	95								
Delta-BHC (ug/kg)	0.02 R								
Dieldrin (ug/kg)	0.08 R								
Endosulfan sulfate (ug/kg)	0.14 R								
Endosulfan-i (ug/kg)	0.14 R								
Endosulfan-ii (ug/kg)	0.03 R								
Endrin (ug/kg)	0.06 R								
Endrin aldehyde (ug/kg)	0.14 R								
Endrin ketone (ug/kg)	0.1 R								
Gamma-chlordane (ug/kg)	0.09 R								
Heptachlor (ug/kg)	0.08 R								
Heptachlor epoxide (ug/kg)	0.12 R								
Lindane (ug/kg)	0 R								
Methoxychlor (ug/kg)	0.77 R								
T.chlordane (ug/kg)									
Tetrachloro-m-xylene (%)	66								

Station	**BH0004**	**BH0004**	**BH0004**	**BH0005**	**BH0005**	**BH0005**	**BH0006**	**BH0006**	**BH0006**
Sample No	**LU00010**	**LU00011**	**LU00012**	**LU00013**	**LU00014**	**LU00015**	**LU00016**	**LU00017**	**LU00018**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**05/15/97**	**09/15/97**	**09/15/97**	**09/15/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**517437**	**517437**	**517437**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**196150**	**196150**	**196150**
Toxaphene (ug/kg)	0.36 R								
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.28	0.22	0.59	0.21	0.31	0.22	0.5 U	0.25	0.25
Radium-226 (pCi/g)	1.46	1.35	2.35	1.65	2.18	3.15	1.14	1.24	1.1
Radium-228 (pCi/g)	1.09	1.14	1.17	1.01	0.95	0.93	0.93	0.81	1.16
Thorium-227 (pCi/g)	0.28	0.22	0.59	0.21	0.31	0.22	0.5 U	0.25	0.25
Thorium-228 (pCi/g)	1.09	1.14	1.17	1.01	0.95	0.93	0.93	0.81	1.16
Thorium-230 (pCi/g)	1.9	2.26	2.11	2.25	1.98	2.13	1.66	2.55	2.31
Thorium-232 (pCi/g)	1.21	1.22	1.2	1.11	0.94	0.92	1.22	0.86	1.08
Uranium-234 (pCi/g)	1.71	1.54	1.86	1.81	1.59	2.24	1.45	1.74	1.64
Uranium-235 (pCi/g)	0.14 J	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.18 J	0.12 R	0.08 R	0.03 R
Uranium-238 (pCi/g)	1.62	1.64	1.91	1.64	2.21	2.16	1.77	2.07	1.7
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0 UJ	11.63	0 UJ	0 UJ	1.15	1.23	0 UJ	0 UJ	1.51
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.09	0.5 UJ	0.5 UJ	0.11	0.5 UJ	0.5 UJ	0.16	0.08	0.5 UJ
Potassium-40 (pCi/g)	15.44	18.14	20.02	18.35	19.52	20.42	17.11	16.12	16.67
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.81 J	0.93 J	1.06 J	0.82 J	1.27 J	1.28 J	0.67 J	0.87 J	0.94 J
Radium-228 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89	0.77	0.79	0.54
Thorium-228 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89			
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.74	0.71	1	0.63	0.76	0.89	0.77	0.79	0.54
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	1.9	2.87	0 UJ	4.77	3.16	0 UJ	3.28	0 UJ	0 UJ

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	12300	15800	17800	16100	14000	18300	17700	12900	17200
Antimony (mg/kg)	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
Arsenic (mg/kg)	14.5	3.6	7.5	15.2	5.6	5.1	10.5	3.5	5.7
Barium (mg/kg)	109	97.2	97	86.9	96.8	114	101	81.6	99.9
Beryllium (mg/kg)	0.76	0.82	0.92	0.94	0.88	1	0.96	0.76	0.91
Boron (mg/kg)	10.5	13.4	11.7	8.7	11.7	10.8	12.6	7.4	8.5
Cadmium (mg/kg)	0.24	0.43	0.02 U	0.02 U	0.48	0.02 U	0.02 U	0.28	0.02 U
Calcium (mg/kg)	55100	8660	5290	15100	29100	6720	13500	6690	5460
Chromium (mg/kg)	16.9	22.2	25.4	24	19.9	25.4	25.3	19.2	24.8
Cobalt (mg/kg)	15.8	8.7	11.5	15.1	8.8	11.2	14.1	7.9	10.7
Copper (mg/kg)	30.6	25.3	19.2	25.3	34	29.2	26	19.8	17.5
Iron (mg/kg)	27200	18400	27200	36000	18700	23500	30600	17000	24600
Lead (mg/kg)	14 J	19.9 J	13.3 J	13.6 J	18.9 J	14.5 J	13.2 J	15.5 J	13.3 J
Magnesium (mg/kg)	10600	4650	5160	7990	6830	5520	7490	4180	5220
Manganese (mg/kg)	1060 J	136 J	214 J	314 J	256 J	250 J	341 J	124 J	197 J
Mercury (mg/kg)	0.02 UJ	0.02 UJ	0.02 UJ	0.19 J	0.02 UJ	0.06 J	0.02 UJ	0.02 UJ	0.02 UJ
Molybdenum (mg/kg)	6.4	1.2	5.2	11.3	2.8	4.3	9	1.2	3.8
Nickel (mg/kg)	42	27.8	32.8	38.8	29.2	34.2	37.3	25.6	31.1
Potassium (mg/kg)	1850 J	2160 J	2200 J	1990 J	2280 J	2080 J	2260 J	1530 J	2000 J
Selenium (mg/kg)	0.15 U	1.6	0.96	1.1	1.4	1	1	1.6	0.93
Silicon (mg/kg)	334	408	375	376	379	472	395	615	350
Silver (mg/kg)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sodium (mg/kg)	252	279	270	270	255	256	275	213	239
Strontium (mg/kg)	36.5	47.2	32.2	35.3	56	37.5	37.2	37.7	33.2
Thallium (mg/kg)	1.7	1.4	1.7	1.6	0.59	1.1	1.7	1.1	0.98
Tin (mg/kg)									
Vanadium (mg/kg)	26.6	25.4	34.7	37.3	26.9	33.5	37.6	21.1	29.9
Zinc (mg/kg)	76.1	109	84.1	80.6	89.9	87.7	82.5	83.2	84.2
Indicator Parameters									
% Moisture (%)	13.3	18.1	13.5	12.9	17	14	12.2	17.6	13.7
Chloride (mg/kg)	0.6 U	0.6 U	0.6 U	0.6 U	4.34	2.44	0.6 U	0.6 U	0.6 U
Fluoride (mg/kg)	6.69	0.4 U	0.4 U	2.87	0.4 U	2.79	3.76	0.4 U	0.4 U
Nitrate, as N (mg/kg)	0.2 U	4.52	0.2 U	0.2 U	5.06	1.28	0.2 U	2.43	0.2 U
Phosphorus (mg/kg)	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Sulfate (mg/kg)	10.8	18.7	15.3	37	10.1	20.5	33	5.95	11.6
pH (ph)	8.28	6.71	7.78	8.11	7.84	7.97	8.11	6.95	7.53

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
-heptadien-one, -dimethyl- (ug/kg)									
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-tribromophenol (%)	67.4	80.4	85.3	66.3	76.9	81	81.3	75	74.6
2,4-Dichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
2-Pentanone, 4-hydroxy-4-methyl- (ug/kg)	790 R	980 R	950 R	900 R	1100 R	1000 R	1000 R	1200 R	1000 R
2-fluorobiphenyl (%)	70.1	68.4	72	67	72.7	70.1	66.3	69.1	66.3
2-fluorophenol (%)	88.9	84.6	93.4	86.4	87.2	91.7	87.2	75.5	86.7
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
3-Penten-2-one, 4-methyl- (ug/kg)	3500 R	3500 R	3700 R	3800 R	4000 R	3500 R	3200 R	7900 R	3100 R
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	2800	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
Anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Benzo(ghi)perylene (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Cyclohexane, -dimethyl- (ug/kg)									
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Fluorene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Heptane, 2,5-dimethyl- (ug/kg)									
Hexachlorobenzene (ug/kg)	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Isophorone (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Naphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene-d5 (%)	77	64	75.7	72.8	77.2	79.5	78.7	76	79.2
Pentachlorophenol (ug/kg)	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Phenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenol-d5 (%)	84.4	84.4	87.4	82.5	84.2	87.5	80	78.2	86.7
Pyrene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Terphenyl-d14 (%)	91.8	93	89.8	83.8	91.6	88.8	79.2	92.3	90.6

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	70 UJ	70 U	70 U	70 UJ	70 UJ	70 U	70 UJ	70 U	70 U
trans--dimethyl--hexene (ug/kg)			220 R						
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	1.3 UJ		1.3 U	1.3 U		1.3 U	1.3 U		1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	1.45 UJ		1.45 U	1.45 U		1.45 U	1.45 U		1.45 U
1,1,2-Trichloroethane (ug/kg)	1.35 UJ		1.35 U	1.35 U		1.35 U	1.35 U		1.35 U
1,1-Dichloroethane (ug/kg)	0.65 UJ		0.65 U	0.65 U		0.65 U	0.65 U		0.65 U
1,1-Dichloroethene (ug/kg)	0.7 UJ		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
1,2-Dichloroethane (ug/kg)	0.85 UJ		0.85 U	0.85 U		0.85 U	0.85 U		0.85 U
1,2-Dichloroethane-d4 (ug/kg)	13 R		19 R	12 R		11 R	18 R		12 R
1,2-Dichloropropane (ug/kg)	1.1 UJ		1.1 U	1.1 U		1.1 U	1.1 U		1.1 U
1,2-dichloroethylene(total) (ug/kg)	1.4 UJ		1.4 U	1.4 U		1.4 U	1.4 U		1.4 U
2-Butanone (ug/kg)	2.6 UJ		2.6 UJ	2.6 UJ		2.6 UJ	2.6 UJ		2.6 UJ
2-Hexanone (ug/kg)	1.9 UJ		1.9 U	1.9 U		1.9 UJ	1.9 U		1.9 U
4-Methyl-2-pentanone (ug/kg)	2.15 UJ		2.15 U	2.15 U		2.15 U	2.15 U		2.15 U
Acetone (ug/kg)	3.4 UJ		54 J	57 J		3.4 UJ	58 J		52 J
Benzene (ug/kg)	0.55 UJ		0.55 U	0.55 U		0.55 U	0.55 U		0.55 U
Bromodichloromethane (ug/kg)	1.2 UJ		1.2 U	1.2 U		1.2 U	1.2 U		1.2 U
Bromofluorobenzene (%)	70.3		77.1	88		79.6	79.9		81.4
Bromomethane (ug/kg)	1.1 UJ		1.1 U	1.1 U		1.1 U	1.1 U		1.1 U
Carbon disulfide (ug/kg)	0.9 UJ		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
Carbon tetrachloride (ug/kg)	1.55 UJ		1.55 U	1.55 U		1.55 U	1.55 U		1.55 U
Chlorobenzene (ug/kg)	0.9 UJ		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
Chloroethane (ug/kg)	1.45 UJ		1.45 U	1.45 U		1.45 U	1.45 U		1.45 U
Chloroform (ug/kg)	0.7 UJ		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
Chloromethane (ug/kg)	1.45 UJ		1.45 U	1.45 U		1.45 U	1.45 U		1.45 U
Cyclotetrasiloxane (ug/kg)									
Dibromochloromethane (ug/kg)	1.55 UJ		1.55 U	1.55 U		1.55 U	1.55 U		1.55 U
Dibromofluoromethane (%)	118.5		111.4	107		106.1	103.8		108.9
Ethylbenzene (ug/kg)	0.7 UJ		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
Methylene chloride (ug/kg)	0.65 UJ		0.65 UJ	0.65 UJ		0.65 UJ	0.65 U		0.65 UJ
Styrene (ug/kg)	0.75 UJ		0.75 U	0.75 U		0.75 U	0.75 U		0.75 U
Tetrachloroethene (ug/kg)	1 UJ		1 U	1 U		1 U	1 U		1 U
Toluene (ug/kg)	4 J		0.6 U	0.6 U		0.6 U	0.6 U		0.6 U
Toluene-d8 (%)	91.5		97.1	98.3		93.2	96.1		98

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
Tribromomethane (ug/kg)	1.65 UJ		1.65 U	1.65 U		1.65 U	1.65 U		1.65 U
Trichloroethene (ug/kg)	1.1 UJ		1.1 U	1.1 U		1.1 U	1.1 U		1.1 U
Vinyl chloride (ug/kg)	1.35 UJ		1.35 U	1.35 U		1.35 U	1.35 U		1.35 U
Xylenes (total) (ug/kg)	1.8 UJ		1.8 U	1.8 U		1.8 U	1.8 U		1.8 U
cis-1,3-dichloropropene (ug/kg)	0.9 UJ		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
trans-1,3-dichloropropene (ug/kg)	1.05 UJ		1.05 U	1.05 U		1.05 U	1.05 U		1.05 U
Pesticides									
4,4'-DDD (ug/kg)		0.05 R						0.05 R	
4,4'-DDE (ug/kg)		0.08 R						0.08 R	
4,4'-DDT (ug/kg)		0.13 R						0.13 R	
Aldrin (ug/kg)		0.03 R						0.03 R	
Alpha-bhc (ug/kg)		0.07 R						0.07 R	
Alpha-chlordane (ug/kg)		0.13 R						0.13 R	
Aroclor-1016 (ug/kg)		1.3 R						1.3 R	
Aroclor-1221 (ug/kg)		1.15 R						1.15 R	
Aroclor-1232 (ug/kg)		0.9 R						0.9 R	
Aroclor-1242 (ug/kg)		0.8 R						0.8 R	
Aroclor-1248 (ug/kg)		1.1 R						1.1 R	
Aroclor-1254 (ug/kg)		1.6 R						1.6 R	
Aroclor-1260 (ug/kg)		1.35 R						1.35 R	
Beta-BHC (ug/kg)		0.06 R						0.06 R	
Decachlorobiphenyl (%)		102.7 R						85.4 R	
Delta-BHC (ug/kg)		0.04 R						0.04 R	
Dieldrin (ug/kg)		0.09 R						0.09 R	
Endosulfan sulfate (ug/kg)		0.13 R						0.13 R	
Endosulfan-i (ug/kg)		0.05 R						0.05 R	
Endosulfan-ii (ug/kg)		0.05 R						0.05 R	
Endrin (ug/kg)		0.06 R						0.06 R	
Endrin aldehyde (ug/kg)		0.11 R						0.11 R	
Endrin ketone (ug/kg)		0.06 R						0.06 R	
Gamma-chlordane (ug/kg)		0.07 R						0.07 R	
Heptachlor (ug/kg)		0.05 R						0.05 R	
Heptachlor epoxide (ug/kg)		0.03 R						0.03 R	
Lindane (ug/kg)		0.03 R						0.03 R	
Methoxychlor (ug/kg)		0.2 R						0.2 R	
T.chlordane (ug/kg)									
Tetrachloro-m-xylene (%)		72.4 R						55.6 R	

Station	**BH0006**	**BH0009**	**BH0009**	**BH0009**	**BH0010**	**BH0010**	**BH0010**	**BH0011**	**BH0011**
Sample No	**LU00045**	**LU00025**	**LU00026**	**LU00027**	**LU00028**	**LU00029**	**LU00030**	**LU00031**	**LU00032**
Collection Date	**09/15/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**	**09/16/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**517437**	**514531**	**514531**	**514531**	**0**	**0**	**0**	**0**	**0**
Easting	**196150**	**200331**	**200331**	**200331**	**0**	**0**	**0**	**0**	**0**
Toxaphene (ug/kg)		1 R						1 R	
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.22	0.48	0.5 U	0.5 U					
Radium-226 (pCi/g)	0.92	0.5 UJ	1.35	1.69					
Radium-228 (pCi/g)	0.82	1.28	1.2	1.22					
Thorium-227 (pCi/g)	0.22	0.48	0.5 U	0.5 U					
Thorium-228 (pCi/g)	0.82	1.28	1.2	1.22					
Thorium-230 (pCi/g)	2.49	2.45	2.68	2.16					
Thorium-232 (pCi/g)	0.83	1.02	1.01	0.98					
Uranium-234 (pCi/g)	1.68	1.3	1.35	1.69					
Uranium-235 (pCi/g)	0.13 J	0.24	0.5 UJ	0.5 UJ					
Uranium-238 (pCi/g)	1.87	1.94	2.1	1.89					
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0 UJ	1.27 J	1.31 J	1.64 J					
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ					
Cesium-137 (pCi/g)	0.5 UJ	0.23	0.5 UJ	0.5 UJ					
Potassium-40 (pCi/g)	16.57	18.24 J	16.45 J	18.61 J					
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ					
Radium-226 (pCi/g)	0.69 J	0.75 J	0.92 J	0.86 J					
Radium-228 (pCi/g)	0.33	0.82 J	0.93 J	0.81 J					
Thorium-228 (pCi/g)									
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ					
Thorium-232 (pCi/g)	0.33	0.82 J	0.93 J	0.81 J					
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ					
Uranium-238 (pCi/g)	2.78	2.36 J	1.89 J	0 UJ					

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	14000	11400	15500	12200	12600	14500	13700	16400	14400
Antimony (mg/kg)	0.15 UJ	0.54 R	0.5 R	0.56 R	0.44 R	0.49 R	0.74 R	0.78 R	0.55 R
Arsenic (mg/kg)	10.9	3.1	2.8	4.1	3.1	2.6	6.8	4.1	3.9
Barium (mg/kg)	79.9	96.1	123	93.9	105	123	98.5	119	126
Beryllium (mg/kg)	0.82	0.94	1	0.82	1	1	0.84	1.1	1.1
Boron (mg/kg)	7.5	4.7	2.9	2.5	6.4	2.9	2.9	11.8	2.9
Cadmium (mg/kg)	0.02 U	0.59	0.46	0.33	0.66	0.53	0.51	0.78	0.61
Calcium (mg/kg)	21900	6690	5930	5240	8160	5820	8820	8450	6910
Chromium (mg/kg)	20.8	16.1	20.8	18.5	17.5	19.7	19.2	21.9	19.2
Cobalt (mg/kg)	12.6	7.3	8.5	8.4	7.6	8.6	9.9	8.5	9.4
Copper (mg/kg)	22.1	31.1	33	36	31.8	31.1	31.5	41.4	42.6
Iron (mg/kg)	29200	15600	19100	18500	16500	18000	22800	19800	18800
Lead (mg/kg)	12 J	18.9	13.4	12.1	20.5	13.3	12.2	22.3	15.2
Magnesium (mg/kg)	8470	3920 J	4900 J	4630 J	4200 J	4740 J	6180 J	4760 J	4510 J
Manganese (mg/kg)	290 J	247	253	267	236	292	451	265	276
Mercury (mg/kg)	0.02 UJ	0.08 J	0.05 J	0.04 J	0.07 J	0.06 J	0.01 UJ	0.07 J	0.06 J
Molybdenum (mg/kg)	8	1.4	1.8	2.6	1.4	1.7	4.7	1.9	1.9
Nickel (mg/kg)	33.6	24.8	29.3	27.5	25.8	29.1	30.8	27.7	28.5
Potassium (mg/kg)	1790 J	1020	983	814	1350	849	1140	2010	849
Selenium (mg/kg)	0.68	1.2	0.83	0.12 U	1.2	0.77	0.29	1.3	0.69
Silicon (mg/kg)	339	362 J	240 J	294 J	338 J	395 J	164 J	525 J	273 J
Silver (mg/kg)	0.1 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Sodium (mg/kg)	236	128	182	153	146	166	166	138	148
Strontium (mg/kg)	38.8	60.7	54	39.8	68.2	57.4	47.4	75.6	65.2
Thallium (mg/kg)	1.5	0.23 U	0.23 U	0.23 U	0.45	0.23 U	0.42	0.23 U	0.23 U
Tin (mg/kg)									
Vanadium (mg/kg)	30.1	21	25.9	24.6	23.5	24.6	26.4	33.6	29.7
Zinc (mg/kg)	72.4	95.3	90.1	76.7	92.4	87	77.1	111	98.8
Indicator Parameters									
% Moisture (%)	12.2	20.1 J	14.5 J	12.5 J	25.1 J	15.5 J	12 J	25.8 J	17 J
Chloride (mg/kg)	0.6 U	4.63	3.27	2.97	4.81	3.43	0.6 U	4.99	2.53
Fluoride (mg/kg)	3.08	0.4 U	0.4 U	0.4 U	0.4 U	2.48	3.07	0.4 U	0.4 U
Nitrate, as N (mg/kg)	0.2 U	2.88 J	0.2 UJ	0.2 UJ	3.34 J	0.2 UJ	0.2 UJ	5.66 J	1.44 J
Phosphorus (mg/kg)	0.8 U	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ	0.8 UJ
Sulfate (mg/kg)	28.9	14.5	33	32.1	13.5	22	25.2	16.2	18.3
pH (ph)	8.15	7.05	7.16	7.47	7.44	7.39	8.04	7.17	7.27

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
-heptadien-one, -dimethyl- (ug/kg)									
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4,6-tribromophenol (%)	74.4	92.4	84.4	82.7	100.7	94.9	91.9	101.2	100.7
2,4-Dichlorophenol (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,4-Dimethylphenol (ug/kg)	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U
2,4-Dinitrophenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 UJ	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chloronaphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Chlorophenol (ug/kg)	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U	42.5 U
2-Methylphenol (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
2-Nitroaniline (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
2-Nitrophenol (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
2-Pentanone, 4-hydroxy-4-methyl- (ug/kg)	810 R	1400 R	1500 R	1700 R	2600 R	1700 R	2600 R	3900 R	2700 R
2-fluorobiphenyl (%)	72	82.4	79	77.3	90	91.1	89.5	92.7	91.4
2-fluorophenol (%)	87.1	91.6	84.7	70.7	84.1	84.2	102.2	103.9	103.2
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
3-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
3-Penten-2-one, 4-methyl- (ug/kg)	3000 R	2600 R	2300 R	2000 R	3400 R	2700 R	3600 R	4400 R	3400 R
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Chloroaniline (ug/kg)	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U	105 U
4-Methylphenol (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Nitroaniline (ug/kg)	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U	75 U
4-Nitrophenol (ug/kg)	55 U	50 J	55 U	55 U	55 U	55 U	55 U	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
4-chlorophenylphenylether (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Acenaphthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthylene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)anthracene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzo(a)pyrene (ug/kg)	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Benzo(ghi)perylene (ug/kg)	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 UJ	50 UJ	50 UJ
Butylbenzylphthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Carbazole (ug/kg)	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U	42.75 U
Chrysene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Cyclohexane, -dimethyl- (ug/kg)									
Di-n-butylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dibenzofuran (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Diethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Fluoranthene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Fluorene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Heptane, 2,5-dimethyl- (ug/kg)		330 R	370 R	620 R		420 R			1400 R
Hexachlorobenzene (ug/kg)	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U
Hexachlorobutadiene (ug/kg)	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U
Hexachloroethane (ug/kg)	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Isophorone (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Naphthalene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Nitrobenzene (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene-d5 (%)	84.8	76.6	76.4	73.6	83.6	87	84.2	83.7	84.4
Pentachlorophenol (ug/kg)	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U
Perylene (ug/kg)									
Phenanthrene (ug/kg)	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U	55 U
Phenol (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenol-d5 (%)	87.1	94.1	87.8	100.5	119.3	119	104.6	104.8	104.9
Pyrene (ug/kg)	60 U	60 U	60 U	60 U	60 U	60 U	60 UJ	60 UJ	60 UJ
Terphenyl-d14 (%)	94.3	105.7	97.1	96	116.8	115.6	119.7	121.5	118.4

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	70 U	70 U	70 U	70 U	70 U	70 U	41 J	130 J	70 UJ
trans--dimethyl--hexene (ug/kg)									
Volatile Organics									
1,1,1-Trichloroethane (ug/kg)	1.3 U		1.3 U	1.3 U		1.3 U	1.3 U		1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)	1.45 U		12	1.45 U		1.45 U	1.45 U		1.45 U
1,1,2-Trichloroethane (ug/kg)	1.35 U		1.35 U	1.35 U		1.35 U	1.35 U		1.35 U
1,1-Dichloroethane (ug/kg)	0.65 U		0.65 U	0.65 U		0.65 U	0.65 U		0.65 U
1,1-Dichloroethene (ug/kg)	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
1,2-Dichloroethane (ug/kg)	0.85 U		0.85 U	0.85 U		0.85 U	0.85 U		0.85 U
1,2-Dichloroethane-d4 (ug/kg)	13 R								
1,2-Dichloropropane (ug/kg)	1.1 U		1.1 U	1.1 U		1.1 U	1.1 U		1.1 U
1,2-dichloroethylene(total) (ug/kg)	1.4 U		1.4 U	1.4 U		1.4 U	1.4 U		1.4 U
2-Butanone (ug/kg)	2.6 UJ		2.6 U	2.6 U		2.6 UJ	2.6 UJ		2.6 U
2-Hexanone (ug/kg)	1.9 UJ		1.9 U	1.9 U		1.9 U	1.9 U		1.9 U
4-Methyl-2-pentanone (ug/kg)	2.15 U		2.15 U	2.15 U		2.15 U	2.15 U		2.15 U
Acetone (ug/kg)	3.4 UJ		14 J	20 J		3700 J	4300 J		52 J
Benzene (ug/kg)	0.55 U		0.55 U	0.55 U		0.55 U	0.55 U		0.55 U
Bromodichloromethane (ug/kg)	1.2 U		1.2 U	1.2 U		1.2 U	1.2 U		1.2 U
Bromofluorobenzene (%)	85.2		95.8	85.9		104.3	108.1		86.8
Bromomethane (ug/kg)	1.1 U		1.1 U	1.1 U		1.1 UJ	1.1 UJ		1.1 U
Carbon disulfide (ug/kg)	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
Carbon tetrachloride (ug/kg)	1.55 U		1.55 U	1.55 U		1.55 U	1.55 U		1.55 U
Chlorobenzene (ug/kg)	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
Chloroethane (ug/kg)	1.45 U		1.45 U	1.45 U		1.45 UJ	1.45 UJ		1.45 U
Chloroform (ug/kg)	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
Chloromethane (ug/kg)	1.45 U		1.45 U	1.45 U		1.45 U	1.45 U		1.45 U
Cyclotetrasiloxane (ug/kg)				13 R					
Dibromochloromethane (ug/kg)	1.55 U		1.55 U	1.55 U		1.55 U	1.55 U		1.55 U
Dibromofluoromethane (%)	84.3		112.1	113.2		105.7	98		99.6
Ethylbenzene (ug/kg)	0.7 U		0.7 U	0.7 U		0.7 U	0.7 U		0.7 U
Methylene chloride (ug/kg)	0.65 UJ		49 J	66 J		7600 J	4500 J		85 J
Styrene (ug/kg)	0.75 U		0.75 U	0.75 U		0.75 U	0.75 U		0.75 U
Tetrachloroethene (ug/kg)	1 U		1 U	1 U		1 U	1 U		1 U
Toluene (ug/kg)	5 J		0.6 U	4 J		0.6 U	0.6 U		0.6 U
Toluene-d8 (%)	95		103	100		103.9	104.5		92.1

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Tribromomethane (ug/kg)	1.65 U		1.65 U	1.65 U		1.65 U	1.65 U		1.65 U
Trichloroethene (ug/kg)	1.1 U		1.1 U	1.1 U		1.1 U	1.1 U		1.1 U
Vinyl chloride (ug/kg)	1.35 U		1.35 U	1.35 U		1.35 U	1.35 U		1.35 U
Xylenes (total) (ug/kg)	1.8 U		1.8 U	1.8 U		1.8 U	1.8 U		1.8 U
cis-1,3-dichloropropene (ug/kg)	0.9 U		0.9 U	0.9 U		0.9 U	0.9 U		0.9 U
trans-1,3-dichloropropene (ug/kg)	1.05 U		1.05 U	1.05 U		1.05 U	1.05 U		1.05 U
Pesticides									
4,4'-DDD (ug/kg)		0.05 R							
4,4'-DDE (ug/kg)		0.08 UJ							
4,4'-DDT (ug/kg)		1.9 J							
Aldrin (ug/kg)		0.03 R							
Alpha-bhc (ug/kg)		0.07 R							
Alpha-chlordane (ug/kg)									
Aroclor-1016 (ug/kg)		1.3 R							
Aroclor-1221 (ug/kg)		1.15 R							
Aroclor-1232 (ug/kg)		0.9 UJ							
Aroclor-1242 (ug/kg)		0.8 R							
Aroclor-1248 (ug/kg)		1.1 R							
Aroclor-1254 (ug/kg)		1.6 R							
Aroclor-1260 (ug/kg)		1.35 R							
Beta-BHC (ug/kg)									
Decachlorobiphenyl (%)		54.1							
Delta-BHC (ug/kg)									
Dieldrin (ug/kg)		0.57 J							
Endosulfan sulfate (ug/kg)		0.13 UJ							
Endosulfan-i (ug/kg)		0.05 R							
Endosulfan-ii (ug/kg)		0.06 R							
Endrin (ug/kg)		0.06 R							
Endrin aldehyde (ug/kg)		0.11 R							
Endrin ketone (ug/kg)		0.06 R							
Gamma-chlordane (ug/kg)									
Heptachlor (ug/kg)		0.05 R							
Heptachlor epoxide (ug/kg)		0.03 R							
Lindane (ug/kg)		0.03 R							
Methoxychlor (ug/kg)		0.2 R							
T.chlordane (ug/kg)		0 R							
Tetrachloro-m-xylene (%)		49.9							

Station	**BH0011**	**BH0012**	**BH0012**	**BH0012**	**BH0013**	**BH0013**	**BH0013**	**BH0014**	**BH0014**
Sample No	**LU00033**	**LU00034**	**LU00035**	**LU00036**	**LU00041**	**LU00042**	**LU00065**	**LU00043**	**LU00044**
Collection Date	**09/16/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**	**10/27/97**
Depth (ft)	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Toxaphene (ug/kg)		1 R							
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)		1.34 J	1.41	1.23	1.13	1.16	1.16	1.12	1.27
Radium-226 (pCi/g)		1.27	1.46 J	1.69	1.38	1.55	1.49	1.08	1.84
Radium-228 (pCi/g)		1.34 J	1.41	1.23	1.13	1.16	1.16	1.12	1.27
Thorium-227 (pCi/g)		1.34 J	1.41	1.23	1.13	1.16	1.16	1.12	1.27
Thorium-228 (pCi/g)		1.34 J	1.41	1.23	1.13	1.16	1.16	1.12	1.27
Thorium-230 (pCi/g)		2.74 J	2.25	1.55	1.98	2.04	2.2	2.01	2.78
Thorium-232 (pCi/g)		1.49 J	1.27	1.26	0.97	0.87	1.03	0.92	1.41
Uranium-234 (pCi/g)		1.79	1.56	1.27	2.43	1.3	1.36	1.38 J	1.16
Uranium-235 (pCi/g)		0.5 UJ	0.5 UJ	0.25	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)		1.82	1.95	1.31	2.71	1.62	1.44	1.45 J	1.71
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)		0.79	1.57	1.98	0 UJ	1.39	0 UJ	0.67	1.91
Americium-241 (pCi/g)		0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)		0.29	0.5 UJ	0.5 UJ	0.39	0.5 UJ	0.5 UJ	0.34	0.5 UJ
Potassium-40 (pCi/g)		15.38	15.6	15.28	17.35	14.54	16.69	14.21	15.21
Protactinium-231 (pCi/g)		0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)		0.99 J	0.95 J	1 J	1.09 J	0.91 J	0.92 J	0.98 J	1.04 J
Radium-228 (pCi/g)		0.75	0.94	0.75	0.67	0.78	0.76	0.68	0.77
Thorium-228 (pCi/g)		0.75	0.94	0.75	0.67	0.78	0.76	0.68	0.77
Thorium-230 (pCi/g)		0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)		0.75	0.94	0.75	0.67	0.78	0.76	0.68	0.77
Uranium-235 (pCi/g)		0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)		5.4	0 UJ	2.06	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	15900	14000
Antimony (mg/kg)	0.68 R	0.52 R
Arsenic (mg/kg)	4.2	3.9
Barium (mg/kg)	119	112
Beryllium (mg/kg)	1.1	0.92
Boron (mg/kg)	9.4	2.1
Cadmium (mg/kg)	0.81	0.54
Calcium (mg/kg)	8310	6250
Chromium (mg/kg)	21.4	19.6
Cobalt (mg/kg)	8.9	9.7
Copper (mg/kg)	41.7	34.7
Iron (mg/kg)	20400	20000
Lead (mg/kg)	21.4	13.2
Magnesium (mg/kg)	4690 J	5860 J
Manganese (mg/kg)	267	315
Mercury (mg/kg)	0.08 J	0.05 J
Molybdenum (mg/kg)	2.1	3.3
Nickel (mg/kg)	28.2	29.2
Potassium (mg/kg)	1770	961
Selenium (mg/kg)	1.3	0.64
Silicon (mg/kg)	397 J	111 J
Silver (mg/kg)	0.09 U	0.09 U
Sodium (mg/kg)	151	243
Strontium (mg/kg)	74.4	51.7
Thallium (mg/kg)	0.23 U	0.23 U
Tin (mg/kg)		
Vanadium (mg/kg)	33.7	27.6
Zinc (mg/kg)	110	92.4
Indicator Parameters		
% Moisture (%)	25.1 J	14.1 J
Chloride (mg/kg)	5.21	5
Fluoride (mg/kg)	0.4 U	2.91
Nitrate, as N (mg/kg)	6.41 J	0.2 UJ
Phosphorus (mg/kg)	0.8 UJ	0.8 UJ
Sulfate (mg/kg)	15.8	45.8
pH (ph)	7.19	7.42

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
Semivolatile Organics		
-heptadien-one, -dimethyl- (ug/kg)		
1,2,4-Trichlorobenzene (ug/kg)	47 U	47 U
1,2-Dichlorobenzene (ug/kg)	50 U	50 U
1,3-Dichlorobenzene (ug/kg)	50 U	50 U
1,4-Dichlorobenzene (ug/kg)	60 U	60 U
2,2'-oxybis (1-chloropropane) (ug/kg)	44.5 U	44.5 U
2,4,5-Trichlorophenol (ug/kg)	55 U	55 U
2,4,6-Trichlorophenol (ug/kg)	55 U	55 U
2,4,6-tribromophenol (%)	103.2	99.2
2,4-Dichlorophenol (ug/kg)	55 U	55 U
2,4-Dimethylphenol (ug/kg)	80 U	80 U
2,4-Dinitrophenol (ug/kg)	50 UJ	50 UJ
2,4-Dinitrotoluene (ug/kg)	55 U	55 U
2,6-Dinitrotoluene (ug/kg)	55 U	55 U
2-Chloronaphthalene (ug/kg)	55 U	55 U
2-Chlorophenol (ug/kg)	48.5 U	48.5 U
2-Methylnaphthalene (ug/kg)	42.5 U	42.5 U
2-Methylphenol (ug/kg)	65 U	65 U
2-Nitroaniline (ug/kg)	55 U	55 U
2-Nitrophenol (ug/kg)	49.5 U	49.5 U
2-Pentanone, 4-hydroxy-4-methyl- (ug/kg)	2800 R	2400 R
2-fluorobiphenyl (%)	91.2	92.5
2-fluorophenol (%)	102	104.4
3,3'-Dichlorobenzidine (ug/kg)	60 U	60 U
3-Nitroaniline (ug/kg)	75 U	75 U
3-Penten-2-one, 4-methyl- (ug/kg)	4000 R	3200 R
4,6-Dinitro-2-methylphenol (ug/kg)	50 U	50 U
4-Chloroaniline (ug/kg)	105 U	105 U
4-Methylphenol (ug/kg)	47 U	47 U
4-Nitroaniline (ug/kg)	75 U	75 U
4-Nitrophenol (ug/kg)	55 U	55 U
4-bromophenyl phenyl ether (ug/kg)	43 U	43 U
4-chloro-3-methyl phenol (ug/kg)	45 U	45 U
4-chlorophenylphenylether (ug/kg)	60 U	60 U
Acenaphthene (ug/kg)	50 U	50 U
Acenaphthylene (ug/kg)	60 U	60 U

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
Anthracene (ug/kg)	50 U	50 U
Benzo(a)anthracene (ug/kg)	50 U	50 U
Benzo(a)pyrene (ug/kg)	41.5 U	41.5 U
Benzo(b)fluoranthene (ug/kg)	60 U	60 U
Benzo(ghi)perylene (ug/kg)	65 U	65 U
Benzo(k)fluoranthene (ug/kg)	50 UJ	50 UJ
Butylbenzylphthalate (ug/kg)	60 U	60 U
Carbazole (ug/kg)	42.75 U	42.75 U
Chrysene (ug/kg)	50 U	50 U
Cyclohexane, -dimethyl- (ug/kg)		
Di-n-butylphthalate (ug/kg)	55 U	55 U
Di-n-octylphthalate (ug/kg)	55 U	55 U
Dibenz(a,h)anthracene (ug/kg)	60 U	60 U
Dibenzofuran (ug/kg)	55 U	55 U
Diethyl phthalate (ug/kg)	60 U	60 U
Dimethyl phthalate (ug/kg)	60 U	60 U
Fluoranthene (ug/kg)	50 U	50 U
Fluorene (ug/kg)	50 U	50 U
Heptane, 2,5-dimethyl- (ug/kg)		1000 R
Hexachlorobenzene (ug/kg)	42 U	42 U
Hexachlorobutadiene (ug/kg)	45 U	45 U
Hexachlorocyclopentadiene (ug/kg)	37.5 U	37.5 U
Hexachloroethane (ug/kg)	47 U	47 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	55 U	55 U
Isophorone (ug/kg)	50 U	50 U
N-nitroso-di-n-propylamine (ug/kg)	43.5 U	43.5 U
N-nitrosodiphenylamine (ug/kg)	55 U	55 U
Naphthalene (ug/kg)	55 U	55 U
Nitrobenzene (ug/kg)	50 U	50 U
Nitrobenzene-d5 (%)	85.3	85.7
Pentachlorophenol (ug/kg)	38 U	38 U
Perylene (ug/kg)		
Phenanthrene (ug/kg)	55 U	55 U
Phenol (ug/kg)	50 U	50 U
Phenol-d5 (%)	104.7	107.3
Pyrene (ug/kg)	60 UJ	60 UJ
Terphenyl-d14 (%)	125.5	123.6

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
bis(2-chloroethoxy)methane (ug/kg)	49.5 U	49.5 U
bis(2-chloroethyl) ether (ug/kg)	50 U	50 U
bis(2-ethylhexyl)phthalate (ug/kg)	63 J	70 UJ
trans--dimethyl--hexene (ug/kg)		
Volatile Organics		
1,1,1-Trichloroethane (ug/kg)		1.3 U
1,1,2,2-Tetrachloroethane (ug/kg)		1.45 U
1,1,2-Trichloroethane (ug/kg)		1.35 U
1,1-Dichloroethane (ug/kg)		0.65 U
1,1-Dichloroethene (ug/kg)		0.7 U
1,2-Dichloroethane (ug/kg)		0.85 U
1,2-Dichloroethane-d4 (ug/kg)		
1,2-Dichloropropane (ug/kg)		1.1 U
1,2-dichloroethylene(total) (ug/kg)		1.4 U
2-Butanone (ug/kg)		2.6 U
2-Hexanone (ug/kg)		1.9 U
4-Methyl-2-pentanone (ug/kg)		2.15 U
Acetone (ug/kg)		33 J
Benzene (ug/kg)		0.55 U
Bromodichloromethane (ug/kg)		1.2 U
Bromofluorobenzene (%)		85.7
Bromomethane (ug/kg)		1.1 U
Carbon disulfide (ug/kg)		0.9 U
Carbon tetrachloride (ug/kg)		1.55 U
Chlorobenzene (ug/kg)		0.9 U
Chloroethane (ug/kg)		1.45 U
Chloroform (ug/kg)		0.7 U
Chloromethane (ug/kg)		1.45 U
Cyclotetrasiloxane (ug/kg)		9 R
Dibromochloromethane (ug/kg)		1.55 U
Dibromofluoromethane (%)		90.6
Ethylbenzene (ug/kg)		0.7 U
Methylene chloride (ug/kg)		60 J
Styrene (ug/kg)		0.75 U
Tetrachloroethene (ug/kg)		1 U
Toluene (ug/kg)		3 J
Toluene-d8 (%)		93.9

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
Tribromomethane (ug/kg)		1.65 U
Trichloroethene (ug/kg)		1.1 U
Vinyl chloride (ug/kg)		1.35 U
Xylenes (total) (ug/kg)		1.8 U
cis-1,3-dichloropropene (ug/kg)		0.9 U
trans-1,3-dichloropropene (ug/kg)		1.05 U
Pesticides		
4,4'-DDD (ug/kg)		
4,4'-DDE (ug/kg)		
4,4'-DDT (ug/kg)		
Aldrin (ug/kg)		
Alpha-bhc (ug/kg)		
Alpha-chlordane (ug/kg)		
Aroclor-1016 (ug/kg)		
Aroclor-1221 (ug/kg)		
Aroclor-1232 (ug/kg)		
Aroclor-1242 (ug/kg)		
Aroclor-1248 (ug/kg)		
Aroclor-1254 (ug/kg)		
Aroclor-1260 (ug/kg)		
Beta-BHC (ug/kg)		
Decachlorobiphenyl (%)		
Delta-BHC (ug/kg)		
Dieldrin (ug/kg)		
Endosulfan sulfate (ug/kg)		
Endosulfan-i (ug/kg)		
Endosulfan-ii (ug/kg)		
Endrin (ug/kg)		
Endrin aldehyde (ug/kg)		
Endrin ketone (ug/kg)		
Gamma-chlordane (ug/kg)		
Heptachlor (ug/kg)		
Heptachlor epoxide (ug/kg)		
Lindane (ug/kg)		
Methoxychlor (ug/kg)		
T.chlordane (ug/kg)		
Tetrachloro-m-xylene (%)		

Station	**BH0014**	**BH0014**
Sample No	**LU00046**	**LU00066**
Collection Date	**10/27/97**	**10/27/97**
Depth (ft)	**0.0-0.5**	**1.5-2.5**
Northing	**0**	**0**
Easting	**0**	**0**
Toxaphene (ug/kg)		
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	1.23	1.76
Radium-226 (pCi/g)	1.48	2.28
Radium-228 (pCi/g)	1.23	1.76
Thorium-227 (pCi/g)	1.23	1.76
Thorium-228 (pCi/g)	1.23	1.76
Thorium-230 (pCi/g)	2.36	3.21
Thorium-232 (pCi/g)	1.04	1.27
Uranium-234 (pCi/g)	1.76 J	1.22
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	2.42 J	1.75
Radiological Parameters (GammaSpec)		
Actinium-227 (pCi/g)	1.64	1.96
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.28	0.5 UJ
Potassium-40 (pCi/g)	16.54	16.26
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	0.97 J	1.07 J
Radium-228 (pCi/g)	0.78	0.77
Thorium-228 (pCi/g)	0.78	0.77
Thorium-230 (pCi/g)	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.78	0.77
Uranium-235 (pCi/g)	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	1.88

Phase II Offsite Soil

Station	**BH0005**	**BH0005**	**BH0005**	**BH0007**	**BH0007**	**BH0007**	**BH0007**	**BH0008**	**BH0008**
Sample No	**LU00055**	**LU00056**	**LU00057**	**LU00019**	**LU00020**	**LU00021**	**LU00058**	**LU00022**	**LU00023**
Collection Date	**05/15/97**	**05/15/97**	**05/15/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**	**05/16/97**
Depth (ft)	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.5-1.5**	**1.5-2.5**	**0.0-0.5**	**0.0-0.5**	**0.5-1.5**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)				0.2	0.5 UJ	0.17	0.25	0.17	0.16
Radium-226 (pCi/g)	2.64	2.29	2.68	2.08	3.5	2.52 J	1.9	2.45	2.32 J
Radium-228 (pCi/g)				1.17	1.19	1.32	1.14	1.02	1.38
Thorium-227 (pCi/g)				0.2	0.5 UJ	0.17	0.25	0.17	0.16
Thorium-228 (pCi/g)	1.48 J	1.43 J	0.74 J	1.17	1.19	1.32	1.14	1.02	1.38
Thorium-230 (pCi/g)	3.89 J	3.11 J	3.39 J	2.23	2.04	2.69	2.16	2.38	2.66
Thorium-232 (pCi/g)	1.3 J	0.85 J	1.33 J	1.16	1.15	1.42	1.03	1.21	1.44
Uranium-234 (pCi/g)	1.27	1.89	1.63	2.31	1.46	1.16	2.42	2.61	1.28
Uranium-235 (pCi/g)	0 UJ	0 UJ	0 UJ	0.2 J	0.5 UJ	0.5 UJ	0.08 J	0.19 J	1.56
Uranium-238 (pCi/g)	1.48	2	1.79	2.51	1.38	1.74	2	3.04	1.79
Radiological Parameters (GammaSpec)									
Actinium-227 (pCi/g)	0 UJ	0.13	0 UJ	0.7	0 UJ	0.85	1.02	2.05	0.77
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.18	0.12	0 UJ	0.38	0.1	0 UJ	0.32	0.37	0 UJ
Potassium-40 (pCi/g)	24.8	23.6	25.72	17.24	19.29	18.93	15.69	17.15	18.8
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	-1.76	0 UJ
Radium-226 (pCi/g)	1.18 J	1.25 J	1.52 J	0.82 J	0.8 J	0.97 J	0.86 J	0.86 J	0.88 J
Radium-228 (pCi/g)	1.03	1.03	1.05	0.78	0.87	0.67	0.6	0.57	0.82
Thorium-228 (pCi/g)	1.03	1.03	1.05	0.78	0.87	0.67	0.6	0 UJ	0.82
Thorium-230 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Thorium-232 (pCi/g)	1.03	1.03	1.05	0.78	0.87	0.67	0.6	0.57	0.82
Uranium-235 (pCi/g)	0.21	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	1.61	0 UJ	2.39	5.74	0 UJ

Phase II Offsite Soil

Station	**BH0008**
Sample No	**LU00024**
Collection Date	**05/16/97**
Depth (ft)	**1.5-2.5**
Northing	**0**
Easting	**0**
Radiological Parameters (AlphaSpec)	
Actinium-227 (pCi/g)	0.3
Radium-226 (pCi/g)	2.65
Radium-228 (pCi/g)	1.08
Thorium-227 (pCi/g)	0.3
Thorium-228 (pCi/g)	1.08
Thorium-230 (pCi/g)	2.17
Thorium-232 (pCi/g)	1.3
Uranium-234 (pCi/g)	1.54
Uranium-235 (pCi/g)	0.08 J
Uranium-238 (pCi/g)	1.53
Radiological Parameters (GammaSpec)	
Actinium-227 (pCi/g)	1.89
Americium-241 (pCi/g)	0 UJ
Cesium-137 (pCi/g)	0 UJ
Potassium-40 (pCi/g)	16.42
Protactinium-231 (pCi/g)	0 UJ
Radium-226 (pCi/g)	0.98 J
Radium-228 (pCi/g)	0.76
Thorium-228 (pCi/g)	0.76
Thorium-230 (pCi/g)	0 UJ
Thorium-232 (pCi/g)	0.76
Uranium-235 (pCi/g)	0 UJ
Uranium-238 (pCi/g)	0 UJ

APPENDIX 4A.2:
Analytical Sediment Sample Results

Phase II IA02 Sediment

Station	**07BA01**	**08AW01**
Sample No	**LU00300**	**LU00301**
Collection Date	**11/05/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	23400	24300
Arsenic (mg/kg)	2.7	8.6
Beryllium (mg/kg)	1680 J	637 J
Lead (mg/kg)	21.9	73.7
Magnesium (mg/kg)	2200	9080
Indicator Parameters		
% Moisture (%)	36	22
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	1.63	0.5 UJ
Radium-228 (pCi/g)	0.5 UJ	0.775
Thorium-227 (pCi/g)	1.63	0.5 UJ
Thorium-228 (pCi/g)	0.5 UJ	0.775
Thorium-230 (pCi/g)	11.7	4.21
Thorium-232 (pCi/g)	0.5 U	0.689
Uranium-234 (pCi/g)	9.34	6.54
Uranium-235 (pCi/g)	0.422	0.175
Uranium-238 (pCi/g)	9.73	6.34
Radiological Parameters (GammaSpec)		
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.398
Potassium-40 (pCi/g)	0 UJ	17.9
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	64.2 J	4.95 J

Phase II IA06 Sediment

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**	**SWSD0012**
Sample No	**LU00071**	**LU00073**	**LU00075**	**LU00077**	**LU00079**	**LU00081**	**LU00083**	**LU00085**	**LU00087**
Collection Date	**09/30/97**	**09/30/97**	**09/30/97**	**09/30/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**517675**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**199287**
Metals									
Aluminum (mg/kg)	11600	17100	10800	11100 J	5990	5740	6420	7430	3600
Antimony (mg/kg)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Arsenic (mg/kg)	3.7	7.7	5.2	2.2 J	4.9	4.6	3.8	5.6	3.4
Barium (mg/kg)	69.8 J	173 J	209 J	141 J	45.2 J	49.4 J	51.3 J	64.1 J	79.3 J
Beryllium (mg/kg)	25.1	236	297	108 J	3.3	64.5	35.3	0.55	0.7
Boron (mg/kg)	0.48 U	15.5 J	13.9 J	0.48 U	7.4 J	9.3 J	0.48 U	9.3 J	0.48 U
Cadmium (mg/kg)	1.5	56.8	12.4	1.5 J	0.56	0.77	0.6	1	1.4
Calcium (mg/kg)	87800	27000	28200	119000 J	62300	62200	73200	52200	89000
Chromium (mg/kg)	18	26.8	23.6	18.7 J	10.9	11.2	15.1	16.3	9.8
Cobalt (mg/kg)	7.9	12.5	6.4	4.8 J	7.3	5.8	6.1	5.6	2.9
Copper (mg/kg)	24.7 J	147 J	65.4 J	50.1 J	16.8 J	23.5 J	36.6 J	79.8 J	110 J
Iron (mg/kg)	18500 J	26600 J	17500 J	14700 J	13200 J	11600 J	12500 J	14400 J	7680 J
Lead (mg/kg)	13.1 J	61.7 J	110 J	102 J	13.4 J	48 J	53.3 J	60.4 J	135 J
Magnesium (mg/kg)	11400	10500	9340	14700 J	21700	21600	31100	25300	37400
Manganese (mg/kg)	333 J	323 J	207 J	205 J	351 J	247 J	182 J	168 J	137 J
Mercury (mg/kg)	0.07	0.14	0.11	0.18	0.03	0.11	0.09	0.11	0.18
Molybdenum (mg/kg)	3	3.1	2.3	2.1 J	2.9	2.7	2.5	4.5	2.4
Nickel (mg/kg)	22.5	32.7	21.7	18.6 J	16.5	14.4	16.4	16.5	10.2
Potassium (mg/kg)	2110 J	2590 J	1600 J	2490 J	1060 J	990 J	1020 J	1160 J	719 J
Selenium (mg/kg)	0.04 U	0.04 U	0.5	0.04 U	0.5	0.04 U	1.1	0.54	0.04 U
Silicon (mg/kg)	1770 J	3090 J	1980 J	2550 J	1290 J	1410 J	1300 J	1940 J	1150 J
Silver (mg/kg)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Sodium (mg/kg)	337	670	833	3110 J	204	389	412	587	295
Strontium (mg/kg)	236	545	385	3400 J	115	205	191	87.5	292
Thallium (mg/kg)	1.4	0.07 U	0.07 U	0.07 U	1.1	0.95	0.07 U	0.07 U	1.2
Vanadium (mg/kg)	23.2	31	19.2	22.4 J	15.3	14.2	17.7	14.9	8.3
Zinc (mg/kg)	63.6	284	579	702 J	52	114	98.9	192	354
Indicator Parameters									
% Moisture (%)	28	60	52	64 J	40	33	29	47	30
Chloride (mg/kg)	19			3670 J			262		
Fluoride (mg/kg)	11.4			24.4 J			4.32		
Nitrate, as N (mg/kg)	7.29			0.318			0.163		
Phosphorus (mg/kg)	2.64			2.09			0.22 R		
Sulfate (mg/kg)	436			671 J			606		
Temperature (c)	30	54.2	44.3	58.9	35.9	32.2	31	42.1	31.5
Total organic carbon (mg/kg)	47900 J	17400 J	48900 J	28500 J	18100 J	38900 J	40100 J	57200 J	50900 J

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**	**SWSD0012**
Sample No	**LU00071**	**LU00073**	**LU00075**	**LU00077**	**LU00079**	**LU00081**	**LU00083**	**LU00085**	**LU00087**
Collection Date	**09/30/97**	**09/30/97**	**09/30/97**	**09/30/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**517675**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**199287**
pH (ph)	7.79	7.18	7.1 J	7.38	6.91	7.33	7.6 J	7.52	7.22
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
1,2-Dichlorobenzene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
1,3-Dichlorobenzene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
1,4-Dichlorobenzene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,2'-oxybis (1-chloropropane) (ug/kg)	230 UJ	2050 UJ	8500 UJ	900 UJ	270 UJ	495 UJ	1150 UJ	1550 UJ	1200 UJ
2,4,5-Trichlorophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,4,6-Trichlorophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,4,6-tribromophenol (%)	44	64	0	68	52	65	58	0	69
2,4-Dichlorophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,4-Dimethylphenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,4-Dinitrophenol (ug/kg)	455 UJ	4100 UJ	17000 UJ	1800 UJ	550 UJ	1000 UJ	2300 UJ	3100 UJ	2350 UJ
2,4-Dinitrotoluene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2,6-Dinitrotoluene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Chloronaphthalene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Chlorophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Methylnaphthalene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Methylphenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Nitroaniline (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
2-Nitrophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 UJ	1150 UJ	1550 UJ	1200 UJ
2-fluorobiphenyl (%)	45	0	0	56	50	62	0	0	0
2-fluorophenol (%)	44	0	0	49	46	55	0	0	0
3,3'-Dichlorobenzidine (ug/kg)	455 UJ	4100 UJ	17000 UJ	1800 UJ	550 UJ	1000 U	2300 UJ	3100 UJ	2350 UJ
3-Nitroaniline (ug/kg)	275 UJ	2500 UJ	10200 UJ	1100 UJ	325 UJ	600 U	1350 UJ	1850 UJ	1400 UJ
4,6-Dinitro-2-methylphenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 UJ	1150 UJ	1550 UJ	1200 UJ
4-Chloroaniline (ug/kg)	275 U	2500 UJ	10200 UJ	1100 UJ	325 U	600 U	1350 UJ	1850 UJ	1400 UJ
4-Nitroaniline (ug/kg)	230 UJ	2050 UJ	8500 UJ	900 UJ	270 UJ	495 U	1150 UJ	1550 UJ	1200 UJ
4-Nitrophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
4-bromophenyl phenyl ether (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
4-chloro-3-methyl phenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
4-chlorophenylphenylether (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Acenaphthene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Acenaphthylene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Anthracene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Benzo(a)anthracene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	1830 J	1150 UJ	1550 UJ	1200 UJ
Benzo(a)pyrene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	1780 J	1150 UJ	1550 UJ	1200 UJ

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**	**SWSD0012**
Sample No	**LU00071**	**LU00073**	**LU00075**	**LU00077**	**LU00079**	**LU00081**	**LU00083**	**LU00085**	**LU00087**
Collection Date	**09/30/97**	**09/30/97**	**09/30/97**	**09/30/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**517675**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**199287**
Benzo(b)fluoranthene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	2240	1150 UJ	1550 UJ	1200 UJ
Benzo(ghi)perylene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Benzo(k)fluoranthene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	1130 J	1150 UJ	1550 UJ	1200 UJ
Butylbenzylphthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Carbazole (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Chrysene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	2050	1150 UJ	1550 UJ	1200 UJ
Di-n-butylphthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Di-n-octylphthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Dibenz(a,h)anthracene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Dibenzofuran (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Diethyl phthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Dimethyl phthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Fluoranthene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	5430	4280 J	7570 J	1200 UJ
Fluorene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Hexachlorobenzene (ug/kg)	275 U	2500 UJ	10200 UJ	1100 UJ	325 U	600 U	1350 UJ	1850 UJ	1400 UJ
Hexachlorobutadiene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Hexachlorocyclopentadiene (ug/kg)	230 UJ	2050 UJ	8500 UJ	900 UJ	270 UJ	495 UJ	1150 UJ	1550 UJ	1200 UJ
Hexachloroethane (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Indeno(1,2,3-c,d)pyrene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Isophorone (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
N-nitroso-di-n-propylamine (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
N-nitrosodiphenylamine (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Naphthalene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Nitrobenzene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Nitrobenzene-d5 (%)	45	0	0	52	46	58	0	0	0
Pentachlorophenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Phenanthrene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	3630	2510 J	4550 J	1200 UJ
Phenol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Phenol-d5 (%)	47	55	0	53	50	58	52	50	54
Pyrene (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	3640	1150 UJ	3540 J	1200 UJ
Terphenyl-d14 (%)	95	0	0	103	91	100	0	0	0
bis(2-chloroethoxy)methane (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
bis(2-chloroethyl) ether (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
bis(2-ethylhexyl)phthalate (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	1680 J	1150 UJ	1550 UJ	2710 J
m,p-cresol (ug/kg)	230 U	2050 UJ	8500 UJ	900 UJ	270 U	495 U	1150 UJ	1550 UJ	1200 UJ
Volatile Organics									
1,1,1,2-tetrachloroethane (ug/kg)	0 U	0 U	0 U	0 UJ	0 U	0 U	0 UJ	0 U	0 U

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**	**SWSD0012**
Sample No	**LU00071**	**LU00073**	**LU00075**	**LU00077**	**LU00079**	**LU00081**	**LU00083**	**LU00085**	**LU00087**
Collection Date	**09/30/97**	**09/30/97**	**09/30/97**	**09/30/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**517675**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**199287**
1,1,1-Trichloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
1,1,2,2-Tetrachloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
1,1,2-Trichloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
1,1-Dichloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
1,1-Dichloroethene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
1,2-Dichloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
1,2-Dichloropropane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
2-Butanone (ug/kg)	1.4 UJ	2.5 UJ	6 J	2.8 UJ	4.7 J	7 J	1 U	7.6 J	1.4 U
2-Hexanone (ug/kg)	3.45 U	6.25 U	5.2 U	6.95 U	4.15 U	3.75 U	2.5 UJ	4.7 U	3.55 U
4-Methyl-2-pentanone (ug/kg)	3.45 U	6.25 U	5.2 U	6.95 U	4.15 U	3.75 U	2.5 UJ	4.7 U	3.55 U
Acetone (ug/kg)	3.45 U	6.25 U	76.8 J	32.6 J	58.4 J	81.9 J	21.5 J	86 J	22 J
Benzene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Bromodichloromethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Bromofluorobenzene (%)	110	124	114	125	108	118	118	129	122
Bromomethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Carbon dioxide (ug/kg)	407 R	1570 R	1090 R	857 R	1150 R	632 R	191 R	490 R	469 R
Carbon disulfide (ug/kg)	1.4 UJ	2.5 UJ	2.1 U	2.8 UJ	1.65 U	1.5 UJ	1 U	1.9 UJ	1.4 U
Carbon tetrachloride (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Chlorobenzene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Chloroethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Chloroform (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 UJ
Chloromethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Cyclotetrasiloxane, octamethyl- (ug/kg)						5.2 R			
Dibromochloromethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Dibromofluoromethane (%)	106	101	107	101	102	98	93	98	103
Ethylbenzene (ug/kg)	0.7 UJ	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Methylene chloride (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Styrene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Tetrachloroethene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Toluene (ug/kg)	0.91	0.79	1.05 U	18.4 J	24	54.6	2.4 J	111 J	0.76
Toluene-d8 (%)	109	108	113	112	108	115	105	115	112
Tribromomethane (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Trichloroethene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Vinyl acetate (ug/kg)	0 U	0 U	0 U	0 UJ	0 U	0 U	0 UJ	0 U	0 U
Vinyl chloride (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
Xylenes (total) (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
cis-1,2-dichloroethene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**	**SWSD0012**
Sample No	**LU00071**	**LU00073**	**LU00075**	**LU00077**	**LU00079**	**LU00081**	**LU00083**	**LU00085**	**LU00087**
Collection Date	**09/30/97**	**09/30/97**	**09/30/97**	**09/30/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**	**10/02/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**517675**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**199287**
cis-1,3-dichloropropene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
trans-1,2-dichloroethene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 U	0.95 U	0.7 U
trans-1,3-dichloropropene (ug/kg)	0.7 U	1.25 U	1.05 U	1.4 UJ	0.85 U	0.75 U	0.5 UJ	0.95 U	0.7 U
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.135	0.216	0.313	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Radium-228 (pCi/g)	0.665	0.625	0.563	0.679	0.417	0.465	0.489	0.321	0.312
Thorium-227 (pCi/g)	0.135	0.216	0.313	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-228 (pCi/g)	0.665	0.625	0.563	0.679	0.417	0.465	0.489	0.321	0.312
Thorium-230 (pCi/g)	0.841	2.39	2.87	0.763	0.687	0.787	0.687	0.441	0.519
Thorium-232 (pCi/g)	0.633	0.585	0.447	0.486	0.187	0.435	0.334	0.442	0.243
Uranium-234 (pCi/g)	0.723	0.969	2.28	0.516	0.356	0.503	0.569	0.476	0.782
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.056	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.036
Uranium-238 (pCi/g)	0.776	0.963	2.06	0.644	0.542	0.447	0.384	0.528	0.885
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.313	0.362	0.131	0.5 UJ	0.5 UJ	0.171	0.553
Potassium-40 (pCi/g)	21.1	21.1	11.2	12	13.8	10.8	10.7	13.5	5.64
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.91	4.77	9.09	1.46					

Station	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0017**	**SWSD0018**	**SWSD0019**	**SWSD0021**	**SWSD0022**
Sample No	**LU00089**	**LU00091**	**LU00093**	**LU00095**	**LU00097**	**LU00099**	**LU00101**	**LU00105**	**LU00107**
Collection Date	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517607**	**0**	**517113**	**517413**	**0**	**0**
Easting	**0**	**0**	**0**	**199618**	**0**	**199421**	**199401**	**0**	**0**
Metals									
Aluminum (mg/kg)	8040	7290	7170	15400 J	14900	7670	7950	30200	9210 J
Antimony (mg/kg)	0.04 U	0.04 U	0.04 U	0.7 J	0.47	0.49	0.04 U	0.04 R	0.04 U
Arsenic (mg/kg)	4.8	4.8	9.6	7.4 J	9.1	4.1	4	16.7	3.4 J
Barium (mg/kg)	51.4 J	69.9 J	53.2	182 J	95.8 J	148 J	232 J	240	71.8 J
Beryllium (mg/kg)	97.6	43.3	223	2.6 J	10.3	17.5	10.9	57.2	1950 J
Boron (mg/kg)	9.9 J	10.1 J	7.3	23.7 J	21.2 J	14.5 J	14.1 J	17.7	47.2 J
Cadmium (mg/kg)	32.3	4.3	1.4	2 J	0.11	1.5	8.3	1.2	3.3 J
Calcium (mg/kg)	46500	47900	45400	63700 J	9290	110000	23100	53000	162000 J
Chromium (mg/kg)	13.1	11.5	10.9	28 J	20	16.4	12.4	42.8	18.2 J
Cobalt (mg/kg)	6.8	7.6	9.6	8.8 J	7.8	4.6	7.9	30.5	3.1 J
Copper (mg/kg)	21.7 J	14.6 J	23.1	228 J	38.2	30.1	167	46.6 J	19.7 J
Iron (mg/kg)	15000 J	11900 J	14800	24600 J	22400 J	12400 J	13600 J	52100	6540 J
Lead (mg/kg)	33 J	34.2 J	23.3	172 J	31.9	139	47.9	43.8	453 J
Magnesium (mg/kg)	13000	10400	7550	21000 J	5010	55700	11400	17100	51100 J
Manganese (mg/kg)	306	271	318	240 J	227	336	213	1380	191 J
Mercury (mg/kg)	0.04	0.04	0.07	0.67	0.06	0.15	0.07	0.61	0.12
Molybdenum (mg/kg)	2.3	2.8	5	5.8 J	1.8	1.6	1.4	8.6 J	2.5 J
Nickel (mg/kg)	17.4	15.8	19.2	34.2 J	24.5	15.7	17.2	61.4	51.8 J
Potassium (mg/kg)	1460	1480	1240 J	2730 J	2250	1730	1260	3740	2090 J
Selenium (mg/kg)	0.04 U	0.04 U	0.42	3.2 J	2.4	0.58	0.04 U	0.04 U	0.04 U
Silicon (mg/kg)	889 J	1070 J	602 J	3100 J	1650 J	925 J	897 J	1420 J	3930 J
Silver (mg/kg)	0.27	0.28	0.76	0.02 U	0.02 U	0.02 U	9.8	0.42	0.02 U
Sodium (mg/kg)	221	155	192	840 J	166 J	263 J	403 J	262 J	1070 J
Strontium (mg/kg)	192 J	128 J	147	219 J	44.5 J	500 J	181 J	218	309 J
Thallium (mg/kg)	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	2.4 J
Vanadium (mg/kg)	17.8	17.7	18.1	28.4 J	30.3	17.2	15.7	60.5	17.2 J
Zinc (mg/kg)	79.4	61	61.3	712 J	111	321	118	144	292 J
Indicator Parameters									
% Moisture (%)	29	29	0.5	68 J	26	18	25	59	64 J
Chloride (mg/kg)	16.5			779 J			14.6		49.7 J
Fluoride (mg/kg)	0.05 U			7.17			2.4		99.5 J
Nitrate, as N (mg/kg)	0.281			0.388			0.266		3.59
Phosphorus (mg/kg)	2.68			2.55			1.14		0.46 R
Sulfate (mg/kg)	91.5			197 J			76.7 J		3840 J
Temperature (c)	22.3	22.7	22.3	63.5 J	26.9 J	23.7 J	26.5 J		56.7
Total organic carbon (mg/kg)	21600 J	19200 J	16000 J	33100 J	89600 J	80400 J	10700 J		56000 J

Station	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0017**	**SWSD0018**	**SWSD0019**	**SWSD0021**	**SWSD0022**
Sample No	**LU00089**	**LU00091**	**LU00093**	**LU00095**	**LU00097**	**LU00099**	**LU00101**	**LU00105**	**LU00107**
Collection Date	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517607**	**0**	**517113**	**517413**	**0**	**0**
Easting	**0**	**0**	**0**	**199618**	**0**	**199421**	**199401**	**0**	**0**
pH (ph)	7.54	7.05	0.01 U	6.95	7.01	7.66	8.58		5.48
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
1,2-Dichlorobenzene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
1,3-Dichlorobenzene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
1,4-Dichlorobenzene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2,2'-oxybis (1-chloropropane) (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2,4,5-Trichlorophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2,4,6-Trichlorophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2,4,6-tribromophenol (%)	74	75	60	78	99 R	32	53	0	23
2,4-Dichlorophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2,4-Dimethylphenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2,4-Dinitrophenol (ug/kg)	235 U	230 U	160 U	2100 UJ	220 U	1200 U	850 U	16000 UJ	1850 UJ
2,4-Dinitrotoluene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2,6-Dinitrotoluene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2-Chloronaphthalene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2-Chlorophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2-Methylnaphthalene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2-Methylphenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2-Nitroaniline (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
2-Nitrophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
2-fluorobiphenyl (%)	77	75	78	66	89 R	66	54	0	78
2-fluorophenol (%)	75	74	79	57	79 R	39	35	0	48
3,3'-Dichlorobenzidine (ug/kg)	115 U	115 U	160 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
3-Nitroaniline (ug/kg)	140 UJ	140 UJ	95 UJ	1250 UJ	130 UJ	700 UJ	500 UJ	9600 R	1100 UJ
4,6-Dinitro-2-methylphenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
4-Chloroaniline (ug/kg)	140 UJ	140 UJ	95 U	1250 UJ	130 U	700 UJ	500 UJ	9600 UJ	1100 UJ
4-Nitroaniline (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
4-Nitrophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
4-bromophenyl phenyl ether (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
4-chloro-3-methyl phenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
4-chlorophenylphenylether (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Acenaphthene (ug/kg)	115 U	115 U	48.9 J	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Acenaphthylene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Anthracene (ug/kg)	115 U	115 U	116 J	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Benzo(a)anthracene (ug/kg)	115 U	74.5 J	80 U	1050 UJ	110 U	5640 J	435 UJ	8000 UJ	900 UJ
Benzo(a)pyrene (ug/kg)	34 J	76.5 J	199 J	1050 UJ	110 U	7330 J	435 UJ	8000 UJ	900 UJ

Station	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0017**	**SWSD0018**	**SWSD0019**	**SWSD0021**	**SWSD0022**
Sample No	**LU00089**	**LU00091**	**LU00093**	**LU00095**	**LU00097**	**LU00099**	**LU00101**	**LU00105**	**LU00107**
Collection Date	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517607**	**0**	**517113**	**517413**	**0**	**0**
Easting	**0**	**0**	**0**	**199618**	**0**	**199421**	**199401**	**0**	**0**
Benzo(b)fluoranthene (ug/kg)	52.5 J	112 J	271 J	1050 UJ	110 U	10700 J	435 UJ	8000 UJ	900 UJ
Benzo(ghi)perylene (ug/kg)	115 U	44.6 J	88 J	1050 UJ	110 UJ	4880 J	435 UJ	8000 UJ	900 UJ
Benzo(k)fluoranthene (ug/kg)	115 U	48.6 J	109 J	1050 UJ	110 U	4370 J	435 UJ	8000 UJ	900 UJ
Butylbenzylphthalate (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	17700 J	900 UJ
Carbazole (ug/kg)	115 U	115 U	164 J	1050 UJ	110 UJ	600 UJ	435 UJ	8000 UJ	920 UJ
Chrysene (ug/kg)	45.3 J	100 J	253 J	1050 UJ	110 U	6130 J	435 UJ	8000 UJ	900 UJ
Di-n-butylphthalate (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Di-n-octylphthalate (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Dibenz(a,h)anthracene (ug/kg)	115 U	115 U	9.2 J	1050 UJ	110 UJ	1880 J	435 UJ	8000 UJ	900 UJ
Dibenzofuran (ug/kg)	115 U	115 U	18.9 J	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Diethyl phthalate (ug/kg)	44.2 J	48.2 J	25.5 J	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Dimethyl phthalate (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Fluoranthene (ug/kg)	59.6 J	173 J	534	1050 UJ	110 U	12400 J	886 J	8000 UJ	900 UJ
Fluorene (ug/kg)	115 U	115 U	64 J	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Hexachlorobenzene (ug/kg)	140 U	140 U	95 U	1250 UJ	130 U	700 UJ	500 UJ	9600 UJ	1100 UJ
Hexachlorobutadiene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Hexachlorocyclopentadiene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Hexachloroethane (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Indeno(1,2,3-c,d)pyrene (ug/kg)	14 J	115 U	86.2 J	1050 UJ	110 UJ	5470 J	435 UJ	8000 UJ	900 UJ
Isophorone (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
N-nitroso-di-n-propylamine (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
N-nitrosodiphenylamine (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Naphthalene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
Nitrobenzene (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 R	435 R	8000 UJ	900 UJ
Nitrobenzene-d5 (%)	69	69	75	55	88 R	0	0	0	77
Pentachlorophenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
Phenanthrene (ug/kg)	115 U	81 J	402	1050 UJ	110 U	5250 J	435 UJ	8000 UJ	900 UJ
Phenol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
Phenol-d5 (%)	76	74	81	64	86 R	48	42	0	67
Pyrene (ug/kg)	62.7 J	152 J	420	1050 UJ	110 U	12300 J	435 UJ	8000 UJ	900 UJ
Terphenyl-d14 (%)	99	95	92	84	98 R	66	89	0	123
bis(2-chloroethoxy)methane (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
bis(2-chloroethyl) ether (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 UJ	435 UJ	8000 UJ	900 UJ
bis(2-ethylhexyl)phthalate (ug/kg)	56.8 J	84.7 J	80 U	1050 UJ	110 U	1200 J	1030 J	195000 J	900 UJ
m,p-cresol (ug/kg)	115 U	115 U	80 U	1050 UJ	110 U	600 U	435 U	8000 UJ	900 UJ
Volatile Organics									
1,1,1,2-tetrachloroethane (ug/kg)									

Station	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0017**	**SWSD0018**	**SWSD0019**	**SWSD0021**	**SWSD0022**
Sample No	**LU00089**	**LU00091**	**LU00093**	**LU00095**	**LU00097**	**LU00099**	**LU00101**	**LU00105**	**LU00107**
Collection Date	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517607**	**0**	**517113**	**517413**	**0**	**0**
Easting	**0**	**0**	**0**	**199618**	**0**	**199421**	**199401**	**0**	**0**
1,1,1-Trichloroethane (ug/kg)									
1,1,2,2-Tetrachloroethane (ug/kg)									
1,1,2-Trichloroethane (ug/kg)									
1,1-Dichloroethane (ug/kg)									
1,1-Dichloroethene (ug/kg)									
1,2-Dichloroethane (ug/kg)									
1,2-Dichloropropane (ug/kg)									
2-Butanone (ug/kg)									
2-Hexanone (ug/kg)									
4-Methyl-2-pentanone (ug/kg)									
Acetone (ug/kg)									
Benzene (ug/kg)									
Bromodichloromethane (ug/kg)									
Bromofluorobenzene (%)									
Bromomethane (ug/kg)									
Carbon dioxide (ug/kg)									
Carbon disulfide (ug/kg)									
Carbon tetrachloride (ug/kg)									
Chlorobenzene (ug/kg)									
Chloroethane (ug/kg)									
Chloroform (ug/kg)									
Chloromethane (ug/kg)									
Cyclotetrasiloxane, octamethyl- (ug/kg)									
Dibromochloromethane (ug/kg)									
Dibromofluoromethane (%)									
Ethylbenzene (ug/kg)									
Methylene chloride (ug/kg)									
Styrene (ug/kg)									
Tetrachloroethene (ug/kg)									
Toluene (ug/kg)									
Toluene-d8 (%)									
Tribromomethane (ug/kg)									
Trichloroethene (ug/kg)									
Vinyl acetate (ug/kg)									
Vinyl chloride (ug/kg)									
Xylenes (total) (ug/kg)									
cis-1,2-dichloroethene (ug/kg)									

Station	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0017**	**SWSD0018**	**SWSD0019**	**SWSD0021**	**SWSD0022**
Sample No	**LU00089**	**LU00091**	**LU00093**	**LU00095**	**LU00097**	**LU00099**	**LU00101**	**LU00105**	**LU00107**
Collection Date	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/20/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517607**	**0**	**517113**	**517413**	**0**	**0**
Easting	**0**	**0**	**0**	**199618**	**0**	**199421**	**199401**	**0**	**0**
cis-1,3-dichloropropene (ug/kg)									
trans-1,2-dichloroethene (ug/kg)									
trans-1,3-dichloropropene (ug/kg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.213	0.151	0.217	0.258	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.23
Radium-228 (pCi/g)	0.522	0.473	0.269	0.464	0.5 UJ	0.5 UJ	0.292	0.186	0.215
Thorium-227 (pCi/g)	0.213	0.151	0.217	0.258	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.23
Thorium-228 (pCi/g)	0.522	0.473	0.269	0.464	0.5 UJ	0.5 UJ	0.292	0.186	0.215
Thorium-230 (pCi/g)	1.41	0.616	0.968	1.22	1.12	1.13	0.55	0.172	3.06
Thorium-232 (pCi/g)	0.266	0.526	0.259	0.586	0.655	0.5 UJ	0.268	0.061	0.194
Uranium-234 (pCi/g)	0.721	0.655	1.01	0.868	0.766	0.5 UJ	0.262	0.368	3.84
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.152
Uranium-238 (pCi/g)	0.89	0.573	1.1	1.03	0.791	0.5 UJ	0.327	0.449	4.16
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.213	0.146	0.488	0.542	0.309	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	15.4	13.6	15.7	16.8	20.3	10.6	8.2	2.06	0 U
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.85	1.28	1.69	2.31	1.44	0.993	0.938	0.5 UJ	2.76

Station	**SWSD0022**	**SWSD0023**
Sample No	**LU00125**	**LU00109**
Collection Date	**11/05/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	10100 J	573
Antimony (mg/kg)	0.04 U	0.04 U
Arsenic (mg/kg)	2.8 J	10.5
Barium (mg/kg)	69.9 J	378 J
Beryllium (mg/kg)	2020 J	18.1
Boron (mg/kg)	37.1 J	0.48 U
Cadmium (mg/kg)	2.3 J	0.01 U
Calcium (mg/kg)	166000 J	101000 J
Chromium (mg/kg)	18.5 J	45.5
Cobalt (mg/kg)	3.7 J	4.4
Copper (mg/kg)	18.7 J	104
Iron (mg/kg)	7470 J	119000
Lead (mg/kg)	432 J	372
Magnesium (mg/kg)	72400 J	57500
Manganese (mg/kg)	302 J	458
Mercury (mg/kg)	0.13	0.3 J
Molybdenum (mg/kg)	2.6 J	3.6
Nickel (mg/kg)	60.1 J	37.2
Potassium (mg/kg)	1970 J	0.15 U
Selenium (mg/kg)	0.04 U	0.04 U
Silicon (mg/kg)	3850 J	0.55 U
Silver (mg/kg)	0.02 U	0.02 U
Sodium (mg/kg)	1040 J	329
Strontium (mg/kg)	303 J	274 J
Thallium (mg/kg)	3 J	4.2
Vanadium (mg/kg)	18.2 J	4.8
Zinc (mg/kg)	257 J	1450
Indicator Parameters		
% Moisture (%)	67 J	11
Chloride (mg/kg)	47.7 J	
Fluoride (mg/kg)	100 J	
Nitrate, as N (mg/kg)	4.13	
Phosphorus (mg/kg)	0.48 R	
Sulfate (mg/kg)	4100 J	
Temperature (c)	58.8	22
Total organic carbon (mg/kg)	38900 J	66000 J

Station	**SWSD0022**	**SWSD0023**
Sample No	**LU00125**	**LU00109**
Collection Date	**11/05/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
pH (ph)	10.8	8.45
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/kg)	2500 UJ	7500 UJ
1,2-Dichlorobenzene (ug/kg)	2500 UJ	7500 UJ
1,3-Dichlorobenzene (ug/kg)	2500 UJ	7500 UJ
1,4-Dichlorobenzene (ug/kg)	2500 UJ	7500 UJ
2,2'-oxybis (1-chloropropane) (ug/kg)	2500 UJ	7500 UJ
2,4,5-Trichlorophenol (ug/kg)	2500 UJ	7500 UJ
2,4,6-Trichlorophenol (ug/kg)	2500 UJ	7500 UJ
2,4,6-tribromophenol (%)	0	0
2,4-Dichlorophenol (ug/kg)	2500 UJ	7500 UJ
2,4-Dimethylphenol (ug/kg)	2500 UJ	7500 UJ
2,4-Dinitrophenol (ug/kg)	4950 UJ	15000 UJ
2,4-Dinitrotoluene (ug/kg)	2500 UJ	7500 UJ
2,6-Dinitrotoluene (ug/kg)	2500 UJ	7500 UJ
2-Chloronaphthalene (ug/kg)	2500 UJ	7500 UJ
2-Chlorophenol (ug/kg)	2500 UJ	7500 UJ
2-Methylnaphthalene (ug/kg)	2500 UJ	7500 UJ
2-Methylphenol (ug/kg)	2500 UJ	7500 UJ
2-Nitroaniline (ug/kg)	2500 UJ	7500 UJ
2-Nitrophenol (ug/kg)	2500 UJ	7500 UJ
2-fluorobiphenyl (%)	0	0
2-fluorophenol (%)	0	0
3,3'-Dichlorobenzidine (ug/kg)	2500 UJ	7500 UJ
3-Nitroaniline (ug/kg)	3000 UJ	9000 UJ
4,6-Dinitro-2-methylphenol (ug/kg)	2500 UJ	7500 UJ
4-Chloroaniline (ug/kg)	3000 UJ	9000 UJ
4-Nitroaniline (ug/kg)	2500 UJ	7500 UJ
4-Nitrophenol (ug/kg)	2500 UJ	7500 UJ
4-bromophenyl phenyl ether (ug/kg)	2500 UJ	7500 UJ
4-chloro-3-methyl phenol (ug/kg)	2500 UJ	7500 UJ
4-chlorophenylphenylether (ug/kg)	2500 UJ	7500 UJ
Acenaphthene (ug/kg)	2500 UJ	7500 UJ
Acenaphthylene (ug/kg)	2500 UJ	7500 UJ
Anthracene (ug/kg)	2500 UJ	7500 UJ
Benzo(a)anthracene (ug/kg)	2500 UJ	7500 UJ
Benzo(a)pyrene (ug/kg)	2500 UJ	7500 UJ

Station	**SWSD0022**	**SWSD0023**
Sample No	**LU00125**	**LU00109**
Collection Date	**11/05/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzo(b)fluoranthene (ug/kg)	2500 UJ	7500 UJ
Benzo(ghi)perylene (ug/kg)	2500 UJ	7500 UJ
Benzo(k)fluoranthene (ug/kg)	2500 UJ	7500 UJ
Butylbenzylphthalate (ug/kg)	2500 UJ	7500 UJ
Carbazole (ug/kg)	2500 UJ	7500 UJ
Chrysene (ug/kg)	2500 UJ	7500 UJ
Di-n-butylphthalate (ug/kg)	2500 UJ	7500 UJ
Di-n-octylphthalate (ug/kg)	2500 UJ	7500 UJ
Dibenz(a,h)anthracene (ug/kg)	2500 UJ	7500 UJ
Dibenzofuran (ug/kg)	2500 UJ	7500 UJ
Diethyl phthalate (ug/kg)	2500 UJ	7500 UJ
Dimethyl phthalate (ug/kg)	2500 UJ	7500 UJ
Fluoranthene (ug/kg)	2500 UJ	7500 UJ
Fluorene (ug/kg)	2500 UJ	7500 UJ
Hexachlorobenzene (ug/kg)	3000 UJ	9000 UJ
Hexachlorobutadiene (ug/kg)	2500 UJ	7500 UJ
Hexachlorocyclopentadiene (ug/kg)	2500 UJ	7500 UJ
Hexachloroethane (ug/kg)	2500 UJ	7500 UJ
Indeno(1,2,3-c,d)pyrene (ug/kg)	2500 UJ	7500 UJ
Isophorone (ug/kg)	2500 UJ	7500 UJ
N-nitroso-di-n-propylamine (ug/kg)	2500 UJ	7500 UJ
N-nitrosodiphenylamine (ug/kg)	2500 UJ	7500 UJ
Naphthalene (ug/kg)	2500 UJ	7500 UJ
Nitrobenzene (ug/kg)	2500 UJ	7500 UJ
Nitrobenzene-d5 (%)	0	0
Pentachlorophenol (ug/kg)	2500 UJ	7500 UJ
Phenanthrene (ug/kg)	2500 UJ	7500 UJ
Phenol (ug/kg)	2500 UJ	7500 UJ
Phenol-d5 (%)	65	0
Pyrene (ug/kg)	2500 UJ	7500 UJ
Terphenyl-d14 (%)	111	0
bis(2-chloroethoxy)methane (ug/kg)	2500 UJ	7500 UJ
bis(2-chloroethyl) ether (ug/kg)	2500 UJ	7500 UJ
bis(2-ethylhexyl)phthalate (ug/kg)	2500 UJ	7500 UJ
m,p-cresol (ug/kg)	2500 UJ	7500 UJ
Volatile Organics		
1,1,1,2-tetrachloroethane (ug/kg)		

Station	**SWSD0022**	**SWSD0023**
Sample No	**LU00125**	**LU00109**
Collection Date	**11/05/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,1,1-Trichloroethane (ug/kg)		
1,1,2,2-Tetrachloroethane (ug/kg)		
1,1,2-Trichloroethane (ug/kg)		
1,1-Dichloroethane (ug/kg)		
1,1-Dichloroethene (ug/kg)		
1,2-Dichloroethane (ug/kg)		
1,2-Dichloropropane (ug/kg)		
2-Butanone (ug/kg)		
2-Hexanone (ug/kg)		
4-Methyl-2-pentanone (ug/kg)		
Acetone (ug/kg)		
Benzene (ug/kg)		
Bromodichloromethane (ug/kg)		
Bromofluorobenzene (%)		
Bromomethane (ug/kg)		
Carbon dioxide (ug/kg)		
Carbon disulfide (ug/kg)		
Carbon tetrachloride (ug/kg)		
Chlorobenzene (ug/kg)		
Chloroethane (ug/kg)		
Chloroform (ug/kg)		
Chloromethane (ug/kg)		
Cyclotetrasiloxane, octamethyl- (ug/kg)		
Dibromochloromethane (ug/kg)		
Dibromofluoromethane (%)		
Ethylbenzene (ug/kg)		
Methylene chloride (ug/kg)		
Styrene (ug/kg)		
Tetrachloroethene (ug/kg)		
Toluene (ug/kg)		
Toluene-d8 (%)		
Tribromomethane (ug/kg)		
Trichloroethene (ug/kg)		
Vinyl acetate (ug/kg)		
Vinyl chloride (ug/kg)		
Xylenes (total) (ug/kg)		
cis-1,2-dichloroethene (ug/kg)		

Station	**SWSD0022**	**SWSD0023**
Sample No	**LU00125**	**LU00109**
Collection Date	**11/05/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
cis-1,3-dichloropropene (ug/kg)		
trans-1,2-dichloroethene (ug/kg)		
trans-1,3-dichloropropene (ug/kg)		
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	0.234	0.5 UJ
Radium-228 (pCi/g)	0.198	0.241
Thorium-227 (pCi/g)		0.5 UJ
Thorium-228 (pCi/g)	0.198	0.241
Thorium-230 (pCi/g)	3.35	0.092
Thorium-232 (pCi/g)	0.178	0.026
Uranium-234 (pCi/g)	3.71	0.168
Uranium-235 (pCi/g)	0.181	0.5 UJ
Uranium-238 (pCi/g)	3.89	0.25
Radiological Parameters (GammaSpec)		
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.219	0.5 UJ
Potassium-40 (pCi/g)	0 U	1.87
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	2.97	0.764

Phase II IA06 Sediment

Station	**SWSD0022**	**SWSD0022**	**SWSD0022**	**SWSD0022**
Sample No	**LU9004**	**LU9005**	**LU9006**	**LU9007**
Collection Date	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**
Metals				
Aluminum (mg/kg)	17200	15000	18400	14700
Antimony (mg/kg)	0.36	0.38	0.37	0.04 U
Arsenic (mg/kg)	14.9	21.6	16.7	7
Barium (mg/kg)	134 J	118 J	115 J	116 J
Beryllium (mg/kg)	7.9 J	9.1 J	8.6 J	6.6 J
Boron (mg/kg)	0.48 U	0.48 U	0.48 U	0.48 U
Cadmium (mg/kg)	0.01 U	0.01 U	0.01 U	0.01 U
Calcium (mg/kg)	1590	1570	1480	1580
Chromium (mg/kg)	32.5 J	36.3 J	34.5 J	26.6 J
Cobalt (mg/kg)	27.2	23.1	26.9	28.5
Copper (mg/kg)	8.3 J	7.7 J	8.1 J	7.3 J
Iron (mg/kg)	33300 J	36200 J	34100 J	31900 J
Lead (mg/kg)	40.6	35.9	38	40.9
Magnesium (mg/kg)	923	731	996	718
Manganese (mg/kg)	2290	2210	2250	2300
Mercury (mg/kg)	0.44	0.16	0.72	0.11
Molybdenum (mg/kg)	0.01 U	0.01 U	0.01 U	0.01 U
Nickel (mg/kg)	13 J	12.1 J	13 J	10.4 J
Potassium (mg/kg)	1030 J	856 J	1130 J	836 J
Selenium (mg/kg)	1.5	2	3	3.3
Silicon (mg/kg)	1560 J	1690 J	1600 J	1620 J
Silver (mg/kg)	0.02 U	0.02 U	0.02 U	0.02 U
Sodium (mg/kg)	62.2 J	54.7 J	67 J	51.8 J
Strontium (mg/kg)	6.2	5.5	6.5	5.6
Thallium (mg/kg)	7	9.6	7.9	7.3
Vanadium (mg/kg)	34.3	35.5	36.7	32.8
Zinc (mg/kg)	31.2	25.8	32.5	25.5
Indicator Parameters				
% Moisture (%)	19	21	19	17
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.205			
Radium-228 (pCi/g)	1.05			
Thorium-227 (pCi/g)				
Thorium-228 (pCi/g)	1.05			
Thorium-230 (pCi/g)	0.618			
Thorium-232 (pCi/g)	0.831			

Phase II IA06 Sediment
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Station	**SWSD0022**	**SWSD0022**	**SWSD0022**	**SWSD0022**
Sample No	**LU9004**	**LU9005**	**LU9006**	**LU9007**
Collection Date	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**
Uranium-234 (pCi/g)	5.14			
Uranium-235 (pCi/g)	0.184			
Uranium-238 (pCi/g)	5.11			
Radiological Parameters (GammaSpec)				
Americium-241 (pCi/g)	0 UJ			
Cesium-137 (pCi/g)	4.95			
Potassium-40 (pCi/g)	11			
Protactinium-231 (pCi/g)	0 UJ			
Radium-226 (pCi/g)	13.5 J			

Phase IV IA06 Sediment

Station	**IA06-SD0001**	**IA06-SD0002**	**IA06-SD0003**	**IA06-SD0004**	**IA06-SD0004**	**IA06-SD0005**
Sample No	**LUSD0005**	**LUSD0004**	**LUSD0001**	**LUSD0002**	**LUSD0002D**	**LUSD0003**
Collection Date	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**
Duplicate ID					**LUSD9106**	
Northing	**199527**	**199330**	**199403**	**199820**	**199820**	**199415**
Easting	**517499**	**517162**	**517094**	**517510**	**517510**	**517391**
Metals						
Arsenic (mg/kg)	7.4	4.5	8.4	7.9	7.3	3.3
Barium (mg/kg)	77.4	162	82.3	55	58.4	110
Beryllium (mg/kg)	376 E	150 N	55 N	83.8 N	117 N	7 N
Lead (mg/kg)	68.9	170	28.4	25.1	31.8	128
Indicator Parameters						
Fluoride (mg/kg)	163	13.8	18.8	9.83	18.1	2.14
Semivolatile Organics						
1,2,4-Trichlorobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
1,2-Dichlorobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
1,3-Dichlorobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
1,4-Dichlorobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,2'-Oxybis (1-chloropropane) (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,4,5-Trichlorophenol (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
2,4,6-Trichlorophenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,4-Dichlorophenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,4-Dimethylphenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,4-Dinitrophenol (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
2,4-Dinitrotoluene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2,6-Dinitrotoluene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2-Chloronaphthalene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2-Chlorophenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2-Methylnaphthalene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2-Nitrophenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
2-methyl-4,6-dinitrophenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
3,3'-Dichlorobenzidine (ug/kg)	2140 U	885 J	10600 U	9170 U	9270 U	420 J
4-Bromophenyl phenyl ether (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
4-Chloroaniline (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
4-Chlorophenylphenylether (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
4-Nitrophenol (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
4-chloro-3-methyl phenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Acenaphthene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Acenaphthylene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Anthracene (ug/kg)	427 U	8570 U	243 J	1830 U	1850 U	3730 U
Benzo(a)anthracene (ug/kg)	427 U	941 J	739 J	1830 U	1850 U	819 J
Benzo(a)pyrene (ug/kg)	427 U	1110 J	739 J	1830 U	1850 U	696 J

Phase IV IA06 Sediment

Station	**IA06-SD0001**	**IA06-SD0002**	**IA06-SD0003**	**IA06-SD0004**	**IA06-SD0004**	**IA06-SD0005**
Sample No	**LUSD0005**	**LUSD0004**	**LUSD0001**	**LUSD0002**	**LUSD0002D**	**LUSD0003**
Collection Date	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**
Duplicate ID					**LUSD9106**	
Northing	**199527**	**199330**	**199403**	**199820**	**199820**	**199415**
Easting	**517499**	**517162**	**517094**	**517510**	**517510**	**517391**
Benzo(b)fluoranthene (ug/kg)	427 U	2190 J	1490 J	1830 U	1850 U	1400 J
Benzo(ghi)perylene (ug/kg)	427 U	988 J	432 J	1830 U	1850 U	448 J
Benzo(k)fluoranthene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Butylbenzylphthalate (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Carbazole (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Chrysene (ug/kg)	427 U	1280 J	1070 J	1830 U	1850 U	1090 J
Di-n-butylphthalate (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Di-n-octylphthalate (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	479 J
Dibenz(a,h)anthracene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Dibenzofuran (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Diethyl phthalate (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Dimethyl phthalate (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Fluoranthene (ug/kg)	427 U	2840 J	2100 J	1830 U	1850 U	2950 J
Fluorene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Hexachlorobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Hexachlorobutadiene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Hexachlorocyclopentadiene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Hexachloroethane (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	427 U	908 J	488 J	1830 U	1850 U	452 J
Isophorone (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
N-Nitrosodiphenylamine (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
N-Nitrosodipropylamine (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Naphthalene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Nitrobenzene (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Pentachlorophenol (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
Phenanthrene (ug/kg)	427 U	931 J	1180 J	1830 U	1850 U	2550 J
Phenol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
Pyrene (ug/kg)	427 U	1880 J	1620 J	1830 U	1850 U	1750 J
bis(2-chloroethoxy)methane (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
bis(2-chloroethyl) ether (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
bis(2-ethylhexyl)phthalate (ug/kg)	427 U	2780 J	8800	1830 U	1850 U	11000
m,p-Cresol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
m-Nitroaniline (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
o-Cresol (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U
o-Nitroaniline (ug/kg)	1070 U	21400 U	5290 U	4580 U	4630 U	9330 U
p-Nitroaniline (ug/kg)	427 U	8570 U	2120 U	1830 U	1850 U	3730 U

Phase IV IA06 Sediment

Station	**IA06-SD0001**	**IA06-SD0002**	**IA06-SD0003**	**IA06-SD0004**	**IA06-SD0004**	**IA06-SD0005**
Sample No	**LUSD0005**	**LUSD0004**	**LUSD0001**	**LUSD0002**	**LUSD0002D**	**LUSD0003**
Collection Date	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**
Duplicate ID					**LUSD9106**	
Northing	**199527**	**199330**	**199403**	**199820**	**199820**	**199415**
Easting	**517499**	**517162**	**517094**	**517510**	**517510**	**517391**
Volatile Organics						
1,1,1-Trichloroethane (ug/kg)	5.6 U	2.6 U	6.6 U	7.1 U	1.4 U	5.1 U
1,1,2,2-Tetrachloroethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,1,2-Trichloroethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,1-Dichloroethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,1-Dichloroethene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,2-Dichloroethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,2-Dichloroethylene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
1,2-Dichloropropane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
2-Butanone (ug/kg)	11.1 U	34.8	9.7 J	4.3 J	5 J	14.9
2-Hexanone (ug/kg)	11.1 U	26.3 U	13.1 U	14.2 U	14.1 U	10.3 U
4-Methyl-2-pentanone (ug/kg)	11.1 U	26.3 U	13.1 U	14.2 U	14.1 U	10.3 U
Acetone (ug/kg)	23.8	1020	51.3	365	267	42.3
Benzene (ug/kg)	4 J	2.1 J	3.6 J	5.2 J	5.4 J	0.83 J
Bromoform (ug/kg)	5.6 U	2.6 U	6.6 U	7.1 U	1.4 U	5.1 U
Carbon disulfide (ug/kg)	3.6 J	155	20.4	16.8	14.5	41.2
Carbon tetrachloride (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Chlorobenzene (ug/kg)	5.6 U	13.2 U	1.3 J	7.1 U	7 U	5.1 U
Chlorodibromomethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Chloroethane (ug/kg)	32.4	26.3 U	13.1 U	14.2 U	14.1 U	10.3 U
Chloroform (ug/kg)	5.6 U	1.5 J	6.6 U	7.1 U	7 U	5.1 U
Dichlorobromomethane (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Ethylbenzene (ug/kg)	1.8 J	2 J	2.9 J	3.2 J	3.3 J	0.67 J
Methyl Bromide (ug/kg)	11.1 U	26.3 U	13.1 U	14.2 U	14.1 U	10.3 U
Methyl Chloride (ug/kg)	11.1 U	26.3 U	13.1 U	14.2 U	14.1 U	10.3 U
Methyl Pentane Isomer (ug/kg)	10.9 J					
Methylene chloride (ug/kg)	0.58 BJ	2.4 BJ	0.71 BJ	0.86 BJ	0.85 BJ	5.1 U
Styrene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Tetrachloroethene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Toluene (ug/kg)	13.9	50.6	13.9	17.4	17.8	2.7
Trichloroethene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Vinyl chloride (ug/kg)	2.2 U	5.3 U	2.6 U	2.8 U	2.8 U	2 U
Xylenes (total) (ug/kg)	6.5	4 J	11	9.9	10.5	0.77 J
cis-1,3-dichloropropene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
trans-1,3-Dichloropropene (ug/kg)	5.6 U	13.2 U	6.6 U	7.1 U	7 U	5.1 U
Radiological Parameters						

Phase IV IA06 Sediment
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Station	**IA06-SD0001**	**IA06-SD0002**	**IA06-SD0003**	**IA06-SD0004**	**IA06-SD0004**	**IA06-SD0005**
Sample No	**LUSD0005**	**LUSD0004**	**LUSD0001**	**LUSD0002**	**LUSD0002D**	**LUSD0003**
Collection Date	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**	**07/07/98**
Depth (ft)	**0.0-1.0**	**0.0-0.5**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**
Duplicate ID					**LUSD9106**	
Northing	**199527**	**199330**	**199403**	**199820**	**199820**	**199415**
Easting	**517499**	**517162**	**517094**	**517510**	**517510**	**517391**
Radiological Parameters (AlphaSpec)						
Actinium-227 (pCi/g)	0.143 U	0.0179 U	0.0017 U	0.179 U	-0.0335 U	0.0386 U
Thorium-228 (pCi/g)	1.07	1.22	1.11	0.976 J	1.22	0.387 J
Thorium-230 (pCi/g)	2	1.5	1.09	1.76	2.51	0.488 J
Thorium-232 (pCi/g)	0.757 J	0.809 J	0.945 J	0.667 J	0.848 J	0.184 J
Uranium-233/234 (pCi/g)	1.11	0.947 J	1.02	1.33	1.44	0.536 J
Uranium-235 (pCi/g)	0.0367 U	0.0248 U	0.0686 J	0.0334 U	0.0662 J	0.0265 U
Uranium-238 (pCi/g)	1.39	0.804 J	1.08	1.4	1.15	0.598 J
Actinium-227 (pCi/g)						
Radiological Parameters (GammaSpec)						
Actinium-228 (pCi/g)	0.994 J	1.03	0.985 J	0.868 J	1.2	0.154 J
Cesium-137 (pCi/g)	0.006 U	0.148	0.221	0.103	0.0567 U	0.0773 J
Cobalt-60 (pCi/g)	-0.0004 U	0.0154 U	0.0093 U	-0.0012 U	-0.0338 U	0.018 U
Potassium-40 (pCi/g)	24	13.3	23.3	23.1	23.4	4.09
Protactinium-231 (pCi/g)	-1.2 U	0.725 U	-0.53 U	-0.582 U	0.407 U	0.0682 U
Radium-226 (pCi/g)	1.95	1.62	1.39	1.87	2.05	0.431 J
Radium-228 (pCi/g)	0.994 J	1.03	0.985 J	0.868 J	1.2	0.154 J
Thorium-234 (pCi/g)	0.665 U	0.607 U	2.09 J	1.85 J	1.49 J	0.791 J
Uranium-235 (pCi/g)	0.0949 U	0.101 U	0.126 U	0.0764 U	0.0882 U	0.0582 U

Phase IV IA06 Sediment

Station	**IA06-SD0006**	**IA06-SD0007**	**IA06-SD0008**	**IA06-SD0008**	**IA06-SD0009**	**IA06-SD0010**	**IA06-SD0010**	**IA06-SD0011**	**IA06-SD0012**
Sample No	**LUSD0016**	**LUSD0019**	**LUSD0022**	**LUSD0023**	**LUSD0025**	**LUSD0028**	**LUSD0029**	**LUSD0031**	**LUSD0034**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/26/98**	**06/26/98**	**06/26/98**	**06/26/98**	**06/26/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID									
Northing	**200605**	**200854**	**200939**	**200939**	**201290**	**201514**	**201514**	**201554**	**201657**
Easting	**521420**	**521943**	**522575**	**522575**	**523574**	**524580**	**524580**	**525089**	**525869**
Metals									
Aluminum (mg/kg)									
Antimony (mg/kg)									
Arsenic (mg/kg)	4.6	3.7	13.8	5.6	8.8	5	10.7	7	31.3
Barium (mg/kg)	42.4	42.9	46.4	45.2	25.9	36.6	48.2	38	82.4
Beryllium (mg/kg)	10.4	5.7	11.2	14.5	4.4	2.9	1.8	2.1	5.1
Cadmium (mg/kg)									
Calcium (mg/kg)									
Chromium (mg/kg)									
Cobalt (mg/kg)									
Copper (mg/kg)									
Iron (mg/kg)									
Lead (mg/kg)	10.4	11.2	16.6	14.2	10.3	9.5	10.8	9.3	19.8
Magnesium (mg/kg)									
Manganese (mg/kg)									
Nickel (mg/kg)									
Phosphorus (mg/kg)									
Potassium (mg/kg)									
Selenium (mg/kg)									
Silver (mg/kg)									
Sodium (mg/kg)									
Thallium (mg/kg)									
Vanadium (mg/kg)									
Zinc (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)	1.42	1.62	6.5	4.53	0.87	1.45	2.24	1.63	3.18
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters									
Gross Alpha (pCi/g)									
Nonvolatile Beta (pCi/g)									
Weight of Sample, A&B (mg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.001 UJ	0.0333 UJ	0.0658 UJ	-0.0614 UJ	0.0949 UJ	0.115 UJ	0.0472 UJ	0.0887 UJ	0 UJ
Thorium-228 (pCi/g)	0.718 J	0.74 J	0.415 J	0.417 J	1.54 J	1.49 J	1.17 J	0.383 J	0.678 J
Thorium-230 (pCi/g)	0.88 J	1.62 J	0.935 J	1.31 J	1.74 J	1.07 J	1.73 J	1.09 J	1.04 J
Thorium-232 (pCi/g)	0.76 J	0.832 J	0.416 J	0.415 J	0.531 J	0.455 J	0.762 J	0.369 J	0.358 J

Phase IV IA06 Sediment

Station	**IA06-SD0006**	**IA06-SD0007**	**IA06-SD0008**	**IA06-SD0008**	**IA06-SD0009**	**IA06-SD0010**	**IA06-SD0010**	**IA06-SD0011**	**IA06-SD0012**
Sample No	**LUSD0016**	**LUSD0019**	**LUSD0022**	**LUSD0023**	**LUSD0025**	**LUSD0028**	**LUSD0029**	**LUSD0031**	**LUSD0034**
Collection Date	**06/27/98**	**06/27/98**	**06/27/98**	**06/27/98**	**06/26/98**	**06/26/98**	**06/26/98**	**06/26/98**	**06/26/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID									
Northing	**200605**	**200854**	**200939**	**200939**	**201290**	**201514**	**201514**	**201554**	**201657**
Easting	**521420**	**521943**	**522575**	**522575**	**523574**	**524580**	**524580**	**525089**	**525869**
Uranium-233/234 (pCi/g)	0.706 J	1.22	0.761 J	1.28	0.827 J	0.398 J	1.04	0.757 J	0.632 J
Uranium-235 (pCi/g)	0.0702 U	0.0255 U	0.095 J	0.0471 U	0.046 U	0.0432 U	0.0782 U	0.0379 U	0.0358 U
Uranium-238 (pCi/g)	0.647 J	1.22	0.75 J	1.03	0.982 J	0.327 J	1.23	0.849 J	0.627 J
Actinium-227 (pCi/g)									
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.399 J	0.686 J	0.459 J	0.439 J	0.428 J	1.8	0.861 J	0 U	0.573 J
Cesium-137 (pCi/g)	0.0378 J	0.047 U	0.0895 J	0.451	0.0311 U	0.0141 U	0.0057 U	0.0044 U	0.0401 J
Cobalt-60 (pCi/g)	0.0207 U	0.0021 U	-0.0018 U	0.002 U	0.0242 U	-0.0183 U	0.0056 U	0.0289 U	-0.0144 U
Potassium-40 (pCi/g)	10.9	19.5	15.6	16.7	16.6	20.1	22.1	14.7	13.8
Protactinium-231 (pCi/g)	0.174 U	0.72 U	0.0574 U	0.328 U	0.229 U	-0.281 U	0.879 U	-0.386 U	-0.467 U
Radium-226 (pCi/g)	1.11	1.26	0.842 J	1.05	1.23	0.813 J	1.5	1.02	0.779 J
Radium-228 (pCi/g)	0.399 J	0.686 J	0.459 J	0.439 J	0.428 J	1.8	0.861 J	0 U	0.573 J
Thorium-234 (pCi/g)	1.47 J	2.13 J	1.23 U	1.17 J	1.43 J	-0.0769 U	1.24 U	1.24 U	1.06 J
Uranium-235 (pCi/g)	0.0966 U	0.054 U	0.0242 U	0.156 U	0.0634 U	0.0544 U	0.072 U	0.0212 U	0.215 J
Wet Chemistry									
Total Organic Carbon (mg/kg)									

Station	**IA06-SD0012**	**IA06-SD0013**	**IA06-SD0013**	**IA06-SD0013**	**IA06-SD0014**	**IA06-SD0015**	**IA06-SD0016**	**IA06-SD0016**	**IA06-SD0017**
Sample No	**LUSD0034D**	**LUSD0037**	**LUSD0038**	**LUSD0037D**	**LUSD0040**	**LUSD0043**	**LUSD0046**	**LUSD0047**	**LUSD0049**
Collection Date	**06/26/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**
Duplicate ID	**LUSD9109**			**LUSD9108**					
Northing	**201657**	**201857**	**201857**	**201857**	**202323**	**202571**	**203327**	**203327**	**204031**
Easting	**525869**	**526696**	**526696**	**526696**	**528068**	**528310**	**529367**	**529367**	**529933**
Metals									
Aluminum (mg/kg)				6330					
Antimony (mg/kg)				0.34 UN					
Arsenic (mg/kg)	6.2	7.7	11.1	6.5	8	3.3	8	4.6	8.9
Barium (mg/kg)	36.9	58.5	43.6	39.2	73.8	15.3	32.1	39	20.6
Beryllium (mg/kg)	2.2	4.3	0.95	2.8	1.2	1.2	2.2	0.43	1.6
Cadmium (mg/kg)				0.5					
Calcium (mg/kg)				53400					
Chromium (mg/kg)				9.2					
Cobalt (mg/kg)				5.9					
Copper (mg/kg)				12.3					
Iron (mg/kg)				12400					
Lead (mg/kg)	10.6	12.5 J	6.2 J	11.9 J	11.7 J	7.2 J	9.1 J	8.3 J	8.2 J
Magnesium (mg/kg)				14200 N					
Manganese (mg/kg)				295					
Nickel (mg/kg)				12.7					
Phosphorus (mg/kg)				505					
Potassium (mg/kg)				1060					
Selenium (mg/kg)				0.46 B					
Silver (mg/kg)				0.28 U					
Sodium (mg/kg)				131					
Thallium (mg/kg)				0.69 B					
Vanadium (mg/kg)				13.1					
Zinc (mg/kg)				42.6					
Indicator Parameters									
Fluoride (mg/kg)	1.32	1.37	1.76	1.22	3.38	2.35	2.82	1.71	0.58 J
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters									
Gross Alpha (pCi/g)									
Nonvolatile Beta (pCi/g)									
Weight of Sample, A&B (mg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.148 UJ	0.0637 U	0.0387 U	0.0737 U	0.105 U	-0.0207 U	0.0456 U	0.151 J	0.0693 U
Thorium-228 (pCi/g)	0.691 J	0.532 J	0.446 J	0.515 J	1.18	0.478 J	0.459 J	0.53 J	0.342 J
Thorium-230 (pCi/g)	1.13 J	1.18	1.02	1.01	1.74	0.86 J	0.807 J	1.31	0.928 J
Thorium-232 (pCi/g)	0.461 J	0.413 J	0.326 J	0.344 J	1.04	0.554 J	0.359 J	0.451 J	0.18 J

Station	**IA06-SD0012**	**IA06-SD0013**	**IA06-SD0013**	**IA06-SD0013**	**IA06-SD0014**	**IA06-SD0015**	**IA06-SD0016**	**IA06-SD0016**	**IA06-SD0017**
Sample No	**LUSD0034D**	**LUSD0037**	**LUSD0038**	**LUSD0037D**	**LUSD0040**	**LUSD0043**	**LUSD0046**	**LUSD0047**	**LUSD0049**
Collection Date	**06/26/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**	**06/25/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**
Duplicate ID	**LUSD9109**			**LUSD9108**					
Northing	**201657**	**201857**	**201857**	**201857**	**202323**	**202571**	**203327**	**203327**	**204031**
Easting	**525869**	**526696**	**526696**	**526696**	**528068**	**528310**	**529367**	**529367**	**529933**
Uranium-233/234 (pCi/g)	0.363 J	0.741 J	0.824 J	0.719 J	1.44	0.512 J	0.507 J	1.02	0.723 J
Uranium-235 (pCi/g)	-0.0097 U	0.0095 U	0.0403 U	0.0165 U	0.0836 U	0.0298 U	0.0188 U	0.0051 U	0.0311 U
Uranium-238 (pCi/g)	0.561 J	0.774 J	0.88 J	0.621 J	1.48	0.57 J	0.587 J	1.09	0.758 J
Actinium-227 (pCi/g)									
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.559 J	0.597 J	0.583 J	0.232 J	0.974 J	0.343 J	0.399 J	0.556 J	0.469 J
Cesium-137 (pCi/g)	0.0219 U	0.1	-0.0167 U	0.0561 J	-0.0086 U	0.0274 U	0.0645 J	0.0242 U	0.0106 U
Cobalt-60 (pCi/g)	-0.0015 U	0.0008 U	0.0086 U	-0.0179 U	0.0095 U	0.0224 U	0.0073 U	-0.009 U	-0.0106 U
Potassium-40 (pCi/g)	12.4	17.5	16.1	14.4	23.8	12.7	14.7	14.6	15
Protactinium-231 (pCi/g)	0.208 U	0.427 U	0.31 U	0.0531 U	-0.029 U	-0.108 U	-0.234 U	-0.28 U	0.0499 U
Radium-226 (pCi/g)	0.856 J	1.13	0.943 J	0.86 J	1.26	0.883 J	0.926 J	1.23	0.743 J
Radium-228 (pCi/g)	0.559 J	0.597 J	0.583 J	0.232 J	0.974 J	0.343 J	0.399 J	0.556 J	0.469 J
Thorium-234 (pCi/g)	1.28 J	1.21 U	0.838 U	0.824 U	1.45 J	1.52 J	0.633 U	1.5 J	1.31 J
Uranium-235 (pCi/g)	0.186 U	0.0499 U	0.113 U	0.0596 U	0.0734 U	-0.0178 U	0.206 J	0.114 U	0.204 U
Wet Chemistry									
Total Organic Carbon (mg/kg)									

Station	**IA06-SD0017**	**IA06-SD0018**	**IA06-SD0018**	**IA06-SD0019**	**IA06-SD0019**	**IA06-SD0019**	**IA06-SD0020**	**IA06-SD0021**	**IA06-SD0022**
Sample No	**LUSD0050**	**LUSD0052**	**LUSD0053**	**LUSD0055**	**LUSD0056**	**LUSD0056D**	**LUSD0058**	**LUSD0061**	**LUSD0064**
Collection Date	**06/25/98**	**06/25/98**	**06/25/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID						**LUSD9107**			
Northing	**204031**	**204417**	**204417**	**204706**	**204706**	**204706**	**204862**	**205471**	**206551**
Easting	**529933**	**530649**	**530649**	**531592**	**531592**	**531592**	**532228**	**533181**	**534088**
Metals									
Aluminum (mg/kg)									
Antimony (mg/kg)									
Arsenic (mg/kg)	4.3	5.1	7.8	5.4	10.8	13.7	5.7	7.4	4.4
Barium (mg/kg)	30.2	40.3	37.2	42.9	145	56.8	27.5	56	51.4
Beryllium (mg/kg)	0.72	2.2	2.2	1.3	0.83	0.83	0.78	0.55	0.98
Cadmium (mg/kg)									
Calcium (mg/kg)									
Chromium (mg/kg)									
Cobalt (mg/kg)									
Copper (mg/kg)									
Iron (mg/kg)									
Lead (mg/kg)	9.3 J	8.7 J	10	12.3	12.2	11.8	6.4 J	10.5 J	10.2 J
Magnesium (mg/kg)									
Manganese (mg/kg)									
Nickel (mg/kg)									
Phosphorus (mg/kg)									
Potassium (mg/kg)									
Selenium (mg/kg)									
Silver (mg/kg)									
Sodium (mg/kg)									
Thallium (mg/kg)									
Vanadium (mg/kg)									
Zinc (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)	2.34	2.48	3.21	3.59	2.21	2.87	0.67	2.4	3.42
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters									
Gross Alpha (pCi/g)									
Nonvolatile Beta (pCi/g)									
Weight of Sample, A&B (mg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.0556 U	0.186 J	-0.241 UJ	-0.236 UJ	-0.476 UJ	0.24 UJ	0.135 UJ	0.154 U	0.0671 UJ
Thorium-228 (pCi/g)	0.429 J	0.556 J	1.06 J	0.687 J	1.34 J	0.956 J	0.629 UJ	1.04 U	0.35 UJ
Thorium-230 (pCi/g)	1.36	0.963 J	1.62 J	1.08 J	2.23 J	1.08 J	1.01 J	1.74	1.77 J
Thorium-232 (pCi/g)	0.343 J	0.388 J	0.786 J	0.595 J	0.808 J	0.838 J	0.374 J	0.901 J	0.695 J

Station	**IA06-SD0017**	**IA06-SD0018**	**IA06-SD0018**	**IA06-SD0019**	**IA06-SD0019**	**IA06-SD0019**	**IA06-SD0020**	**IA06-SD0021**	**IA06-SD0022**
Sample No	**LUSD0050**	**LUSD0052**	**LUSD0053**	**LUSD0055**	**LUSD0056**	**LUSD0056D**	**LUSD0058**	**LUSD0061**	**LUSD0064**
Collection Date	**06/25/98**	**06/25/98**	**06/25/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**	**06/24/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**
Duplicate ID						**LUSD9107**			
Northing	**204031**	**204417**	**204417**	**204706**	**204706**	**204706**	**204862**	**205471**	**206551**
Easting	**529933**	**530649**	**530649**	**531592**	**531592**	**531592**	**532228**	**533181**	**534088**
Uranium-233/234 (pCi/g)	0.851 J	0.708 J	0.957 J	1.04 J	1.28 J	1.26 J	0.657 J	1.1	0.962 J
Uranium-235 (pCi/g)	0.0158 U	0.0224 U	0 UJ	0 UJ	0.0495 UJ	0.0474 UJ	0.0771 U	0.0813 U	-0.0222 UJ
Uranium-238 (pCi/g)	1.3	0.758 J	0.755 J	0.754 J	1.37 J	1.23 J	0.996 J	1.2	1.14 J
Actinium-227 (pCi/g)									
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.458 J	0.52 J	0.432 J	0.536 J	0.702 J	0.693 J	0.603 J	0.674 J	0.659 J
Cesium-137 (pCi/g)	-0.0058 U	0.0126 U	0.0454 J	0.0466 J	-0.0147 U	0.0552 J	0.0156 U	-0.0053 U	0.0415 J
Cobalt-60 (pCi/g)	0.0048 U	0.0001 U	0.0167 U	-0.0015 U	0.0034 U	0.0096 U	-0.0034 U	0.0275 U	0.0124 U
Potassium-40 (pCi/g)	15	16	13.9	16.9	20.9	16.8	16.8	22.9	16.6
Protactinium-231 (pCi/g)	0.462 U	0.792 U	0.68 U	-0.361 U	-0.335 U	0.219 U	0.122 U	-0.786 U	0.434 U
Radium-226 (pCi/g)	1.42	0.992 J	0.902 J	1.04	1.35	1.25	0.996 J	1.3	1.13
Radium-228 (pCi/g)	0.458 J	0.52 J	0.432 J	0.536 J	0.702 J	0.693 J	0.603 J	0.674 J	0.659 J
Thorium-234 (pCi/g)	1.92 J	1.13 J	1.36 J	0.545 U	2.19 J	0.769 U	1.03 J	1.12 U	1.25 J
Uranium-235 (pCi/g)	0.22 J	0.096 U	0.163 U	0.117 U	0.167 U	0.104 U	0.051 U	0.11 U	0.11 U
Wet Chemistry									
Total Organic Carbon (mg/kg)									

Station	**IA06-SD0022**	**IA06-SD0023**	**IA06-SD0024**	**IA06-SD0025**	**IA06-SD0025**	**IA06-SD0026**	**IA06-SD0026**	**IA06-SD0027**	**IA06-SD0027**
Sample No	**LUSD0065**	**LUSD0067**	**LUSD0070**	**LUSD0073**	**LUSD0074**	**LUSD0076**	**LUSD0077**	**LUSD0079**	**LUSD0080**
Collection Date	**06/24/98**	**06/24/98**	**06/23/98**	**06/23/98**	**06/23/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID									
Northing	**206551**	**207325**	**208214**	**208459**	**208459**	**208833**	**208833**	**209165**	**209165**
Easting	**534088**	**534310**	**534893**	**535659**	**535659**	**536561**	**536561**	**537356**	**537356**
Metals									
Aluminum (mg/kg)									
Antimony (mg/kg)									
Arsenic (mg/kg)	7.8	6.2	4.4	6	8.4	5.3	4.7	4.5	6.3
Barium (mg/kg)	48.5	33.5	42.9	27.8	52.7	39.7	43.4	21.7	43.1
Beryllium (mg/kg)	1	1	13.9	0.76	0.54	1.3 E	2.9 E	0.87 E	1.3 E
Cadmium (mg/kg)									
Calcium (mg/kg)									
Chromium (mg/kg)									
Cobalt (mg/kg)									
Copper (mg/kg)									
Iron (mg/kg)									
Lead (mg/kg)	11.8 J	10.8 J	10 J	8.4 J	9.9 J	12.4	13.8	7.4	10.4
Magnesium (mg/kg)									
Manganese (mg/kg)									
Nickel (mg/kg)									
Phosphorus (mg/kg)									
Potassium (mg/kg)									
Selenium (mg/kg)									
Silver (mg/kg)									
Sodium (mg/kg)									
Thallium (mg/kg)									
Vanadium (mg/kg)									
Zinc (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)	3.96	1.37	2.43	1.5	1.62	2.75	3.06	1.5	3.01
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters									
Gross Alpha (pCi/g)									
Nonvolatile Beta (pCi/g)									
Weight of Sample, A&B (mg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.296 UJ	-0.299 UJ	-0.367 UJ	0.126 UJ	0.0236 UJ	-0.0332 U	-0.0312 U	0.0015 U	0.188 U
Thorium-228 (pCi/g)	0.852 J	0.961 J	1.97 J	0.832 J	1.13 J	0.573 J	0.815 J	0.668 J	1.06
Thorium-230 (pCi/g)	2.22 J	1.51 J	2.65 J	1.47 J	1.67 J	0.942 J	1.45	1.21	1.73
Thorium-232 (pCi/g)	0.509 J	0.543 J	1.02 J	0.445 J	0.699 J	0.257 J	0.56 J	0.373 J	1.09

Station	**IA06-SD0022**	**IA06-SD0023**	**IA06-SD0024**	**IA06-SD0025**	**IA06-SD0025**	**IA06-SD0026**	**IA06-SD0026**	**IA06-SD0027**	**IA06-SD0027**
Sample No	**LUSD0065**	**LUSD0067**	**LUSD0070**	**LUSD0073**	**LUSD0074**	**LUSD0076**	**LUSD0077**	**LUSD0079**	**LUSD0080**
Collection Date	**06/24/98**	**06/24/98**	**06/23/98**	**06/23/98**	**06/23/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)	**1.0-2.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-0.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**
Duplicate ID									
Northing	**206551**	**207325**	**208214**	**208459**	**208459**	**208833**	**208833**	**209165**	**209165**
Easting	**534088**	**534310**	**534893**	**535659**	**535659**	**536561**	**536561**	**537356**	**537356**
Uranium-233/234 (pCi/g)	1.38 J	1.12 J	0.873 J	0.966 J	0.833 J	0.663 J	0.897 J	0.803 J	1.04
Uranium-235 (pCi/g)	0 UJ	0.0728 UJ	0.0418 UJ	0.0509 U	0.207 UJ	0.0367 U	0.0134 U	0.0727 J	0.0511 J
Uranium-238 (pCi/g)	1.39 J	1.03 J	0.897 J	0.844 J	1.02 J	0.577 J	1.04	0.705 J	1
Actinium-227 (pCi/g)									
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.502 J	0.548 J	0.646 J	0.435 J	0.865 J	0.488 J	0.735 J	0.614 J	0.838 J
Cesium-137 (pCi/g)	0.0243 U	0.03 U	0.0639 J	0.0074 U	0.0057 U	0.0389 J	0.258	0.0591 J	0.0023 U
Cobalt-60 (pCi/g)	0.004 U	0.005 U	0.0102 U	-0.0005 U	0.0069 U	-0.0077 U	-0.0022 U	0.0165 U	0.0335 U
Potassium-40 (pCi/g)	16.3	15.6	15.7	12.2	19.2	16.3	16.8	15.5	17.5
Protactinium-231 (pCi/g)	0.109 U	-0.0172 U	-0.335 U	-0.225 U	-0.444 U	0.233 U	0.284 U	-0.115 U	-0.367 U
Radium-226 (pCi/g)	1.28	1.05	1.05	0.785 J	1.47	0.824 J	1.13	1.03	1.3
Radium-228 (pCi/g)	0.502 J	0.548 J	0.646 J	0.435 J	0.865 J	0.488 J	0.735 J	0.614 J	0.838 J
Thorium-234 (pCi/g)	1.51 J	0.362 U	0.26 U	0.845 J	2.2 J	1.33 J	0.0435 U	1.21 U	2.28 J
Uranium-235 (pCi/g)	0.23 J	0.0345 U	0.121 U	0.184 J	0.117 U	0.211 J	0.0435 U	0.15 U	0.224 U
Wet Chemistry									
Total Organic Carbon (mg/kg)									

Station	**IA06-SD0028**	**IA06-SD0029**	**IA06-SD0030**	**IA06-SD0030**	**IA06-SD0031**	**IA06-SD0031**	**IA06-SD0032**	**IA06-SD0032**	**IA06-SD0033**
Sample No	**LUSD0082**	**LUSD0085**	**LUSD0088**	**LUSD0088D**	**LUSD0091**	**LUSD0092**	**LUSD0094**	**LUSD0095**	**LUSD0097**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/09/98**	**07/09/98**	**07/09/98**	**07/09/98**	**07/09/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-0.5**
Duplicate ID				**LUSD9110**					
Northing	**209209**	**209219**	**209423**	**209423**	**209323**	**209323**	**209390**	**209390**	**210068**
Easting	**538166**	**539136**	**539748**	**539748**	**540579**	**540579**	**541352**	**541352**	**541542**
Metals									
Aluminum (mg/kg)									
Antimony (mg/kg)									
Arsenic (mg/kg)	7.7	2.8	5.7	7.6	6.8	6.9	6.9	6.4	6.9
Barium (mg/kg)	52.8	29.5	35.5	53.9	39.9	30.1	47.5	65.2	108
Beryllium (mg/kg)	1.4 E	1.2 E	1.4 E	1.4 E	0.87	0.73	3.3	2.8	0.93
Cadmium (mg/kg)									
Calcium (mg/kg)									
Chromium (mg/kg)									
Cobalt (mg/kg)									
Copper (mg/kg)									
Iron (mg/kg)									
Lead (mg/kg)	16.2	8	9	9.2	13	67.1	12.6	13.9	13.5
Magnesium (mg/kg)									
Manganese (mg/kg)									
Nickel (mg/kg)									
Phosphorus (mg/kg)									
Potassium (mg/kg)									
Selenium (mg/kg)									
Silver (mg/kg)									
Sodium (mg/kg)									
Thallium (mg/kg)									
Vanadium (mg/kg)									
Zinc (mg/kg)									
Indicator Parameters									
Fluoride (mg/kg)	2.83	4.19	2.71	1.63	2.54	1.97	4.1	3.39	2.42
Nitrogen, Ammonia (mg/kg)									
Radiological Parameters									
Gross Alpha (pCi/g)									
Nonvolatile Beta (pCi/g)									
Weight of Sample, A&B (mg)									
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.113 U	0.088 U	0.0779 U	0.0762 U	0.0861 U	0.15 J	0.114 U	-0.0486 U	0.192 U
Thorium-228 (pCi/g)	0.73 J	0.912 J	0.559 J	0.826 J	0.586 J	0.548 J	0.61 J	0.819 J	1.08
Thorium-230 (pCi/g)	1.57	1.22	1.03	1.55	1.1	1	1.34	1.45	1.94
Thorium-232 (pCi/g)	0.746 J	0.52 J	0.532 J	0.615 J	0.427 J	0.309 J	0.523 J	0.57 J	1.06

Station	**IA06-SD0028**	**IA06-SD0029**	**IA06-SD0030**	**IA06-SD0030**	**IA06-SD0031**	**IA06-SD0031**	**IA06-SD0032**	**IA06-SD0032**	**IA06-SD0033**
Sample No	**LUSD0082**	**LUSD0085**	**LUSD0088**	**LUSD0088D**	**LUSD0091**	**LUSD0092**	**LUSD0094**	**LUSD0095**	**LUSD0097**
Collection Date	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/09/98**	**07/09/98**	**07/09/98**	**07/09/98**	**07/09/98**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**0.0-1.0**	**1.0-2.0**	**0.0-1.0**	**1.0-2.0**	**0.0-0.5**
Duplicate ID				**LUSD9110**					
Northing	**209209**	**209219**	**209423**	**209423**	**209323**	**209323**	**209390**	**209390**	**210068**
Easting	**538166**	**539136**	**539748**	**539748**	**540579**	**540579**	**541352**	**541352**	**541542**
Uranium-233/234 (pCi/g)	1.54	12.6	1.17	0.675 J	0.903 J	0.88 J	0.977 J	1.18	1.49
Uranium-235 (pCi/g)	0.07 U	0.443 J	0.0521 J	0.0479 J	0.0508 U	0.0379 U	0.0391 U	0.0294 U	0.102 J
Uranium-238 (pCi/g)	1.26	13	1.22	0.755 J	0.705 J	0.983 J	0.857 J	0.97 J	1.35
Actinium-227 (pCi/g)									
Radiological Parameters (GammaSpec)									
Actinium-228 (pCi/g)	0.593 J	0.625 J	0.45 J	0.552 J	0.555 J	0.664 J	0.716 J	0.577 J	0.99 J
Cesium-137 (pCi/g)	0.0228 U	0.0753 J	0.0329 J	0.0123 U	0.0641 J	0.0409 J	0.0925 J	0.0207 U	-0.0047 U
Cobalt-60 (pCi/g)	0.0222 U	0.0117 U	0.0068 U	0.0039 U	0.0001 U	-0.0167 U	0.0067 U	0.0037 U	-0.0075 U
Potassium-40 (pCi/g)	16.1	18.8	17.9	16.8	16.5	17	17.3	19.4	22.8
Protactinium-231 (pCi/g)	0.759 U	-0.465 U	-0.362 U	-0.671 U	0.165 U	0.214 U	0.191 U	0.926 U	-0.44 U
Radium-226 (pCi/g)	1.02	1.06	1.13	1.17	1.25	1.08	1.14	1.24	1.79
Radium-228 (pCi/g)	0.593 J	0.625 J	0.45 J	0.552 J	0.555 J	0.664 J	0.716 J	0.577 J	0.99 J
Thorium-234 (pCi/g)	2.09 J	1.07 U	1.9 J	1.51 J	0.898 J	0.939 U	1.24 U	1.2 U	1.35 U
Uranium-235 (pCi/g)	0.125 U	0.398 J	0.0837 U	0.198 U	0.0796 U	0.111 U	0.239 J	0.169 U	0.145 U
Wet Chemistry									
Total Organic Carbon (mg/kg)									

Station	IA06-SD0034	IA06-SD0034	IA06-SD0037	IA06-SD0038	IA06-SD0039
Sample No	**LUSD0100**	**LUSD0100D**	**LUSD0177**	**LUSD0178**	**LUSD0179**
Collection Date	**07/09/98**	**07/09/98**	**07/07/99**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID		**LUSD9111**			
Northing	**210599**	**210599**	**0**	**0**	**0**
Easting	**542237**	**542237**	**0**	**0**	**0**
Metals					
Aluminum (mg/kg)					
Antimony (mg/kg)					
Arsenic (mg/kg)	5.7	5.9	5.5 J	4.6 J	4.3 J
Barium (mg/kg)	83.5	81.6	55.5	75	45.6
Beryllium (mg/kg)	0.95	1	9.1 J	22.2 J	19.7 J
Cadmium (mg/kg)					
Calcium (mg/kg)					
Chromium (mg/kg)					
Cobalt (mg/kg)					
Copper (mg/kg)					
Iron (mg/kg)					
Lead (mg/kg)	23.2	33.7	12.6	19.9	15.1
Magnesium (mg/kg)					
Manganese (mg/kg)					
Nickel (mg/kg)					
Phosphorus (mg/kg)					
Potassium (mg/kg)					
Selenium (mg/kg)					
Silver (mg/kg)					
Sodium (mg/kg)					
Thallium (mg/kg)					
Vanadium (mg/kg)					
Zinc (mg/kg)					
Indicator Parameters					
Fluoride (mg/kg)	2.58	5.05	7.27	13.6	4.61
Nitrogen, Ammonia (mg/kg)			27.3	73.9	57.4
Radiological Parameters					
Gross Alpha (pCi/g)			14	14.7	13.3
Nonvolatile Beta (pCi/g)			14.1	21.3	24.6
Weight of Sample, A&B (mg)			32.3	34.1	41.8
Radiological Parameters (AlphaSpec)					
Actinium-227 (pCi/g)	0.104 U	0.115 U	0.0776 U	0.0496 U	0.133
Thorium-228 (pCi/g)	1.09	1.16	0.544	0.63499	0.71899
Thorium-230 (pCi/g)	1.44	1.58	1.31	1.21	1.32
Thorium-232 (pCi/g)	0.53 J	0.771 J	0.65299	0.615	0.67599

Phase IV IA06 Sediment

Station	**IA06-SD0034**	**IA06-SD0034**	**IA06-SD0037**	**IA06-SD0038**	**IA06-SD0039**
Sample No	**LUSD0100**	**LUSD0100D**	**LUSD0177**	**LUSD0178**	**LUSD0179**
Collection Date	**07/09/98**	**07/09/98**	**07/07/99**	**07/07/99**	**07/07/99**
Depth (ft)	**0.0-1.0**	**0.0-1.0**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**
Duplicate ID		**LUSD9111**			
Northing	**210599**	**210599**	**0**	**0**	**0**
Easting	**542237**	**542237**	**0**	**0**	**0**
Uranium-233/234 (pCi/g)	1.03	1.07	1.17	0.91799	0.95899
Uranium-235 (pCi/g)	0.0252 U	0.14 J	0.03319 J	0.052 U	0.03799 J
Uranium-238 (pCi/g)	0.886 J	1.28	1.35	0.869	1
Actinium-227 (pCi/g)			0.00755 U	-0.0606 U	-0.0806 U
Radiological Parameters (GammaSpec)					
Actinium-228 (pCi/g)	1.01	1.22	0.4 J	0.62099 J	0.49799 J
Cesium-137 (pCi/g)	0.0081 U	0.0417 U	0.0359 J	0.0894 J	0.12899
Cobalt-60 (pCi/g)	-0.015 U	0.0059 U	-0.00047 U	0.00405 U	-0.00107 U
Potassium-40 (pCi/g)	20.4	21.7	13	16.3	14.1
Protactinium-231 (pCi/g)	-0.241 U	0.0605 U	-0.19499 U	0.19799 U	0.37799 U
Radium-226 (pCi/g)	1.58	1.54	1.05	0.961 J	1.04
Radium-228 (pCi/g)	1.01	1.22	0.4 J	0.62099 J	0.49799 J
Thorium-234 (pCi/g)	0.927 U	0.739 U	2.06 J	1.3 J	0.35499 U
Uranium-235 (pCi/g)	0.212 U	0.269 J	0.221 J	0.0601 U	0.0692 U
Wet Chemistry					
Total Organic Carbon (mg/kg)			25100	28600	20200

Phase II IA10 Sediment
Page 1 of 2

Station	**BH0017**	**BH0017**	**BH0017**	**BH0018**	**BH0018**	**BH0018**	**BH0019**	**BH0019**	**BH0019**
Sample No	**LU00284**	**LU00285**	**LU00286**	**LU00287**	**LU00288**	**LU00289**	**LU00290**	**LU00291**	**LU00292**
Collection Date	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (mg/kg)	7060	4610	5810	10500	7870	10700	8640	4210	9130
Arsenic (mg/kg)	6 J	2.8 J	3.8 J	5.5 J	5.1 J	6.6 J	4.4 J	4.5 J	7.1 J
Beryllium (mg/kg)	1.9	7.8	9.4	12.1	30.4	34.9	32	6.4	5.2
Lead (mg/kg)	11.1	9.5	13.7	20.6	2170	29.9	16.6	7.9	13.7
Magnesium (mg/kg)	17700	9710	7780	10500	8850	9060	9000	21200	9560
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.236
Radium-228 (pCi/g)	0.417 J	0.323 J	0.324 J	0.647 J	0.586 J	0.652 J	0.461 J	0.421 J	0.338 J
Thorium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.236
Thorium-228 (pCi/g)	0.417 J	0.323 J	0.324 J	0.647 J	0.586 J	0.652 J	0.461 J	0.421 J	0.338 J
Thorium-230 (pCi/g)	0.411	0.438	0.637	0.791	0.726	1.07	0.766	0.519	0.544
Thorium-232 (pCi/g)	0.325	0.399	0.367	0.627	0.411	0.509	0.26	0.427	0.331
Uranium-234 (pCi/g)	0.291 J	0.496 J	0.445 J	0.441 J	0.376 J	0.446 J	0.414 J	0.42 J	0.431 J
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.0503 J
Uranium-238 (pCi/g)	0.387	0.445	0.491	0.452	0.385	0.494	0.468	0.568	0.431
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.17	0.293	0.3	0.344	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	17.1	11.7	16.4	19.2	14.6	21	15.2	10.1	18.9
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	0.992 J	0.767 J	0.68 J	1.5 J	1.08 J	1.57 J	0.97 J	0.838 J	1.24 J

Phase II IA10 Sediment

Station	**BH0020**	**BH0020**	**BH0020**	**BH0020**
Sample No	**LU00293**	**LU00294**	**LU00295**	**LU00296**
Collection Date	**11/03/97**	**11/03/97**	**11/03/97**	**11/03/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**
Metals				
Aluminum (mg/kg)	7220	4450	6160	4490
Arsenic (mg/kg)	9.5 J	5.5 J	8 J	6.3 J
Beryllium (mg/kg)	0.96	7.1	9.7	8.4
Lead (mg/kg)	10.4	9.4	13	11.2
Magnesium (mg/kg)	17600	14600	10900	9150
Radiological Parameters (AlphaSpec)				
Actinium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Radium-228 (pCi/g)	0.629 J	0.268 J	0.366 J	0.312 J
Thorium-227 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-228 (pCi/g)	0.629 J	0.268 J	0.366 J	0.312 J
Thorium-230 (pCi/g)	0.859	0.668	0.68	0.64
Thorium-232 (pCi/g)	0.447	0.216	0.282	0.418
Uranium-234 (pCi/g)	0.439 J	0.503 J	0.52 J	0.545 J
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	0.761	0.565	0.645	0.685
Radiological Parameters (GammaSpec)				
Americium-241 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Potassium-40 (pCi/g)	22.2	12.9	12.7	13.2
Protactinium-231 (pCi/g)	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/g)	1.47 J	1 J	0.866 J	0.938 J

Phase IV IA10 Sediment

Station	**IA10-SD0001**	**IA10-SD0002**	**IA10-SD0003**
Sample No	**LUSD0006**	**LUSD0007**	**LUSD0008**
Collection Date	**08/28/98**	**11/20/98**	**11/20/98**
Depth (ft)	**75.0-75.0**	**0.0-0.5**	**0.0-0.5**
Duplicate ID			
Northing	**199002**	**199380**	**199580**
Easting	**517301**	**517658**	**517618**
Metals			
Arsenic (mg/kg)	9.1		
Barium (mg/kg)	102		
Beryllium (mg/kg)	1.2	2.2 B	8.7 B
Lead (mg/kg)	37.5		
Indicator Parameters			
Fluoride (mg/kg)	4.03		
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/g)	0.243 U	0.204 UJ	0 UJ
Thorium-228 (pCi/g)	0.882 J	0.596 J	0.641 J
Thorium-230 (pCi/g)	2.17	1.49 J	1.69 J
Thorium-232 (pCi/g)	1.02	0.574 J	0.554 J
Uranium-233/234 (pCi/g)	1.48	1.15	1.35
Uranium-235 (pCi/g)	0.0478 U	0.0715 U	0.0977 U
Uranium-238 (pCi/g)	1.14	1.27	1.9
Radiological Parameters (GammaSpec)			
Actinium-228 (pCi/g)	1	0.562 J	0.886 J
Cesium-137 (pCi/g)	0.519	0.36	0.688
Cobalt-60 (pCi/g)	0.008 U	0.0153 U	0.0432 U
Potassium-40 (pCi/g)	21	8.74	13.3
Protactinium-231 (pCi/g)	-0.19 U	-0.462 U	0.0044 U
Radium-226 (pCi/g)	1.67	1.64	2.19
Radium-228 (pCi/g)	1	0.562 J	0.886 J
Thorium-234 (pCi/g)	1.4 U	1.08 J	0.882 J
Uranium-235 (pCi/g)	0.152 U	0.0904 U	0.0587 U

Phase II Offsite Sediment

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (mg/kg)	11800 J	2700
Antimony (mg/kg)	0.88	0.2 UJ
Arsenic (mg/kg)	4.5 J	4.8
Barium (mg/kg)	76.6 J	22.2
Beryllium (mg/kg)	0.69	0.26
Boron (mg/kg)	15.5 J	4.9
Cadmium (mg/kg)	0.51	0.19
Calcium (mg/kg)	25900 J	48200
Chromium (mg/kg)	17 J	5.1
Cobalt (mg/kg)	8.5 J	4
Copper (mg/kg)	21 J	9.1
Iron (mg/kg)	18500 J	8220
Lead (mg/kg)	12.6 J	6.7
Magnesium (mg/kg)	7200 J	7400
Manganese (mg/kg)	471 J	248
Mercury (mg/kg)	0 UJ	0 U
Molybdenum (mg/kg)	2.5 J	2.6
Nickel (mg/kg)	22.5 J	10.8
Potassium (mg/kg)	2390 J	598
Selenium (mg/kg)	1.8 J	0.48
Silicon (mg/kg)	567 J	388 J
Silver (mg/kg)	0.1 UJ	0.1 U
Sodium (mg/kg)	373 J	237
Strontium (mg/kg)	98.3 J	78.4
Thallium (mg/kg)	1.1 J	0.25 U
Tin (mg/kg)	1 UJ	1 U
Vanadium (mg/kg)	24.7 J	9.6
Zinc (mg/kg)	108 J	25.3
Indicator Parameters		
Chloride (mg/kg)	40.6 R	14.4 R
Fluoride (mg/kg)	3.75	1.08
Nitrate, as N (mg/kg)	0 R	0 R
Phosphorus (mg/kg)	0 R	0 R
Sulfate (mg/kg)	24.7 R	4.32
Total organic carbon (mg/kg)	27800	10800
pH (ph)	6.91	7.17

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/kg)	35.5 UJ	35.5 U
1,2-Dichlorobenzene (ug/kg)	24.55 U	24.55 U
1,3-Dichlorobenzene (ug/kg)	34.65 U	34.65 U
1,4-Dichlorobenzene (ug/kg)	47.05 U	47.05 U
2,2'-oxybis (1-chloropropane) (ug/kg)	42.15 U	42.15 U
2,4,5-Trichlorophenol (ug/kg)	42.85 U	42.85 U
2,4,6-Trichlorophenol (ug/kg)	37.8 UJ	37.8 U
2,4,6-tribromophenol (%)	83	80
2,4-Dichlorophenol (ug/kg)	43.6 UJ	43.6 U
2,4-Dimethylphenol (ug/kg)	47.9 UJ	47.9 U
2,4-Dinitrophenol (ug/kg)	132.8 UJ	132.8 UJ
2,4-Dinitrotoluene (ug/kg)	93.2 UJ	93.2 U
2,6-Dinitrotoluene (ug/kg)	48.35 U	48.35 U
2-Chloronaphthalene (ug/kg)	34.7 UJ	34.7 U
2-Chlorophenol (ug/kg)	37.9 UJ	37.9 U
2-Methylnaphthalene (ug/kg)	42.05 U	42.05 U
2-Methylphenol (ug/kg)	46.7 UJ	46.7 U
2-Nitroaniline (ug/kg)	73.05 U	73.05 U
2-Nitrophenol (ug/kg)	37.15 U	37.15 U
2-fluorobiphenyl (%)	73	76
2-fluorophenol (%)	72	73
3,3'-Dichlorobenzidine (ug/kg)	86 UJ	86 UJ
3-Nitroaniline (ug/kg)	66.75 U	66.75 U
4,6-Dinitro-2-methylphenol (ug/kg)	75.1 UJ	75.1 U
4-Chloroaniline (ug/kg)	85.05 U	85.05 U
4-Methylphenol (ug/kg)	50.75 U	50.75 U
4-Nitroaniline (ug/kg)	118.45 U	118.45 U
4-Nitrophenol (ug/kg)	128.75 U	128.75 U
4-bromophenyl phenyl ether (ug/kg)	32.05 U	32.05 U
4-chloro-3-methyl phenol (ug/kg)	60.65 U	60.65 U
4-chlorophenylphenylether (ug/kg)	37.2 UJ	37.2 U
Acenaphthene (ug/kg)	28.8 UJ	28.8 U
Acenaphthylene (ug/kg)	18.9 UJ	18.9 U
Anthracene (ug/kg)	29.1 UJ	29.1 U
Benzo(a)anthracene (ug/kg)	73.35 U	73.35 U
Benzo(a)pyrene (ug/kg)	72.2 UJ	72.2 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzo(b)fluoranthene (ug/kg)	65.9 UJ	65.9 U
Benzo(ghi)perylene (ug/kg)	45 UJ	45 U
Benzo(k)fluoranthene (ug/kg)	122 UJ	122 U
Butylbenzylphthalate (ug/kg)	60 UJ	60 U
Carbazole (ug/kg)	145 UJ	145 U
Chrysene (ug/kg)	68.8 UJ	52 J
Di-n-butylphthalate (ug/kg)	55 UJ	55 U
Di-n-octylphthalate (ug/kg)	55 UJ	55 U
Dibenz(a,h)anthracene (ug/kg)	51.75 U	51.75 U
Dibenzofuran (ug/kg)	40.2 UJ	40.2 U
Diethyl phthalate (ug/kg)	41.7 UJ	41.7 U
Dimethyl phthalate (ug/kg)	60 UJ	60 U
Fluoranthene (ug/kg)	42.55 U	76 J
Fluorene (ug/kg)	32.5 UJ	32.5 U
Hexachlorobenzene (ug/kg)	27.75 U	27.75 U
Hexachlorobutadiene (ug/kg)	78.9 UJ	78.9 U
Hexachlorocyclopentadiene (ug/kg)	44.5 UJ	44.5 U
Hexachloroethane (ug/kg)	37.65 U	37.65 U
Indeno(1,2,3-c,d)pyrene (ug/kg)	38.95 U	38.95 U
Isophorone (ug/kg)	28.95 U	28.95 U
N-nitroso-di-n-propylamine (ug/kg)	38.85 U	38.85 U
N-nitrosodiphenylamine (ug/kg)	33.95 U	33.95 U
Naphthalene (ug/kg)	37.1 UJ	37.1 U
Nitrobenzene (ug/kg)	35.85 U	35.85 U
Nitrobenzene-d5 (%)	71	72
Pentachlorophenol (ug/kg)	68.25 U	68.25 U
Phenanthrene (ug/kg)	22.05 U	56 J
Phenol (ug/kg)	36.55 U	36.55 U
Phenol-d5 (%)	78	81
Pyrene (ug/kg)	64.25 U	74 J
Terphenyl-d14 (%)	88	100
bis(2-chloroethoxy)methane (ug/kg)	44.85 U	44.85 U
bis(2-chloroethyl) ether (ug/kg)	32.85 U	32.85 U
bis(2-ethylhexyl)phthalate (ug/kg)	63.6 UJ	63.6 UJ
Volatile Organics		
1,1,1-Trichloroethane (ug/kg)	1.28 U	1.28 U
1,1,2,2-Tetrachloroethane (ug/kg)	0.6 UJ	0.6 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,1,2-Trichloroethane (ug/kg)	1.35 U	1.35 U
1,1-Dichloroethane (ug/kg)	0.26 U	0.26 U
1,1-Dichloroethene (ug/kg)	0.31 U	0.31 U
1,2-Dichloroethane (ug/kg)	0.12 U	0.12 U
1,2-Dichloropropane (ug/kg)	0.24 U	0.24 U
1,2-dichloroethylene(total) (ug/kg)	0 UJ	0 U
2-Butanone (ug/kg)	0.7 UJ	0.7 UJ
2-Hexanone (ug/kg)	0.7 UJ	0.7 UJ
4-Methyl-2-pentanone (ug/kg)	0.27 U	0.27 U
Acetone (ug/kg)	0.8 R	0.8 R
Benzene (ug/kg)	0.22 U	0.22 U
Bromodichloromethane (ug/kg)	0.36 U	0.36 U
Bromofluorobenzene (%)	55	74
Bromomethane (ug/kg)	0.32 U	0.32 U
Carbon disulfide (ug/kg)	0.3 UJ	0.3 U
Carbon tetrachloride (ug/kg)	0.16 U	0.16 U
Chlorobenzene (ug/kg)	0.35 U	0.35 U
Chloroethane (ug/kg)	0.55 U	0.55 U
Chloroform (ug/kg)	0.24 U	0.24 U
Chloromethane (ug/kg)	0.5 UJ	0.5 U
Dibromochloromethane (ug/kg)	0.44 U	0.44 U
Dibromofluoromethane (%)	88	99
Ethylbenzene (ug/kg)	0.33 U	0.33 U
Methylene chloride (ug/kg)	0.95 U	0.95 U
Styrene (ug/kg)	1.2 UJ	1.2 U
Tetrachloroethene (ug/kg)	0.3 UJ	0.3 U
Toluene (ug/kg)	0.13 U	0.13 U
Toluene-d8 (%)	75	89
Tribromomethane (ug/kg)	0.75 U	0.75 U
Trichloroethene (ug/kg)	0.35 U	0.35 U
Vinyl chloride (ug/kg)	0.49 U	0.49 U
Xylenes (total) (ug/kg)	0 UJ	0 U
cis-1,3-dichloropropene (ug/kg)	0.18 U	0.18 U
trans-1,3-dichloropropene (ug/kg)	0.22 U	0.22 U
Pesticides		
4,4'-DDD (ug/kg)	0.16 U	0.16 U
4,4'-DDE (ug/kg)	0.04 U	0.04 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
4,4'-DDT (ug/kg)	0.15 U	0.15 U
Aldrin (ug/kg)	0.03 U	0.03 U
Alpha-bhc (ug/kg)	0.03 U	0.03 U
Alpha-chlordane (ug/kg)	0.03 U	0.03 U
Aroclor-1016 (ug/kg)	0.93 U	0.93 U
Aroclor-1221 (ug/kg)	0.93 U	0.93 U
Aroclor-1232 (ug/kg)	0.93 U	0.93 U
Aroclor-1242 (ug/kg)	0.93 U	0.93 U
Aroclor-1248 (ug/kg)	0.93 U	0.93 U
Aroclor-1254 (ug/kg)	0.67 U	0.67 U
Aroclor-1260 (ug/kg)	0.67 U	0.67 U
Beta-BHC (ug/kg)	0.03 U	0.03 U
Decachlorobiphenyl (%)	80	86
Delta-BHC (ug/kg)	0.02 U	0.02 U
Dieldrin (ug/kg)	0.05 U	0.05 U
Endosulfan sulfate (ug/kg)	0.03 U	0.03 U
Endosulfan-i (ug/kg)	0.07 U	0.07 U
Endosulfan-ii (ug/kg)	0.03 U	0.03 U
Endrin (ug/kg)	0.06 U	0.06 U
Endrin aldehyde (ug/kg)	0.06 U	0.06 U
Endrin ketone (ug/kg)	0.02 U	0.02 U
Gamma-chlordane (ug/kg)	0.04 U	0.04 U
Heptachlor (ug/kg)	0.06 U	0.06 U
Heptachlor epoxide (ug/kg)	0.02 U	0.02 U
Lindane (ug/kg)	0.04 U	0.04 U
Methoxychlor (ug/kg)	0.55 U	0.55 U
Tetrachloro-m-xylene (%)	70	63
Toxaphene (ug/kg)	1.83 U	1.83 U
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/g)	0.22	0.4
Radium-226 (pCi/g)	1.63	1.02
Radium-228 (pCi/g)	1.11	0.64
Thorium-227 (pCi/g)	0.22	0.4
Thorium-228 (pCi/g)	1.11	0.64
Thorium-230 (pCi/g)	1.89	1.32
Thorium-232 (pCi/g)	0.84	0.56
Uranium-234 (pCi/g)	1.8	1.76

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00038**	**LU00040**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Uranium-235 (pCi/g)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/g)	2.08	0.5 U
Radiological Parameters (GammaSpec)		
Actinium-227 (pCi/g)	1.35	0.67
Americium-241 (pCi/g)	0 UJ	0 UJ
Cesium-137 (pCi/g)	0.13	0.5 U
Potassium-40 (pCi/g)	17.25	9.79
Protactinium-231 (pCi/g)	0 UJ	0 UJ
Radium-226 (pCi/g)	0.86	0.57
Radium-228 (pCi/g)	0.73	0.34
Thorium-228 (pCi/g)	0.73	0.34
Thorium-230 (pCi/g)	0 UJ	0 UJ
Thorium-232 (pCi/g)	0.73	0.34
Uranium-235 (pCi/g)	0 UJ	0 UJ
Uranium-238 (pCi/g)	0 UJ	0 UJ

APPENDIX 4A.3:
Analytical Surface Water Sample Results

Phase IV IA03 Surface Water

Station	**IA03-TR0002**
Sample No	**LUSW0028**
Collection Date	**07/23/98**
Depth (ft)	**4.0-0.0**
Duplicate ID	
Northing	**0**
Easting	**0**
Metals	
Arsenic (ug/l)	681
Barium (ug/l)	5180 J
Beryllium (ug/l)	276000 J
Lead (ug/l)	188000 J
Semivolatile Organics	
1,2,4-Trichlorobenzene (ug/l)	10 UJ
1,2-Dichlorobenzene (ug/l)	10 UJ
1,3-Dichlorobenzene (ug/l)	10 UJ
1,4-Dichlorobenzene (ug/l)	10 UJ
2,2'-Oxybis (1-chloropropane) (ug/l)	10 UJ
2,4,5-Trichlorophenol (ug/l)	25 UJ
2,4,6-Trichlorophenol (ug/l)	10 UJ
2,4-Dichlorophenol (ug/l)	10 UJ
2,4-Dimethylphenol (ug/l)	10 UJ
2,4-Dinitrophenol (ug/l)	25 UJ
2,4-Dinitrotoluene (ug/l)	10 UJ
2,6-Dinitrotoluene (ug/l)	10 UJ
2-Chloronaphthalene (ug/l)	10 UJ
2-Chlorophenol (ug/l)	10 UJ
2-Methylnaphthalene (ug/l)	10 UJ
2-Nitrophenol (ug/l)	10 UJ
2-methyl-4,6-dinitrophenol (ug/l)	10 UJ
3,3'-Dichlorobenzidine (ug/l)	50 UJ
4-Bromophenyl phenyl ether (ug/l)	10 UJ
4-Chloroaniline (ug/l)	20 UJ
4-Chlorophenylphenylether (ug/l)	10 UJ
4-Nitrophenol (ug/l)	25 UJ
4-chloro-3-methyl phenol (ug/l)	10 UJ
Acenaphthene (ug/l)	10 UJ
Acenaphthylene (ug/l)	10 UJ
Anthracene (ug/l)	10 UJ
Benzo(a)anthracene (ug/l)	10 UJ
Benzo(a)pyrene (ug/l)	10 UJ
Benzo(b)fluoranthene (ug/l)	10 UJ
Benzo(ghi)perylene (ug/l)	10 UJ

Station	**IA03-TR0002**
Sample No	**LUSW0028**
Collection Date	**07/23/98**
Depth (ft)	**4.0-0.0**
Duplicate ID	
Northing	**0**
Easting	**0**
Benzo(k)fluoranthene (ug/l)	10 UJ
Butylbenzylphthalate (ug/l)	10 UJ
Carbazole (ug/l)	10 UJ
Chrysene (ug/l)	10 UJ
Di-n-butylphthalate (ug/l)	10 UJ
Di-n-octylphthalate (ug/l)	10 UJ
Dibenz(a,h)anthracene (ug/l)	10 UJ
Dibenzofuran (ug/l)	10 UJ
Diethyl phthalate (ug/l)	10 UJ
Dimethyl phthalate (ug/l)	10 UJ
Fluoranthene (ug/l)	10 UJ
Fluorene (ug/l)	10 UJ
Hexachlorobenzene (ug/l)	10 UJ
Hexachlorobutadiene (ug/l)	10 UJ
Hexachlorocyclopentadiene (ug/l)	10 UJ
Hexachloroethane (ug/l)	10 UJ
Indeno(1,2,3-c,d)pyrene (ug/l)	10 UJ
Isophorone (ug/l)	10 UJ
N-Nitrosodiphenylamine (ug/l)	10 UJ
N-Nitrosodipropylamine (ug/l)	10 UJ
Naphthalene (ug/l)	10 UJ
Nitrobenzene (ug/l)	10 UJ
Pentachlorophenol (ug/l)	25 UJ
Phenanthrene (ug/l)	10 UJ
Phenol (ug/l)	10 UJ
Pyrene (ug/l)	10 UJ
bis(2-chloroethoxy)methane (ug/l)	10 UJ
bis(2-chloroethyl) ether (ug/l)	10 UJ
bis(2-ethylhexyl)phthalate (ug/l)	10 UJ
m,p-Cresol (ug/l)	10 UJ
m-Nitroaniline (ug/l)	25 UJ
o-Cresol (ug/l)	10 UJ
o-Nitroaniline (ug/l)	25 UJ
p-Nitroaniline (ug/l)	25 UJ
Volatile Organics	
1,1,1-Trichloroethane (ug/l)	5 U

Phase IV IA03 Surface Water

Station	**IA03-TR0002**
Sample No	**LUSW0028**
Collection Date	**07/23/98**
Depth (ft)	**4.0-0.0**
Duplicate ID	
Northing	**0**
Easting	**0**
1,1,2,2-Tetrachloroethane (ug/l)	5 U
1,1,2-Trichloroethane (ug/l)	5 U
1,1-Dichloroethane (ug/l)	5 U
1,1-Dichloroethene (ug/l)	5 U
1,2-Dichloroethane (ug/l)	5 U
1,2-Dichloroethylene (ug/l)	5 U
1,2-Dichloropropane (ug/l)	5 U
2-Butanone (ug/l)	10 U
2-Hexanone (ug/l)	10 U
4-Methyl-2-pentanone (ug/l)	10 U
Acetone (ug/l)	10 U
Benzene (ug/l)	5 U
Bromoform (ug/l)	5 U
Carbon disulfide (ug/l)	5 U
Carbon tetrachloride (ug/l)	5 U
Chlorobenzene (ug/l)	5 U
Chlorodibromomethane (ug/l)	5 U
Chloroethane (ug/l)	10 U
Chloroform (ug/l)	5 U
Dichlorobromomethane (ug/l)	5 U
Ethylbenzene (ug/l)	8.4 J
Methyl Bromide (ug/l)	10 U
Methyl Chloride (ug/l)	10 U
Methylene chloride (ug/l)	1.5 UJ
Styrene (ug/l)	5 U
Tetrachloroethene (ug/l)	5 U
Toluene (ug/l)	1.1 J
Trichloroethene (ug/l)	5 U
Vinyl chloride (ug/l)	2 UJ
Xylenes (total) (ug/l)	26.6
cis-1,3-dichloropropene (ug/l)	5 U
trans-1,3-Dichloropropene (ug/l)	5 U
Radiological Parameters	
Radium-226 (pCi/l)	15.9
Radiological Parameters (AlphaSpec)	
Actinium-227 (pCi/l)	0.997 U

Phase IV IA03 Surface Water

Station	**IA03-TR0002**
Sample No	**LUSW0028**
Collection Date	**07/23/98**
Depth (ft)	**4.0-0.0**
Duplicate ID	
Northing	**0**
Easting	**0**
Thorium-228 (pCi/l)	0.848 J
Thorium-230 (pCi/l)	13
Thorium-232 (pCi/l)	0.116 U
Uranium-233/234 (pCi/l)	31.5
Uranium-235 (pCi/l)	1.58
Uranium-238 (pCi/l)	31.5
Radiological Parameters (GammaSpec)	
Actinium-228 (pCi/l)	3.26 U
Cesium-137 (pCi/l)	1.87 U
Cobalt-60 (pCi/l)	-0.205 U
Potassium-40 (pCi/l)	35.5 U
Protactinium-231 (pCi/l)	13.9 U
Thorium-234 (pCi/l)	56.8 U
Uranium-235 (pCi/l)	-1.58 U

Phase II IA06 Onsite Surface Water

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**
Sample No	**LU00070**	**LU00072**	**LU00074**	**LU00076**	**LU00078**	**LU00124**	**LU00080**	**LU00082**	**LU00084**
Collection Date	**10/06/97**	**10/06/97**	**10/06/97**	**10/06/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**0**
Metals									
Aluminum (ug/l)	591	299	407	18.85 U	270	384	3340	149	947
Antimony (ug/l)	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Arsenic (ug/l)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Barium (ug/l)	53.8	64.4	161	39.8	64.8	63	140	77.5	56.7
Beryllium (ug/l)	19.6	2.2	15.6	1.3	0.78	0.12 U	10.9	1.1	0.12 U
Boron (ug/l)	117	80.3	81.9	78.9	88.3	87.2	76.7	75.6	406
Cadmium (ug/l)	2.7	0.11 U	0.11 U	0.43	0.11 U	0.11 U	0.64	0.11 U	0.11 U
Calcium (ug/l)	108000	115000	109000	87000	80200	79700	7.75 U	158000	112000
Chromium (ug/l)	2	0.78	1.2	0.63	0.86	0.89	5.7	0.37 U	2.2
Cobalt (ug/l)	1.2	0.34 U	0.96	0.34 U	1.2	1.1	2.7	0.34 U	1.1
Copper (ug/l)	26.3	19.5	0.7 U	27.3	0.7 U	0.7 U	20.1	19.5	55
Iron (ug/l)	1240	745	1240	165	628	924	5890	400	1670
Lead (ug/l)	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	9.2	0.34 U	0.34 U
Magnesium (ug/l)	54900	59000	54700	44500	29600	29800	104000	80300	49400
Manganese (ug/l)	93	10.4	248	15.5	682	720	138	35.7	70.7
Mercury (ug/l)	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.13	0.06 U	0.11
Molybdenum (ug/l)	0.22 U	0.22 U	0.22 U	0.22 U	13.2	16.4	0.22 U	0.22 U	5.4
Nickel (ug/l)	46.1	46	44.9	45.7	7.6	8.6	47.8	43.6	11.1
Potassium (ug/l)	6450	4480	4990	4090	5500	5040	9490	6790	12800
Selenium (ug/l)	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Silicon (ug/l)	5920	4730	3840	4170	2150	1820	8830	4140	5790
Silver (ug/l)	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Sodium (ug/l)	133000	97900	108000	333000	100000	98300	848000	597000	456000
Strontium (ug/l)	9010	8750	10800	6950	3190	3110	16800	12400	432
Thallium (ug/l)	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U
Vanadium (ug/l)	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	7.3	0.22 U	0.22 U
Zinc (ug/l)	59.1	40.9	51.5	42.4	0.49 U	0.49 U	61.9	38.6	84.9
Indicator Parameters									
Alkalinity (mg/l)	299	298	305	294	187	187	302	306	441
Ammonia (mg/l)	0.19	0.99	0.31	0.08	0.04	0.04	0.4	0.13	23.3
Chloride (mg/l)	50.1			352				961	
Fluoride (mg/l)	1.2 J			0 UJ				0 U	
Nitrate, as N (mg/l)	1.47			0.705				1.08	
Phosphorus (mg/l)	1.49			0.036				0.039	
Sulfate (mg/l)	361			366				346	
Total dissolved solids (mg/l)	922	907	902	1390	622	640	3240	2480	1830
Total suspended solids (mg/l)	70	39.2	26.4	0.85 U	18.3	14.3	52	16.3	22

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**
Sample No	**LU00070**	**LU00072**	**LU00074**	**LU00076**	**LU00078**	**LU00124**	**LU00080**	**LU00082**	**LU00084**
Collection Date	**10/06/97**	**10/06/97**	**10/06/97**	**10/06/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichlorobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,2'-oxybis (1-chloropropane) (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,5-Trichlorophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,6-Trichlorophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-Dichlorophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-Dimethylphenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-Dinitrophenol (ug/l)	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
2,4-Dinitrotoluene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2,6-Dinitrotoluene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chloronaphthalene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Methylnaphthalene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Methylphenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Nitroaniline (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Nitrophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
3,3'-Dichlorobenzidine (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
4,6-Dinitro-2-methylphenol (ug/l)	2.55 U	2.5 UJ	2.5 UJ	2.5 UJ	2.6 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
4-Chloroaniline (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Nitroaniline (ug/l)	2.55 U	2.5 UJ	2.5 UJ	2.5 UJ	2.6 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
4-Nitrophenol (ug/l)	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-bromophenyl phenyl ether (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
4-chloro-3-methyl phenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
4-chlorophenylphenylether (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Acenaphthene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Acenaphthylene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Anthracene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzenamine, 2,4,6-tribromo- (ug/l)									
Benzo(a)anthracene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzo(a)pyrene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzo(b)fluoranthene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**
Sample No	**LU00070**	**LU00072**	**LU00074**	**LU00076**	**LU00078**	**LU00124**	**LU00080**	**LU00082**	**LU00084**
Collection Date	**10/06/97**	**10/06/97**	**10/06/97**	**10/06/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**0**
Semivolatile Organics (continued)									
Benzo(ghi)perylene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzo(k)fluoranthene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Butylbenzylphthalate (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbazole (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Chrysene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Di-n-butylphthalate (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Di-n-octylphthalate (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Dibenz(a,h)anthracene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Dibenzofuran (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Diethyl phthalate (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	8.3 J
Dimethyl phthalate (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Fluoranthene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Fluorene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorocyclopentadiene (ug/l)	2.55 U	2.5 UJ	2.5 UJ	2.5 UJ	2.6 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Hexachloroethane (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Indeno(1,2,3-c,d)pyrene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Isophorone (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
N-nitroso-di-n-propylamine (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
N-nitrosodiphenylamine (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Naphthalene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitrobenzene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Pentachlorophenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Phenanthrene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
Phenol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	5.8 J
Pyrene (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
bis(2-chloroethoxy)methane (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U
bis(2-chloroethyl) ether (ug/l)	2.55 U	2.5 UJ	2.5 UJ	2.5 UJ	2.6 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
bis(2-ethylhexyl)phthalate (ug/l)	25.4	2.5 U	2.5 U	14.7	35.9	2.5 U	2.5 U	2.5 U	8.5 J
m,p-cresol (ug/l)	2.55 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	21.3

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**
Sample No	**LU00070**	**LU00072**	**LU00074**	**LU00076**	**LU00078**	**LU00124**	**LU00080**	**LU00082**	**LU00084**
Collection Date	**10/06/97**	**10/06/97**	**10/06/97**	**10/06/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**0**
Volatile Organics									
1,1,1-Trichloroethane (ug/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
1,1,2,2-Tetrachloroethane (ug/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
1,1,2-Trichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone (ug/l)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2-Hexanone (ug/l)	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
4-Methyl-2-pentanone (ug/l)	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Acetone (ug/l)	2.5 UJ	2.5 UJ	4.4 J	2.5 UJ	2.5 UJ	4.4 J	2.5 UJ	2.5 UJ	39.2 J
Benzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane (ug/l)	0.5 U	0.33	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide (ug/l)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Carbon tetrachloride (ug/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Chlorobenzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (ug/l)	0.44	0.76	0.5 U	0.23	0.16	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane (ug/l)	0.5 U	0.22	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Toluene (ug/l)	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ
Tribromomethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylenes (total) (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-dichloropropene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-dichloropropene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Station	**SWSD0004**	**SWSD0005**	**SWSD0006**	**SWSD0007**	**SWSD0008**	**SWSD0008**	**SWSD0009**	**SWSD0010**	**SWSD0011**
Sample No	**LU00070**	**LU00072**	**LU00074**	**LU00076**	**LU00078**	**LU00124**	**LU00080**	**LU00082**	**LU00084**
Collection Date	**10/06/97**	**10/06/97**	**10/06/97**	**10/06/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**	**10/07/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**	**517103**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**199380**	**0**	**0**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/l)	0 UJ	0.598	0 UJ	0 UJ	0.517	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/l)	0.398	0.501	0.939	0.357	0.198	0.221	0.922	0.705	0.526
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.324	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.5 UJ	0.598	0.5 UJ	0.5 UJ	0.517	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.324	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.286	0.5 UJ	0.5 UJ
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.5 UJ	0.5 UJ	2.54	0.5 UJ	0.557	0.672	0.347	0.468	0.747
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.096	0.037	0.045	-0.004	0 R
Uranium-238 (pCi/l)	0.5 UJ	0.5 UJ	3.27	0.5 UJ	0.432	0.36	0.313	0.31	1.14
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/l)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Potassium-40 (pCi/l)	0 UJ	397	0 U	0 U	0 UJ	451	0 UJ	0 UJ	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ

Station	**SWSD0012**	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0019**	**SWSD0020**	**SWSD0021**	**SWSD0022**
Sample No	**LU00086**	**LU00088**	**LU00090**	**LU00092**	**LU00094**	**LU00100**	**LU00102**	**LU00104**	**LU00106**
Collection Date	**10/07/97**	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/22/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**517675**	**0**	**0**	**0**	**517607**	**517413**	**0**	**0**	**0**
Easting	**199287**	**0**	**0**	**0**	**199618**	**199401**	**0**	**0**	**0**
Metals									
Aluminum (ug/l)	148	18.85 U	194	288	18.85 U	18.85 U	148	38.5	18.85 U
Antimony (ug/l)	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Arsenic (ug/l)	1.5 U	1.5 U	1.5 U	2.7	1.5 U	1.5 U	1.5 U	5.8	2.6
Barium (ug/l)	36.9	51	57.5	86.6	27.6	78.7	233	38.7	13.4
Beryllium (ug/l)	0.12 U	2.9	1.8	1.5	0.32	0.23	35.9	1.4	9.8
Boron (ug/l)	386	76.4 J	160 J	152	475	73.4	56.8	748	55.6
Cadmium (ug/l)	0.11 U	1	0.84	0.43	0.11 U	0.11 U	3.7	0.11 U	0.65
Calcium (ug/l)	95400	96500	93200	91900	99600	107000	64500	30800	40600
Chromium (ug/l)	1.9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	6.4	42.8	0.37 U
Cobalt (ug/l)	0.95	0.34 U	0.7	1.5	0.34 U	0.34 U	2.1	5	0.34 U
Copper (ug/l)	40.9	0.7 U	0.7 U	0.7 U	9.5	16.9	1940	21.1	4.7
Iron (ug/l)	314	205	407	978	376	694	9610	8080	4.35 U
Lead (ug/l)	0.34 U	0.34 U	0.34 U	10.3	0.34 U	0.34 U	416	12.8	25.1
Magnesium (ug/l)	42100	48100	41600	39300	42900	54100	11200	16500	615
Manganese (ug/l)	55.9	66.8	155	667	76.9	5.7	222	166	2.7
Mercury (ug/l)	0.27	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.65	0.15	0.06 U
Molybdenum (ug/l)	0.22 U	0.22 U	0.22 U	6.4	0.22 U	0.22 U	0.22 U	0.22 U	49
Nickel (ug/l)	3.9	36.4	22	21.9	1.15 U	39.4	8	124	25.7
Potassium (ug/l)	13100	5000	7380	7430	16400	4280	18500	62600	25200
Selenium (ug/l)	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4.3	0.7 U
Silicon (ug/l)	5050	4160	3540	3010	5710	4030	3490	39100	2340
Silver (ug/l)	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Sodium (ug/l)	295000	122000	162000	142000	348000	102000	38500	1730000 J	162000
Strontium (ug/l)	409	7820	5180	4580	582	9260	3490	1360	456
Thallium (ug/l)	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U	1.35 U
Vanadium (ug/l)	0.22 U	1.2	1.4	1.4	0.68	0.47	0.22 U	12.5	4
Zinc (ug/l)	37.2	0.49 U	0.49 U	11.8	15.5	26.1	592	58	12.2
Indicator Parameters									
Alkalinity (mg/l)	462	275 J	298 J	290 J	522	316	258	1850 J	69
Ammonia (mg/l)	26.8	0.01 U	5.55	3.63	25.7	1.29	0.17	3.39	0.08
Chloride (mg/l)		63.3			549	45.8			13
Fluoride (mg/l)		0.979			1.67	1.07			9.1
Nitrate, as N (mg/l)		1.31			0 U	0 U			0.015
Phosphorus (mg/l)		0.134			5.96	0.344			0.02 U
Sulfate (mg/l)		355			50.2	352			378
Total dissolved solids (mg/l)	1240	870	920	876	1390	909	341	4860	646
Total suspended solids (mg/l)	19	10.5	9.67	15.7	8.6	14	518	27	23.2

Station	**SWSD0012**	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0019**	**SWSD0020**	**SWSD0021**	**SWSD0022**
Sample No	**LU00086**	**LU00088**	**LU00090**	**LU00092**	**LU00094**	**LU00100**	**LU00102**	**LU00104**	**LU00106**
Collection Date	**10/07/97**	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/22/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**517675**	**0**	**0**	**0**	**517607**	**517413**	**0**	**0**	**0**
Easting	**199287**	**0**	**0**	**0**	**199618**	**199401**	**0**	**0**	**0**
Semivolatile Organics									
1,2,4-Trichlorobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
1,2-Dichlorobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
1,3-Dichlorobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
1,4-Dichlorobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
2,2'-oxybis (1-chloropropane) (ug/l)	2.5 U	2.5 U	2.5 U	2.5 UJ	2.55 U	10 U	28 UJ	5 UJ	10.5 U
2,4,5-Trichlorophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2,4,6-Trichlorophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2,4-Dichlorophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2,4-Dimethylphenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2,4-Dinitrophenol (ug/l)	5 UJ	5 U	5 R	5 UJ	5 R	20 R	55 UJ	10 U	20.5 U
2,4-Dinitrotoluene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
2,6-Dinitrotoluene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
2-Chloronaphthalene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 UJ	2.55 U	10 U	28 UJ	5 U	10.5 U
2-Chlorophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2-Methylnaphthalene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
2-Methylphenol (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
2-Nitroaniline (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 UJ
2-Nitrophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
3,3'-Dichlorobenzidine (ug/l)	5 U	2.5 U	2.5 U	5 U	2.55 U	10 U	28 UJ	5 UJ	10.5 U
3-Nitroaniline (ug/l)	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 UJ
4,6-Dinitro-2-methylphenol (ug/l)	2.5 UJ	2.5 U	2.5 R	2.5 UJ	2.55 R	10 R	28 UJ	5 U	10.5 U
4-Chloroaniline (ug/l)	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.55 U	10 UJ	28 UJ	5 UJ	10.5 UJ
4-Nitroaniline (ug/l)	2.5 UJ	2.5 U	2.5 U	2.5 UJ	2.55 U	10 U	28 UJ	5 U	10.5 U
4-Nitrophenol (ug/l)	5 U	5 U	5 R	5 U	5 R	20 R	55 UJ	10 U	20.5 U
4-bromophenyl phenyl ether (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 UJ	28 UJ	5 U	10.5 UJ
4-chloro-3-methyl phenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
4-chlorophenylphenylether (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Acenaphthene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Acenaphthylene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Anthracene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Benzenamine, 2,4,6-tribromo- (ug/l)		5.4 R							
Benzo(a)anthracene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Benzo(a)pyrene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Benzo(b)fluoranthene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U

Station	**SWSD0012**	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0019**	**SWSD0020**	**SWSD0021**	**SWSD0022**
Sample No	**LU00086**	**LU00088**	**LU00090**	**LU00092**	**LU00094**	**LU00100**	**LU00102**	**LU00104**	**LU00106**
Collection Date	**10/07/97**	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/22/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**517675**	**0**	**0**	**0**	**517607**	**517413**	**0**	**0**	**0**
Easting	**199287**	**0**	**0**	**0**	**199618**	**199401**	**0**	**0**	**0**
Semivolatile Organics (continued)									
Benzo(ghi)perylene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Benzo(k)fluoranthene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Butylbenzylphthalate (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Carbazole (ug/l)	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.55 U	10 U	28 U	5 U	10.5 UJ
Chrysene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Di-n-butylphthalate (ug/l)	2.5 U	2.5 UJ	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Di-n-octylphthalate (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	10.8	10 U	28 UJ	5 U	10.5 U
Dibenz(a,h)anthracene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Dibenzofuran (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Diethyl phthalate (ug/l)	5.1 J	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Dimethyl phthalate (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Fluoranthene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Fluorene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Hexachlorobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Hexachlorobutadiene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Hexachlorocyclopentadiene (ug/l)	2.5 UJ	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Hexachloroethane (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Indeno(1,2,3-c,d)pyrene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Isophorone (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
N-nitroso-di-n-propylamine (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
N-nitrosodiphenylamine (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Naphthalene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Nitrobenzene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
Pentachlorophenol (ug/l)	2.5 U	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 UJ
Phenanthrene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 UJ	28 UJ	5 U	10.5 U
Phenol (ug/l)	6.4 J	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U
Pyrene (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
bis(2-chloroethoxy)methane (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
bis(2-chloroethyl) ether (ug/l)	2.5 UJ	2.5 U	2.5 U	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
bis(2-ethylhexyl)phthalate (ug/l)	2.5 U	2.5 U	2.5 UJ	2.5 U	2.55 U	10 U	28 UJ	5 U	10.5 U
m,p-cresol (ug/l)	17.3	2.5 U	2.5 R	2.5 U	2.55 R	10 R	28 UJ	5 U	10.5 U

Station	**SWSD0012**	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0019**	**SWSD0020**	**SWSD0021**	**SWSD0022**
Sample No	**LU00086**	**LU00088**	**LU00090**	**LU00092**	**LU00094**	**LU00100**	**LU00102**	**LU00104**	**LU00106**
Collection Date	**10/07/97**	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/22/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**517675**	**0**	**0**	**0**	**517607**	**517413**	**0**	**0**	**0**
Easting	**199287**	**0**	**0**	**0**	**199618**	**199401**	**0**	**0**	**0**
Volatile Organics									
1,1,1-Trichloroethane (ug/l)	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane (ug/l)	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	31.9 J	0.5 U
1,1-Dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone (ug/l)	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2-Hexanone (ug/l)	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (ug/l)	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone (ug/l)	59 J	2.5 UJ	2.5 UJ	2.5 UJ	2.5 R	2.5 R	33.8 R	254 J	2.5 R
Benzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Bromodichloromethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U
Bromomethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide (ug/l)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Carbon tetrachloride (ug/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloromethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4 J	0.5 U	0.5 U	0.5 U
Ethylbenzene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8800 R	0.5 U
Styrene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene (ug/l)	0.5 UJ	0.5 UJ	0.5 UJ	1 J	0.5 UJ	0.5 UJ	20	1280	0.5 UJ
Tribromomethane (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	6 J	0.5 UJ	0.5 U	0.5 U
Trichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	118 J	0.5 U
Vinyl chloride (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylenes (total) (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	8 J	0.5 U
cis-1,2-dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	37.9 J	0.5 U
cis-1,3-dichloropropene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-dichloroethene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-dichloropropene (ug/l)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U

Station	**SWSD0012**	**SWSD0013**	**SWSD0014**	**SWSD0015**	**SWSD0016**	**SWSD0019**	**SWSD0020**	**SWSD0021**	**SWSD0022**
Sample No	**LU00086**	**LU00088**	**LU00090**	**LU00092**	**LU00094**	**LU00100**	**LU00102**	**LU00104**	**LU00106**
Collection Date	**10/07/97**	**10/08/97**	**10/08/97**	**10/09/97**	**10/20/97**	**10/20/97**	**10/22/97**	**10/23/97**	**11/05/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**517675**	**0**	**0**	**0**	**517607**	**517413**	**0**	**0**	**0**
Easting	**199287**	**0**	**0**	**0**	**199618**	**199401**	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)									
Actinium-227 (pCi/l)	0 UJ	0.426	0 UJ	0.523	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/l)	0.239	0.273	0.273	0.5 UJ	0.349	0.573	0.454	0.5 UJ	0.5 UJ
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.5 UJ	0.426	0.5 UJ	0.523	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.487	0.286	0.38	0.393	0.637	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-235 (pCi/l)	0.059	0.054	0.101	0 R	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/l)	0.703	0.5 UJ	0.5 UJ	0.419	0.561	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Radiological Parameters (GammaSpec)									
Americium-241 (pCi/l)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Potassium-40 (pCi/l)	519	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	325 J	257 J	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ	0 UJ

Station	**SWSD0022**	**SWSD0022**	**SWSD0023**
Sample No	**LU00126**	**LU9001**	**LU00108**
Collection Date	**11/05/97**	**11/03/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Metals			
Aluminum (ug/l)	18.85 U	132	18.85 U
Antimony (ug/l)	0.85 U	0.85 U	0.85 U
Arsenic (ug/l)	1.5 U	125	1.5 U
Barium (ug/l)	13.5	42.6	25.5
Beryllium (ug/l)	9.8	41.2	0.12 U
Boron (ug/l)	53.8	9.55 U	76.1
Cadmium (ug/l)	0.47	42.2	0.11 U
Calcium (ug/l)	40900	7.75 U	51400
Chromium (ug/l)	0.37 U	125	0.37 U
Cobalt (ug/l)	0.34 U	126	0.34 U
Copper (ug/l)	4.3	127	36.9
Iron (ug/l)	4.35 U	156	214
Lead (ug/l)	25.5	124	0.34 U
Magnesium (ug/l)	619	1.7 U	25700
Manganese (ug/l)	2.6	127	0.46 U
Mercury (ug/l)	0.06 U	0.25	0.06 U
Molybdenum (ug/l)	48.8	0.22 U	0.22 U
Nickel (ug/l)	25.8	131	41.3
Potassium (ug/l)	25400	2.95 U	2440
Selenium (ug/l)	0.7 U	124	0.7 U
Silicon (ug/l)	2370	10.7 U	4020
Silver (ug/l)	0.31 U	43.2	1.2
Sodium (ug/l)	164000	14.6 U	283000
Strontium (ug/l)	461	0.15 U	4560
Thallium (ug/l)	1.35 U	251	1.35 U
Vanadium (ug/l)	3.7	124	0.56
Zinc (ug/l)	13.1	129	34.7
Indicator Parameters			
Alkalinity (mg/l)	69		289 J
Ammonia (mg/l)	0.11		0.77
Chloride (mg/l)	12.8		
Fluoride (mg/l)	9.11		
Nitrate, as N (mg/l)	0.037		
Phosphorus (mg/l)	0.053		
Sulfate (mg/l)	377		
Total dissolved solids (mg/l)	650		974
Total suspended solids (mg/l)	19.6		3.2 J

Station	**SWSD0022**	**SWSD0022**	**SWSD0023**
Sample No	**LU00126**	**LU9001**	**LU00108**
Collection Date	**11/05/97**	**11/03/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Semivolatile Organics			
1,2,4-Trichlorobenzene (ug/l)	10.5 U		2.5 U
1,2-Dichlorobenzene (ug/l)	10.5 U		2.5 U
1,3-Dichlorobenzene (ug/l)	10.5 U		2.5 U
1,4-Dichlorobenzene (ug/l)	10.5 U		2.5 U
2,2'-oxybis (1-chloropropane) (ug/l)	10.5 U		2.5 UJ
2,4,5-Trichlorophenol (ug/l)	10.5 U		2.5 R
2,4,6-Trichlorophenol (ug/l)	10.5 U		2.5 R
2,4-Dichlorophenol (ug/l)	10.5 U		2.5 R
2,4-Dimethylphenol (ug/l)	10.5 U		2.5 R
2,4-Dinitrophenol (ug/l)	20.5 U		5 R
2,4-Dinitrotoluene (ug/l)	10.5 U		2.5 U
2,6-Dinitrotoluene (ug/l)	10.5 U		2.5 UJ
2-Chloronaphthalene (ug/l)	10.5 U		2.5 UJ
2-Chlorophenol (ug/l)	10.5 U		2.5 R
2-Methylnaphthalene (ug/l)	10.5 U		2.5 UJ
2-Methylphenol (ug/l)	10.5 U		2.5 R
2-Nitroaniline (ug/l)	10.5 UJ		2.5 UJ
2-Nitrophenol (ug/l)	10.5 U		2.5 R
3,3'-Dichlorobenzidine (ug/l)	10.5 U		2.5 UJ
3-Nitroaniline (ug/l)	10.5 UJ		2.5 UJ
4,6-Dinitro-2-methylphenol (ug/l)	10.5 U		2.5 R
4-Chloroaniline (ug/l)	10.5 UJ		2.5 UJ
4-Nitroaniline (ug/l)	10.5 U		2.5 UJ
4-Nitrophenol (ug/l)	20.5 U		5 R
4-bromophenyl phenyl ether (ug/l)	10.5 UJ		2.5 UJ
4-chloro-3-methyl phenol (ug/l)	10.5 U		2.5 R
4-chlorophenylphenylether (ug/l)	10.5 U		2.5 UJ
Acenaphthene (ug/l)	10.5 U		2.5 R
Acenaphthylene (ug/l)	10.5 U		2.5 UJ
Anthracene (ug/l)	10.5 U		2.5 UJ
Benzenamine, 2,4,6-tribromo- (ug/l)			
Benzo(a)anthracene (ug/l)	10.5 U		2.5 UJ
Benzo(a)pyrene (ug/l)	10.5 U		2.5 UJ
Benzo(b)fluoranthene (ug/l)	10.5 U		2.5 UJ

Station	**SWSD0022**	**SWSD0022**	**SWSD0023**
Sample No	**LU00126**	**LU9001**	**LU00108**
Collection Date	**11/05/97**	**11/03/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Semivolatile Organics (continued)			
Benzo(ghi)perylene (ug/l)	10.5 U		2.5 UJ
Benzo(k)fluoranthene (ug/l)	10.5 U		2.5 UJ
Butylbenzylphthalate (ug/l)	10.5 U		2.5 UJ
Carbazole (ug/l)	10.5 UJ		2.5 UJ
Chrysene (ug/l)	10.5 U		2.5 UJ
Di-n-butylphthalate (ug/l)	10.5 U		2.5 UJ
Di-n-octylphthalate (ug/l)	10.5 U		2.5 UJ
Dibenz(a,h)anthracene (ug/l)	10.5 U		2.5 UJ
Dibenzofuran (ug/l)	10.5 U		2.5 UJ
Diethyl phthalate (ug/l)	10.5 U		2.5 UJ
Dimethyl phthalate (ug/l)	10.5 U		2.5 UJ
Fluoranthene (ug/l)	10.5 U		2.5 UJ
Fluorene (ug/l)	10.5 U		2.5 UJ
Hexachlorobenzene (ug/l)	10.5 U		2.5 UJ
Hexachlorobutadiene (ug/l)	10.5 U		2.5 UJ
Hexachlorocyclopentadiene (ug/l)	10.5 U		2.5 UJ
Hexachloroethane (ug/l)	10.5 U		2.5 UJ
Indeno(1,2,3-c,d)pyrene (ug/l)	10.5 U		2.5 UJ
Isophorone (ug/l)	10.5 U		2.5 UJ
N-nitroso-di-n-propylamine (ug/l)	10.5 U		2.5 U
N-nitrosodiphenylamine (ug/l)	10.5 U		2.5 UJ
Naphthalene (ug/l)	10.5 U		2.5 UJ
Nitrobenzene (ug/l)	10.5 U		2.5 UJ
Pentachlorophenol (ug/l)	10.5 UJ		2.5 R
Phenanthrene (ug/l)	10.5 U		2.5 UJ
Phenol (ug/l)	10.5 U		2.5 R
Pyrene (ug/l)	10.5 U		2.5 UJ
bis(2-chloroethoxy)methane (ug/l)	10.5 U		2.5 UJ
bis(2-chloroethyl) ether (ug/l)	10.5 U		2.5 UJ
bis(2-ethylhexyl)phthalate (ug/l)	10.5 U		2.5 UJ
m,p-cresol (ug/l)	10.5 U		2.5 R

Station	**SWSD0022**	**SWSD0022**	**SWSD0023**
Sample No	**LU00126**	**LU9001**	**LU00108**
Collection Date	**11/05/97**	**11/03/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Volatile Organics			
1,1,1-Trichloroethane (ug/l)	0.5 U		0.31
1,1,2,2-Tetrachloroethane (ug/l)	0.5 U		0.5 U
1,1,2-Trichloroethane (ug/l)	0.5 U		0.5 UJ
1,1-Dichloroethane (ug/l)	0.5 U		0.5 UJ
1,1-Dichloroethene (ug/l)	0.5 U		0.5 U
1,2-Dichloroethane (ug/l)	0.5 U		0.5 U
1,2-Dichloropropane (ug/l)	0.5 U		0.5 U
2-Butanone (ug/l)	1 U		1 U
2-Hexanone (ug/l)	2.5 U		2.5 UJ
4-Methyl-2-pentanone (ug/l)	2.5 U		2.5 UJ
Acetone (ug/l)	2.5 R		2.5 UJ
Benzene (ug/l)	0.5 U		0.5 U
Bromodichloromethane (ug/l)	0.5 U		0.78
Bromomethane (ug/l)	0.5 U		0.5 UJ
Carbon disulfide (ug/l)	1 U		1 U
Carbon tetrachloride (ug/l)	0.5 U		0.5 U
Chlorobenzene (ug/l)	0.5 U		0.5 U
Chloroethane (ug/l)	0.5 U		0.5 UJ
Chloroform (ug/l)	0.5 U		0.5 UJ
Chloromethane (ug/l)	0.5 U		
Dibromochloromethane (ug/l)	0.5 U		2.9 J
Ethylbenzene (ug/l)	0.5 U		0.5 U
Methylene chloride (ug/l)	0.5 U		6.6 J
Styrene (ug/l)	0.5 U		0.5 U
Tetrachloroethene (ug/l)	0.5 U		0.5 U
Toluene (ug/l)	0.5 UJ		0.5 UJ
Tribromomethane (ug/l)	0.5 U		12.5 J
Trichloroethene (ug/l)	0.5 U		0.5 U
Vinyl chloride (ug/l)	0.5 U		0.5 U
Xylenes (total) (ug/l)	0.5 U		0.5 U
cis-1,2-dichloroethene (ug/l)	0.5 U		0.5 U
cis-1,3-dichloropropene (ug/l)	0.5 U		0.5 U
trans-1,2-dichloroethene (ug/l)	0.5 U		0.5 U
trans-1,3-dichloropropene (ug/l)	0.5 U		0.5 U

Station	**SWSD0022**	**SWSD0022**	**SWSD0023**
Sample No	**LU00126**	**LU9001**	**LU00108**
Collection Date	**11/05/97**	**11/03/97**	**11/11/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**	**0**
Easting	**0**	**0**	**0**
Radiological Parameters (AlphaSpec)			
Actinium-227 (pCi/l)	0 UJ	0 UJ	0 UJ
Radium-226 (pCi/l)	0.5 UJ	0.5 UJ	0.305
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.308	3.87	0.5 UJ
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ	0.5 UJ
Uranium-238 (pCi/l)	0.5 UJ	4.5	0.5 UJ
Radiological Parameters (GammaSpec)			
Americium-241 (pCi/l)	0 UJ		0 UJ
Cesium-137 (pCi/l)	5 UJ		5 UJ
Potassium-40 (pCi/l)	0 UJ		0 UJ
Protactinium-231 (pCi/l)	0 UJ		

Phase IV IA06 Surface Water

Station	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**
Sample No	**LUSW0006**	**LUSW0007**	**LUSW0008**	**LUSW0009**	**LUSW0010**	**LUSW0011**	**LUSW0012**	**LUSW0013**
Collection Date	**06/23/98**	**07/01/98**	**07/08/98**	**07/14/98**	**07/24/98**	**07/28/98**	**08/03/98**	**08/11/98**
Depth (ft)	**6.0-8.0**	**0.0-0.0**	**0.0-2.0**	**0.0-2.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**
Easting	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**
Metals								
Aluminum (ug/l)								
Antimony (ug/l)								
Arsenic (ug/l)	4 U	4 U	3 U	5.1	3.5 J	4.5 B	8.7	3 U
Barium (ug/l)	44.9	51.4	43	62.8	49.2 J	63.9	109	52
Beryllium (ug/l)	0.72 B	1.3	1.1	1.4 UJ	2.9 UJ	1.8	5.1	0.69 B
Cadmium (ug/l)								
Calcium (ug/l)								
Chromium (ug/l)								
Cobalt (ug/l)								
Copper (ug/l)								
Iron (ug/l)								
Lead (ug/l)	1.5 U	2 B	1.5 U	1.5 U	2.1 UJ	2.2 B	5.3	2.2 B
Magnesium (ug/l)								
Manganese (ug/l)								
Mercury (ug/l)								
Nickel (ug/l)								
Phosphorus (ug/l)								
Potassium (ug/l)								
Selenium (ug/l)								
Silver (ug/l)								
Sodium (ug/l)								
Thallium (ug/l)								
Vanadium (ug/l)								
Zinc (ug/l)								
Indicator Parameters								
Fluoride (mg/l)	0.24	0.2	0.29	0.36	0.23	0.24	0.41	0.28
Radiological Parameters								
Gross Alpha (pCi/l)	10.2	2.46 J						
Nonvolatile Beta (pCi/l)	84.4	7.36						
Radium-226 (pCi/l)	0.279 U	1.1	0.483 J	0.312 U	0.699 J	0.5 J	0.463 U	0.42 J
Radium-228 (pCi/l)	1.31	0.134 U	0.174 U	0.282 U	0.387 U	0.396 U	0.479 U	0.45 U
Weight of Sample, A&B (mg)	73.1	64.8						
Radiological Parameters (AlphaSpec)								
Actinium-227 (pCi/l)	-0.119 U	-0.413 U	-0.0181 U	0.112 U	0.064 U	0.124 U	0.24 U	0.102 U
Thorium-228 (pCi/l)	0.0708 U	0.22 U	0.307 J	0.14 J	0.187 J	0.326 J	0.233 U	0.165 U

Phase IV IA06 Surface Water

Station	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**	**IA06-SW0002**
Sample No	**LUSW0006**	**LUSW0007**	**LUSW0008**	**LUSW0009**	**LUSW0010**	**LUSW0011**	**LUSW0012**	**LUSW0013**
Collection Date	**06/23/98**	**07/01/98**	**07/08/98**	**07/14/98**	**07/24/98**	**07/28/98**	**08/03/98**	**08/11/98**
Depth (ft)	**6.0-8.0**	**0.0-0.0**	**0.0-2.0**	**0.0-2.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**	**200449**
Easting	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**	**518217**
Thorium-230 (pCi/l)	0.107 J	0.183 U	0.0383 U	0.0793 J	0.0076 U	0.224 J	0.319 J	0.438 J
Thorium-232 (pCi/l)	-0.0001 U	0.0186 U	0.0383 U	0.0088 U	-0.0035 U	0 U	0 U	0.0885 U
Uranium-233/234 (pCi/l)	2.86	0.8 J	0.432 J	0.434 J	0.276 J	0.705 J	0.457 J	0.851 J
Uranium-235 (pCi/l)	0.3 J	0.0879 U	0.0363 U	0.0133 U	0.0185 U	0 U	0.0313 U	0.0585 U
Uranium-238 (pCi/l)	3.19	0.712 J	0.144 J	0.464 J	0.493 J	0.555 J	0.519 J	0.767 J
Radiological Parameters (GammaSpec)								
Actinium-228 (pCi/l)	1.66 U	5.94 U	0.829 U	8.61 U	0.774 U	9.62 U	3.85 U	12.8 U
Cesium-137 (pCi/l)	0.662 U	-0.463 U	-0.513 U	-0.123 U	0.868 U	0.866 U	3.4 U	-0.748 U
Cobalt-60 (pCi/l)	1.47 U	-0.127 U	0.538 U	-0.0937 U	-0.551 U	0.213 U	0.227 U	-1.69 U
Potassium-40 (pCi/l)	14.7 U	25.5 U	36.7 J	17.1 U	31.3 U	21.8 U	2.63 U	36.8 U
Protactinium-231 (pCi/l)	-2.31 U	4.69 U	-85.2 U	59.2 U	-66.9 U	-6.84 U	8.12 U	-33.6 U
Thorium-234 (pCi/l)	88.4 U	30.1 U	6.89 U	141 U	65.7 U	18.6 U	42.2 U	114 U
Uranium-235 (pCi/l)	14.2 U	2.34 U	5.26 U	10.4 U	11.2 U	16.7 U	8.5 U	3.71 U

Phase IV IA06 Surface Water

Station	**IA06-SW0002**	**IA06-SW0002**
Sample No	**LUSW0014**	**LUSW0011D**
Collection Date	**08/28/98**	**07/28/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Duplicate ID		**LUSW9123**
Northing	**200449**	**200449**
Easting	**518217**	**518217**
Metals		
Aluminum (ug/l)	1700	
Antimony (ug/l)	2.5 U	
Arsenic (ug/l)	3 U	3.2 B
Barium (ug/l)	41.4	66.2
Beryllium (ug/l)	0.39 B	2.1
Cadmium (ug/l)	1.1 U	
Calcium (ug/l)	61600	
Chromium (ug/l)	4 U	
Cobalt (ug/l)	1.6 B	
Copper (ug/l)	8.4	
Iron (ug/l)	1960	
Lead (ug/l)	2.9 B	2.4 B
Magnesium (ug/l)	13900	
Manganese (ug/l)	28.4	
Mercury (ug/l)	0.1 U	
Nickel (ug/l)	4.8 B	
Phosphorus (ug/l)	287	
Potassium (ug/l)	4080	
Selenium (ug/l)	2.4 U	
Silver (ug/l)	2 U	
Sodium (ug/l)	6270	
Thallium (ug/l)	5.3 B	
Vanadium (ug/l)	5.5 B	
Zinc (ug/l)	14.4	
Indicator Parameters		
Fluoride (mg/l)	0.18	0.28
Radiological Parameters		
Gross Alpha (pCi/l)	2.02 J	
Nonvolatile Beta (pCi/l)	4.21 J	
Radium-226 (pCi/l)	0.29 U	0.915 J
Radium-228 (pCi/l)	0.358 U	0.585 U
Weight of Sample, A&B (mg)	43.8	
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/l)	0.115 U	0.0347 U
Thorium-228 (pCi/l)	0.277 U	0.267 U

Phase IV IA06 Surface Water

Station	**IA06-SW0002**	**IA06-SW0002**
Sample No	**LUSW0014**	**LUSW0011D**
Collection Date	**08/28/98**	**07/28/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Duplicate ID		**LUSW9123**
Northing	**200449**	**200449**
Easting	**518217**	**518217**
Thorium-230 (pCi/l)	0.197 U	0.34 J
Thorium-232 (pCi/l)	-0.01 U	0.0316 U
Uranium-233/234 (pCi/l)	0.288 J	0.667 J
Uranium-235 (pCi/l)	0.02 U	0.0271 U
Uranium-238 (pCi/l)	0.422 J	0.498 J
Radiological Parameters (GammaSpec)		
Actinium-228 (pCi/l)	10.1 U	9.6 U
Cesium-137 (pCi/l)	1.03 U	0.864 U
Cobalt-60 (pCi/l)	0.434 U	-0.0536 U
Potassium-40 (pCi/l)	0 U	5.75 U
Protactinium-231 (pCi/l)	137 U	25.8 U
Thorium-234 (pCi/l)	16.2 U	75 U
Uranium-235 (pCi/l)	14.7 U	7.45 U

Phase IV IA10 Surface Water

Station	**IA10-SW0003**	**IA10-SW0003**	**IA10-SW0004**	**IA10-SW0004**
Sample No	**LUSW0015**	**LUSW0016**	**LUSW0017**	**LUSW0018**
Collection Date	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**
Depth (ft)	**10.0-10.0**	**60.0-60.0**	**10.0-10.0**	**60.0-60.0**
Duplicate ID				
Northing	**198996**	**198996**	**199002**	**199002**
Easting	**517447**	**517447**	**517301**	**517301**
Metals				
Aluminum (ug/l)	53.2	31.8 B	36.3 B	24.5 B
Antimony (ug/l)	2.5 U	2.5 U	2.5 U	2.5 U
Arsenic (ug/l)	3 U	3 U	3 U	3 U
Barium (ug/l)	36.6	40.2	35.3	40.1
Beryllium (ug/l)	0.13 U	0.13 U	0.13 U	0.13 U
Cadmium (ug/l)	1.1 U	1.1 U	1.1 U	1.1 U
Calcium (ug/l)	30900	36900	29500	36800
Chromium (ug/l)	2.9 U	1.7 U	2.5 U	2.3 U
Cobalt (ug/l)	0.82 U	0.82 U	0.82 U	0.82 U
Copper (ug/l)	2 B	1.3 B	2.1 B	2.9 B
Iron (ug/l)	42.8 B	37.1 B	42.8 B	41.8 B
Lead (ug/l)	1.5 U	1.5 U	1.5 U	1.5 U
Magnesium (ug/l)	45800	46500	43800	46500
Manganese (ug/l)	1.7 B	9.3	2 B	3.4 B
Mercury (ug/l)	0.1 U	0.1 U	0.1 U	0.1 U
Nickel (ug/l)	1.3 B	1.3 B	1.1 U	1.9 B
Phosphorus (ug/l)	46.1 B	31.3 B	59.5	71
Potassium (ug/l)	8480	8480	8050	8460
Selenium (ug/l)	2.5 B	2.5 B	2.4 U	2.4 U
Silver (ug/l)	2 U	2 U	2 U	2 U
Sodium (ug/l)	20100	19900	19000	20100
Thallium (ug/l)	4 U	4 U	4 U	4 U
Vanadium (ug/l)	1 B	0.72 B	0.71 B	0.67 U
Zinc (ug/l)	5.3	4.6 B	3.8 B	8.3
Indicator Parameters				
Fluoride (mg/l)	0.17	0.18	0.16	0.21
Gross Alpha (pCi/l)	2.88 J	3.03 J	2.02 J	2.53 J
Nonvolatile Beta (pCi/l)	7.33	7.94	5.02	7.74
Radium-226 (pCi/l)	0.333 U	0.435 U	0.289 U	0.34 U
Radium-228 (pCi/l)	0.0552 U	0.0284 U	0.481 U	0.21 U
Weight of Sample, A&B (mg)	75.8	98.2	72.2	86.9
Radiological Parameters (AlphaSpec)				

Phase IV IA10 Surface Water

Station	**IA10-SW0003**	**IA10-SW0003**	**IA10-SW0004**	**IA10-SW0004**
Sample No	**LUSW0015**	**LUSW0016**	**LUSW0017**	**LUSW0018**
Collection Date	**08/28/98**	**08/28/98**	**08/28/98**	**08/28/98**
Depth (ft)	**10.0-10.0**	**60.0-60.0**	**10.0-10.0**	**60.0-60.0**
Duplicate ID				
Northing	**198996**	**198996**	**199002**	**199002**
Easting	**517447**	**517447**	**517301**	**517301**
Actinium-227 (pCi/l)	-0.0184 U	0.717 J	0.339 U	-0.15 U
Thorium-228 (pCi/l)	0.198 U	0.0472 U	0.302 U	0.116 U
Thorium-230 (pCi/l)	0.0895 U	0.248 J	0.118 U	0.121 U
Thorium-232 (pCi/l)	0.027 U	0 U	-0.0308 U	0.0113 U
Uranium-233/234 (pCi/l)	1.56	1.15	1.35	1.33
Uranium-235 (pCi/l)	0.0325 U	0.07 U	0.0674 U	0.0013 U
Uranium-238 (pCi/l)	1.22	1.18	1.41	1.42
Radiological Parameters (GammaSpec)				
Actinium-228 (pCi/l)	13 U	11.8 U	5.07 U	10.8 U
Cesium-137 (pCi/l)	0.385 U	2.82 U	0 U	1.15 U
Cobalt-60 (pCi/l)	0.387 U	-0.374 U	-0.579 U	0.812 U
Potassium-40 (pCi/l)	1.48 U	52.4 U	8.18 U	46.9 U
Protactinium-231 (pCi/l)	80.5 U	-8.96 U	-11.7 U	-12.8 U
Thorium-234 (pCi/l)	161 U	250 U	0 U	0 U
Uranium-235 (pCi/l)	8.28 U	10.2 U	8.12 U	17.6 U

Phase II Offsite Surface Water

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (ug/l)	733	731
Antimony (ug/l)	2 U	2 U
Arsenic (ug/l)	2.5 U	2.5 U
Barium (ug/l)	38.8	31.5
Beryllium (ug/l)	0.5 U	0.5 U
Boron (ug/l)	20 U	20 U
Cadmium (ug/l)	0.5 U	0.5 U
Calcium (ug/l)	89400	73400
Chromium (ug/l)	1	1.2
Cobalt (ug/l)	1 U	1 U
Copper (ug/l)	4.6	1 U
Iron (ug/l)	810	871
Lead (ug/l)	1.2	1.5 U
Magnesium (ug/l)	27000	20800
Manganese (ug/l)	19.7	14.8
Mercury (ug/l)	0 R	0 R
Molybdenum (ug/l)	5.7	11.1
Nickel (ug/l)	0.5 U	0.5 U
Potassium (ug/l)	1530	1570
Selenium (ug/l)	2.5 U	2.5 U
Silicon (ug/l)	3620	2020
Silver (ug/l)	1 U	1 U
Sodium (ug/l)	10500	18500
Strontium (ug/l)	1130	1450
Thallium (ug/l)	2.5 U	2.5 U
Tin (ug/l)	10 U	10 U
Vanadium (ug/l)	2.2	1.9
Zinc (ug/l)	2 U	2 U
Indicator Parameters		
Alkalinity (mg/l)	207	146
Chloride (mg/l)	36.3 R	44.5 R
Fluoride (mg/l)	0.16	0.08
Nitrate, as N (mg/l)	10.3 R	7.2 R
Phosphorus (mg/l)	0 R	0 R
Sulfate (mg/l)	60 R	67.8 R
Total dissolved solids (mg/l)	434	398

Phase II Offsite Surface Water

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Total suspended solids (mg/l)	16	20
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/l)	0.63 U	0.63 U
1,2-Dichlorobenzene (ug/l)	1.18 U	1.18 U
1,3-Dichlorobenzene (ug/l)	1.2 U	1.2 U
1,4-Dichlorobenzene (ug/l)	1.32 U	1.32 U
2,2'-oxybis (1-chloropropane) (ug/l)	1.73 U	1.73 U
2,4,5-Trichlorophenol (ug/l)	1.17 U	1.17 U
2,4,6-Trichlorophenol (ug/l)	0.54 U	0.54 U
2,4,6-tribromophenol (%)	52	54
2,4-Dichlorophenol (ug/l)	0.87 U	0.87 U
2,4-Dimethylphenol (ug/l)	1.1 U	1.1 U
2,4-Dinitrophenol (ug/l)	3.27 U	3.27 U
2,4-Dinitrotoluene (ug/l)	2.27 U	2.27 U
2,6-Dinitrotoluene (ug/l)	1.88 U	1.88 U
2-Chloronaphthalene (ug/l)	0.65 U	0.65 U
2-Chlorophenol (ug/l)	1.46 U	1.46 U
2-Methylnaphthalene (ug/l)	0.85 U	0.85 U
2-Methylphenol (ug/l)	1.92 U	1.92 U
2-Nitroaniline (ug/l)	1.85 U	1.85 U
2-Nitrophenol (ug/l)	1.15 U	1.15 U
2-fluorobiphenyl (%)	64	67
2-fluorophenol (%)	34	38
3,3'-Dichlorobenzidine (ug/l)	1.42 U	1.42 U
3-Nitroaniline (ug/l)	1.79 U	1.79 U
4,6-Dinitro-2-methylphenol (ug/l)	2.84 U	2.84 U
4-Chloroaniline (ug/l)	1.25 U	1.25 U
4-Methylphenol (ug/l)	2.78 U	2.78 U
4-Nitroaniline (ug/l)	2.44 U	2.44 U
4-Nitrophenol (ug/l)	3.55 U	3.55 U
4-bromophenyl phenyl ether (ug/l)	1.13 U	1.13 U
4-chloro-3-methyl phenol (ug/l)	1.64 U	1.64 U
4-chlorophenylphenylether (ug/l)	0.9 U	0.9 U
Acenaphthene (ug/l)	0.7 U	0.7 U
Acenaphthylene (ug/l)	0.55 U	0.55 U
Anthracene (ug/l)	1.2 U	1.2 U
Benzo(a)anthracene (ug/l)	0.8 U	0.8 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzo(a)pyrene (ug/l)	0.6 U	0.6 U
Benzo(b)fluoranthene (ug/l)	1.35 U	1.35 U
Benzo(ghi)perylene (ug/l)	1.35 U	1.35 U
Benzo(k)fluoranthene (ug/l)	1.65 U	1.65 U
Butylbenzylphthalate (ug/l)	0.55 U	0.55 U
Carbazole (ug/l)	0.9 U	0.9 U
Chrysene (ug/l)	1 U	1 U
Di-n-butylphthalate (ug/l)	1 U	1 U
Di-n-octylphthalate (ug/l)	1 U	1 U
Dibenz(a,h)anthracene (ug/l)	1.2 U	1.2 U
Dibenzofuran (ug/l)	0.76 U	0.76 U
Diethyl phthalate (ug/l)	0.18 U	0.18 U
Dimethyl phthalate (ug/l)	0.4 U	0.4 U
Fluoranthene (ug/l)	1.35 U	1.35 U
Fluorene (ug/l)	0.95 U	0.95 U
Hexachlorobenzene (ug/l)	1.29 U	1.29 U
Hexachlorobutadiene (ug/l)	0.68 U	0.68 U
Hexachlorocyclopentadiene (ug/l)	0 U	0 U
Hexachloroethane (ug/l)	1.22 U	1.22 U
Indeno(1,2,3-c,d)pyrene (ug/l)	1.05 U	1.05 U
Isophorone (ug/l)	1.41 U	1.41 U
N-nitroso-di-n-propylamine (ug/l)	3.08 U	3.08 U
N-nitrosodiphenylamine (ug/l)	0.82 U	0.82 U
Naphthalene (ug/l)	0.8 U	0.8 U
Nitrobenzene (ug/l)	0.59 U	0.59 U
Nitrobenzene-d5 (%)	64	63
Pentachlorophenol (ug/l)	2.41 U	2.41 U
Phenanthrene (ug/l)	0.9 U	0.9 U
Phenol (ug/l)	1.88 U	1.88 U
Phenol-d5 (%)	27	31
Pyrene (ug/l)	1.6 U	1.6 U
Terphenyl-d14 (%)	75	77
bis(2-chloroethoxy)methane (ug/l)	0.9 U	0.9 U
bis(2-chloroethyl) ether (ug/l)	1.63 U	1.63 U
bis(2-ethylhexyl)phthalate (ug/l)	3.04 U	3.04 U
Volatile Organics		
1,1,1-Trichloroethane (ug/l)	0.31 U	0.31 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,1,2,2-Tetrachloroethane (ug/l)	0 U	0 U
1,1,2-Trichloroethane (ug/l)	0.4 U	0.4 U
1,1-Dichloroethane (ug/l)	0 U	0 U
1,1-Dichloroethene (ug/l)	0 U	0 U
1,2-Dichloroethane (ug/l)	0 U	0 U
1,2-Dichloropropane (ug/l)	0 U	0 U
1,2-dichloroethylene(total) (ug/l)	0 U	0 U
2-Butanone (ug/l)	0 UJ	0 UJ
2-Hexanone (ug/l)	0 UJ	0 UJ
4-Methyl-2-pentanone (ug/l)	0 UJ	0 UJ
Acetone (ug/l)	0 R	0 R
Benzene (ug/l)	0 U	0 U
Bromodichloromethane (ug/l)	0 U	0 U
Bromofluorobenzene (%)	102	90
Bromomethane (ug/l)	0 U	0 U
Carbon disulfide (ug/l)	0 U	0 U
Carbon tetrachloride (ug/l)	0 U	0 U
Chlorobenzene (ug/l)	0 U	0 U
Chloroethane (ug/l)	0 U	0 U
Chloroform (ug/l)	0 U	2 J
Chloromethane (ug/l)	0 U	0 U
Dibromochloromethane (ug/l)	0 U	0 U
Dibromofluoromethane (%)	106	95
Ethylbenzene (ug/l)	0 U	0 U
Methylene chloride (ug/l)	0 U	0 U
Styrene (ug/l)	0 U	0 U
Tetrachloroethene (ug/l)	0 U	0 U
Toluene (ug/l)	0 U	0 U
Toluene-d8 (%)	105	92
Tribromomethane (ug/l)	0 U	0 U
Trichloroethene (ug/l)	0 U	0 U
Vinyl chloride (ug/l)	0 U	0 U
Xylenes (total) (ug/l)	0.1 U	0.1 U
cis-1,3-dichloropropene (ug/l)	0 U	0 U
trans-1,3-dichloropropene (ug/l)	0 U	0 U
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/l)	0.36	0.5 UJ

Phase II Offsite Surface Water

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Radium-226 (pCi/l)	0.24	0.5 UJ
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.36	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.41	0.57
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.51	0.78
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/l)	0.62	1.02
Radiological Parameters (GammaSpec)		
Actinium-227 (pCi/l)	0 UJ	0 UJ
Americium-241 (pCi/l)	0 UJ	0 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ
Potassium-40 (pCi/l)	0 UJ	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ
Radium-226 (pCi/l)	0 UJ	0 UJ
Radium-228 (pCi/l)	0 UJ	0 UJ
Thorium-228 (pCi/l)	0 UJ	0 UJ
Thorium-230 (pCi/l)	0 UJ	0 UJ
Thorium-232 (pCi/l)	0 UJ	0 UJ
Uranium-235 (pCi/l)	0 UJ	0 UJ
Uranium-238 (pCi/l)	0 UJ	0 UJ

APPENDIX 4A.4:
Analytical Groundwater Sample Results

Station	IA09-BMW-09(I)	IA09-BMW-10(S)	IA09-BMW-11(I)	IA09-BMW-12(S)	IA09-BMW-15(I)	IA09-BMW-15(I)	IA09-BMW-16(S)
Sample No	**LUGW0084**	**LUGW0085**	**LUGW0086**	**LUGW0087**	**LUGW0088**	**LUGW0088D**	**LUGW0089**
Collection Date	**04/06/99**	**04/06/99**	**04/06/99**	**04/07/99**	**04/06/99**	**04/06/99**	**04/06/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						**LUGW9194**	
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
Aluminum (ug/l)	20.6 B	22.9 B	249	1150	59.6	46.2 B	124
Antimony (Filtered) (ug/l)	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Antimony (ug/l)	1.9 U	1.9 U	1.9 B	1.9 U	1.9 U	1.9 U	1.9 U
Arsenic (Filtered) (ug/l)	3.5 J	5.4 J	5 J	5 J	6.2 J	5.5 J	5.4 J
Arsenic (ug/l)	2.7 U	2.8 B	2.7 U	2.7 U	4.1 B	5.5	3 B
Barium (Filtered) (ug/l)	19.8	25.5	8	10.3	81.1	79.6	52.6
Barium (ug/l)	22.5	28.1	10.1	18.4	86.6	85.1	56.9
Beryllium (Filtered) (ug/l)	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Beryllium (ug/l)	0.15 B	0.14 U	0.79 B	0.14 U	0.14 U	4.6	0.14 U
Cadmium (Filtered) (ug/l)	0.36 B	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Cadmium (ug/l)	0.99 B	0.79 B	1	0.34 U	0.34 U	4.9	0.34 U
Calcium (Filtered) (ug/l)	86700	101000	61500	66100	54400	55100	58100
Calcium (ug/l)	85100	101000	62200	76800	55800	55400	59200
Chromium (Filtered) (ug/l)	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Chromium (ug/l)	1 B	0.8 B	1.2 B	2.9 B	2.3 B	0.94 B	2.6 B
Cobalt (Filtered) (ug/l)	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Cobalt (ug/l)	0.44 U	0.44 U	0.86 B	0.89 B	0.44 U	4.4 B	0.44 U
Copper (Filtered) (ug/l)	0.98 B	1.2 B	0.94 B	1.9 B	0.75 B	0.85 B	1.2 B
Copper (ug/l)	2.7 B	3.5 B	2 B	3.4 B	1.2 B	6.6	2.9 B
Iron (Filtered) (ug/l)	383	817	8.4 U	8.4 U	384	392	727
Iron (ug/l)	514	934	290	2170	552	478	1090
Lead (Filtered) (ug/l)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Lead (ug/l)	7.2	6.7	3.3	4.4	1.3 U	5.2	3.4
Magnesium (Filtered) (ug/l)	44900	51000	28300	30200	33900	34100	32800
Magnesium (ug/l)	43400	49800	28300	37300	35000	34800	32200
Manganese (Filtered) (ug/l)	15.5	36	0.44 U	0.44 U	11.1	11.2	76.4
Manganese (ug/l)	18.9	44.3	4 B	47.8	15.7	19.9	92.6
Mercury (Filtered) (ug/l)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Mercury (ug/l)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Nickel (Filtered) (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Nickel (ug/l)	2 B	1.1 B	2.3 B	4.4 B	1.8 B	5.9 B	1.8 B
Phosphorus (Filtered) (ug/l)	39.7 BE	33.2 BE	43.7 BE	63.2 E	57.3 E	51.1 E	33.8 BE
Phosphorus (ug/l)	26.3 BE	3.5 BE	12.7 BE	33.1 BE	25.4 BE	26.1 BE	35.2 BE
Potassium (Filtered) (ug/l)	16100	2660	503	806	1360	1350	1430

Station	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**
Sample No	**LUGW0084**	**LUGW0085**	**LUGW0086**	**LUGW0087**	**LUGW0088**	**LUGW0088D**	**LUGW0089**
Collection Date	**04/06/99**	**04/06/99**	**04/06/99**	**04/07/99**	**04/06/99**	**04/06/99**	**04/06/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						**LUGW9194**	
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (ug/l)	16200	2510	606	1010	1410	1340	1430
Selenium (Filtered) (ug/l)	6.5	5.5	7.5	5.7	4 B	6.3	5.7
Selenium (ug/l)	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Silver (Filtered) (ug/l)	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Silver (ug/l)	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Sodium (Filtered) (ug/l)	27400	16900	1440	3840	10300	10200	7960
Sodium (ug/l)	28100	17200	1150	2640	10900	10600	8100
Thallium (Filtered) (ug/l)	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Thallium (ug/l)	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Vanadium (Filtered) (ug/l)	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Vanadium (ug/l)	0.47 U	0.47 U	1.3 B	3.1 B	0.47 U	3.9 B	0.47 U
Zinc (Filtered) (ug/l)	0.46 U	0.46 U	8.3	7	0.46 U	0.46 U	0.46 U
Zinc (ug/l)	10.5	10.7	19.2	63.8	122	9.2	12.2
Indicator Parameters							
Alkalinity (mg/l)	200	218	214	242	244	230	232
Chloride (mg/l)	13.7	14.9	3.66	4.22	8.82	8.94	2.24
Fluoride (mg/l)	0.82	0.74	0.14	0.17	1.13	1.16	1.12
Nitrate/Nitrite (mg/l)	0.04 J	0.04 J	5.45	4.6	0.03 J	0.03 J	0.03 J
Nitrogen, Ammonia (mg/l)	0.21	0.16	0 U	0 U	0.1	0.09	0.15
Sulfate (mg/l)	250	260	24.5	27.6	61.7	61.3	64
Total Dissolved Solids (mg/l)	616	634	276	297	341	343	352
Total Rec. Petro. Hydrocarbons (mg/l)							
Total Suspended Solids (mg/l)	2 J	3.2 J	5.8	154	27.6	23.8	11.6
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
1,2-Dichlorobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
1,3-Dichlorobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
1,4-Dichlorobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2,2'-Oxybis (1-chloropropane) (ug/l)							
2,2'-Oxybis (1-cloropropane) (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2,4,5-Trichlorophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
2,4,6-Trichlorophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
2,4-Dichlorophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2,4-Dimethylphenol (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2,4-Dinitrophenol (ug/l)	27.8 U	27.5 U	26.6 U	29.8 UJ	25.8 U	25 U	26.3 U
2,4-Dinitrotoluene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U

Station	IA09-BMW-09(I)	IA09-BMW-10(S)	IA09-BMW-11(I)	IA09-BMW-12(S)	IA09-BMW-15(I)	IA09-BMW-15(I)	IA09-BMW-16(S)
Sample No	LUGW0084	LUGW0085	LUGW0086	LUGW0087	LUGW0088	LUGW0088D	LUGW0089
Collection Date	04/06/99	04/06/99	04/06/99	04/07/99	04/06/99	04/06/99	04/06/99
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID						LUGW9194	
Northing	0	0	0	0	0	0	0
Easting	0	0	0	0	0	0	0
2,6-Dinitrotoluene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2-Chloronaphthalene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2-Chlorophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
2-Methylnaphthalene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
2-Nitrophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
2-methyl-4,6-dinitrophenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
3,3'-Dichlorobenzidine (ug/l)	55.6 U	54.9 U	53.2 U	59.5 U	51.5 U	50 U	52.6 U
4-Bromophenyl phenyl ether (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
4-Chloroaniline (ug/l)	22.2 U	22 U	21.3 U	23.8 U	20.6 U	20 U	21 U
4-Chlorophenylphenylether (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
4-Nitrophenol (ug/l)	27.8 U	27.5 U	26.6 U	29.8 UJ	25.8 U	25 U	26.3 U
4-chloro-3-methyl phenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
Acenaphthene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Acenaphthylene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Anthracene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Benzo(a)anthracene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Benzo(a)pyrene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Benzo(b)fluoranthene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Benzo(ghi)perylene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Benzo(k)fluoranthene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Butylbenzylphthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Carbazole (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Chrysene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Di-n-butylphthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Di-n-octylphthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Dibenz(a,h)anthracene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Dibenzofuran (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Diesel Range Organics (mg/l)	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Diethyl phthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Dimethyl phthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Diphenylamine (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Fluoranthene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Fluorene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Hexachlorobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Hexachlorobutadiene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Hexachlorocyclopentadiene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U

Station	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**
Sample No	**LUGW0084**	**LUGW0085**	**LUGW0086**	**LUGW0087**	**LUGW0088**	**LUGW0088D**	**LUGW0089**
Collection Date	**04/06/99**	**04/06/99**	**04/06/99**	**04/07/99**	**04/06/99**	**04/06/99**	**04/06/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						**LUGW9194**	
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Hexachloroethane (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Indeno(1,2,3-c,d)pyrene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Isophorone (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
N-Nitrosodiphenylamine (ug/l)							
N-Nitrosodipropylamine (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Naphthalene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Nitrobenzene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Pentachlorophenol (ug/l)	27.8 U	27.5 U	26.6 U	29.8 UJ	25.8 U	25 U	26.3 U
Phenanthrene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Phenol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
Pyrene (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
bis(2-chloroethoxy)methane (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
bis(2-chloroethyl) ether (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
bis(2-ethylhexyl)phthalate (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
m,p-Cresol (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
m-Nitroaniline (ug/l)	27.8 U	27.5 U	26.6 U	29.8 U	25.8 U	25 U	26.3 U
o-Cresol (ug/l)	11.1 U	11 U	10.6 U	11.9 UJ	10.3 U	10 U	10.5 U
o-Nitroaniline (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
p-Nitroaniline (ug/l)	11.1 U	11 U	10.6 U	11.9 U	10.3 U	10 U	10.5 U
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	4.1 U	2 U	2.1 U	1.8 U	1.6 U	2.5 U	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide (ug/l)	1.9 J	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**
Sample No	**LUGW0084**	**LUGW0085**	**LUGW0086**	**LUGW0087**	**LUGW0088**	**LUGW0088D**	**LUGW0089**
Collection Date	**04/06/99**	**04/06/99**	**04/06/99**	**04/07/99**	**04/06/99**	**04/06/99**	**04/06/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						**LUGW9194**	
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Gasoline Range Organics (ug/l)	50 U	50 U	50 U	57.2	50 U	50 U	50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)							
Gross Alpha (pCi/l)	4 J	3.23 J	2.67 J	2.17 J	1.18 J	4.43 J	0.96 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)							
Nonvolatile Beta (pCi/l)	14.6 J	4.4 J	1.79 J	2.41 J	2.24 J	6.73 J	1.27 J
Radium-226 (Filtered) (pCi/l)							
Radium-226 (pCi/l)	1.18	0.74 J	0.43 U	0.77 J	0.29 U	1.15	0.34 U
Radium-228 (Filtered) (pCi/l)							
Radium-228 (pCi/l)	0.71 U	0 U	-0.23 U	-0.31 U	0.27 U	0.3 U	0.01 U
Weight of Sample, A&B (Filtered) (mg)							
Weight of Sample, A&B (mg)	52.9 J	54.2 J	76.5 J	99.1	81.6 J	54.2 J	36.5 J
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)							
Actinium-227 (pCi/l)	-0.05 U	0.09 U	-0.05 U	0.05 U	0.02 U	-0.04 U	0.12 U
Thorium-228 (Filtered) (pCi/l)							
Thorium-228 (pCi/l)	0.52 U	0.44 J	0.3 U	0.27 U	0.58 J	0.57 J	0.65 J
Thorium-230 (Filtered) (pCi/l)							

Station	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**
Sample No	**LUGW0084**	**LUGW0085**	**LUGW0086**	**LUGW0087**	**LUGW0088**	**LUGW0088D**	**LUGW0089**
Collection Date	**04/06/99**	**04/06/99**	**04/06/99**	**04/07/99**	**04/06/99**	**04/06/99**	**04/06/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						**LUGW9194**	
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-230 (pCi/l)	0.2 J	0.03 U	-0.03 U	0.23 J	0.08 U	-0.07 U	0.02 U
Thorium-232 (Filtered) (pCi/l)							
Thorium-232 (pCi/l)	0.02 U	0.03 U	-0.02 U	0.07 U	-0.01 U	-0.03 U	0.01 U
Uranium-233/234 (Filtered) (pCi/l)							
Uranium-233/234 (pCi/l)	0.47 J	0.51 J	1.4 J	1.46 J	0.36 J	0.32 J	0.1 U
Uranium-235 (Filtered) (pCi/l)							
Uranium-235 (pCi/l)	0.02 U	0.04 U	0 U	-0.01 U	0.01 U	0 U	0 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)							
Uranium-238 (pCi/l)	0.14 U	0.27 J	1.03 J	0.9 J	0.2 J	0.26 J	0.11 U
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)							
Actinium-228 (pCi/l)	0.79 U	0.91 U	5.93 U	5.7 U	9.44 U	4.22 U	4.77 U
Cesium-137 (Filtered) (pCi/l)							
Cesium-137 (pCi/l)	-0.71 U	0.28 U	-0.02 U	-0.27 U	-0.1 U	0.31 U	-0.56 U
Cobalt-60 (Filtered) (pCi/l)							
Cobalt-60 (pCi/l)	0.43 U	-0.1 U	-0.41 U	-0.58 U	0.9 U	-1.52 U	-0.57 U
Potassium-40 (Filtered) (pCi/l)							
Potassium-40 (pCi/l)	26.4 U	32.5 U	27.9 U	28 U	24.4 U	22.8 U	9.66 U
Protactinium-231 (Filtered) (pCi/l)							
Protactinium-231 (pCi/l)	-89.1 U	10.2 U	50.3 U	-19.9 U	-11.3 U	86.9 U	69.2 U
Thorium-234 (Filtered) (pCi/l)							
Thorium-234 (pCi/l)	21.3 U	139 U	30.5 U	64 U	73.5 U	130 U	119 U
Uranium-235 (Filtered) (pCi/l)							
Uranium-235 (pCi/l)	4.42 U	-5.88 U	3.82 U	-1.29 U	18.4 U	2.75 U	-5.45 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	IA09-GW0002	IA09-GW0003	IA09-GW0003	IA09-GW0004	IA09-MW-01(I)	IA09-MW-01(I)	IA09-MW-02(S)	IA09-MW-02(S)
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
Metals								
Aluminum (Filtered) (ug/l)					19.2 U	7.4 U	18.3 U	7.4 U
Aluminum (ug/l)	13.3 B	7.7 B	7.4 U	7.4 U	32.5 U	21.5 B	23.3 U	16.2 B
Antimony (Filtered) (ug/l)					2.8 U	1.9 U	2.5 U	1.9 U
Antimony (ug/l)	1.9 U	1.9 U	1.9 U	1.9 U	3.5 U	1.9 U	2.5 U	1.9 U
Arsenic (Filtered) (ug/l)					3 UJ	6 J	3 UJ	6.8 J
Arsenic (ug/l)	2.7 U	2.8 B	2.7 U	2.7 U	3.4 J	2.7 U	3.1 J	2.7 U
Barium (Filtered) (ug/l)					40.5	33.1	48.3	31.9
Barium (ug/l)	55.2	34.2	34.1	52.1	40.1	31.5	48.2	28.9
Beryllium (Filtered) (ug/l)					30.1 J	33.5	14.5 J	16.4
Beryllium (ug/l)	0.14 U	0.14 U	0.14 U	0.14 U	30.5 J	32.8	14 J	15
Cadmium (Filtered) (ug/l)					1.1 U	0.34 U	1.1 U	0.34 U
Cadmium (ug/l)	0.34 U	0.34 U	0.34 U	0.34 U	1.1 U	0.34 U	1.1 U	0.34 U
Calcium (Filtered) (ug/l)					135000	134000	150000	146000
Calcium (ug/l)	68200	59500	59300	94700	137000	131000	149000	135000
Chromium (Filtered) (ug/l)					0.7 U	0.42 U	0.7 U	0.42 U
Chromium (ug/l)	0.42 U	0.42 U	0.43 B	0.42 U	0.7 U	0.55 B	0.7 U	0.42 U
Cobalt (Filtered) (ug/l)					0.82 U	0.51 B	2.9 B	2.3 B
Cobalt (ug/l)	0.44 U	0.44 U	0.44 U	0.44 U	0.82 U	0.44 U	3.6 B	1.6 B
Copper (Filtered) (ug/l)					15.3	29.1 J	2.8 U	18.9 J
Copper (ug/l)	5.9	3 B	4.9 B	5.5	0.74 U	3 B	0.74 U	2.1 B
Iron (Filtered) (ug/l)					931	1010	263	688
Iron (ug/l)	338	359	393	1000	984	1050	262	808
Lead (Filtered) (ug/l)					1.9 B	1.3 U	3.3 B	1.3 U
Lead (ug/l)	1.3 U	1.9 B	7.4	2 B	2.2 B	1.3 U	2.9 B	1.3 U
Magnesium (Filtered) (ug/l)					57600	57800	63600	61400
Magnesium (ug/l)	27500	24900	24700	39900	58900	56400	63600	56500
Manganese (Filtered) (ug/l)					31.8	25	247	145
Manganese (ug/l)	3.9 B	5.5	3 B	16.4	30.3	24.9	253	132
Mercury (Filtered) (ug/l)					0.1 UJ	0.12 U	0.1 UJ	0.12 U
Mercury (ug/l)	0.12 U	0.12 U	0.12 U	0.12 U	0.1 UJ	0.12 U	0.1 UJ	0.12 U
Nickel (Filtered) (ug/l)					25.1	27	27.8	24.6
Nickel (ug/l)	1 U	1 U	1 U	2.3 B	23	23.2	26.6	19.6
Phosphorus (Filtered) (ug/l)						40.4 B		26.5 B
Phosphorus (ug/l)	8.1 U	8.1 U	8.1 U	86.7		148		10.7 B
Potassium (Filtered) (ug/l)					6140	6270	5030	5330

Station	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-01(I)**	**IA09-MW-02(S)**	**IA09-MW-02(S)**
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
Potassium (ug/l)	1760	1980	1960	2960	6270	5600	4990	4650
Selenium (Filtered) (ug/l)					2.4 U	6.5	2.4 U	1.9 U
Selenium (ug/l)	1.9 U	1.9 U	1.9 U	1.9 U	2.4 U	1.9 U	2.4 U	1.9 U
Silver (Filtered) (ug/l)					3.2 U	0.89 U	2.5 U	0.89 U
Silver (ug/l)	0.89 U	0.89 U	1 B	0.89 U	2.4 U	0.89 U	3.2 U	0.89 U
Sodium (Filtered) (ug/l)					31200	32100	52800	32300
Sodium (ug/l)	14500	18800	18700	15600	32000	30900	52000	30300
Thallium (Filtered) (ug/l)					4 UJ	5.6 U	4 UJ	5.6 U
Thallium (ug/l)	5.6 U	5.6 U	5.6 U	5.6 U	4 UJ	5.6 U	4 UJ	5.6 U
Vanadium (Filtered) (ug/l)					0.67 U	0.47 U	0.67 U	0.47 U
Vanadium (ug/l)	0.47 U	0.47 U	0.47 U	0.47 U	0.67 U	0.47 U	0.67 U	0.47 U
Zinc (Filtered) (ug/l)					3.5 U	8.4	3.6 U	12.6
Zinc (ug/l)	58.1	78.5	135	38.4	2.6 U	29.3	2.6 U	5.6
Indicator Parameters								
Alkalinity (mg/l)	186	166	166	236	171	331	179	325
Chloride (mg/l)	18	15.7	15.7	32.7	17.8	18.4	27.6	19.5
Fluoride (mg/l)	0.42	0.74	0.74	0.34	1.25	1.31	1.46	1.7
Nitrate/Nitrite (mg/l)	0.04 J	0.03 J	0.03 J	0.03 J	0 U	0.04 J	0 U	0.05
Nitrogen, Ammonia (mg/l)	0.08	0.13	0.14	0.15	0.24	0.21	0.47	0.51
Sulfate (mg/l)	115	121	121	175	260	257	319	293
Total Dissolved Solids (mg/l)	396	379	380	578	757	739	859	812
Total Rec. Petro. Hydrocarbons (mg/l)								
Total Suspended Solids (mg/l)	1.75 J	1.4 J	0.6 U	2.2 J	1.8 J	4 J	0.25 U	2.2 J
Semivolatile Organics								
1,2,4-Trichlorobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
1,2-Dichlorobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
1,3-Dichlorobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
1,4-Dichlorobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2,2'-Oxybis (1-chloropropane) (ug/l)					9.9 U		11.1 U	
2,2'-Oxybis (1-cloropropane) (ug/l)	10.5 U	10.2 U	10.9 U	10 U		10.4 U		11.8 U
2,4,5-Trichlorophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	24.8 U	10.4 U	27.8 U	11.8 U
2,4,6-Trichlorophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2,4-Dichlorophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2,4-Dimethylphenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2,4-Dinitrophenol (ug/l)	26.3 U	25.5 U	27.2 U	25 U	24.8 U	26 U	27.8 U	29.4 U
2,4-Dinitrotoluene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U

Station	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-01(I)**	**IA09-MW-02(S)**	**IA09-MW-02(S)**
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
2,6-Dinitrotoluene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2-Chloronaphthalene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2-Chlorophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2-Methylnaphthalene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2-Nitrophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
2-methyl-4,6-dinitrophenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
3,3'-Dichlorobenzidine (ug/l)	52.6 U	51 U	54.3 U	50 U	49.5 U	52.1 U	55.6 U	58.8 U
4-Bromophenyl phenyl ether (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
4-Chloroaniline (ug/l)	21 U	20.4 U	21.7 U	20 U	19.8 U	20.8 U	22.2 U	23.5 U
4-Chlorophenylphenylether (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
4-Nitrophenol (ug/l)	26.3 U	25.5 U	27.2 U	25 U	24.8 U	26 U	27.8 U	29.4 U
4-chloro-3-methyl phenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Acenaphthene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Acenaphthylene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Anthracene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Benzo(a)anthracene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Benzo(a)pyrene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Benzo(b)fluoranthene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Benzo(ghi)perylene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Benzo(k)fluoranthene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Butylbenzylphthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Carbazole (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Chrysene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Di-n-butylphthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Di-n-octylphthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Dibenz(a,h)anthracene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Dibenzofuran (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Diesel Range Organics (mg/l)	0.01 U	0 U	0.01 U	0.01 U		0.01 U		0.01 U
Diethyl phthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Dimethyl phthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Diphenylamine (ug/l)	10.5 U	10.2 U	10.9 U	10 U		10.4 U		11.8 U
Fluoranthene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Fluorene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Hexachlorobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Hexachlorobutadiene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Hexachlorocyclopentadiene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U

Station	IA09-GW0002	IA09-GW0003	IA09-GW0003	IA09-GW0004	IA09-MW-01(I)	IA09-MW-01(I)	IA09-MW-02(S)	IA09-MW-02(S)
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
Hexachloroethane (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Indeno(1,2,3-c,d)pyrene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Isophorone (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
N-Nitrosodiphenylamine (ug/l)					9.9 U		11.1 U	
N-Nitrosodipropylamine (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Naphthalene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Nitrobenzene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Pentachlorophenol (ug/l)	26.3 U	25.5 U	27.2 U	25 U	24.8 U	26 U	27.8 U	29.4 U
Phenanthrene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Phenol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
Pyrene (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
bis(2-chloroethoxy)methane (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
bis(2-chloroethyl) ether (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
bis(2-ethylhexyl)phthalate (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
m,p-Cresol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
m-Nitroaniline (ug/l)	26.3 U	25.5 U	27.2 U	25 U	24.8 U	26 U	27.8 U	29.4 U
o-Cresol (ug/l)	10.5 U	10.2 U	10.9 U	10 U	9.9 U	10.4 U	11.1 U	11.8 U
o-Nitroaniline (ug/l)	10.5 U	10.2 U	10.9 U	10 U	24.8 U	10.4 U	27.8 U	11.8 U
p-Nitroaniline (ug/l)	10.5 U	10.2 U	10.9 U	10 U	24.8 U	10.4 U	27.8 U	11.8 U
Volatile Organics								
1,1,1-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	1 U	5 U	1 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	1.6 U	10 U	10 U	10 U	10 UJ	10 U	10 UJ	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	5 U	5 U	5 U	1 U	5 U	1 U	5 U
Carbon disulfide (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-01(I)**	**IA09-MW-02(S)**	**IA09-MW-02(S)**
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U
Gasoline Range Organics (ug/l)	50 U	50 U	50 U	50 U		50 U		50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	10 U	10 U	10 U	10 UJ	10 U	10 UJ	10 U
Methylene chloride (ug/l)	5 U	5 U	5 U	5 U	2.4 UJ	5 U	2.2 UJ	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Radiological Parameters								
Gross Alpha (Filtered) (pCi/l)					2.31 J		4.1 J	
Gross Alpha (pCi/l)	2.37 J	3.5 J	2.03 J	3.13 J	3.81 J	0.49 U	5.17	4.72 J
Gross Beta (pCi/l)								
Nonvolatile Beta (Filtered) (pCi/l)					6.4		4.33 J	
Nonvolatile Beta (pCi/l)	2.57 J	3.41 J	2.79 J	3.64 J	4.7 U	3.7 J	3.31 U	6.11 J
Radium-226 (Filtered) (pCi/l)					1.13		1.5	
Radium-226 (pCi/l)	0.77 J	0.68 J	0.91 J	1.22	2.22	0.46 J	0.765 J	0.37 J
Radium-228 (Filtered) (pCi/l)					0.203 U		0.0997 U	
Radium-228 (pCi/l)	-0.27 U	0.3 U	0.06 U	0.37 U	0.042 U	-0.11 U	0.34 U	-0.33 U
Weight of Sample, A&B (Filtered) (mg)					89.1		98.7	
Weight of Sample, A&B (mg)	72.1	68.7	65.9	93.3	31	66.3	36	64.7
Radiological Parameters (AlphaSpec)								
Actinium-227 (Filtered) (pCi/l)					0.131 U		0.0683 U	
Actinium-227 (pCi/l)	-0.11 U	0.14 U	0.07 U	0.37 U	0.0362 U	-0.04 U	0.124 U	-0.03 U
Thorium-228 (Filtered) (pCi/l)					0.363 J		0.234 J	
Thorium-228 (pCi/l)	0.71 J	0.32 U	0.48 J	0.19 U	0.117 J	0.61 J	0.124 J	0.64 J
Thorium-230 (Filtered) (pCi/l)					0.111 J		0.0785 J	

Station	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-01(I)**	**IA09-MW-02(S)**	**IA09-MW-02(S)**
Sample No	**LUGW0091**	**LUGW0092**	**LUGW0092D**	**LUGW0093**	**LUGW0001**	**LUGW0094**	**LUGW0002**	**LUGW0095**
Collection Date	**04/07/99**	**04/07/99**	**04/07/99**	**04/07/99**	**07/14/98**	**04/07/99**	**07/14/98**	**04/07/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9196**					
Northing	**199316**	**200063**	**200063**	**199819**	**199583**	**199583**	**199581**	**199581**
Easting	**517063**	**517141**	**517141**	**517179**	**517402**	**517402**	**517398**	**517398**
Thorium-230 (pCi/l)	-0.02 U	-0.03 U	0.15 U	0.09 U	0.154 J	-0.02 U	0.0351 U	0.04 U
Thorium-232 (Filtered) (pCi/l)					0 U		-0.0036 U	
Thorium-232 (pCi/l)	0.04 U	0.11 U	0.01 U	0.02 U	-0.0071 U	0.03 U	-0.0032 U	-0.01 U
Uranium-233/234 (Filtered) (pCi/l)					1.38		2.36	
Uranium-233/234 (pCi/l)	0.24 J	0.66 J	1 J	0.22 U	1.54	1.7 J	2.33	2.09 J
Uranium-235 (Filtered) (pCi/l)					0.0401 U		0.147 J	
Uranium-235 (pCi/l)	-0.03 U	0 U	-0.03 U	-0.01 U	0.0729 J	0.05 U	0.0853 J	-0.03 U
Uranium-235/236 (pCi/l)								
Uranium-238 (Filtered) (pCi/l)					0.89 J		1.78	
Uranium-238 (pCi/l)	0.04 U	0.59 J	0.27 U	0.43 J	1.19	1.05 J	2.02	1.56 J
Radiological Parameters (GammaSpec)								
Actinium-227 (pCi/l)								
Actinium-228 (Filtered) (pCi/l)					8.53 U		7.89 U	
Actinium-228 (pCi/l)	9.01 U	6.52 U	8.04 U	8.01 U	11.5 U	9.07 U	8.96 U	0.73 U
Cesium-137 (Filtered) (pCi/l)					0 U		2.03 U	
Cesium-137 (pCi/l)	0.6 U	-2.02 U	0.91 U	0.39 U	-0.576 U	-0.63 U	2.6 U	-1.48 U
Cobalt-60 (Filtered) (pCi/l)					0.146 U		-0.613 U	
Cobalt-60 (pCi/l)	1.05 U	0.28 U	0.17 U	-0.02 U	-0.186 U	0.25 U	0.064 U	0.3 U
Potassium-40 (Filtered) (pCi/l)					14 U		14.1 U	
Potassium-40 (pCi/l)	27.3 U	23.6 U	13.9 U	33.1 U	23.6 U	6.48 U	13.4 U	4.04 U
Protactinium-231 (Filtered) (pCi/l)					-25.8 U		-23.7 U	
Protactinium-231 (pCi/l)	-59.9 U	88.4 U	-73.6 U	-30.8 U	-55.8 U	62.7 U	-21.3 U	38 U
Thorium-234 (Filtered) (pCi/l)					0 U		0 U	
Thorium-234 (pCi/l)	33.2 U	0 U	11.2 U	127 U	98.5 U	92 U	0 U	136 U
Uranium-235 (Filtered) (pCi/l)					6.84 U		0.496 U	
Uranium-235 (pCi/l)	-5.34 U	22.8 U	8.08 U	-11.6 U	4.17 U	7.89 U	1.85 U	-7.88 U
Wet Chemistry								
Fluoride (mg/l)								
Nitrogen, Ammonia (mg/l)								

Station	**IA09-MW-02(S)**	**IA09-MW-03(I)**	**IA09-MW-03(I)**	**IA09-MW-04(S)**	**IA09-MW-04(S)**	**IA09-MW-05(I)**	**IA09-MW-05(I)**
Sample No	**LUGW0002D**	**LUGW0003**	**LUGW0096**	**LUGW0004**	**LUGW0097**	**LUGW0005**	**LUGW0098**
Collection Date	**07/14/98**	**07/15/98**	**04/13/99**	**07/16/98**	**04/08/99**	**07/15/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**8.4-13.2**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9186**						
Northing	**199581**	**199297**	**199297**	**199297**	**199297**	**199438**	**199438**
Easting	**517398**	**517264**	**517264**	**517259**	**517259**	**517608**	**517608**
Metals							
Aluminum (Filtered) (ug/l)	49.8 U	38.8 U	7.4 U	12.4 U	7.4 U	26.6 U	7.4 U
Aluminum (ug/l)	42.6 U	6420	989	12.4 U	82.6	43.7 U	83.2
Antimony (Filtered) (ug/l)	2.5 U	3 U	2.8 B	6.1 U	1.9 U	2.5 U	1.9 U
Antimony (ug/l)	2.5 U	4.2 U	1.9 U	2.5 U	1.9 U	2.5 U	1.9 U
Arsenic (Filtered) (ug/l)	3 UJ	3 U	2.7 U	4 U	8.6 U	3 U	6.6 J
Arsenic (ug/l)	3 UJ	3.5 B	2.7 U	4 U	4.5 U	3 U	2.7 U
Barium (Filtered) (ug/l)	48.6	38.2	35	78.8	68.2	50.3	25.1
Barium (ug/l)	48.6	78.4	42	81	76.6	52.6	26.6
Beryllium (Filtered) (ug/l)	13.8 J	0.13 UJ	0.14 U	0.13 U	0.14 U	0.13 UJ	0.14 U
Beryllium (ug/l)	13.6 J	0.45 UJ	0.17 B	0.15 U	0.14 U	0.13 UJ	0.51 B
Cadmium (Filtered) (ug/l)	1.1 U	1.1 U	0.34 U	1.1 U	0.34 U	1.1 U	0.34 U
Cadmium (ug/l)	1.1 U	1.1 U	0.48 B	1.1 U	0.39 B	1.1 U	0.34 U
Calcium (Filtered) (ug/l)	143000	69700	74900	206000	173000	126000	109000
Calcium (ug/l)	145000	88300	79400	210000	172000	126000	109000
Chromium (Filtered) (ug/l)	0.7 U	0.7 U	0.42 U	0.7 U	0.42 U	0.7 U	0.42 U
Chromium (ug/l)	0.7 U	8.5	2 B	0.7 U	0.91 B	0.7 U	1.5 B
Cobalt (Filtered) (ug/l)	2.3 B	0.82 U	0.44 U	3.3 B	6.7	0.95 U	0.44 U
Cobalt (ug/l)	2.8 B	2.5 U	0.44 U	3.4 B	6.4	1.5 U	0.44 U
Copper (Filtered) (ug/l)	19.9	9.4	26.3 J	27.4	25.3	15.4	2.6 B
Copper (ug/l)	0.74 U	4.7 B	4.2 B	0.99 B	1.4 B	0.74 U	2.1 B
Iron (Filtered) (ug/l)	262	90.6	83.4	2370	1600	76	252
Iron (ug/l)	261	7250	2220	2510	1970	70.7	503
Lead (Filtered) (ug/l)	1.8 B	1.5 U	1.3 U	3 U	1.9 B	4.5 B	4
Lead (ug/l)	1.5 U	6.3	2.9 B	1.5 U	6.8	3.9 B	4.8
Magnesium (Filtered) (ug/l)	59700	43500	49700	102000	84600	59900	53000
Magnesium (ug/l)	60300	52200	51000	104000	83900	61100	53300
Manganese (Filtered) (ug/l)	238	26.9	27	297	536	73.7	49.1
Manganese (ug/l)	247	98.7	51.5	309	536	83.1	57.2
Mercury (Filtered) (ug/l)	0.11 UJ	0.1 U	0.12 U	0.1 U	0.12 U	0.1 U	0.12 U
Mercury (ug/l)	0.1 UJ	0.1 U	0.12 U	0.1 U	0.12 U	0.1 U	0.12 U
Nickel (Filtered) (ug/l)	29.2	1.1 UJ	5.2 B	98.3	78.7	49.1 J	48.2
Nickel (ug/l)	25.6	6.2 J	3.1 B	95.5	80.1	46.9 J	48.4
Phosphorus (Filtered) (ug/l)	3.8 UJ		8.1 U		32.3 BE		16.4 B
Phosphorus (ug/l)	1.5 U		28 B		12.4 BE		8.1 U
Potassium (Filtered) (ug/l)	4880	8640	9130	5480	5380	10700	17200

Station	**IA09-MW-02(S)**	**IA09-MW-03(I)**	**IA09-MW-03(I)**	**IA09-MW-04(S)**	**IA09-MW-04(S)**	**IA09-MW-05(I)**	**IA09-MW-05(I)**
Sample No	**LUGW0002D**	**LUGW0003**	**LUGW0096**	**LUGW0004**	**LUGW0097**	**LUGW0005**	**LUGW0098**
Collection Date	**07/14/98**	**07/15/98**	**04/13/99**	**07/16/98**	**04/08/99**	**07/15/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**8.4-13.2**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9186**						
Northing	**199581**	**199297**	**199297**	**199297**	**199297**	**199438**	**199438**
Easting	**517398**	**517264**	**517264**	**517259**	**517259**	**517608**	**517608**
Potassium (ug/l)	4970	10800	8440	5630	4950	11300	16800
Selenium (Filtered) (ug/l)	2.4 U	2.4 U	1.9 U	4.8 U	8.1	2.4 U	8.2
Selenium (ug/l)	2.4 U	2.4 U	1.9 U	2.4 U	2.2 B	2.4 U	1.9 U
Silver (Filtered) (ug/l)	2 U	3.1 U	0.89 U	2 U	0.89 U	3.2 U	0.89 U
Silver (ug/l)	2.7 U	3.6 U	0.89 U	2 U	0.89 U	3.3 U	0.89 U
Sodium (Filtered) (ug/l)	50100	20100	18700	210000	200000	91700	107000
Sodium (ug/l)	50400	20500	18700	203000	196000	95600	112000
Thallium (Filtered) (ug/l)	5.3 UJ	4 U	5.6 U	7.9 U	5.6 U	4 U	5.6 U
Thallium (ug/l)	4.9 UJ	4 U	5.6 U	4.9 B	7.7 B	4 U	8.1 B
Vanadium (Filtered) (ug/l)	0.67 U	0.67 U	0.47 U	1.3 U	0.47 U	0.67 U	0.47 U
Vanadium (ug/l)	0.67 U	12.1	1.4 B	0.67 U	0.47 U	0.67 U	0.47 U
Zinc (Filtered) (ug/l)	18.9 U	3.6 B	6 U	32.9	9.6	15.3	5.3
Zinc (ug/l)	5.2 U	27.5	14.5	4.4 U	0.73 B	12.5	10.4
Indicator Parameters							
Alkalinity (mg/l)	178	95.6	208	173	325	174	311
Chloride (mg/l)	28.1	37.5	36.5	50.9	51	84.5	85
Fluoride (mg/l)	1.5	0.43	0.31	0.52	0.62	0.25	0.19
Nitrate/Nitrite (mg/l)	0 U	0.01 J	0.02 J	0.38	0.02 J	0 U	0.15
Nitrogen, Ammonia (mg/l)	0.46	0 U	0.05	0.22	0.17	8.94	10.3
Sulfate (mg/l)	323	144	162	905	742	294	293
Total Dissolved Solids (mg/l)	887		486	1930	1580		860
Total Rec. Petro. Hydrocarbons (mg/l)							
Total Suspended Solids (mg/l)	1.6 J		75.3	8.75	23.5		9.4
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
1,2-Dichlorobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
1,3-Dichlorobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
1,4-Dichlorobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2,2'-Oxybis (1-chloropropane) (ug/l)	10.6 U	12.5 U		10.6 U		11.1 U	
2,2'-Oxybis (1-cloropropane) (ug/l)			12.8 U		13.5 U		13.2 U
2,4,5-Trichlorophenol (ug/l)	26.6 U	31.2 U	12.8 U	26.6 U	13.5 U	27.8 U	13.2 U
2,4,6-Trichlorophenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2,4-Dichlorophenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2,4-Dimethylphenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2,4-Dinitrophenol (ug/l)	26.6 U	31.2 U	32 U	26.6 U	33.8 U	27.8 U	32.9 U
2,4-Dinitrotoluene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U

Station	IA09-MW-02(S)	IA09-MW-03(I)	IA09-MW-03(I)	IA09-MW-04(S)	IA09-MW-04(S)	IA09-MW-05(I)	IA09-MW-05(I)
Sample No	LUGW0002D	LUGW0003	LUGW0096	LUGW0004	LUGW0097	LUGW0005	LUGW0098
Collection Date	07/14/98	07/15/98	04/13/99	07/16/98	04/08/99	07/15/98	04/14/99
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	8.4-13.2	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID	LUGW9186						
Northing	199581	199297	199297	199297	199297	199438	199438
Easting	517398	517264	517264	517259	517259	517608	517608
2,6-Dinitrotoluene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2-Chloronaphthalene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2-Chlorophenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2-Methylnaphthalene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2-Nitrophenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
2-methyl-4,6-dinitrophenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
3,3'-Dichlorobenzidine (ug/l)	53.2 U	62.5 U	64.1 U	53.2 U	67.6 U	55.6 U	65.8 U
4-Bromophenyl phenyl ether (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
4-Chloroaniline (ug/l)	21.3 U	25 U	25.6 U	21.3 U	27 U	22.2 U	26.3 U
4-Chlorophenylphenylether (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
4-Nitrophenol (ug/l)	26.6 U	31.2 U	32 U	26.6 U	33.8 U	27.8 U	32.9 U
4-chloro-3-methyl phenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Acenaphthene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Acenaphthylene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Anthracene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Benzo(a)anthracene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Benzo(a)pyrene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Benzo(b)fluoranthene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Benzo(ghi)perylene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Benzo(k)fluoranthene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Butylbenzylphthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Carbazole (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Chrysene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Di-n-butylphthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Di-n-octylphthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Dibenz(a,h)anthracene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Dibenzofuran (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Diesel Range Organics (mg/l)			0.01 U		0.01 U		0.01 U
Diethyl phthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Dimethyl phthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Diphenylamine (ug/l)			12.8 U		13.5 U		13.2 U
Fluoranthene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Fluorene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Hexachlorobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Hexachlorobutadiene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Hexachlorocyclopentadiene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U

Station	**IA09-MW-02(S)**	**IA09-MW-03(I)**	**IA09-MW-03(I)**	**IA09-MW-04(S)**	**IA09-MW-04(S)**	**IA09-MW-05(I)**	**IA09-MW-05(I)**
Sample No	**LUGW0002D**	**LUGW0003**	**LUGW0096**	**LUGW0004**	**LUGW0097**	**LUGW0005**	**LUGW0098**
Collection Date	**07/14/98**	**07/15/98**	**04/13/99**	**07/16/98**	**04/08/99**	**07/15/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**8.4-13.2**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9186**						
Northing	**199581**	**199297**	**199297**	**199297**	**199297**	**199438**	**199438**
Easting	**517398**	**517264**	**517264**	**517259**	**517259**	**517608**	**517608**
Hexachloroethane (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Indeno(1,2,3-c,d)pyrene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Isophorone (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
N-Nitrosodiphenylamine (ug/l)	10.6 U	12.5 U		10.6 U		11.1 U	
N-Nitrosodipropylamine (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Naphthalene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Nitrobenzene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Pentachlorophenol (ug/l)	26.6 U	31.2 U	32 U	26.6 U	33.8 U	27.8 U	32.9 U
Phenanthrene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Phenol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
Pyrene (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
bis(2-chloroethoxy)methane (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
bis(2-chloroethyl) ether (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
bis(2-ethylhexyl)phthalate (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
m,p-Cresol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
m-Nitroaniline (ug/l)	26.6 U	31.2 U	32 U	26.6 U	33.8 U	27.8 U	32.9 U
o-Cresol (ug/l)	10.6 U	12.5 U	12.8 U	10.6 U	13.5 U	11.1 U	13.2 U
o-Nitroaniline (ug/l)	26.6 U	31.2 U	12.8 U	26.6 U	13.5 U	27.8 U	13.2 U
p-Nitroaniline (ug/l)	26.6 U	31.2 U	12.8 U	26.6 U	13.5 U	27.8 U	13.2 U
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	1 U	1 U	5 U	1 U	5 U	1 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	0.64 J	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	0.61 J	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	0.56 J	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	1 J	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	0.62 J	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	2.3 UJ	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	10 UJ	10 UJ	10 U	10 UJ	10 U	10 UJ	10 U
Benzene (ug/l)	5 U	5 U	5 U	0.72 J	5 U	5 U	5 U
Bromoform (ug/l)	1 U	1 U	5 U	1 U	5 U	1 U	5 U
Carbon disulfide (ug/l)	5 U	5 U	5 U	2.8 UJ	5 U	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	**IA09-MW-02(S)**	**IA09-MW-03(I)**	**IA09-MW-03(I)**	**IA09-MW-04(S)**	**IA09-MW-04(S)**	**IA09-MW-05(I)**	**IA09-MW-05(I)**
Sample No	**LUGW0002D**	**LUGW0003**	**LUGW0096**	**LUGW0004**	**LUGW0097**	**LUGW0005**	**LUGW0098**
Collection Date	**07/14/98**	**07/15/98**	**04/13/99**	**07/16/98**	**04/08/99**	**07/15/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**8.4-13.2**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9186**						
Northing	**199581**	**199297**	**199297**	**199297**	**199297**	**199438**	**199438**
Easting	**517398**	**517264**	**517264**	**517259**	**517259**	**517608**	**517608**
Chlorobenzene (ug/l)	5 U	5 U	5 U	0.84 J	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	0.64 J	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 UJ	5 U	5 U	0.84 J	5 U	5 U	5 U
Gasoline Range Organics (ug/l)			50 U		50 U		50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	0.68 J	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 UJ	10 UJ	10 U	1.4 UJ	10 U	2 UJ	10 U
Methylene chloride (ug/l)	2.3 UJ	0.63 UJ	5 U	1.2 UJ	5 U	0.86 UJ	5 U
Styrene (ug/l)	5 U	5 U	5 U	0.83 J	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 UJ	2 U	2 U	0.76 J	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	0.77 J	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	2.6 UJ	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	6	2.82 J		4.38 J		3.09 J	
Gross Alpha (pCi/l)	4.75 J	3.38 J	2.19 U	6.54	111	2.84 J	5.43
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	4.47 J	9.53		5.6		8.76	
Nonvolatile Beta (pCi/l)	6.74	9.7	11.63	7.91	29.5	9.79	18.94
Radium-226 (Filtered) (pCi/l)	0.438 U	1.33		1.05		0.376 U	
Radium-226 (pCi/l)	0.421 U	1.69	2.25	1.05	0.6 U	0.871 J	0.38 U
Radium-228 (Filtered) (pCi/l)	0.547 U	0.748 U		0.756 U		0.368 U	
Radium-228 (pCi/l)	0.143 U	0.162 U	0.08 U	0.526 U	0.08 U	0.188 U	0.68 U
Weight of Sample, A&B (Filtered) (mg)	75.8	91.3		96.7		93.7	
Weight of Sample, A&B (mg)	72.1	46	42.8	70.3	59.6	73.8	79.9
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.0215 U	0.0382 U		0.0071 U		0 U	
Actinium-227 (pCi/l)	0.0212 U	0.074 U	-0.1 U	0.127 U	0 U	0.269 J	0.08 U
Thorium-228 (Filtered) (pCi/l)	0.105 J	0.273 J		0.185 J		0.195 J	
Thorium-228 (pCi/l)	0.192 J	0.196 J	0.39 U	0.216 J	0.33 J	0.276 J	1.49
Thorium-230 (Filtered) (pCi/l)	0.0606 U	0.201 J		0.0874 J		0.0862 J	

Station	**IA09-MW-02(S)**	**IA09-MW-03(I)**	**IA09-MW-03(I)**	**IA09-MW-04(S)**	**IA09-MW-04(S)**	**IA09-MW-05(I)**	**IA09-MW-05(I)**
Sample No	**LUGW0002D**	**LUGW0003**	**LUGW0096**	**LUGW0004**	**LUGW0097**	**LUGW0005**	**LUGW0098**
Collection Date	**07/14/98**	**07/15/98**	**04/13/99**	**07/16/98**	**04/08/99**	**07/15/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**8.4-13.2**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9186**						
Northing	**199581**	**199297**	**199297**	**199297**	**199297**	**199438**	**199438**
Easting	**517398**	**517264**	**517264**	**517259**	**517259**	**517608**	**517608**
Thorium-230 (pCi/l)	0.0108 U	0.23 J	0.15 U	0.0709 U	0.15 U	0.384 J	0.07 U
Thorium-232 (Filtered) (pCi/l)	-0.0079 U	0 U		-0.0097 U		0 U	
Thorium-232 (pCi/l)	0.003 U	-0.0039 U	0.07 U	0 U	0 U	0 U	0.05 U
Uranium-233/234 (Filtered) (pCi/l)	1.94	0.509 J		1.56		1.28	
Uranium-233/234 (pCi/l)	2.19	0.489 J	0.82 J	1.02	1.33	0.974 J	1.3 J
Uranium-235 (Filtered) (pCi/l)	0.159 J	0.0262 U		0.11 J		0.0554 U	
Uranium-235 (pCi/l)	0.0433 U	0.0213 U	0 U	0.0553 U	0.04 U	0.0726 U	0.02 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	2	0.255 J		1.31		0.837 J	
Uranium-238 (pCi/l)	1.81	0.416 J	0.45 J	0.891 J	2.93	0.955 J	0.94 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	0.435 U	5.64 U		12 U		5.2 U	
Actinium-228 (pCi/l)	5.04 U	7.65 U	8.74 U	6.83 U	11.5 U	7.41 U	1.08 U
Cesium-137 (Filtered) (pCi/l)	0 U	0.275 U		-0.712 U		0.0424 U	
Cesium-137 (pCi/l)	-1.17 U	0.525 U	0.3 U	0.545 U	0.59 U	0.128 U	-0.47 U
Cobalt-60 (Filtered) (pCi/l)	1.11 U	-1.32 U		1.22 U		-2.06 U	
Cobalt-60 (pCi/l)	0.617 U	0.118 U	-0.12 U	2.43 U	1.67 U	0.293 U	2.19 U
Potassium-40 (Filtered) (pCi/l)	3.53 U	13 U		46.5 U		33.9 U	
Potassium-40 (pCi/l)	12.1 U	31.6 U	7.58 U	43.8 U	16.7 U	47.6 U	0 U
Protactinium-231 (Filtered) (pCi/l)	-7.87 U	-39 U		-22.3 U		-43.1 U	
Protactinium-231 (pCi/l)	-12.2 U	15.8 U	-14.49 U	53 U	44.5 U	44.8 U	-35.17 U
Thorium-234 (Filtered) (pCi/l)	121 U	97.4 U		165 U		53.1 U	
Thorium-234 (pCi/l)	80.5 U	0.672 U	63.51 U	92.5 J	0 U	170 U	0 U
Uranium-235 (Filtered) (pCi/l)	0.284 U	8.03 U		22.1 U		9.68 U	
Uranium-235 (pCi/l)	7.28 U	3.6 U	12.14 U	-2.05 U	11.4 U	12.8 U	-17.78 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
Metals							
Aluminum (Filtered) (ug/l)	9.6 B	33 U	7.4 U	41.5 B	7.4 U	32.7 B	7.4 U
Aluminum (ug/l)	74.7	111	21.7 B	50.7 U	83	30.3 B	12.1 B
Antimony (Filtered) (ug/l)	4.3 J	2.5 U	3.9 J	3.6 B	1.9 U	2.5 U	1.9 U
Antimony (ug/l)	1.9 U	2.5 U	2.1 B	3.8 U	1.9 U	2.5 U	1.9 U
Arsenic (Filtered) (ug/l)	6 J	3 U	6.3 J	11.7	2.7 U	3 U	2.7 U
Arsenic (ug/l)	2.7 U	3 U	2.7 U	11.6 J	4.7 B	3 U	3.6 B
Barium (Filtered) (ug/l)	25.9	42	46	39.4	31.8	47.5	44.2
Barium (ug/l)	28.1	43.3	47.2	39.8	33.3	47.8	44
Beryllium (Filtered) (ug/l)	0.14 U	0.13 UJ	0.14 U	0.13 U	0.25 B	0.13 U	0.14 U
Beryllium (ug/l)	0.51 B	0.13 UJ	0.14 U	0.13 UJ	0.14 U	0.13 U	0.14 U
Cadmium (Filtered) (ug/l)	0.34 U	1.1 U	0.34 U	1.1 U	0.34 U	1.1 U	0.34 U
Cadmium (ug/l)	0.34 U	1.1 U	0.34 U	3.4	0.34 U	1.1 U	0.34 U
Calcium (Filtered) (ug/l)	110000	91900	94800	119000	128000	175000	184000
Calcium (ug/l)	112000	95800	98600	121000	133000	174000	182000
Chromium (Filtered) (ug/l)	0.42 U	0.7 U	0.42 U	0.7 U	0.42 U	0.7 U	0.53 B
Chromium (ug/l)	0.73 B	0.7 U	0.47 B	2.7 U	0.42 U	0.7 U	0.56 B
Cobalt (Filtered) (ug/l)	0.44 U	1.9 U	0.89 B	0.82 U	0.44 U	0.82 U	0.57 B
Cobalt (ug/l)	0.44 U	1.5 U	0.74 B	0.82 U	0.44 U	0.82 U	0.44 U
Copper (Filtered) (ug/l)	11.6 J	34.9	37.3 J	0.74 U	17.5 J	14.1	17.4 J
Copper (ug/l)	2.4 B	0.74 U	2.5 B	0.74 U	2.3 U	0.74 U	2.1 U
Iron (Filtered) (ug/l)	273	413	8.4 U	288	401	2580	3590
Iron (ug/l)	509	561	79.2	455	627	2600	3720
Lead (Filtered) (ug/l)	4.1	2.6 B	1.3 U	1.5 U	1.9 B	1.5 U	2.4 B
Lead (ug/l)	5.9	1.9 B	1.3 U	1.5 U	1.3 U	1.5 U	1.3 U
Magnesium (Filtered) (ug/l)	53000	45300	48300	54100	53200	92100	97800
Magnesium (ug/l)	54100	47300	50200	54900	55400	92200	96000
Manganese (Filtered) (ug/l)	49.2	101	95.5	24.1	13.8	114	155
Manganese (ug/l)	58	105	99	29.3	16.3	119	156
Mercury (Filtered) (ug/l)	0.12 U	0.1 U	0.12 U	0.1 U	0.12 U	0.1 U	0.12 U
Mercury (ug/l)	0.12 U	0.1 U	0.12 U	0.11 UJ	0.12 U	0.1 U	0.12 U
Nickel (Filtered) (ug/l)	49.4	67.6 J	53.4	1.7 B	2.7 B	25.2	32.6
Nickel (ug/l)	48.9	63.6 J	50.4	4.7 U	1.5 B	22.3	28.3
Phosphorus (Filtered) (ug/l)	28.8 B		8.1 U	10.8 B	9.1 B	6 B	8.1 U
Phosphorus (ug/l)	8.1 U		8.1 U		12.4 B	5.7 B	242
Potassium (Filtered) (ug/l)	16200	18200	20800	4390	4610	2900	3160

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
Potassium (ug/l)	16500	18900	19700	4410	4480	2880	2960
Selenium (Filtered) (ug/l)	7.9 J	2.4 U	7.7 J	3.6 B	1.9 U	2.4 U	1.9 U
Selenium (ug/l)	1.9 U	2.4 U	1.9 U	2.4 U	1.9 U	3.2 B	1.9 U
Silver (Filtered) (ug/l)	0.89 U	3.2 U	0.89 U	2.6 B	0.89 U	2.2 B	0.89 U
Silver (ug/l)	0.89 U	3.6 U	0.89 U	2.8 U	0.89 U	2.4 B	0.89 U
Sodium (Filtered) (ug/l)	103000	119000	107000	12200 N	6360 N	24600	30900 N
Sodium (ug/l)	111000	125000	109000	11600	6670 N	24100	31500 N
Thallium (Filtered) (ug/l)	5.6 U	4 U	5.6 U	4.5 B	5.6 U	4 U	5.6 U
Thallium (ug/l)	7.4 B	4 U	5.6 U	4 UJ	5.6 U	4 U	5.6 U
Vanadium (Filtered) (ug/l)	0.47 U	0.67 U	0.47 U	0.67 U	0.47 U	0.67 U	0.62 B
Vanadium (ug/l)	0.47 U	0.67 U	0.47 U	0.67 U	0.47 U	0.67 U	0.47 U
Zinc (Filtered) (ug/l)	8.1	21.5	15.7 J	2.6 U	6.5	5.5	49.1
Zinc (ug/l)	14	11.8	8.3	2.6 U	7.8	2.6 U	1.8 B
Indicator Parameters							
Alkalinity (mg/l)	311	127	277	364	309	339	333
Chloride (mg/l)	85	115	124	24.7	14	31.7	28
Fluoride (mg/l)	0.19	0.47	0.46	0.36	0.24	0.31	0.31
Nitrate/Nitrite (mg/l)	1.46	0 U	0.09	0.01 J	0.04 J	0.03 J	0.1
Nitrogen, Ammonia (mg/l)	10	22.1	21.8	0 U	0 U	0.42	0.5
Sulfate (mg/l)	291	304	252	174	175	465	484
Total Dissolved Solids (mg/l)	877		857	726	615	1210	1130
Total Rec. Petro. Hydrocarbons (mg/l)							
Total Suspended Solids (mg/l)	7.8		2.5 J	1.8 J	12.8	4.4 J	8.2
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
1,2-Dichlorobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
1,3-Dichlorobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
1,4-Dichlorobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2,2'-Oxybis (1-chloropropane) (ug/l)		11.4 U		13.2 U		10.9 U	
2,2'-Oxybis (1-cloropropane) (ug/l)	13.2 U		11.9 U		11.5 U		13.5 U
2,4,5-Trichlorophenol (ug/l)	13.2 U	28.4 U	11.9 U	32.9 U	11.5 U	27.2 U	13.5 U
2,4,6-Trichlorophenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2,4-Dichlorophenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2,4-Dimethylphenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2,4-Dinitrophenol (ug/l)	32.9 U	28.4 U	29.8 U	32.9 U	28.7 U	27.2 U	33.8 U
2,4-Dinitrotoluene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
2,6-Dinitrotoluene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2-Chloronaphthalene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2-Chlorophenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2-Methylnaphthalene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2-Nitrophenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
2-methyl-4,6-dinitrophenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
3,3'-Dichlorobenzidine (ug/l)	65.8 U	56.8 U	59.5 U	65.8 U	57.5 U	54.3 U	67.6 U
4-Bromophenyl phenyl ether (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
4-Chloroaniline (ug/l)	26.3 U	22.7 U	23.8 U	26.3 U	23 U	21.7 U	27 U
4-Chlorophenylphenylether (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
4-Nitrophenol (ug/l)	32.9 U	28.4 U	29.8 U	32.9 U	28.7 U	27.2 U	33.8 U
4-chloro-3-methyl phenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Acenaphthene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Acenaphthylene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Anthracene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Benzo(a)anthracene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Benzo(a)pyrene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Benzo(b)fluoranthene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Benzo(ghi)perylene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Benzo(k)fluoranthene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Butylbenzylphthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Carbazole (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Chrysene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Di-n-butylphthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Di-n-octylphthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Dibenz(a,h)anthracene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Dibenzofuran (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Diesel Range Organics (mg/l)	0 U		0 U		0.01 U		0 U
Diethyl phthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Dimethyl phthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Diphenylamine (ug/l)	13.2 U		11.9 U		11.5 U		13.5 U
Fluoranthene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Fluorene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Hexachlorobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Hexachlorobutadiene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Hexachlorocyclopentadiene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
Hexachloroethane (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Indeno(1,2,3-c,d)pyrene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Isophorone (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
N-Nitrosodiphenylamine (ug/l)		11.4 U		13.2 U		10.9 U	
N-Nitrosodipropylamine (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Naphthalene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Nitrobenzene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Pentachlorophenol (ug/l)	32.9 U	28.4 U	29.8 U	32.9 U	28.7 U	27.2 U	33.8 U
Phenanthrene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Phenol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
Pyrene (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
bis(2-chloroethoxy)methane (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
bis(2-chloroethyl) ether (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
bis(2-ethylhexyl)phthalate (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
m,p-Cresol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
m-Nitroaniline (ug/l)	32.9 U	28.4 U	29.8 U	32.9 U	28.7 U	27.2 U	33.8 U
o-Cresol (ug/l)	13.2 U	11.4 U	11.9 U	13.2 U	11.5 U	10.9 U	13.5 U
o-Nitroaniline (ug/l)	13.2 U	28.4 U	11.9 U	32.9 U	11.5 U	27.2 U	13.5 U
p-Nitroaniline (ug/l)	13.2 U	28.4 U	11.9 U	32.9 U	11.5 U	27.2 U	13.5 U
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	5 U	1 U	5 U	1 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	18.5	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	1 U	5 U	1 U	5 U	5 U	5 U
Carbon disulfide (ug/l)	5 U	5 U	5 U	5 U	1.2 J	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Gasoline Range Organics (ug/l)	50 U		50 U		50 U		50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	0.57 UJ	10 U	10 U	10 U	10 U	10 U
Methylene chloride (ug/l)	5 U	0.71 UJ	5 U	1.6 JB	5 U	2 BJ	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	0.5 U	5 U	0.5 U	5 U	0.5 U	5 U	0.5 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)		2.79 J		10.2		4.21 U	
Gross Alpha (pCi/l)	3.21 J	2.9 J	3.01 J	8.57	4.6 J	3.24 U	2.6 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)		15.8		4.66 J		6.61 U	
Nonvolatile Beta (pCi/l)	15.71	16.2	16.6	4.97 J	3.9 J	-2.65 U	3.46 J
Radium-226 (Filtered) (pCi/l)		0.49 J		1.31		0.627 J	
Radium-226 (pCi/l)	0.31 U	0.545 U	0.7 J	0.965 J	1.91	0.881 J	0.38 U
Radium-228 (Filtered) (pCi/l)		0.302 U		0.401 U		0.39 U	
Radium-228 (pCi/l)	0.76 J	0.938 U	0.33 U	0.0903 U	0.18 U	0.179 U	0.19 U
Weight of Sample, A&B (Filtered) (mg)		98.3		95.6		24.2	
Weight of Sample, A&B (mg)	78.7	76.4	68.8	99.3	97.3	24.5	89
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)		0 U		-0.0375 U		0.0011 U	
Actinium-227 (pCi/l)	-0.07 U	0.0259 U	0.11 U	0.0653 U	0.08 U	0.0263 U	-0.38 U
Thorium-228 (Filtered) (pCi/l)		0.125 J		0.321 J		0.24 J	
Thorium-228 (pCi/l)	0.95 J	0.243 J	0.48 J	0.352 J	0.37 J	0.214 J	0.42 J
Thorium-230 (Filtered) (pCi/l)		0.0035 U		0.0077 U		0.0076 U	

Station	**IA09-MW-05(I)**	**IA09-MW-06(S)**	**IA09-MW-06(S)**	**IA09-MW-07(I)**	**IA09-MW-07(I)**	**IA09-MW-08(S)**	**IA09-MW-08(S)**
Sample No	**LUGW0098D**	**LUGW0006**	**LUGW0099**	**LUGW0007**	**LUGW0100**	**LUGW0008**	**LUGW0101**
Collection Date	**04/14/99**	**07/15/98**	**04/14/99**	**07/20/98**	**04/14/99**	**07/21/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**14.4-14.7**	**0.0-0.0**	**16.5-16.5**	**0.0-0.0**
Duplicate ID	**LUGW9198**						
Northing	**199438**	**199433**	**199433**	**199545**	**199545**	**199541**	**199541**
Easting	**517608**	**517609**	**517609**	**517592**	**517592**	**517594**	**517594**
Thorium-230 (pCi/l)	0.1 J	0.0728 U	0.12 J	-0.0163 U	0.07 U	0.0571 U	0.09 U
Thorium-232 (Filtered) (pCi/l)		0.0065 U		-0.0028 U		-0.007 U	
Thorium-232 (pCi/l)	0.03 U	-0.0032 U	0.02 U	-0.0041 U	-0.01 U	0.009 U	0.01 U
Uranium-233/234 (Filtered) (pCi/l)		1.46		4.46		0.684 J	
Uranium-233/234 (pCi/l)	1.11 J	1.45	1.45 J	3.97	1.45 J	0.8 J	0.32 U
Uranium-235 (Filtered) (pCi/l)		0.0495 U		0.118 J		0.0751 J	
Uranium-235 (pCi/l)	0.07 U	0.0736 J	0.06 U	0.137 J	0.15 U	0.0323 U	0.01 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)		1.19		3.51		0.492 J	
Uranium-238 (pCi/l)	1.09 J	1.07	1.5 J	3.27	1.28 J	0.366 J	0.61 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)		7.6 U		4.57 U		10 U	
Actinium-228 (pCi/l)	4.94 U	1.02 U	9.2 U	4.86 U	11.47 U	3.61 U	5.73 U
Cesium-137 (Filtered) (pCi/l)		1.15 U		-0.682 U		-2.05 U	
Cesium-137 (pCi/l)	0 U	4.95 J	1.01 U	-1.62 U	-0.41 U	-1.22 U	0.02 U
Cobalt-60 (Filtered) (pCi/l)		1.21 U		-1.21 U		-0.0273 U	
Cobalt-60 (pCi/l)	-0.39 U	0.842 U	1.08 U	-0.991 U	1.53 U	2.59 U	1.21 U
Potassium-40 (Filtered) (pCi/l)		49.4 J		0.795 U		38.4 U	
Potassium-40 (pCi/l)	5.47 U	44.8 J	18.59 U	27.8 U	19.38 U	6.39 U	15.21 U
Protactinium-231 (Filtered) (pCi/l)		35.6 U		-15.5 U		22.2 U	
Protactinium-231 (pCi/l)	25.55 U	15.3 U	-0.41 U	-10.1 U	15.58 U	-30.3 U	-4.83 U
Thorium-234 (Filtered) (pCi/l)		18.8 U		55.8 U		105 U	
Thorium-234 (pCi/l)	9.09 U	151 U	2.96 U	105 U	13.4 U	112 U	69.39 U
Uranium-235 (Filtered) (pCi/l)		14 U		14.1 U		6.37 U	
Uranium-235 (pCi/l)	9.07 U	13.7 U	4.52 U	12.7 U	0.19 U	12.4 U	-1.23 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	IA09-MW-13(S)	IA09-MW-13(S)	IA09-MW-14(S)	IA09-MW-17(S)	IA09-MW-17(S)	IA09-MW-19(I)	IA09-MW-19(I)
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
Metals							
Aluminum (Filtered) (ug/l)	12.4 U		124 U	12.4 U	12.8 B	12.4 U	7.4 U
Aluminum (ug/l)	10800 J	589	5630	12.4 U	133	39.2 B	21.6 B
Antimony (Filtered) (ug/l)	4.1 U		4.4 B	2.5 U	2.5 U	2.5 U	1.9 U
Antimony (ug/l)	5.5 U	3.9 B	3.1 B	2.7 B	1.9 U	2.5 U	1.9 U
Arsenic (Filtered) (ug/l)	3 U		3 U	3 U	3.8 J	3 U	2.7 U
Arsenic (ug/l)	14.3	2.7 U	9.3	3 U	2.7 U	3.2 B	2.7 U
Barium (Filtered) (ug/l)	99.3		40.2	30.1	18.9	35	34
Barium (ug/l)	187	39.6	87.7	31.8	20	37	36
Beryllium (Filtered) (ug/l)	0.2 U		0.13 U	0.13 U	0.14 U	2.5	3.9
Beryllium (ug/l)	3.3	0.86 B	0.48 B	0.13 U	0.14 U	2.4	4.2
Cadmium (Filtered) (ug/l)	1.1 U		1.1 U	1.1 U	0.34 U	1.1 U	0.34 U
Cadmium (ug/l)	3.1 B	2.3	1.1 U	1.1 U	0.34 U	1.1 U	0.34 U
Calcium (Filtered) (ug/l)	124000		388000	192000	202000	155000	154000
Calcium (ug/l)	176000	285000	420000	192000	205000	159000	156000
Chromium (Filtered) (ug/l)	0.7 U		0.7 U	1 B	0.42 U	0.7 U	0.42 U
Chromium (ug/l)	18.3	6.2	9.9	0.73 B	0.7 B	0.7 U	0.68 B
Cobalt (Filtered) (ug/l)	3.3 B		38.7	0.82 U	0.44 U	0.82 U	0.44 U
Cobalt (ug/l)	14.2	8.2	41.8	0.82 U	0.44 U	0.82 U	0.44 U
Copper (Filtered) (ug/l)	3.7 B		6.1	2.6 B	21 J	2.3 B	17.4 J
Copper (ug/l)	35	6.1	17.5	2.5 B	2.4 U	2.9 B	2.5 U
Iron (Filtered) (ug/l)	2.5 U		1940	1870	3360	233	247
Iron (ug/l)	27500	1820	17400	2010	3760	357	708
Lead (Filtered) (ug/l)	2 B		1.6 B	1.5 U	1.6 B	1.5 U	1.3 U
Lead (ug/l)	19.3	1.9 B	9.7	2.5 B	2.6 B	2 B	1.4 B
Magnesium (Filtered) (ug/l)	58800 J		209000	111000	120000	60500	61800
Magnesium (ug/l)	73300 J	112000	219000	111000	122000	62700	62000
Manganese (Filtered) (ug/l)	351		1860	127	73.5	43.7	32.8
Manganese (ug/l)	848	897	2160	108	78.3	41.4	23
Mercury (Filtered) (ug/l)	0.1 U		0.1 U	0.1 U	0.12 U	0.1 U	0.12 U
Mercury (ug/l)	0.1 U	0.12 U	0.1 U	0.1 U	0.12 U	0.1 U	0.12 U
Nickel (Filtered) (ug/l)	15.9		2570	15.7	19.8	2.6 B	4.5 B
Nickel (ug/l)	45.9	42	2430	14.4	17.3	2.3 B	2.4 B
Phosphorus (Filtered) (ug/l)	59.7 U		150 U	8.2 B	10 B	15 U	18.6 B
Phosphorus (ug/l)	4570	36.3 B	150 U	1.5 U	17.5 B	15 U	82
Potassium (Filtered) (ug/l)	5460		13900	4510	4990	2680	3100

Station	**IA09-MW-13(S)**	**IA09-MW-13(S)**	**IA09-MW-14(S)**	**IA09-MW-17(S)**	**IA09-MW-17(S)**	**IA09-MW-19(I)**	**IA09-MW-19(I)**
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
Potassium (ug/l)	9920	4070	13800	4660	4740	2750	3060
Selenium (Filtered) (ug/l)	2.4 U		2.4 U	2.4 U	1.9 U	2.4 U	1.9 U
Selenium (ug/l)	3.7 B	1.9 U	2.7 B	2.4 U	1.9 U	2.4 U	1.9 U
Silver (Filtered) (ug/l)	2 U		2 U	2 U	0.89 U	2 U	0.89 U
Silver (ug/l)	2 U	0.89 U	2 U	2 U	0.89 U	2 U	0.89 U
Sodium (Filtered) (ug/l)	15900		691000	27300	37500 N	5340	5430 N
Sodium (ug/l)	22400	10400	698000	28400	37600 N	5180	5520 N
Thallium (Filtered) (ug/l)	4 U		5.6 B	4 U	5.6 U	5.6 B	5.6 U
Thallium (ug/l)	4 U	7.9 B	9 B	4 U	5.6 U	6.2 B	5.6 U
Vanadium (Filtered) (ug/l)	0.67 U		0.67 U	0.67 U	0.47 U	0.67 U	0.47 U
Vanadium (ug/l)	18.9	0.99 B	13.9	0.67 U	0.47 U	0.67 U	0.47 U
Zinc (Filtered) (ug/l)	8.6 U		12.7	2.6 B	1.6 B		0.95 B
Zinc (ug/l)	95.4 J	16.5	54.2	4.2 B	5.5	2.6 U	4.6 B
Indicator Parameters							
Alkalinity (mg/l)	318	301	771	326	343	345	343
Chloride (mg/l)	32.7	37.03	255	20.5	18.2	9.93	9.45
Fluoride (mg/l)	0.25	0.13	0.24	1.47	1.2	0.5	0.45
Nitrate/Nitrite (mg/l)	0.05	0.07	0.03 J	0.04 J	0.03 J	0.04 J	0.04 J
Nitrogen, Ammonia (mg/l)	0.01 U	0.02 U	0.31	0.32	0.45	0 U	0 U
Sulfate (mg/l)	217	846	2170	632	647	259	254
Total Dissolved Solids (mg/l)					1420		755
Total Rec. Petro. Hydrocarbons (mg/l)							
Total Suspended Solids (mg/l)					26.6		2.6 J
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
1,2-Dichlorobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
1,3-Dichlorobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
1,4-Dichlorobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2,2'-Oxybis (1-chloropropane) (ug/l)	10.6 U		11.5 U	10.6 U		9.9 U	
2,2'-Oxybis (1-cloropropane) (ug/l)		15.4 U			15.9 U		10.2 U
2,4,5-Trichlorophenol (ug/l)	26.6 U	15.4 U	28.7 U	26.6 U	15.9 U	24.8 U	10.2 U
2,4,6-Trichlorophenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2,4-Dichlorophenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2,4-Dimethylphenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2,4-Dinitrophenol (ug/l)	26.6 U	38.5 U	28.7 U	26.6 U	39.7 U	24.8 U	25.5 U
2,4-Dinitrotoluene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U

Station	**IA09-MW-13(S)**	**IA09-MW-13(S)**	**IA09-MW-14(S)**	**IA09-MW-17(S)**	**IA09-MW-17(S)**	**IA09-MW-19(I)**	**IA09-MW-19(I)**
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
2,6-Dinitrotoluene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2-Chloronaphthalene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2-Chlorophenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2-Methylnaphthalene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2-Nitrophenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
2-methyl-4,6-dinitrophenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
3,3'-Dichlorobenzidine (ug/l)	53.2 U	76.9 U	57.5 U	53.2 U	79.4 U	49.5 U	51 U
4-Bromophenyl phenyl ether (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
4-Chloroaniline (ug/l)	21.3 U	30.8 U	23 U	21.3 U	31.7 U	19.8 U	20.4 U
4-Chlorophenylphenylether (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
4-Nitrophenol (ug/l)	26.6 U	38.5 U	28.7 U	26.6 U	39.7 U	24.8 U	25.5 U
4-chloro-3-methyl phenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Acenaphthene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Acenaphthylene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Anthracene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Benzo(a)anthracene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Benzo(a)pyrene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Benzo(b)fluoranthene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Benzo(ghi)perylene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Benzo(k)fluoranthene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Butylbenzylphthalate (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Carbazole (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Chrysene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Di-n-butylphthalate (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Di-n-octylphthalate (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Dibenz(a,h)anthracene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Dibenzofuran (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Diesel Range Organics (mg/l)					0.02 U		0 U
Diethyl phthalate (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Dimethyl phthalate (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Diphenylamine (ug/l)		15.4 U			15.9 U		10.2 U
Fluoranthene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Fluorene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Hexachlorobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Hexachlorobutadiene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Hexachlorocyclopentadiene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U

Station	**IA09-MW-13(S)**	**IA09-MW-13(S)**	**IA09-MW-14(S)**	**IA09-MW-17(S)**	**IA09-MW-17(S)**	**IA09-MW-19(I)**	**IA09-MW-19(I)**
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
Hexachloroethane (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Indeno(1,2,3-c,d)pyrene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Isophorone (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
N-Nitrosodiphenylamine (ug/l)	10.6 U		11.5 U	10.6 U		9.9 U	
N-Nitrosodipropylamine (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Naphthalene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Nitrobenzene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Pentachlorophenol (ug/l)	26.6 U	38.5 U	28.7 U	26.6 U	39.7 U	24.8 U	25.5 U
Phenanthrene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Phenol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
Pyrene (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
bis(2-chloroethoxy)methane (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
bis(2-chloroethyl) ether (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
bis(2-ethylhexyl)phthalate (ug/l)	10.6 UJ	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
m,p-Cresol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
m-Nitroaniline (ug/l)	26.6 U	38.5 U	28.7 U	26.6 U	39.7 U	24.8 U	25.5 U
o-Cresol (ug/l)	10.6 U	15.4 U	11.5 U	10.6 U	15.9 U	9.9 U	10.2 U
o-Nitroaniline (ug/l)	26.6 U	15.4 U	28.7 U	26.6 U	15.9 U	24.8 U	10.2 U
p-Nitroaniline (ug/l)	26.6 U	15.4 U	28.7 U	26.6 U	15.9 U	24.8 U	10.2 U
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	0.85 J
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	IA09-MW-13(S)	IA09-MW-13(S)	IA09-MW-14(S)	IA09-MW-17(S)	IA09-MW-17(S)	IA09-MW-19(I)	IA09-MW-19(I)
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Gasoline Range Organics (ug/l)		50 U			50 U		50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride (ug/l)	1.4 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	0.81 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	0.64 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	5 U	0.5 U	5 U	5 U	0.5 U	5 U	0.5 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	9.01		0.313 U	0.931 J		4.47 J	
Gross Alpha (pCi/l)	17	21.45	14.5 U	0.346 U	1.27 U	3.01 J	0.61 U
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	6.2		2.17 J	1.77 J		2.53 J	
Nonvolatile Beta (pCi/l)	20.3	10.95	17.5 U	1.57 J	5.87	3.19 J	1.35 U
Radium-226 (Filtered) (pCi/l)	0.725 J		0.894 J	1.49		0.812 J	
Radium-226 (pCi/l)	0.818 J	1.05	0.92 J	0.311 U	0.75 J	1.37	1.23
Radium-228 (Filtered) (pCi/l)	0.676 U		1.21	0.549 U		-0.433 U	
Radium-228 (pCi/l)	1.71	0.6 U	1.21	0.573 U	0.27 U	0.73 U	0.43 U
Weight of Sample, A&B (Filtered) (mg)	87.7		90.1	98		98.9	
Weight of Sample, A&B (mg)	45.2	73.9	42.1	93.5	63.3	99.4	61.6
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	-0.0151 U		0.145 U	0.0393 U		0.149 U	
Actinium-227 (pCi/l)	0 U	-0.06 U	0.316 U	0.0774 U	-0.11 U	0.142 U	0.09 U
Thorium-228 (Filtered) (pCi/l)	0.12 U		0.128 U	0.143 U		0.17 U	
Thorium-228 (pCi/l)	0.252 J	0.8 J	0.568 J	0.118 U	0.59 J	0.0031 U	0.26 U
Thorium-230 (Filtered) (pCi/l)	0.139 U		0.371 J	0.294 J		0.193 U	

Station	**IA09-MW-13(S)**	**IA09-MW-13(S)**	**IA09-MW-14(S)**	**IA09-MW-17(S)**	**IA09-MW-17(S)**	**IA09-MW-19(I)**	**IA09-MW-19(I)**
Sample No	**LUGW0038**	**LUGW0102**	**LUGW0034**	**LUGW0036**	**LUGW0104**	**LUGW0037**	**LUGW0106**
Collection Date	**08/19/98**	**04/14/99**	**08/19/98**	**08/19/98**	**04/14/99**	**08/19/98**	**04/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199587**	**199587**	**199340**	**199444**	**199444**	**199585**	**199585**
Easting	**517533**	**517533**	**517255**	**517557**	**517557**	**517538**	**517538**
Thorium-230 (pCi/l)	0.298 J	0.21 U	0.699 J	0.0721 U	0.19 J	0.0855 U	0.03 U
Thorium-232 (Filtered) (pCi/l)	-0.0153 U		0.0296 U	0 U		0 U	
Thorium-232 (pCi/l)	0.0551 U	0.09 U	0.294 J	-0.0062 U	0.17 J	-0.0188 U	0.07 U
Uranium-233/234 (Filtered) (pCi/l)	2.66		2.62	0.663 J		0.247 U	
Uranium-233/234 (pCi/l)	2.16	14.9 J	2.56	0.227 J	0.51 J	0.383 J	0.52 J
Uranium-235 (Filtered) (pCi/l)	-0.0103 U		0.155 U	0.0572 U		0.0406 U	
Uranium-235 (pCi/l)	0.149 U	0.47 J	0.168 U	0.0455 U	0.03 U	-0.0105 U	0.06 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	1.86		1.94	0.228 J		0.325 J	
Uranium-238 (pCi/l)	1.55	8.58 J	2.26	0.181 J	0.62 J	0.197 U	0.24 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	9.04 U		6.94 U	11.9 U		19.8 U	
Actinium-228 (pCi/l)	16.2 U	0 U	3.15 U	12.7 U	4.81 U	0 U	3.05 U
Cesium-137 (Filtered) (pCi/l)	1.15 U		0.188 U	-0.724 U		-0.691 U	
Cesium-137 (pCi/l)	1.69 U	-2.85 U	0 U	3.13 U	-0.71 U	-0.788 U	-0.94 U
Cobalt-60 (Filtered) (pCi/l)	0.879 U		0.638 U	1.39 U		2.82 U	
Cobalt-60 (pCi/l)	-0.825 U	0.2 U	-0.678 U	1.97 U	0.29 U	1.68 U	0.57 U
Potassium-40 (Filtered) (pCi/l)	38 U		25.1 U	42 U		12.2 U	
Potassium-40 (pCi/l)	68.2 J	2.07 U	0 U	0 U	19.29 U	50.3 U	4.21 U
Protactinium-231 (Filtered) (pCi/l)	9.24 U		-76.2 U	-18 U		101 U	
Protactinium-231 (pCi/l)	-22.5 U	41.84 U	-0.526 U	128 U	-10.33 U	-37.2 U	17.32 U
Thorium-234 (Filtered) (pCi/l)	138 U		114 U	0 U		8.81 U	
Thorium-234 (pCi/l)	26.9 U	0 U	32.6 U	136 U	127 U	58.7 U	62.59 U
Uranium-235 (Filtered) (pCi/l)	15.4 U		8.15 U	41.7		20.1 U	
Uranium-235 (pCi/l)	-3.71 U	16.49 U	5.22 U	9.57 U	13.37 U	7.26 U	3.28 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**
Sample No	**LUGW0033**	**LUGW0109**	**LUGW0039**	**LUGW0040**	**LUGW0114**	**LUGW0115**	**LUGW0047**
Collection Date	**08/20/98**	**04/13/99**	**08/19/98**	**08/20/98**	**04/12/99**	**04/12/99**	**11/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199496**	**199583**	**199291**	**199349**	**199587**	**199290**	**199293**
Easting	**517367**	**517473**	**517477**	**517339**	**517402**	**517362**	**517360**
Metals							
Aluminum (Filtered) (ug/l)	12.4 U	7.7 B	12.4 U	124 U	7.4 U	7.4 U	25.9 B
Aluminum (ug/l)	169	26.5 B	100 U	12.4 U	106	21.6 B	83.5
Antimony (Filtered) (ug/l)	4.9 B	1.9 U	4.4 U	2.6 B	1.9 U	1.9 U	2.5 U
Antimony (ug/l)	2.5 U	1.9 U	4.8 U	2.5 U	1.9 U	1.9 U	2.5 U
Arsenic (Filtered) (ug/l)	3 U	4.8 B	3 U	3 U	2.7 U	2.7 U	4 U
Arsenic (ug/l)	3 U	4.5 B	3 U	3 U	2.7 U	2.7 U	4.1 B
Barium (Filtered) (ug/l)	18.5	42.6	75.5	15.6	90	30.7	38.5
Barium (ug/l)	20.2	44.1	81.3	16.9	92.6	30.1	45.1
Beryllium (Filtered) (ug/l)	0.13 U	0.14 U	0.13 U	0.18 B	0.14 U	0.14 U	0.13 U
Beryllium (ug/l)	0.13 U	0.2 B	0.13 U	0.3 B	0.14 U	0.14 U	0.22 U
Cadmium (Filtered) (ug/l)	1.1 U	0.34 U	1.1 U	1.1 U	0.34 U	0.34 U	1.1 U
Cadmium (ug/l)	1.1 U	0.35 B	1.1 U	1.1 U	0.34 U	0.34 U	1.1 U
Calcium (Filtered) (ug/l)	154000	134000	94300	34800	71400	178000	60100
Calcium (ug/l)	158000	134000	88500	37100	79200	172000	67000
Chromium (Filtered) (ug/l)	1.1 B	0.42 U	0.7 U	1.8 B	0.42 U	0.42 U	1.1 B
Chromium (ug/l)	1.9 B	0.63 B	0.7 U	3.9 B	0.42 U	0.42 U	3.2 B
Cobalt (Filtered) (ug/l)	6.2	3.8 B	0.82 U	1.3 B	0.44 U	0.44 U	0.82 U
Cobalt (ug/l)	6.7	4.2 B	1.2 B	1.9 B	0.44 U	0.44 U	0.82 U
Copper (Filtered) (ug/l)	28.6	19.6 J	1.6 B	3.3 B	1.1 B	1.1 B	1.9 B
Copper (ug/l)	4.8 B	1.9 U	3 B	3.8 B	1.8 B	1.2 B	2.7 B
Iron (Filtered) (ug/l)	232	872	328	27.1 B	236	669	21.2
Iron (ug/l)	577	984	321	174	407	784	76.2
Lead (Filtered) (ug/l)	46.2	1.3 U	1.5 U	8.8	1.3 U	2.8 B	1.5 U
Lead (ug/l)	47	1.4 B	1.8 B	9.9	1.7 B	4.2	2.2 B
Magnesium (Filtered) (ug/l)	123000	55600	61900 J	43700	35600	83100	45100
Magnesium (ug/l)	127000	55200	65400 J	45500	37800	75400	49500
Manganese (Filtered) (ug/l)	136	282	111	12.4	11.4	12.5	28.2
Manganese (ug/l)	143	291	137	19	16	13.8	34.5
Mercury (Filtered) (ug/l)	0.1 U	0.12 U	0.1 U	0.1 U	0.12 U	0.12 U	0.19 B
Mercury (ug/l)	0.1 U	0.12 U	0.1 U	0.1 U	0.12 U	0.12 U	0.19 B
Nickel (Filtered) (ug/l)	314	9.8 B	12.3	66.6	1 U	12.6	1.7 B
Nickel (ug/l)	313	7.4 B	12.4	69.1	1.5 B	11.5	1.9 B
Phosphorus (Filtered) (ug/l)	1.5 U	15.5 B	78.7 B	15.6 B	8.1 U	9.6 B	12.6 B
Phosphorus (ug/l)	1.5 U	25.4 B	15 U	28.9 B	23 B	9.1 B	10.5 B
Potassium (Filtered) (ug/l)	8510	6850	8310	5150	969	6550	8940

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**
Sample No	**LUGW0033**	**LUGW0109**	**LUGW0039**	**LUGW0040**	**LUGW0114**	**LUGW0115**	**LUGW0047**
Collection Date	**08/20/98**	**04/13/99**	**08/19/98**	**08/20/98**	**04/12/99**	**04/12/99**	**11/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199496**	**199583**	**199291**	**199349**	**199587**	**199290**	**199293**
Easting	**517367**	**517473**	**517477**	**517339**	**517402**	**517362**	**517360**
Potassium (ug/l)	8840	6520	11800	5330	889	5640	9120
Selenium (Filtered) (ug/l)	2.4 U	2.3 B	2.4 U	2.4 U	1.9 U	1.9 U	2.5 U
Selenium (ug/l)	2.4 U	2.2 B	2.4 U	2.4 U	1.9 U	1.9 U	2.5 U
Silver (Filtered) (ug/l)	2 U	0.89 U	2 U	2 U	0.89 U	0.89 U	3 B
Silver (ug/l)	2 U	0.89 U	2 U	2 U	0.89 U	0.89 U	0.86 U
Sodium (Filtered) (ug/l)	443000	11100 N	256000	606000	4850	38800	24500
Sodium (ug/l)	461000	11200 N	290000	620000	4260	36400	26000
Thallium (Filtered) (ug/l)	4 U	5.6 U	4 U	4 U	5.6 U	5.6 U	4 U
Thallium (ug/l)	4 U	5.6 U	4 U	4 U	5.6 U	5.6 U	4 U
Vanadium (Filtered) (ug/l)	0.67 U	0.47 U	0.67 U	1 B	0.47 U	0.47 U	0.67 U
Vanadium (ug/l)	0.67 U	0.47 U	0.67 U	1.9 B	0.47 U	0.47 U	0.67 U
Zinc (Filtered) (ug/l)	25.4	4.5 B	5.6 U	9.5	0.46 U	0.46 U	2.6 U
Zinc (ug/l)	15.8	9.1	4.9 U	12.3	1.4 B	2.3 U	2.6 U
Indicator Parameters							
Alkalinity (mg/l)	443	327	463	520	271	354	224
Chloride (mg/l)	37.9	13.7	247	37.9	5.17	15.6	41.4
Fluoride (mg/l)	0.65	1.02	0.7	2.49	0.26	0.5	0.629
Nitrate/Nitrite (mg/l)	0.04 J	0.05	0.05	0.6	0.03 J	0.04 J	0 U
Nitrogen, Ammonia (mg/l)	1.57	0.2	0.03 J	1.23	0 U	5.45	0.09
Sulfate (mg/l)	1350	209	210	941	44.8	456	140
Total Dissolved Solids (mg/l)		699			340	1080	426
Total Rec. Petro. Hydrocarbons (mg/l)	0.82 J						
Total Suspended Solids (mg/l)		2.8 J			38.6	8.6	24.8
Semivolatile Organics							
1,2,4-Trichlorobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
1,2-Dichlorobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
1,3-Dichlorobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
1,4-Dichlorobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2,2'-Oxybis (1-chloropropane) (ug/l)	11.4 U		12.2 U	10.1 U			10.5 U
2,2'-Oxybis (1-cloropropane) (ug/l)		13.7 U			16.7 U	14.3 U	
2,4,5-Trichlorophenol (ug/l)	28.4 U	13.7 U	30.5 U	25.2 U	16.7 U	14.3 U	26.3 U
2,4,6-Trichlorophenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2,4-Dichlorophenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2,4-Dimethylphenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2,4-Dinitrophenol (ug/l)	28.4 U	34.2 U	30.5 U	25.2 U	41.7 U	35.7 U	26.3 U
2,4-Dinitrotoluene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U

Station	IA09-MW-21(I)	IA09-MW-22(I)	IA09-MW-23(S)	IA09-MW-24(S)	IA09-MW-39(B)	IA09-MW-40(B)	IA09-MW-41(B)
Sample No	LUGW0033	LUGW0109	LUGW0039	LUGW0040	LUGW0114	LUGW0115	LUGW0047
Collection Date	08/20/98	04/13/99	08/19/98	08/20/98	04/12/99	04/12/99	11/20/98
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID							
Northing	199496	199583	199291	199349	199587	199290	199293
Easting	517367	517473	517477	517339	517402	517362	517360
2,6-Dinitrotoluene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2-Chloronaphthalene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2-Chlorophenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2-Methylnaphthalene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2-Nitrophenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
2-methyl-4,6-dinitrophenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
3,3'-Dichlorobenzidine (ug/l)	56.8 U	68.5 U	61 U	50.5 U	83.3 U	71.4 U	52.6 U
4-Bromophenyl phenyl ether (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
4-Chloroaniline (ug/l)	22.7 U	27.4 U	24.4 U	20.2 U	33.3 U	28.6 U	21 U
4-Chlorophenylphenylether (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
4-Nitrophenol (ug/l)	28.4 U	34.2 U	30.5 U	25.2 U	41.7 U	35.7 U	26.3 U
4-chloro-3-methyl phenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Acenaphthene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Acenaphthylene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Anthracene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Benzo(a)anthracene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Benzo(a)pyrene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Benzo(b)fluoranthene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Benzo(ghi)perylene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Benzo(k)fluoranthene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Butylbenzylphthalate (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Carbazole (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Chrysene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Di-n-butylphthalate (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Di-n-octylphthalate (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Dibenz(a,h)anthracene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Dibenzofuran (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Diesel Range Organics (mg/l)		0.01 U			0.01 U	0.01 U	
Diethyl phthalate (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Dimethyl phthalate (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Diphenylamine (ug/l)		13.7 U			16.7 U	14.3 U	
Fluoranthene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Fluorene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Hexachlorobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Hexachlorobutadiene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Hexachlorocyclopentadiene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**
Sample No	**LUGW0033**	**LUGW0109**	**LUGW0039**	**LUGW0040**	**LUGW0114**	**LUGW0115**	**LUGW0047**
Collection Date	**08/20/98**	**04/13/99**	**08/19/98**	**08/20/98**	**04/12/99**	**04/12/99**	**11/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199496**	**199583**	**199291**	**199349**	**199587**	**199290**	**199293**
Easting	**517367**	**517473**	**517477**	**517339**	**517402**	**517362**	**517360**
Hexachloroethane (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Indeno(1,2,3-c,d)pyrene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Isophorone (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
N-Nitrosodiphenylamine (ug/l)	11.4 U		12.2 U	10.1 U			10.5 U
N-Nitrosodipropylamine (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Naphthalene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Nitrobenzene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Pentachlorophenol (ug/l)	28.4 U	34.2 U	30.5 U	25.2 U	41.7 U	35.7 U	26.3 U
Phenanthrene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Phenol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
Pyrene (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
bis(2-chloroethoxy)methane (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
bis(2-chloroethyl) ether (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
bis(2-ethylhexyl)phthalate (ug/l)	11.4 U	13.7 U	12.2 UJ	10.1 U	16.7 U	14.3 U	10.5 U
m,p-Cresol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
m-Nitroaniline (ug/l)	28.4 U	34.2 U	30.5 U	25.2 U	41.7 U	35.7 U	26.3 U
o-Cresol (ug/l)	11.4 U	13.7 U	12.2 U	10.1 U	16.7 U	14.3 U	10.5 U
o-Nitroaniline (ug/l)	28.4 U	13.7 U	30.5 U	25.2 U	16.7 U	14.3 U	26.3 U
p-Nitroaniline (ug/l)	28.4 U	13.7 U	30.5 U	25.2 U	16.7 U	14.3 U	26.3 U
Volatile Organics							
1,1,1-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	4.5 J
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**
Sample No	**LUGW0033**	**LUGW0109**	**LUGW0039**	**LUGW0040**	**LUGW0114**	**LUGW0115**	**LUGW0047**
Collection Date	**08/20/98**	**04/13/99**	**08/19/98**	**08/20/98**	**04/12/99**	**04/12/99**	**11/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199496**	**199583**	**199291**	**199349**	**199587**	**199290**	**199293**
Easting	**517367**	**517473**	**517477**	**517339**	**517402**	**517362**	**517360**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Gasoline Range Organics (ug/l)		50 U			50 U	50 U	
Methyl Bromide (ug/l)	0.82 J	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride (ug/l)	5 U	5 U	0.7 U	5 U	5 U	5 U	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	2.6 J
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	5 U	0.5 U	5 U	5 U	5 U	5 U	5 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	1.45 J		5.04	22.8			6
Gross Alpha (pCi/l)	1.82 J	1.91 J	4.2 J	27.9	0.73 U	4.84 J	5.39
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	4.26 J		5.34	26.2			10.5
Nonvolatile Beta (pCi/l)	2.8 J	7.71	7.09	20.2	1.16 U	5.92	6.24
Radium-226 (Filtered) (pCi/l)	0.921 J		0.978 J	0.75 J			1.75
Radium-226 (pCi/l)	0.635 J	0.93 J	1.38	0.795 J	0.49 U	2.21	0.809 J
Radium-228 (Filtered) (pCi/l)	0.513 U		-0.0378 U	0.756 U			0.327 U
Radium-228 (pCi/l)	0.195 U	0.46 U	0.259 U	0.482 U	0.26 U	0.47 U	0.905 J
Weight of Sample, A&B (Filtered) (mg)	98.7		98	97.1			64.8
Weight of Sample, A&B (mg)	93.2	53.7	0.4	95.3	53.2	44.5	71
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.0864 U		0.037 U	-0.0616 U			0.0154 U
Actinium-227 (pCi/l)	0.178 U	-0.27 U	-0.12 U	-0.0127 U	-0.05 U	0.03 U	-0.115 U
Thorium-228 (Filtered) (pCi/l)	-0.0502 U		0.0484 U	0.184 U			0.155 U
Thorium-228 (pCi/l)	0.114 U	0.41 U	0.333 J	-0.0496 U	0.45 U	0.4 U	0.08 U
Thorium-230 (Filtered) (pCi/l)	0.141 U		0.208 U	0.103 U			0.0091 U

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**
Sample No	**LUGW0033**	**LUGW0109**	**LUGW0039**	**LUGW0040**	**LUGW0114**	**LUGW0115**	**LUGW0047**
Collection Date	**08/20/98**	**04/13/99**	**08/19/98**	**08/20/98**	**04/12/99**	**04/12/99**	**11/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199496**	**199583**	**199291**	**199349**	**199587**	**199290**	**199293**
Easting	**517367**	**517473**	**517477**	**517339**	**517402**	**517362**	**517360**
Thorium-230 (pCi/l)	0.0528 U	0 U	0.21 J	0.0354 U	0.08 U	0.09 U	0.0247 U
Thorium-232 (Filtered) (pCi/l)	-0.0228 U		0.121 U	-0.0157 U			-0.0037 U
Thorium-232 (pCi/l)	0.03 U	-0.03 U	0.0322 U	0 U	0.07 U	0.07 U	-0.0067 U
Uranium-233/234 (Filtered) (pCi/l)	7.87		2.88	87.1			2.24
Uranium-233/234 (pCi/l)	8.19	0.89 J	5.02	92.3	0.09 U	0.88 J	1.82 J
Uranium-235 (Filtered) (pCi/l)	0.3 J		0.364 J	4.37			0.201 U
Uranium-235 (pCi/l)	0.287 J	-0.01 U	0.0802 U	4.52	0.09 U	0.13 U	0.0874 UJ
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	9.87		2	81.5			1.6
Uranium-238 (pCi/l)	8.63	0.55 J	4.04	88	0.1 U	0.68 J	1.39 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	7.79 U		0 U	27.9 U			4.54 U
Actinium-228 (pCi/l)	15.3 U	7.47 U	9.05 U	8.15 U	11.7 U	2.6 U	1.9 U
Cesium-137 (Filtered) (pCi/l)	0.776 U		-1.3 U	0.758 U			-1.05 U
Cesium-137 (pCi/l)	0.92 U	1.11 U	-1.18 U	-0.935 U	1.66 U	-0.81 U	0.208 U
Cobalt-60 (Filtered) (pCi/l)	-0.749 U		1.68 U	0.494 U			-0.477 U
Cobalt-60 (pCi/l)	2.4 U	0.37 U	0.473 U	-1.44 U	2.93 U	-0.13 U	-1.57 U
Potassium-40 (Filtered) (pCi/l)	62.4 J		54.9 U	39.9 U			8.37 U
Potassium-40 (pCi/l)	0 U	23.62 U	56 U	17.3 U	4.86 U	58.47 U	6.47 U
Protactinium-231 (Filtered) (pCi/l)	-16.9 U		75.3 U	20.8 U			-8.13 U
Protactinium-231 (pCi/l)	-62.2 U	-6.3 U	-1.36 U	44.8 U	24.59 U	82.61 U	-65.1 U
Thorium-234 (Filtered) (pCi/l)	209 U		75.7 U	89.8 U			80.5 U
Thorium-234 (pCi/l)	110 U	94.47 U	148 U	201 J	155 U	134 U	82 U
Uranium-235 (Filtered) (pCi/l)	27.9 U		17.6 U	-2.32 U			-2.24 U
Uranium-235 (pCi/l)	19.7 U	0.29 U	11.7 U	14.6 U	-1.89 U	7.96 U	5.18 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-MW-41(B)**	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**	**IA09-PW(E)**	**IA09-PW(W)**
Sample No	**LUGW0116**	**LUGW0117**	**LUGW0118**	**LUGW0129**	**LUGW0130**
Collection Date	**04/14/99**	**04/08/99**	**04/08/99**	**04/08/99**	**04/08/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					
Northing	**199293**	**199593**	**199593**	**199487**	**199457**
Easting	**517360**	**517330**	**517327**	**517225**	**517142**
Metals					
Aluminum (Filtered) (ug/l)	7.4 U	7.4 U	7.4 U		
Aluminum (ug/l)	19.8 B	29.6 B	107	7.4 U	7.4 U
Antimony (Filtered) (ug/l)	1.9 U	1.9 U	1.9 U		
Antimony (ug/l)	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Arsenic (Filtered) (ug/l)	2.7 U	7.5 J	13 U		
Arsenic (ug/l)	2.7 U	3.5 B	3.9 U	2.7 U	2.7 U
Barium (Filtered) (ug/l)	32.6	60.4	82.3		
Barium (ug/l)	33.6	59	84.1	46.7	29.9
Beryllium (Filtered) (ug/l)	0.14 U	0.14 U	0.14 U		
Beryllium (ug/l)	0.14 U	0.14 U	0.14 U	0.14 U	9.3
Cadmium (Filtered) (ug/l)	0.34 U	0.34 U	0.34 U		
Cadmium (ug/l)	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Calcium (Filtered) (ug/l)	58400	131000	120000		
Calcium (ug/l)	59900	131000	126000	108000	122000
Chromium (Filtered) (ug/l)	0.42 U	0.42 U	0.42 U		
Chromium (ug/l)	0.7 B	0.62 B	1.4 B	1.9 B	0.42 U
Cobalt (Filtered) (ug/l)	0.44 U	0.44 U	0.44 U		
Cobalt (ug/l)	0.44 U	0.54 B	0.44 U	0.44 U	1.8 B
Copper (Filtered) (ug/l)	0.75 U	0.74 U	0.74 U		
Copper (ug/l)	1.5 U	1.3 B	0.84 B	1.3 B	4.4 B
Iron (Filtered) (ug/l)	64.7	773	2320		
Iron (ug/l)	114	858	3540	271	134
Lead (Filtered) (ug/l)	1.3 U	1.5 B	1.7 B		
Lead (ug/l)	1.3 U	1.3 U	3.3	1.3 U	5.9
Magnesium (Filtered) (ug/l)	46100	58300	52800		
Magnesium (ug/l)	46100	56500	53800	55600	74500
Manganese (Filtered) (ug/l)	14.3	45.2	43.2		
Manganese (ug/l)	9.7	47.6	44.1	5.2	114
Mercury (Filtered) (ug/l)	0.12 U	0.12 U	0.12 U		
Mercury (ug/l)	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Nickel (Filtered) (ug/l)	1 U	12.4	1.7 B		
Nickel (ug/l)	1.2 B	12.6	2.4 B	40.9	74.4
Phosphorus (Filtered) (ug/l)	13.8 B	33.8 B	98.1 E		
Phosphorus (ug/l)	14.3 B	28.4 B	35.5 BE	42 B	8.1 U
Potassium (Filtered) (ug/l)	9270	3460	2920		

Station	IA09-MW-41(B)	IA09-OMW-27(I)	IA09-OMW-28(B)	IA09-PW(E)	IA09-PW(W)
Sample No	**LUGW0116**	**LUGW0117**	**LUGW0118**	**LUGW0129**	**LUGW0130**
Collection Date	**04/14/99**	**04/08/99**	**04/08/99**	**04/08/99**	**04/08/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					
Northing	**199293**	**199593**	**199593**	**199487**	**199457**
Easting	**517360**	**517330**	**517327**	**517225**	**517142**
Potassium (ug/l)	8550	3100	2650	4020	5980
Selenium (Filtered) (ug/l)	1.9 U	2.7 B	11.6		
Selenium (ug/l)	1.9 U	1.9 U	1.9 B	1.9 U	1.9 U
Silver (Filtered) (ug/l)	0.89 U	0.89 U	0.89 U		
Silver (ug/l)	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Sodium (Filtered) (ug/l)	23100 N	23800	73000		
Sodium (ug/l)	22200 N	22700	71400	98800	120000
Thallium (Filtered) (ug/l)	5.6 U	5.6 U	5.6 U		
Thallium (ug/l)	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Vanadium (Filtered) (ug/l)	0.47 U	0.47 U	0.47 U		
Vanadium (ug/l)	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Zinc (Filtered) (ug/l)	0.46 U	7.4	0.46 U		
Zinc (ug/l)	7.2	6.5	1.2 B	82.5	95.8
Indicator Parameters					
Alkalinity (mg/l)	184	291	323	295	337
Chloride (mg/l)	37.8	24.1	16.9	34.8	34.1
Fluoride (mg/l)	0.61	0.26	0.26	0.61	0.74
Nitrate/Nitrite (mg/l)	0.04 J	0.03 J	0.86	0.07	0.1
Nitrogen, Ammonia (mg/l)	0.05	0.92	0.04 J	1.61	2.08
Sulfate (mg/l)	127	268	319	341	438
Total Dissolved Solids (mg/l)	434	741	833	849	1060
Total Rec. Petro. Hydrocarbons (mg/l)					
Total Suspended Solids (mg/l)	6.2	5.4	39	1 J	1.2 J
Semivolatile Organics					
1,2,4-Trichlorobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
1,2-Dichlorobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
1,3-Dichlorobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
1,4-Dichlorobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,2'-Oxybis (1-chloropropane) (ug/l)					
2,2'-Oxybis (1-cloropropane) (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,4,5-Trichlorophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,4,6-Trichlorophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,4-Dichlorophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,4-Dimethylphenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2,4-Dinitrophenol (ug/l)	41 U	27.8 U	27.5 U	26.3 U	29.4 U
2,4-Dinitrotoluene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U

Station	IA09-MW-41(B)	IA09-OMW-27(I)	IA09-OMW-28(B)	IA09-PW(E)	IA09-PW(W)
Sample No	LUGW0116	LUGW0117	LUGW0118	LUGW0129	LUGW0130
Collection Date	04/14/99	04/08/99	04/08/99	04/08/99	04/08/99
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID					
Northing	199293	199593	199593	199487	199457
Easting	517360	517330	517327	517225	517142
2,6-Dinitrotoluene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2-Chloronaphthalene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2-Chlorophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2-Methylnaphthalene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2-Nitrophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
2-methyl-4,6-dinitrophenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
3,3'-Dichlorobenzidine (ug/l)	82 U	55.6 U	54.9 U	52.6 U	58.8 U
4-Bromophenyl phenyl ether (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
4-Chloroaniline (ug/l)	32.8 U	22.2 U	22 U	21 U	23.5 U
4-Chlorophenylphenylether (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
4-Nitrophenol (ug/l)	41 U	27.8 U	27.5 U	26.3 U	29.4 U
4-chloro-3-methyl phenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Acenaphthene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Acenaphthylene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Anthracene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Benzo(a)anthracene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Benzo(a)pyrene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Benzo(b)fluoranthene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Benzo(ghi)perylene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Benzo(k)fluoranthene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Butylbenzylphthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Carbazole (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Chrysene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Di-n-butylphthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Di-n-octylphthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Dibenz(a,h)anthracene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Dibenzofuran (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Diesel Range Organics (mg/l)	0.01 U	0.01 U	0.01 U	0 U	0.01 U
Diethyl phthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Dimethyl phthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Diphenylamine (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Fluoranthene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Fluorene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Hexachlorobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Hexachlorobutadiene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Hexachlorocyclopentadiene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U

Station	IA09-MW-41(B)	IA09-OMW-27(I)	IA09-OMW-28(B)	IA09-PW(E)	IA09-PW(W)
Sample No	LUGW0116	LUGW0117	LUGW0118	LUGW0129	LUGW0130
Collection Date	04/14/99	04/08/99	04/08/99	04/08/99	04/08/99
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID					
Northing	199293	199593	199593	199487	199457
Easting	517360	517330	517327	517225	517142
Hexachloroethane (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Indeno(1,2,3-c,d)pyrene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Isophorone (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
N-Nitrosodiphenylamine (ug/l)					
N-Nitrosodipropylamine (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Naphthalene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Nitrobenzene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Pentachlorophenol (ug/l)	41 U	27.8 U	27.5 U	26.3 U	29.4 U
Phenanthrene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Phenol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Pyrene (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
bis(2-chloroethoxy)methane (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
bis(2-chloroethyl) ether (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
bis(2-ethylhexyl)phthalate (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
m,p-Cresol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
m-Nitroaniline (ug/l)	41 U	27.8 U	27.5 U	26.3 U	29.4 U
o-Cresol (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
o-Nitroaniline (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
p-Nitroaniline (ug/l)	16.4 U	11.1 U	11 U	10.5 U	11.8 U
Volatile Organics					
1,1,1-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane (ug/l)	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethylene (ug/l)	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane (ug/l)	5 U	5 U	5 U	5 U	5 U
2-Butanone (ug/l)	10 U	10 U	10 U	10 U	10 U
2-Hexanone (ug/l)	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (ug/l)	10 U	10 U	10 U	10 U	10 U
Acetone (ug/l)	10 U	10 U	10 U	10 U	10 U
Benzene (ug/l)	5 U	5 U	5 U	5 U	5 U
Bromoform (ug/l)	5 U	5 U	5 U	5 U	5 U
Carbon disulfide (ug/l)	0.81 J	5 U	5 U	5 U	5 U
Carbon tetrachloride (ug/l)	5 U	5 U	5 U	5 U	5 U

Station	IA09-MW-41(B)	IA09-OMW-27(I)	IA09-OMW-28(B)	IA09-PW(E)	IA09-PW(W)
Sample No	**LUGW0116**	**LUGW0117**	**LUGW0118**	**LUGW0129**	**LUGW0130**
Collection Date	**04/14/99**	**04/08/99**	**04/08/99**	**04/08/99**	**04/08/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					
Northing	**199293**	**199593**	**199593**	**199487**	**199457**
Easting	**517360**	**517330**	**517327**	**517225**	**517142**
Chlorobenzene (ug/l)	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U
Chloroethane (ug/l)	10 U	10 U	10 U	10 U	10 U
Chloroform (ug/l)	5 U	5 U	5 U	5 U	5 U
Dichlorobromomethane (ug/l)	5 U	5 U	5 U	5 U	5 U
Ethylbenzene (ug/l)	5 U	5 U	5 U	5 U	5 U
Gasoline Range Organics (ug/l)	50 U	50 U	50 U	50 U	50 U
Methyl Bromide (ug/l)	10 U	10 U	10 U	10 U	10 U
Methyl Chloride (ug/l)	10 U	10 U	10 U	10 U	10 U
Methylene chloride (ug/l)	5 U	5 U	5 U	5 U	5 U
Styrene (ug/l)	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U
Toluene (ug/l)	2 U	2 U	2 U	2 U	2 U
Trichloroethene (ug/l)	5 U	5 U	5 U	5 U	5 U
Vinyl chloride (ug/l)	2 U	2 U	2 U	2 U	2 U
Xylenes (total) (ug/l)	5 U	5 U	5 U	5 U	5 U
cis-1,3-dichloropropene (ug/l)	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene (ug/l)	0.5 U	5 U	5 U	5 U	5 U
Radiological Parameters					
Gross Alpha (Filtered) (pCi/l)					
Gross Alpha (pCi/l)	2.57 J	1.34 U	61	3.35 J	7.5
Gross Beta (pCi/l)					
Nonvolatile Beta (Filtered) (pCi/l)					
Nonvolatile Beta (pCi/l)	6.89	-2.21 U	15	3.87 J	5.71 J
Radium-226 (Filtered) (pCi/l)					
Radium-226 (pCi/l)	0.43 J	0.87 U	0.51 J	0.87 J	0.88 U
Radium-228 (Filtered) (pCi/l)					
Radium-228 (pCi/l)	0.19 U	0.57 U	0 U	0.33 U	0.61 U
Weight of Sample, A&B (Filtered) (mg)					
Weight of Sample, A&B (mg)	68.5	60.2	75.5	74.5	92.9
Radiological Parameters (AlphaSpec)					
Actinium-227 (Filtered) (pCi/l)					
Actinium-227 (pCi/l)	0.08 U	0.02 U	0.11 U	0.03 U	-0.02 U
Thorium-228 (Filtered) (pCi/l)					
Thorium-228 (pCi/l)	0.23 U	0.42 J	0.4 J	0.7 J	0.31 J
Thorium-230 (Filtered) (pCi/l)					

Station	**IA09-MW-41(B)**	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**	**IA09-PW(E)**	**IA09-PW(W)**
Sample No	**LUGW0116**	**LUGW0117**	**LUGW0118**	**LUGW0129**	**LUGW0130**
Collection Date	**04/14/99**	**04/08/99**	**04/08/99**	**04/08/99**	**04/08/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					
Northing	**199293**	**199593**	**199593**	**199487**	**199457**
Easting	**517360**	**517330**	**517327**	**517225**	**517142**
Thorium-230 (pCi/l)	0.22 J	0.06 U	0.04 U	0.07 U	0.07 U
Thorium-232 (Filtered) (pCi/l)					
Thorium-232 (pCi/l)	0 U	0.05 U	0.01 U	0 U	0 U
Uranium-233/234 (Filtered) (pCi/l)					
Uranium-233/234 (pCi/l)	0.6 J	1.24	0.41 J	0.23 U	2.67 J
Uranium-235 (Filtered) (pCi/l)					
Uranium-235 (pCi/l)	-0.02 U	0.04 U	-0.01 U	0.05 U	0.21 U
Uranium-235/236 (pCi/l)					
Uranium-238 (Filtered) (pCi/l)					
Uranium-238 (pCi/l)	0.41 J	0.54 J	0.21 J	0.2 U	2.86 J
Radiological Parameters (GammaSpec)					
Actinium-227 (pCi/l)					
Actinium-228 (Filtered) (pCi/l)					
Actinium-228 (pCi/l)	2.42 U	0.89 U	6.9 U	7.13 U	0.27 U
Cesium-137 (Filtered) (pCi/l)					
Cesium-137 (pCi/l)	0.78 U	0.19 U	-0.99 U	-0.51 U	0.3 U
Cobalt-60 (Filtered) (pCi/l)					
Cobalt-60 (pCi/l)	-1.79 U	-0.04 U	0.15 U	-0.8 U	0.21 U
Potassium-40 (Filtered) (pCi/l)					
Potassium-40 (pCi/l)	28.43 U	32.2 U	24.6 U	43.8 U	29.8 U
Protactinium-231 (Filtered) (pCi/l)					
Protactinium-231 (pCi/l)	15.62 U	10.7 U	-23.2 U	-28.9 U	0.04 U
Thorium-234 (Filtered) (pCi/l)					
Thorium-234 (pCi/l)	27.78 U	28.8 U	31.3 U	35.4 U	69.6 J
Uranium-235 (Filtered) (pCi/l)					
Uranium-235 (pCi/l)	2.76 U	15.3 U	-0.1 U	3.81 U	3.31 U
Wet Chemistry					
Fluoride (mg/l)					
Nitrogen, Ammonia (mg/l)					

Phase IV IA09 Groundwater

Station	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-09(I)	IA09-BMW-10(S)	IA09-BMW-10(S)	IA09-BMW-11(I)
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**	**LUGW0011**
Collection Date	**11/18/98**	**08/18/98**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9188**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	24.7 U	12.4 U	191 J		24.7 U	12.4 U	12.4 U
Aluminum (ug/l)	24.7 U	205	12.4 U		24.7 U	29.4 B	70.4
Antimony (Filtered) (ug/l)	6.2 U	4 B	3.2 U		10.3 U	2.7 B	2.5 U
Antimony (ug/l)	4.9 U	2.9 B	2.5 U		7.8 U	2.5 U	5.6 U
Arsenic (Filtered) (ug/l)	8 U	3 U	3 U		8 U	3 U	4 U
Arsenic (ug/l)	8 U	3 U	3 U		8 U	3.6 B	4 U
Barium (Filtered) (ug/l)	34.1	43	50.4		34.8	27	13.5
Barium (ug/l)	33.7	51.3	44.2		35.7	27.5	14.3
Beryllium (Filtered) (ug/l)	0.27 U	0.13 U	0.13 U		0.27 U	0.13 U	0.13 U
Beryllium (ug/l)	0.27 U	0.17 B	0.13 U		0.27 U	0.13 U	0.13 U
Cadmium (Filtered) (ug/l)	2.3 U	1.1 U	1.1 U		2.3 U	1.1 U	1.1 U
Cadmium (ug/l)	2.3 U	1.1 U	1.1 U		2.3 U	1.1 U	1.1 U
Calcium (Filtered) (ug/l)	103000	97200	97000		112000	104000	66200
Calcium (ug/l)	101000	102000	99700		110000	105000	67200
Chromium (Filtered) (ug/l)	1.4 U	0.7 U	0.83 U		1.4 U	0.7 U	0.7 U
Chromium (ug/l)	1.4 U	1.8 B	0.7 U		1.4 U	0.7 U	0.7 U
Cobalt (Filtered) (ug/l)	1.6 U	0.82 U	0.82 U		1.6 U	0.82 U	0.82 U
Cobalt (ug/l)	1.6 U	0.82 U	0.82 U		1.6 U	0.82 U	0.82 U
Copper (Filtered) (ug/l)	1.6 B	40.8	2 B		1.5 B	22.2	1.3 B
Copper (ug/l)	1.5 U	2.3 B	1 B		3 B	1.7 B	1.6 B
Iron (Filtered) (ug/l)	611	276	390		1060	937	
Iron (ug/l)	564	422	318		846	973	
Lead (Filtered) (ug/l)	3 U	1.5 U	3.2 B		3 U	1.5 U	1.5 U
Lead (ug/l)	3 U	2 B	1.5 U		3 U	1.5 U	1.7 B
Magnesium (Filtered) (ug/l)	51200	48000	48100 J		55300	49700	29600
Magnesium (ug/l)	49400	50900	49200 J		54400	49800	30200
Manganese (Filtered) (ug/l)	54.2	41.1	46.3		91.6	30.2	1.1 B
Manganese (ug/l)	64.8	47.5	40.7		144	31.8	1.8 B
Mercury (Filtered) (ug/l)	0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	0.1 U
Mercury (ug/l)	0.1 B	0.1 U	0.21 J		0.1 U	0.1 U	0.1 U
Nickel (Filtered) (ug/l)	2.2 U	6.4 B	1.1 U		2.2 U	3.9 B	1.2 B
Nickel (ug/l)	2.2 U	2.1 B	1.1 U		2.2 U	1.1 U	1.6 B
Phosphorus (Filtered) (ug/l)	218	15 U	15 U		14.2	15 U	39.4 B
Phosphorus (ug/l)	150	15 U	28.3 U		177	15 U	3 U
Potassium (Filtered) (ug/l)	2600	2410	2620		2900	2400	705

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**	**LUGW0011**
Collection Date	**11/18/98**	**08/18/98**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9188**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (ug/l)	2580	2660	2540		2890	2480	747
Selenium (Filtered) (ug/l)	5 U	2.4 U	2.4 B		5 U	2.4 U	2.5 U
Selenium (ug/l)	5 U	2.4 U	2.4 U		5 U	2.4 U	2.5 U
Silver (Filtered) (ug/l)	1.7 U	2 U	2 U		1.7 U	2 U	0.86 U
Silver (ug/l)	1.7 U	2 U	2 U		1.7 U	2 U	1.1 B
Sodium (Filtered) (ug/l)	22100	19500	21300		17900	16900	11500
Sodium (ug/l)	24600	21300	20600		18600	17300	13100
Thallium (Filtered) (ug/l)	7.9 U	5 B	4 U		7.9 U	4 U	4 U
Thallium (ug/l)	7.9 U	5 B	4 U		7.9 U	4.9 B	6.7 B
Vanadium (Filtered) (ug/l)	1.4 B	0.67 U	0.74 B		1.3 U	0.67 U	0.67 U
Vanadium (ug/l)	1.3 U	0.67 U	0.67 U		1.3 U	0.67 U	0.84 B
Zinc (Filtered) (ug/l)	5.2 U	13.4	6.7 U		5.2 U	9	3.9 B
Zinc (ug/l)	5.2 U	22	2.6 U		38.1	2.6 U	6.5
Indicator Parameters							
Fluoride (mg/l)	0.959				0.937		0.189
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)	0.21				0.17		0 U
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	5.48	2.92 J	4.25 J		1.46 U	1.61 J	2.78 J
Gross Alpha (pCi/l)	6.03	2.33 U	4 J	6.4 U	2.38 J	2.15 J	3.46 J
Gross Beta (pCi/l)				6.4			
Nonvolatile Beta (Filtered) (pCi/l)	3.81 J	2.95 J	3.1 J		3 J	3.25 J	1.41 U
Nonvolatile Beta (pCi/l)	3.72 J	3.55 J	3.14 J		1.8 U	2.93 J	1.65 U
Radium-226 (Filtered) (pCi/l)	1.66	1.64	1.42		0.848 J	1.24	0.531 U
Radium-226 (pCi/l)	1.39	1.55	1.8	1 U	0.833 J	1.36	1.57
Radium-228 (Filtered) (pCi/l)	1.02	0.578 U	0.216 U		0.624 U	0.559 U	-0.422 U
Radium-228 (pCi/l)	-0.328 U	0.392 U	0.676 U	1.7 U	0.535 U	0.176 U	0.408 U
Weight of Sample, A&B (Filtered) (mg)	99.1	99.2	99.4		95.8	98.9	49.7
Weight of Sample, A&B (mg)	97.8	97.9	98.1		97.4	95.9	50.6
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.0225 U	0.185 U	0.0911 U		-0.0181 U	0 U	0.0015 U
Actinium-227 (pCi/l)	0.0127 U	-0.0475 U	0.309 U	0.29	-0.0003 U	0.0961 U	0.0638 U
Thorium-228 (Filtered) (pCi/l)	0.03 U	-0.0621 U	-0.0626 U		0.0275 U	0.205 U	0.228 U
Thorium-228 (pCi/l)	0.188 U	-0.0169 U	0.31 U	1.2 U	0.148 U	0.191 U	0.105 U
Thorium-230 (Filtered) (pCi/l)	0.0255 U	0.35 J	0.328 J		0.0327 U	-0.0708 U	0.0444 U
Thorium-230 (pCi/l)	0.0435 U	0.111 U	0.103 U	0.07	0.0353 U	0.0842 U	0.0669 U

Station	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-09(I)**	**IA09-BMW-10(S)**	**IA09-BMW-10(S)**	**IA09-BMW-11(I)**
Sample No	**LUGW0009**	**LUGW0017**	**LUGW0017D**	**LUGW9688**	**LUGW0010**	**LUGW0018**	**LUGW0011**
Collection Date	**11/18/98**	**08/18/98**	**08/18/98**	**08/18/98**	**11/18/98**	**08/18/98**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID			**LUGW9188**				
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-232 (Filtered) (pCi/l)	-0.0027 U	0 U	0.0393 U		-0.0062 U	-0.0283 U	0.0148 U
Thorium-232 (pCi/l)	-0.0001 U	0 U	-0.0151 U	0.03 U	0.0142 U	0.0281 U	-0.0037 U
Uranium-233/234 (Filtered) (pCi/l)	0.59 J	0.788 J	0.577 J		0.287 U	0.72 J	0.976 J
Uranium-233/234 (pCi/l)	0.819 J	0.581 J	0.659 J	0.66	0.359 J	0.738 J	1.08 J
Uranium-235 (Filtered) (pCi/l)	-0.0123 U	0.018 U	0.105 U		-0.0166 U	0.105 U	0.024 U
Uranium-235 (pCi/l)	-0.0137 U	0.0253 U	0.0801 U		0.03 U	-0.0189 U	0.0516 UJ
Uranium-235/236 (pCi/l)				0.04 U			
Uranium-238 (Filtered) (pCi/l)	0.5 J	0.338 J	0.446 J		0.312 U	0.142 U	0.736 J
Uranium-238 (pCi/l)	0.357 J	0.183 U	0.659 J	0.3	0.269 J	0.0991 U	0.785 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	6.11 U	0 U	11.5 U		7.54 U	0 U	13.9 U
Actinium-228 (pCi/l)	0 U	18.9 U	15.9 U		3.3 U	7.11 U	8.98 U
Cesium-137 (Filtered) (pCi/l)	1.51 U	1.79 U	-1.54 U		1.54 U	-0.514 U	-0.697 U
Cesium-137 (pCi/l)	-0.643 U	1.56 U	1.22 U		-0.198 U	1.77 U	-1.16 U
Cobalt-60 (Filtered) (pCi/l)	1.26 U	-0.982 U	-2.59 U		0.211 U	0.0479 U	0.0592 U
Cobalt-60 (pCi/l)	-0.787 U	-2.36 U	0.205 U		0.793 U	-1.75 U	0.929 U
Potassium-40 (Filtered) (pCi/l)	18 U	67 U	52 U		18.6 U	41.1 U	16.6 U
Potassium-40 (pCi/l)	39 J	35.8 U	24.6 U		25.2 U	37 U	41.1 U
Protactinium-231 (Filtered) (pCi/l)	-51.2 U	36.1 U	28.6 U		-22.1 U	69 U	12.9 U
Protactinium-231 (pCi/l)	60.3 U	79.5 U	-69.4 U		2.71 U	3.41 U	-68.4 U
Thorium-234 (Filtered) (pCi/l)	0 U	137 U	154 U		66.8 U	98.7 U	87.1 U
Thorium-234 (pCi/l)	26.5 U	31.5 U	61.7 U		72.3 U	28.6 U	47 U
Uranium-235 (Filtered) (pCi/l)	-6.36 U	19.7 U	21.5 U		4.26 U	16.3 U	12.2 U
Uranium-235 (pCi/l)	27 R	2.83 U	2.7 U		1.07 U	2.73 U	-12.2 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0019**	**LUGW0020**	**LUGW0013**	**LUGW0021**	**LUGW0014**	**LUGW0022**	**LUGW0014D**
Collection Date	**08/18/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Metals							
Aluminum (Filtered) (ug/l)	12.4 U	18.4 B	32.4 B	12.4 U	29.8 B	14.3 B	31.5 B
Aluminum (ug/l)	178	2420	2960	304	220	1650	307
Antimony (Filtered) (ug/l)	2.5 U	2.5 U	9.1 U	2.5 U	5.6 U	2.5 U	4.9 U
Antimony (ug/l)	2.5 U	2.5 U	4.9 U	2.5 U	5.7 U	2.5 U	7.3 U
Arsenic (Filtered) (ug/l)	3 U	3 U	8 U	3 U	8 U	3 U	8 U
Arsenic (ug/l)	3 U	4.7 B	8 U	3 U	8 U	3 U	8 U
Barium (Filtered) (ug/l)	14.4	27.4	93.1	92.7	58.8	52.9	61.2
Barium (ug/l)	15	43.1	105	95.7	62.1	63.7	62
Beryllium (Filtered) (ug/l)	0.13 U	0.13 U	0.27 U	0.13 U	0.27 U	0.13 U	0.27 U
Beryllium (ug/l)	0.13 U	0.2 B	0.27 U	0.13 U	0.27 U	0.13 U	0.27 U
Cadmium (Filtered) (ug/l)	1.1 U	1.1 U	2.3 U	1.1 U	2.3 U	1.1 U	2.3 U
Cadmium (ug/l)	1.1 U	1.1 U	2.3 U	1.1 U	2.3 U	1.1 U	2.3 U
Calcium (Filtered) (ug/l)	64000	72400	49700	43600	64000	61400	61900
Calcium (ug/l)	65400	119000	55900	54600	65900	71900	63400
Chromium (Filtered) (ug/l)	0.7 U	0.7 U	1.4 U	0.7 U	1.4 U	0.7 U	1.4 U
Chromium (ug/l)	0.7 U	5.7	1.5 B	0.7 U	22	2.4 B	1.4 U
Cobalt (Filtered) (ug/l)	0.82 U	0.82 U	1.6 U	0.82 U	1.6 U	0.82 U	1.6 U
Cobalt (ug/l)	0.82 U	1.2 B	1.6 U	0.82 U	1.6 U	0.82 U	1.6 U
Copper (Filtered) (ug/l)	19.9	3 B	2.8 B	2.4 B	1.5 U	8.1	1.6 B
Copper (ug/l)	5.5	5.6	1.5 B	3.4 B	1.7 B	5.5	1.8 B
Iron (Filtered) (ug/l)	2.5 U	2.5 U	309	135	934	705	964
Iron (ug/l)	135	4330	910	512	1310	2840	1380
Lead (Filtered) (ug/l)	1.8 B	1.5 U	3 U	1.5 U	3 U	1.5 U	3 U
Lead (ug/l)	2.5 B	5.1	4.3 B	2.8 B	3 U	1.5 U	3 U
Magnesium (Filtered) (ug/l)	27900	41900	37800	35200	35600	32100	33600
Magnesium (ug/l)	28500	72700	43200	43700	36200	36500	34000
Manganese (Filtered) (ug/l)	9.5	11.9	20.8	10.2	80.8	42.7	82.9
Manganese (ug/l)	10.1	81.3	41.1	18.5	93.6	86.8	93.2
Mercury (Filtered) (ug/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Mercury (ug/l)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel (Filtered) (ug/l)	3.8 B	1.1 U	2.2 U	1.1 U	2.2 U	1.1 U	2.2 U
Nickel (ug/l)	1.9 B	5.5 B	2.2 U	1.5 B	4.1 B	3.5 B	2.3 B
Phosphorus (Filtered) (ug/l)	15 U	15 U	194	25.6 B	192	15 U	58.6
Phosphorus (ug/l)	15 U	15 U	146	15 U	101	22.9 B	67.7
Potassium (Filtered) (ug/l)	719	2210	1690	1900	1570	1310	1590

Station	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0019**	**LUGW0020**	**LUGW0013**	**LUGW0021**	**LUGW0014**	**LUGW0022**	**LUGW0014D**
Collection Date	**08/18/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potassium (ug/l)	783	3010	1780	2130	1680	1920	1700
Selenium (Filtered) (ug/l)	2.4 U	2.4 U	5 U	2.4 U	5 U	2.4 U	5 U
Selenium (ug/l)	2.4 U	2.4 U	5 U	2.4 U	5 U	2.4 U	5 U
Silver (Filtered) (ug/l)	2 U	2 U	1.7 U	2 U	1.7 U	2 U	1.7 U
Silver (ug/l)	2 U	2.2 B	1.7 U	2 U	1.7 U	2 U	1.7 U
Sodium (Filtered) (ug/l)	6200	9380	14100	12700	9720	8020	8830
Sodium (ug/l)	5850	10800	14300	14000	9100	8140	8770
Thallium (Filtered) (ug/l)	4 U	4 U	7.9 U	4.5 B	7.9 U	4 U	7.9 U
Thallium (ug/l)	4 U	5.2 B	7.9 U	4 U	7.9 U	6.1 B	7.9 U
Vanadium (Filtered) (ug/l)	0.67 U	0.67 U	1.3 U	0.67 U	1.3 U	0.67 U	1.3 U
Vanadium (ug/l)	0.67 U	6.3 B	1.3 U	0.67 U	1.3 U	3.4 B	1.9 B
Zinc (Filtered) (ug/l)	10.2	3.9 B	5.2 U	13.4	5.2 U	13.9	5.2 U
Zinc (ug/l)	10.2	88.8	5.2 U	6.4	5.2 U	11	5.2 U
Indicator Parameters							
Fluoride (mg/l)			1.21		1.24		1.21
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)			0.14		0.18		0.17
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	0.207 J	1.52 J	0.543 U	0.861 U	1.48 J	0.905 U	4.45 J
Gross Alpha (pCi/l)	2.17 U	3.13 J	1.57 U	0.674 U	3.2 J	1.67 J	2.38 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	0.192 U	3.43 J	2.4 J	2.29 J	1.36 U	0.788 U	4.39 J
Nonvolatile Beta (pCi/l)	0.744 U	3.03 J	1.87 U	1.69 U	3.43 J	2.72 J	2.89 J
Radium-226 (Filtered) (pCi/l)	2.63	0.448 U	1.12	0.918 J	1.16	1.16	0.717 J
Radium-226 (pCi/l)	1.86	1.65	0.532 J	1.26	0.756 J	1.31	0.999 J
Radium-228 (Filtered) (pCi/l)	0.326 U	0.701 U	1.3	0.32 U	0.561 U	0.164 U	0.267 U
Radium-228 (pCi/l)	0.325 U	0.648 U	0.611 U	-0.217 U	0.705 U	1.57	0.286 U
Weight of Sample, A&B (Filtered) (mg)	46.2	49.4	51.8	52.6	55.4	59.2	55.7
Weight of Sample, A&B (mg)	44.8	90.9	59.5	62.3	64.5	66.4	54.9
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0 U	-0.0138 U	-0.0276 U	0.0641 U	0.0655 U	-0.0083 U	0.0415 U
Actinium-227 (pCi/l)	0.207 U	-0.0188 U	0.35 J	0.0421 U	0.351 J	-0.0418 U	0.09 U
Thorium-228 (Filtered) (pCi/l)	-0.0091 U	0.07 U	0.117 U	0.0024 U	0.0544 U	0.142 U	0.148 J
Thorium-228 (pCi/l)	0.276 U	0.306 U	0.276 J	0.108 U	0.29 U	0.152 U	0.127 U
Thorium-230 (Filtered) (pCi/l)	0.66 J	0.471 J	-0.0214 U	0.322 J	0.0085 U	0.986 J	0.0492 U
Thorium-230 (pCi/l)	0.339 J	0.0827 U	0.142 J	14.7	0.212 J	0.234 U	0.0424 U

Station	**IA09-BMW-11(I)**	**IA09-BMW-12(S)**	**IA09-BMW-15(I)**	**IA09-BMW-15(I)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**	**IA09-BMW-16(S)**
Sample No	**LUGW0019**	**LUGW0020**	**LUGW0013**	**LUGW0021**	**LUGW0014**	**LUGW0022**	**LUGW0014D**
Collection Date	**08/18/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**	**08/18/98**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							**LUGW9189**
Northing	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Easting	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Thorium-232 (Filtered) (pCi/l)	0.0484 U	-0.0141 U	0 U	0 U	0 U	-0.0062 U	0.0063 U
Thorium-232 (pCi/l)	0.111 U	0.0827 U	0.0448 U	0.0569 U	0.0265 U	-0.0096 U	-0.0072 U
Uranium-233/234 (Filtered) (pCi/l)	0.999 J	0.53 J	0.0667 U	0.0802 U	0.174 U	0.344 J	0.193 U
Uranium-233/234 (pCi/l)	1.62	1.19	0.105 J	0.615 J	0.174 UJ	0.169 U	0.243 J
Uranium-235 (Filtered) (pCi/l)	0.0334 U	0.0313 U	0 U	-0.028 U	0.0398 U	0.0363 U	0 U
Uranium-235 (pCi/l)	0.118 U	-0.0071 U	0.0395 U	0.0635 U	0.0582 UJ	0.0286 U	0.0134 U
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	0.932 J	0.998 J	0.146 U	0.0988 U	0.0764 U	-0.0174 U	0.113 U
Uranium-238 (pCi/l)	1.4	0.976 J	0.197 J	0.125 U	0.232 J	0.142 U	0.0538 U
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	11.7 U	1.9 U	8.31 U	11.1 U	4.88 U	13.4 U	10.8 U
Actinium-228 (pCi/l)	16.3 U	15.5 U	2.35 U	17 U	7.61 U	10.5 U	7.8 U
Cesium-137 (Filtered) (pCi/l)	1.31 U	-0.226 U	0.149 U	-2.34 U	0.617 U	-0.24 U	0.501 U
Cesium-137 (pCi/l)	-1.16 U	0.432 U	0.0057 U	0.0083 U	5.29 J	0 U	1.55 U
Cobalt-60 (Filtered) (pCi/l)	0.906 U	-1.1 U	1.52 U	-1.21 U	-0.292 U	2.1 U	1.63 U
Cobalt-60 (pCi/l)	-1.79 U	4.13 U	-0.496 U	1.12 U	0.189 U	2.16 U	1.78 U
Potassium-40 (Filtered) (pCi/l)	55.8 U	34.9 U	31.8 J	16.2 U	24.9 U	0.726 U	12.1 U
Potassium-40 (pCi/l)	65.6 U	63.3 U	37.5 U	3.05 U	11.7 U	0 U	19.3 U
Protactinium-231 (Filtered) (pCi/l)	60.3 U	-44.5 U	-25.2 U	105 U	51.2 U	-59.6 U	-35 U
Protactinium-231 (pCi/l)	-93.7 U	-82.6 U	-21.2 U	11.1 U	-15.2 U	64.8 U	81 U
Thorium-234 (Filtered) (pCi/l)	0 U	96.5 U	96.4 U	131 U	3.78 U	35.6 U	88.1 U
Thorium-234 (pCi/l)	56.1 U	0 U	84.9 U	0 U	0 U	0 U	83.5 U
Uranium-235 (Filtered) (pCi/l)	7.63 U	9.05 U	16.5 U	19.1 U	5.21 U	8.97 U	3.64 U
Uranium-235 (pCi/l)	3.29 U	-1.95 U	5.38 U	12.8 U	4.84 U	4.06 U	0.376 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**
Sample No	**LUGW0053**	**LUGW0090**	**LUGW0131**	**LUGW0144**	**LUGW0056**	**LUGW0081**	**LUGW0132**	**LUGW0145**
Collection Date	**07/16/98**	**04/08/99**	**07/21/99**	**10/14/99**	**07/29/98**	**10/28/98**	**07/21/99**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199430**	**199430**	**199430**	**199430**	**199316**	**199316**	**199316**	**199316**
Easting	**517223**	**517223**	**517223**	**517223**	**517063**	**517063**	**517063**	**517063**
Metals								
Aluminum (Filtered) (ug/l)								
Aluminum (ug/l)								
Antimony (Filtered) (ug/l)								
Antimony (ug/l)								
Arsenic (Filtered) (ug/l)								
Arsenic (ug/l)	3 U	2.7 U	2.7 U	2.7 U	8.6	4 U	2.7 U	2.7 U
Barium (Filtered) (ug/l)								
Barium (ug/l)	50.1	46.1	47.4	53.6	66.9	62.3	55.2	64.3
Beryllium (Filtered) (ug/l)								
Beryllium (ug/l)	0.19 U	2	0.07999 U	0.18999 J	7.7	0.13 U	0.07999 U	0.12999 J
Cadmium (Filtered) (ug/l)								
Cadmium (ug/l)								
Calcium (Filtered) (ug/l)								
Calcium (ug/l)								
Chromium (Filtered) (ug/l)								
Chromium (ug/l)								
Cobalt (Filtered) (ug/l)								
Cobalt (ug/l)								
Copper (Filtered) (ug/l)								
Copper (ug/l)								
Iron (Filtered) (ug/l)								
Iron (ug/l)								
Lead (Filtered) (ug/l)								
Lead (ug/l)	1.5 U	3.7	4.7 B	1.8 J	7.8	1.5 U	5.5	1.6 U
Magnesium (Filtered) (ug/l)								
Magnesium (ug/l)								
Manganese (Filtered) (ug/l)								
Manganese (ug/l)								
Mercury (Filtered) (ug/l)								
Mercury (ug/l)								
Nickel (Filtered) (ug/l)								
Nickel (ug/l)								
Phosphorus (Filtered) (ug/l)								
Phosphorus (ug/l)								
Potassium (Filtered) (ug/l)								

Station	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**
Sample No	**LUGW0053**	**LUGW0090**	**LUGW0131**	**LUGW0144**	**LUGW0056**	**LUGW0081**	**LUGW0132**	**LUGW0145**
Collection Date	**07/16/98**	**04/08/99**	**07/21/99**	**10/14/99**	**07/29/98**	**10/28/98**	**07/21/99**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199430**	**199430**	**199430**	**199430**	**199316**	**199316**	**199316**	**199316**
Easting	**517223**	**517223**	**517223**	**517223**	**517063**	**517063**	**517063**	**517063**
Potassium (ug/l)								
Selenium (Filtered) (ug/l)								
Selenium (ug/l)								
Silver (Filtered) (ug/l)								
Silver (ug/l)								
Sodium (Filtered) (ug/l)								
Sodium (ug/l)								
Thallium (Filtered) (ug/l)								
Thallium (ug/l)								
Vanadium (Filtered) (ug/l)								
Vanadium (ug/l)								
Zinc (Filtered) (ug/l)								
Zinc (ug/l)								
Indicator Parameters								
Fluoride (mg/l)	0.6	0.63	0.66699		0.43	0.424	0.462	
Nitrate/Nitrite (mg/l)								
Nitrogen, Ammonia (mg/l)		1.59	1.3				0.05999	
Radiological Parameters								
Gross Alpha (Filtered) (pCi/l)								
Gross Alpha (pCi/l)	2.17 J	1.83 U	1.29 U	1.21 U		1.84 J	1.71 J	4.17 J
Gross Beta (pCi/l)								
Nonvolatile Beta (Filtered) (pCi/l)								
Nonvolatile Beta (pCi/l)	4.07 J	5.49 J	6.01	1.91 U		2.41 J	1.89 J	2.68 J
Radium-226 (Filtered) (pCi/l)								
Radium-226 (pCi/l)	1.29	1.22	0.73799 J	3.01	1.66	1.53	1.85	2.41
Radium-228 (Filtered) (pCi/l)								
Radium-228 (pCi/l)	0.539 U	0.91 J	1.34 U	0.30099 U	-0.313 U	0.16 U	0.42599 U	0.68199 U
Weight of Sample, A&B (Filtered) (mg)								
Weight of Sample, A&B (mg)	94.7	81.2	79.5			64.1	65.3	
Radiological Parameters (AlphaSpec)								
Actinium-227 (Filtered) (pCi/l)								
Actinium-227 (pCi/l)	-0.0062 U	-0.01 U	-0.06369 U	0.0252 U	0.069 U	0.0379 U	-0.04659 U	0.0434 U
Thorium-228 (Filtered) (pCi/l)								
Thorium-228 (pCi/l)	0.285 J	0.35 J	0.05909 U	0.052 U	0.0945 U	0.288 U	-0.0216 U	0.02989 U
Thorium-230 (Filtered) (pCi/l)								
Thorium-230 (pCi/l)	0.0657 U	0.07 U	0.00173 U	0.02569 U	0.0767 U	0 U	-0.0152 U	0.03689 U

Station	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0001**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**
Sample No	**LUGW0053**	**LUGW0090**	**LUGW0131**	**LUGW0144**	**LUGW0056**	**LUGW0081**	**LUGW0132**	**LUGW0145**
Collection Date	**07/16/98**	**04/08/99**	**07/21/99**	**10/14/99**	**07/29/98**	**10/28/98**	**07/21/99**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199430**	**199430**	**199430**	**199430**	**199316**	**199316**	**199316**	**199316**
Easting	**517223**	**517223**	**517223**	**517223**	**517063**	**517063**	**517063**	**517063**
Thorium-232 (Filtered) (pCi/l)								
Thorium-232 (pCi/l)	0.0286 U	-0.03 U	0 U	0.0599 U	0 U	-0.0187 U	-0.00759 U	-0.00736 U
Uranium-233/234 (Filtered) (pCi/l)								
Uranium-233/234 (pCi/l)	0.114 U	0.95 J	0.03339 U	0.09749 U	0.139 J	0.289 J	0.15199 U	0.16599 U
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	0.0108 U	0 U	0.0218 U	0 U	-0.01 U	-0.0096 U	0.0186 U	0.02199 U
Uranium-235/236 (pCi/l)								
Uranium-238 (Filtered) (pCi/l)								
Uranium-238 (pCi/l)	0.0621 U	0.44 J	0.25099 J	0.03959 U	0.0834 U	0.14 U	0 U	0.0877 J
Radiological Parameters (GammaSpec)								
Actinium-227 (pCi/l)			-7.38 U	14.9 U			-8.52 U	6.02 U
Actinium-228 (Filtered) (pCi/l)								
Actinium-228 (pCi/l)	0 U	6.5 U	5.8 U	9.71 U	8.07 U	13.5 U	5.4 U	14.7 U
Cesium-137 (Filtered) (pCi/l)								
Cesium-137 (pCi/l)	2.31 U	0.37 U	-0.458 U	2.05 U	-0.335 U	-1.02 U	1.88 U	0.17299 U
Cobalt-60 (Filtered) (pCi/l)								
Cobalt-60 (pCi/l)	2.08 U	1.91 U	0.0957 U	0.412 U	0.141 U	1.48 U	0.0912 U	-0.36 U
Potassium-40 (Filtered) (pCi/l)								
Potassium-40 (pCi/l)	43.6 U	0 U	4.62 U	29.9 U	37.6 U	13.3 U	26.9 J	6.81 U
Protactinium-231 (Filtered) (pCi/l)								
Protactinium-231 (pCi/l)	-48.9 U	-6.54 U	-2.62 U	15.2 U	77 U	47.2 U	-36.2 U	-19 U
Thorium-234 (Filtered) (pCi/l)								
Thorium-234 (pCi/l)	35.9 U	132 U	11.3 U	5.48 U	183 J	88.8 U	55.7 U	90 U
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	-2.67 U	6.59 U	4.4 U	19.4 U	20.1 U	13.4 U	4.1 U	8.89 U
Wet Chemistry								
Fluoride (mg/l)				0.64899				0.469
Nitrogen, Ammonia (mg/l)				1.37				0.05 U

Station	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**
Sample No	**LUGW0081D**	**LUGW0132D**	**LUGW0145D**	**LUGW0059**	**LUGW0082**	**LUGW0133**	**LUGW0146**	**LUGW0059D**
Collection Date	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9193**	**LUGW9199**	**LUGW9200**					**LUGW9192**
Northing	**199316**	**199316**	**199316**	**200063**	**200063**	**200063**	**200063**	**200063**
Easting	**517063**	**517063**	**517063**	**517141**	**517141**	**517141**	**517141**	**517141**
Metals								
Aluminum (Filtered) (ug/l)								
Aluminum (ug/l)								
Antimony (Filtered) (ug/l)								
Antimony (ug/l)								
Arsenic (Filtered) (ug/l)								
Arsenic (ug/l)	4 U	2.7 U	2.7 U	3 U	4 U	2.7 U	2.7 U	3 U
Barium (Filtered) (ug/l)								
Barium (ug/l)	62.2	48.9	65	37.5	37.4	34	39.1	37.7
Beryllium (Filtered) (ug/l)								
Beryllium (ug/l)	0.13 U	0.07999 U	0.23 J	0.13 U	0.13 U	0.07999 U	0.15 J	0.13 U
Cadmium (Filtered) (ug/l)								
Cadmium (ug/l)								
Calcium (Filtered) (ug/l)								
Calcium (ug/l)								
Chromium (Filtered) (ug/l)								
Chromium (ug/l)								
Cobalt (Filtered) (ug/l)								
Cobalt (ug/l)								
Copper (Filtered) (ug/l)								
Copper (ug/l)								
Iron (Filtered) (ug/l)								
Iron (ug/l)								
Lead (Filtered) (ug/l)								
Lead (ug/l)	1.5 U	2.5 B	1.6 U	3 B	1.6 B	3.2 B	1.6 U	1.5 B
Magnesium (Filtered) (ug/l)								
Magnesium (ug/l)								
Manganese (Filtered) (ug/l)								
Manganese (ug/l)								
Mercury (Filtered) (ug/l)								
Mercury (ug/l)								
Nickel (Filtered) (ug/l)								
Nickel (ug/l)								
Phosphorus (Filtered) (ug/l)								
Phosphorus (ug/l)								
Potassium (Filtered) (ug/l)								

Station	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**
Sample No	**LUGW0081D**	**LUGW0132D**	**LUGW0145D**	**LUGW0059**	**LUGW0082**	**LUGW0133**	**LUGW0146**	**LUGW0059D**
Collection Date	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9193**	**LUGW9199**	**LUGW9200**					**LUGW9192**
Northing	**199316**	**199316**	**199316**	**200063**	**200063**	**200063**	**200063**	**200063**
Easting	**517063**	**517063**	**517063**	**517141**	**517141**	**517141**	**517141**	**517141**
Potassium (ug/l)								
Selenium (Filtered) (ug/l)								
Selenium (ug/l)								
Silver (Filtered) (ug/l)								
Silver (ug/l)								
Sodium (Filtered) (ug/l)								
Sodium (ug/l)								
Thallium (Filtered) (ug/l)								
Thallium (ug/l)								
Vanadium (Filtered) (ug/l)								
Vanadium (ug/l)								
Zinc (Filtered) (ug/l)								
Zinc (ug/l)								
Indicator Parameters								
Fluoride (mg/l)	0.424	0.46399		0.72	0.717	0.791		0.71
Nitrate/Nitrite (mg/l)								
Nitrogen, Ammonia (mg/l)		0.0241 U				0.18999		
Radiological Parameters								
Gross Alpha (Filtered) (pCi/l)								
Gross Alpha (pCi/l)	2.41 J	2.26 J	1.32 J		1.98 J	2.84 J	1.55 U	
Gross Beta (pCi/l)								
Nonvolatile Beta (Filtered) (pCi/l)								
Nonvolatile Beta (pCi/l)	2.24 J	2.26 J	2.42 J		2.21 J	3.59 J	0.74699 U	
Radium-226 (Filtered) (pCi/l)								
Radium-226 (pCi/l)	1.21	1.71	1.73	1.64	1.35	0.88499 U	1.67	0.885 J
Radium-228 (Filtered) (pCi/l)								
Radium-228 (pCi/l)	0.708 U	0.57599 U	1.11 U	0.601 U	0.163 U	0.279 U	0.78799 U	1.11 U
Weight of Sample, A&B (Filtered) (mg)								
Weight of Sample, A&B (mg)	64	64.9			94.1	32.6		
Radiological Parameters (AlphaSpec)								
Actinium-227 (Filtered) (pCi/l)								
Actinium-227 (pCi/l)	0.0896 U	0.02449 U	0.02459 U	-0.0271 U	-0.0505 U	0.0855 U	0.09799 U	-0.0872 U
Thorium-228 (Filtered) (pCi/l)								
Thorium-228 (pCi/l)	0.413 J	0.02109 U	0.04239 U	0.133 U	-0.0165 U	-0.08079 U	-0.027 U	0.199 J
Thorium-230 (Filtered) (pCi/l)								
Thorium-230 (pCi/l)	0.102 U	0.192 U	0.05849 U	0.669 J	-0.0625 U	-0.0546 U	0.0533 J	0.216 J

Station	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**	**IA09-GW0003**
Sample No	**LUGW0081D**	**LUGW0132D**	**LUGW0145D**	**LUGW0059**	**LUGW0082**	**LUGW0133**	**LUGW0146**	**LUGW0059D**
Collection Date	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**	**10/28/98**	**07/21/99**	**10/14/99**	**08/10/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID	**LUGW9193**	**LUGW9199**	**LUGW9200**					**LUGW9192**
Northing	**199316**	**199316**	**199316**	**200063**	**200063**	**200063**	**200063**	**200063**
Easting	**517063**	**517063**	**517063**	**517141**	**517141**	**517141**	**517141**	**517141**
Thorium-232 (Filtered) (pCi/l)								
Thorium-232 (pCi/l)	-0.0074 U	0.0306 U	-0.03339 U	0 U	0.0728 U	-0.0273 U	0.01329 U	-0.0111 U
Uranium-233/234 (Filtered) (pCi/l)								
Uranium-233/234 (pCi/l)	0.268 J	0.186 U	0.18199 U	0.339 J	0.694 J	0.517 J	0.425 J	0.609 J
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	0.0769 U	0.02979 U	0.0452 U	0.0091 U	0 U	0.067 U	0.0434 U	0.0715 U
Uranium-235/236 (pCi/l)								
Uranium-238 (Filtered) (pCi/l)								
Uranium-238 (pCi/l)	0.0874 U	0.06889 U	0.07029 U	0.18 U	0.51 J	0.12099 U	0.33 J	0.213 J
Radiological Parameters (GammaSpec)								
Actinium-227 (pCi/l)		-6.74 U	-11 U			3.59 U	4.55 U	
Actinium-228 (Filtered) (pCi/l)								
Actinium-228 (pCi/l)	12 U	6.74 U	6.88 U	10.1 U	8.05 U	0 U	7.18 U	3.98 U
Cesium-137 (Filtered) (pCi/l)								
Cesium-137 (pCi/l)	-1.31 U	-0.754 U	1.13 U	1.06 U	0 U	-0.0568 U	1.26 U	0.329 U
Cobalt-60 (Filtered) (pCi/l)								
Cobalt-60 (pCi/l)	-1.12 U	-0.12399 U	0.27099 U	0.953 U	1.77 U	-0.55 U	1.17 U	0.95 U
Potassium-40 (Filtered) (pCi/l)								
Potassium-40 (pCi/l)	0.68 U	31.1 U	31.3 U	58.5 J	0 U	47.5 U	33.5 J	58.6 U
Protactinium-231 (Filtered) (pCi/l)								
Protactinium-231 (pCi/l)	-37 U	11.8 U	-30.8 U	-5.22 U	5.65 U	-6.66 U	-4.74 U	-16.7 U
Thorium-234 (Filtered) (pCi/l)								
Thorium-234 (pCi/l)	0 U	36.8 U	0 U	30.8 U	0 U	57.6 U	32.3 U	0 U
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	10.5 U	3.27 U	8.58 U	0 U	0 U	-6.77 U	4.14 U	5.51 U
Wet Chemistry								
Fluoride (mg/l)			0.47499				0.78799	
Nitrogen, Ammonia (mg/l)			0.05 U				0.10999	

Station	**IA09-GW0004**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-06(S)**	**IA09-MW-18(I)**	**IA09-MW-18(I)**	**IA09-MW-18(I)**
Sample No	**LUGW0061**	**LUGW9694**	**LUGW9697**	**LUGW9686**	**LUGW0041**	**LUGW0105**	**LUGW9692**
Collection Date	**08/27/98**	**08/27/98**	**04/07/99**	**07/15/98**	**08/20/98**	**04/09/99**	**08/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199819**	**199819**	**199583**	**199433**	**199522**	**199522**	**199522**
Easting	**517179**	**517179**	**517402**	**517609**	**517165**	**517165**	**517165**
Metals							
Aluminum (Filtered) (ug/l)							
Aluminum (ug/l)					12.4 U		
Antimony (Filtered) (ug/l)							
Antimony (ug/l)					2.5 U		
Arsenic (Filtered) (ug/l)					3 U	9 U	
Arsenic (ug/l)	3 U				3 U	7.2 U	
Barium (Filtered) (ug/l)					59.2	51.1	
Barium (ug/l)	49.1				56.3	51.2	
Beryllium (Filtered) (ug/l)					2.4	0.14 U	
Beryllium (ug/l)	0.13 U				0.13 U	0.14 U	
Cadmium (Filtered) (ug/l)							
Cadmium (ug/l)					1.1 U		
Calcium (Filtered) (ug/l)							
Calcium (ug/l)					116000		
Chromium (Filtered) (ug/l)							
Chromium (ug/l)					0.94 B		
Cobalt (Filtered) (ug/l)							
Cobalt (ug/l)					0.82 U		
Copper (Filtered) (ug/l)							
Copper (ug/l)					0.74 U		
Iron (Filtered) (ug/l)							
Iron (ug/l)					392		
Lead (Filtered) (ug/l)					4.4 B	2.7 B	
Lead (ug/l)	5.6				2.3 B	3.3	
Magnesium (Filtered) (ug/l)							
Magnesium (ug/l)					50600		
Manganese (Filtered) (ug/l)							
Manganese (ug/l)					24.5		
Mercury (Filtered) (ug/l)							
Mercury (ug/l)							
Nickel (Filtered) (ug/l)							
Nickel (ug/l)					11.8		
Phosphorus (Filtered) (ug/l)							
Phosphorus (ug/l)					1.5 U		
Potassium (Filtered) (ug/l)							

Station	IA09-GW0004	IA09-GW0004	IA09-MW-01(I)	IA09-MW-06(S)	IA09-MW-18(I)	IA09-MW-18(I)	IA09-MW-18(I)
Sample No	**LUGW0061**	**LUGW9694**	**LUGW9697**	**LUGW9686**	**LUGW0041**	**LUGW0105**	**LUGW9692**
Collection Date	**08/27/98**	**08/27/98**	**04/07/99**	**07/15/98**	**08/20/98**	**04/09/99**	**08/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199819**	**199819**	**199583**	**199433**	**199522**	**199522**	**199522**
Easting	**517179**	**517179**	**517402**	**517609**	**517165**	**517165**	**517165**
Potassium (ug/l)					3490		
Selenium (Filtered) (ug/l)							
Selenium (ug/l)					2.4 U		
Silver (Filtered) (ug/l)							
Silver (ug/l)					2 U		
Sodium (Filtered) (ug/l)							
Sodium (ug/l)					26400		
Thallium (Filtered) (ug/l)							
Thallium (ug/l)					4 U		
Vanadium (Filtered) (ug/l)							
Vanadium (ug/l)					0.67 U		
Zinc (Filtered) (ug/l)							
Zinc (ug/l)					5.4		
Indicator Parameters							
Fluoride (mg/l)	0.44				0.51	0.41	
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)						1.02	
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)					1.29 J		
Gross Alpha (pCi/l)	2.31 J	7 U		26.8	1.71 J	21.2	6.5 U
Gross Beta (pCi/l)		9		24.4			7.2
Nonvolatile Beta (Filtered) (pCi/l)					1.7 J		
Nonvolatile Beta (pCi/l)	5.04				3.68 J	15.9	
Radium-226 (Filtered) (pCi/l)					0.96 J		
Radium-226 (pCi/l)	1.19	1.1 U	6.4	1 U	1.11	1.03 U	1.1 U
Radium-228 (Filtered) (pCi/l)					0.0314 U		
Radium-228 (pCi/l)	0.456 U	1.9 U	6.4	1.8 U	-0.109 U	0.17 U	1.9 U
Weight of Sample, A&B (Filtered) (mg)					92.4		
Weight of Sample, A&B (mg)	98.4				88.9	52.8	
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)					0.149 U		
Actinium-227 (pCi/l)	0.0584 U	0.11 U		0.08 U	0.0171 U	0.03 U	0.11 U
Thorium-228 (Filtered) (pCi/l)					0.171 U		
Thorium-228 (pCi/l)	0.209 U	1.2 U		1.2 U	0.221 U	0.34 J	1.2 U
Thorium-230 (Filtered) (pCi/l)					0.835 J		
Thorium-230 (pCi/l)	0.0627 U	0.06 U		0.04 U	0.251 J	0.13 J	0.06 U

Station	**IA09-GW0004**	**IA09-GW0004**	**IA09-MW-01(I)**	**IA09-MW-06(S)**	**IA09-MW-18(I)**	**IA09-MW-18(I)**	**IA09-MW-18(I)**
Sample No	**LUGW0061**	**LUGW9694**	**LUGW9697**	**LUGW9686**	**LUGW0041**	**LUGW0105**	**LUGW9692**
Collection Date	**08/27/98**	**08/27/98**	**04/07/99**	**07/15/98**	**08/20/98**	**04/09/99**	**08/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199819**	**199819**	**199583**	**199433**	**199522**	**199522**	**199522**
Easting	**517179**	**517179**	**517402**	**517609**	**517165**	**517165**	**517165**
Thorium-232 (Filtered) (pCi/l)					0.0337 U		
Thorium-232 (pCi/l)	-0.0171 U	0.04 U		0.03 U	0.0313 U	0.01 U	0.04 U
Uranium-233/234 (Filtered) (pCi/l)					0.876 J		
Uranium-233/234 (pCi/l)	0.97 J	1.17		1.38	0.656 U	0.64 J	0.77
Uranium-235 (Filtered) (pCi/l)					0.113 U		
Uranium-235 (pCi/l)	0.0161 U				0.232 U	0.1 U	
Uranium-235/236 (pCi/l)		0.03 U		0.04 U			0.03 U
Uranium-238 (Filtered) (pCi/l)					0.501 J		
Uranium-238 (pCi/l)	0.77 J	0.62		1.12	0.496 J	0.49 J	0.54
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)					20.1 U		
Actinium-228 (pCi/l)	15.6 U				12.4 U	3.04 U	
Cesium-137 (Filtered) (pCi/l)					-1.4 U		
Cesium-137 (pCi/l)	0.571 U				0 U	-0.73 U	
Cobalt-60 (Filtered) (pCi/l)					0.894 U		
Cobalt-60 (pCi/l)	0.907 U				0.285 U	-1.05 U	
Potassium-40 (Filtered) (pCi/l)					57.7 U		
Potassium-40 (pCi/l)	12.5 U				0 U	7.21 U	
Protactinium-231 (Filtered) (pCi/l)					97.8 U		
Protactinium-231 (pCi/l)	-101 U				-17.1 U	50 U	
Thorium-234 (Filtered) (pCi/l)					76.2 U		
Thorium-234 (pCi/l)	25.8 U				10.1 U	23.3 U	
Uranium-235 (Filtered) (pCi/l)					10.2 U		
Uranium-235 (pCi/l)	12.2 U				7.27 U	-0.87 U	
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	IA09-MW-21(I)	IA09-MW-22(I)	IA09-MW-23(S)	IA09-MW-24(S)	IA09-MW-24(S)	IA09-MW-24(S)	IA09-MW-24(S)
Sample No	LUGW0108	LUGW0042	LUGW0110	LUGW0111	LUGW0040D	LUGW0111D	LUGW9691
Collection Date	04/09/99	08/20/98	04/13/99	04/09/99	08/20/98	04/09/99	08/20/98
Depth (ft)	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0	0.0-0.0
Duplicate ID					LUGW9191	LUGW9197	
Northing	199496	199583	199291	199349	199349	199349	199349
Easting	517367	517473	517477	517339	517339	517339	517339
Metals							
Aluminum (Filtered) (ug/l)					124 U		
Aluminum (ug/l)					12.4 U		
Antimony (Filtered) (ug/l)					2.5 U		
Antimony (ug/l)					2.8 B		
Arsenic (Filtered) (ug/l)	5.5 U	3 U	7.1 J	9.4 U	4.6 B	9.4 U	
Arsenic (ug/l)	2.7 U	3 U	2.7 U	3.5 U	3 U	2.7 U	
Barium (Filtered) (ug/l)	12.6	36.8	28.8	15.2	15.9	19.5	
Barium (ug/l)	13.2	37.2	25.6	16.2	17.6	27.4	
Beryllium (Filtered) (ug/l)	0.14 U	0.13 U	0.14 U	0.17 B	0.21 B	0.14 U	
Beryllium (ug/l)	0.14 U	0.13 U	0.14 U	0.26 B	0.31 B	0.29 B	
Cadmium (Filtered) (ug/l)					1.1 U		
Cadmium (ug/l)					1.1 U		
Calcium (Filtered) (ug/l)					35500		
Calcium (ug/l)					38200		
Chromium (Filtered) (ug/l)					1.6 B		
Chromium (ug/l)					2.5 B		
Cobalt (Filtered) (ug/l)					1.3 B		
Cobalt (ug/l)					1.9 B		
Copper (Filtered) (ug/l)					3.5 B		
Copper (ug/l)					3.6 B		
Iron (Filtered) (ug/l)					28.8 B		
Iron (ug/l)					159		
Lead (Filtered) (ug/l)	39.5	5.3	1.3 U	15.9	8.8	15.6	
Lead (ug/l)	42.6	1.8 B	1.3 U	15.4	8.2	18.2	
Magnesium (Filtered) (ug/l)					44500		
Magnesium (ug/l)					46800		
Manganese (Filtered) (ug/l)					12.7		
Manganese (ug/l)					17.8		
Mercury (Filtered) (ug/l)					0.1 U		
Mercury (ug/l)					0.1 U		
Nickel (Filtered) (ug/l)					68.7		
Nickel (ug/l)					71.1		
Phosphorus (Filtered) (ug/l)					25.1 B		
Phosphorus (ug/l)					84.2		
Potassium (Filtered) (ug/l)					5280		

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**
Sample No	**LUGW0108**	**LUGW0042**	**LUGW0110**	**LUGW0111**	**LUGW0040D**	**LUGW0111D**	**LUGW9691**
Collection Date	**04/09/99**	**08/20/98**	**04/13/99**	**04/09/99**	**08/20/98**	**04/09/99**	**08/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					**LUGW9191**	**LUGW9197**	
Northing	**199496**	**199583**	**199291**	**199349**	**199349**	**199349**	**199349**
Easting	**517367**	**517473**	**517477**	**517339**	**517339**	**517339**	**517339**
Potassium (ug/l)					5560		
Selenium (Filtered) (ug/l)					2.4 U		
Selenium (ug/l)					2.4 U		
Silver (Filtered) (ug/l)					2 U		
Silver (ug/l)					2 U		
Sodium (Filtered) (ug/l)					614000		
Sodium (ug/l)					630000		
Thallium (Filtered) (ug/l)					4 U		
Thallium (ug/l)					4 U		
Vanadium (Filtered) (ug/l)					0.67 U		
Vanadium (ug/l)					1.6 B		
Zinc (Filtered) (ug/l)					11.5		
Zinc (ug/l)					12.7		
Indicator Parameters							
Fluoride (mg/l)	0.56	1.03	0.68	2.25		2.29	
Nitrate/Nitrite (mg/l)					0.61		
Nitrogen, Ammonia (mg/l)	1.88		0.01 U	0.89	1.25	0.91	
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)		8.12			28.5		
Gross Alpha (pCi/l)	5.72 U	0.603 U	4.38 J	5.44 U		13.3	183
Gross Beta (pCi/l)							125
Nonvolatile Beta (Filtered) (pCi/l)		8.02			21.8		
Nonvolatile Beta (pCi/l)	2.28 U	3.31 J	2.58 U	8.7 U		15.7	
Radium-226 (Filtered) (pCi/l)		1.4			0.699 U		
Radium-226 (pCi/l)	0.71 U	0.854 J	0.27 U	0.34 U		0.58 U	1 U
Radium-228 (Filtered) (pCi/l)		0.128 U			0.243 U		
Radium-228 (pCi/l)	0.71 U	0.763 U	-0.05 U	-1.29 U		0.44 U	1.8 U
Weight of Sample, A&B (Filtered) (mg)		90.3			99.7		
Weight of Sample, A&B (mg)	55.9	96.9	99.7	65.6		68	
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)		-0.0292 U			0.326 U		
Actinium-227 (pCi/l)	0.02 U	-0.136 U	0.04 U	0 U		-0.02 U	0.1 U
Thorium-228 (Filtered) (pCi/l)		0.0685 U			0.101 U		
Thorium-228 (pCi/l)	0.32 J	0.0013 U	0.56 J	0.52 J		0.44 J	1.1 U
Thorium-230 (Filtered) (pCi/l)		0.346 J			0.131 U		
Thorium-230 (pCi/l)	0.08 U	0.323 J	0.15 J	0.21 U		0.11 J	0.05

Station	**IA09-MW-21(I)**	**IA09-MW-22(I)**	**IA09-MW-23(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**	**IA09-MW-24(S)**
Sample No	**LUGW0108**	**LUGW0042**	**LUGW0110**	**LUGW0111**	**LUGW0040D**	**LUGW0111D**	**LUGW9691**
Collection Date	**04/09/99**	**08/20/98**	**04/13/99**	**04/09/99**	**08/20/98**	**04/09/99**	**08/20/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID					**LUGW9191**	**LUGW9197**	
Northing	**199496**	**199583**	**199291**	**199349**	**199349**	**199349**	**199349**
Easting	**517367**	**517473**	**517477**	**517339**	**517339**	**517339**	**517339**
Thorium-232 (Filtered) (pCi/l)		0 U			-0.0434 U		
Thorium-232 (pCi/l)	-0.01 U	0.0323 U	0.02 U	0.04 U		0.01 U	0.02 U
Uranium-233/234 (Filtered) (pCi/l)		0.906 J			85.6		
Uranium-233/234 (pCi/l)	6.25	0.678 J	3.43 J	129		124	91.4
Uranium-235 (Filtered) (pCi/l)		0.0535 U			3.81		
Uranium-235 (pCi/l)	0.18 J	0.127 U	0 U	6.39		5.58	
Uranium-235/236 (pCi/l)							3.8
Uranium-238 (Filtered) (pCi/l)		0.789 J			84.1		
Uranium-238 (pCi/l)	6.04	0.755 J	2.74 J	129		121	90.4
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)		9.94 U			7.25 U		
Actinium-228 (pCi/l)	0.59 U	13.1 U	4.78 U	4.08 U		7.65 U	
Cesium-137 (Filtered) (pCi/l)		2.87 U			1.8 U		
Cesium-137 (pCi/l)	-0.84 U	-0.48 U	2.67 U	0.03 U		-1.11 U	
Cobalt-60 (Filtered) (pCi/l)		-0.23 U			0.729 U		
Cobalt-60 (pCi/l)	1.33 U	0.527 U	0.17 U	0.88 U		0.7 U	
Potassium-40 (Filtered) (pCi/l)		43.5 U			86.1 U		
Potassium-40 (pCi/l)	22.3 U	64.5 U	52.37 U	14.1 U		3.29 U	
Protactinium-231 (Filtered) (pCi/l)		-4.6 U			-19.8 U		
Protactinium-231 (pCi/l)	0 U	-62.2 U	-10.17 U	41.2 U		-42 U	
Thorium-234 (Filtered) (pCi/l)		6.71 U			0 U		
Thorium-234 (pCi/l)	56.3 U	177 U	137.5 U	22.6 U		112 U	
Uranium-235 (Filtered) (pCi/l)		6.74 U			4.83 U		
Uranium-235 (pCi/l)	11.5 U	8.39 U	11.95 U	11 U		9.46 U	
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-MW-25(I)**	**IA09-MW-25(I)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**
Sample No	**LUGW0035**	**LUGW0112**	**LUGW0045**	**LUGW0046**	**LUGW9699**	**LUGW0023**	**LUGW0024**
Collection Date	**08/19/98**	**04/13/99**	**11/20/98**	**11/20/98**	**04/14/99**	**11/19/98**	**11/19/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199583**	**199583**	**199587**	**199290**	**199293**	**199593**	**199593**
Easting	**517256**	**517256**	**517402**	**517362**	**517360**	**517330**	**517327**
Metals							
Aluminum (Filtered) (ug/l)							
Aluminum (ug/l)						127	
Antimony (Filtered) (ug/l)							
Antimony (ug/l)						3.4 B	
Arsenic (Filtered) (ug/l)	3 U	2.7 U	4.3 B	4 U		4 U	4 U
Arsenic (ug/l)	3 U	2.7 U	4 U	4 U		4 U	4 U
Barium (Filtered) (ug/l)	71.1	153	95.9	41.6		74	93
Barium (ug/l)	77	153	99.9	44.6		82.6	93.1
Beryllium (Filtered) (ug/l)	0.13 U	0.14 U	0.13 U	0.13 U		0.13 U	0.13 U
Beryllium (ug/l)	0.15 B	0.14 U	0.37 U	0.13 U		0.13 U	0.13 U
Cadmium (Filtered) (ug/l)							
Cadmium (ug/l)						1.1 U	
Calcium (Filtered) (ug/l)							
Calcium (ug/l)						142000	
Chromium (Filtered) (ug/l)							
Chromium (ug/l)						0.79 B	
Cobalt (Filtered) (ug/l)							
Cobalt (ug/l)						0.82 U	
Copper (Filtered) (ug/l)							
Copper (ug/l)						1.5 B	
Iron (Filtered) (ug/l)							
Iron (ug/l)							
Lead (Filtered) (ug/l)	1.5 U	1.3 U	1.5 U	3.9		1.9 B	1.5 U
Lead (ug/l)	3.2 B	1.3 U	2.3 B	6.2		2.5 B	5.2
Magnesium (Filtered) (ug/l)							
Magnesium (ug/l)						62700	
Manganese (Filtered) (ug/l)							
Manganese (ug/l)						68	
Mercury (Filtered) (ug/l)							
Mercury (ug/l)							
Nickel (Filtered) (ug/l)							
Nickel (ug/l)						11.7	
Phosphorus (Filtered) (ug/l)							
Phosphorus (ug/l)							
Potassium (Filtered) (ug/l)							

Station	**IA09-MW-25(I)**	**IA09-MW-25(I)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**
Sample No	**LUGW0035**	**LUGW0112**	**LUGW0045**	**LUGW0046**	**LUGW9699**	**LUGW0023**	**LUGW0024**
Collection Date	**08/19/98**	**04/13/99**	**11/20/98**	**11/20/98**	**04/14/99**	**11/19/98**	**11/19/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199583**	**199583**	**199587**	**199290**	**199293**	**199593**	**199593**
Easting	**517256**	**517256**	**517402**	**517362**	**517360**	**517330**	**517327**
Potassium (ug/l)						3370	
Selenium (Filtered) (ug/l)							
Selenium (ug/l)						2.5 U	
Silver (Filtered) (ug/l)							
Silver (ug/l)						0.86 U	
Sodium (Filtered) (ug/l)							
Sodium (ug/l)						23500	
Thallium (Filtered) (ug/l)							
Thallium (ug/l)						4 U	
Vanadium (Filtered) (ug/l)							
Vanadium (ug/l)						0.9 B	
Zinc (Filtered) (ug/l)							
Zinc (ug/l)							
Indicator Parameters							
Fluoride (mg/l)	0.29	0.37	0.31	0.441		0.263	0.254
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)		0.13	0 U	5.45		0.7	0.08
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	1.87 J		2.86 J	5.97		2.2 U	1.99 U
Gross Alpha (pCi/l)	3.1 J	-0.26 U	3.1 J	5.14		3.06 J	2.55 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	3.57 J		1.09 U	6.81		4.09 J	2.92 U
Nonvolatile Beta (pCi/l)	6.64	3.93 J	1.48 U	6.16		4.68 J	3.36 J
Radium-226 (Filtered) (pCi/l)	1.35		1.2	2.38		0.9 J	0.583 J
Radium-226 (pCi/l)	1.46	1.75	0.963 J	1.98	9.9	2.33	3.66
Radium-228 (Filtered) (pCi/l)	1.21		0.82 U	0.839 U		0.0938 U	-0.298 U
Radium-228 (pCi/l)	0.535 U	0.94 U	0.618 U	0.892 U	5.6	0.554 U	-0.245 U
Weight of Sample, A&B (Filtered) (mg)	1.2		46.7	93.2		60.4	66.9
Weight of Sample, A&B (mg)	93.6	95.5	66.9	92.3		60.5	63.6
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	-0.0317 U		0.165 U	0.117 U		-0.0369 U	0.0196 U
Actinium-227 (pCi/l)	-0.037 U	-0.33 U	0.172 U	0.308 J		0.0097 U	0.0484 U
Thorium-228 (Filtered) (pCi/l)	0.0293 U		0.165 U	0.0918 U		0.108 U	0.095 U
Thorium-228 (pCi/l)	0.0691 U	0.35 U	0.142 U	0.209 J		0.159 U	0.159 U
Thorium-230 (Filtered) (pCi/l)	0.343 J		0.0373 U	0.0668 U		0.0399 U	0.0439 U
Thorium-230 (pCi/l)	0.142 U	0.13 U	0.0988 U	0.113 J		-0.0083 U	0.0204 U

Station	**IA09-MW-25(I)**	**IA09-MW-25(I)**	**IA09-MW-39(B)**	**IA09-MW-40(B)**	**IA09-MW-41(B)**	**IA09-OMW-27(I)**	**IA09-OMW-28(B)**
Sample No	**LUGW0035**	**LUGW0112**	**LUGW0045**	**LUGW0046**	**LUGW9699**	**LUGW0023**	**LUGW0024**
Collection Date	**08/19/98**	**04/13/99**	**11/20/98**	**11/20/98**	**04/14/99**	**11/19/98**	**11/19/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199583**	**199583**	**199587**	**199290**	**199293**	**199593**	**199593**
Easting	**517256**	**517256**	**517402**	**517362**	**517360**	**517330**	**517327**
Thorium-232 (Filtered) (pCi/l)	0.0857 U		-0.0045 U	0.0069 U		0.0137 U	0.0385 U
Thorium-232 (pCi/l)	-0.0071 U	0 U	0.0852 U	0.0609 U		0.0091 U	0.0159 U
Uranium-233/234 (Filtered) (pCi/l)	0.583 J		0.49 J	0.541 J		1.33	0.622 J
Uranium-233/234 (pCi/l)	1.13	0.81 J	0.615 J	0.687 J		0.99 J	0.6 J
Uranium-235 (Filtered) (pCi/l)	0 U		-0.0622 U	-0.0354 U		-0.0095 U	-0.0045 U
Uranium-235 (pCi/l)	0.0308 U	0.03 U	-0.0105 UJ	0.0175 UJ		0.0472 UJ	-0.0086 UJ
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	0.682 J		0.151 U	0.322 J		1.1	0.184 J
Uranium-238 (pCi/l)	1.07	0.36 U	0.394 J	0.285 J		0.517 J	0.0459 UJ
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	18.5 U		4.77 U	2.56 U		8.65 U	6.24 U
Actinium-228 (pCi/l)	1.9 U	7.14 U	2.03 U	2.53 U		10.1 U	2.51 U
Cesium-137 (Filtered) (pCi/l)	-0.823 U		0.846 U	1.29 U		0.295 U	1.77 U
Cesium-137 (pCi/l)	2.13 U	0.06 U	0.783 U	0.206 U		3.43 U	0 U
Cobalt-60 (Filtered) (pCi/l)	-1 U		0.25 U	-0.934 U		-1.15 U	-0.721 U
Cobalt-60 (pCi/l)	-0.074 U	-0.67 U	1.37 U	0.693 U		0.345 U	0.802 U
Potassium-40 (Filtered) (pCi/l)	16 U		11.7 U	16 U		33.7 U	17.3 U
Potassium-40 (pCi/l)	5.4 U	47.71 J	19.1 U	7.87 U		0 U	1.31 U
Protactinium-231 (Filtered) (pCi/l)	134 U		56 U	4.36 U		-4.11 U	-16.3 U
Protactinium-231 (pCi/l)	41.4 U	10.44 U	-24.9 U	15.5 U		-91.4 U	-4.17 U
Thorium-234 (Filtered) (pCi/l)	151 U		70.1 U	0 U		170 U	151 U
Thorium-234 (pCi/l)	155 U	102.9 U	36.8 U	31.4 U		0 U	0 U
Uranium-235 (Filtered) (pCi/l)	24.7 U		-1.66 U	8.72 U		5.75 U	12.1 U
Uranium-235 (pCi/l)	1.53 U	3.54 U	3.72 U	9.59 U		10.2 U	12 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-OMW-29(I)**	**IA09-OMW-29(I)**	**IA09-OMW-30(B)**	**IA09-OMW-30(B)**	**IA09-OMW-31(I)**	**IA09-OMW-31(I)**	**IA09-OMW-32(B)**
Sample No	**LUGW0025**	**LUGW0119**	**LUGW0026**	**LUGW0120**	**LUGW0027**	**LUGW0121**	**LUGW0028**
Collection Date	**11/18/98**	**04/12/99**	**11/18/98**	**04/12/99**	**11/17/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199684**	**199684**	**199687**	**199687**	**199712**	**199712**	**199712**
Easting	**517109**	**517109**	**517109**	**517109**	**517305**	**517305**	**517308**
Metals							
Aluminum (Filtered) (ug/l)							
Aluminum (ug/l)							
Antimony (Filtered) (ug/l)							
Antimony (ug/l)							
Arsenic (Filtered) (ug/l)	5.2	2.7 U	4 U	2.7 B	8 U	5.2	8 U
Arsenic (ug/l)	4 U	2.7 U	4 U	2.7 U	8 U	2.7 U	8 U
Barium (Filtered) (ug/l)	87.9	75.5	68.9	221	110	92.6	106
Barium (ug/l)	89.6	79	79.1	223	102	106	103
Beryllium (Filtered) (ug/l)	0.13 U	0.14 U	0.13 U	0.14 U	0.27 U	0.14 U	0.27 U
Beryllium (ug/l)	0.13 U	0.14 U	0.13 U	0.14 U	0.27 U	0.14 U	0.27 U
Cadmium (Filtered) (ug/l)							
Cadmium (ug/l)							
Calcium (Filtered) (ug/l)							
Calcium (ug/l)							
Chromium (Filtered) (ug/l)							
Chromium (ug/l)							
Cobalt (Filtered) (ug/l)							
Cobalt (ug/l)							
Copper (Filtered) (ug/l)							
Copper (ug/l)							
Iron (Filtered) (ug/l)							
Iron (ug/l)							
Lead (Filtered) (ug/l)	1.5 U	1.3 U	1.5 U	1.3 U	3 U	1.3 U	4.4 B
Lead (ug/l)	1.5 U	1.3 U	2.9 B	1.3 U	3 U	1.9 B	3 U
Magnesium (Filtered) (ug/l)							
Magnesium (ug/l)							
Manganese (Filtered) (ug/l)							
Manganese (ug/l)							
Mercury (Filtered) (ug/l)							
Mercury (ug/l)							
Nickel (Filtered) (ug/l)							
Nickel (ug/l)							
Phosphorus (Filtered) (ug/l)							
Phosphorus (ug/l)							
Potassium (Filtered) (ug/l)							

Station	**IA09-OMW-29(I)**	**IA09-OMW-29(I)**	**IA09-OMW-30(B)**	**IA09-OMW-30(B)**	**IA09-OMW-31(I)**	**IA09-OMW-31(I)**	**IA09-OMW-32(B)**
Sample No	**LUGW0025**	**LUGW0119**	**LUGW0026**	**LUGW0120**	**LUGW0027**	**LUGW0121**	**LUGW0028**
Collection Date	**11/18/98**	**04/12/99**	**11/18/98**	**04/12/99**	**11/17/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199684**	**199684**	**199687**	**199687**	**199712**	**199712**	**199712**
Easting	**517109**	**517109**	**517109**	**517109**	**517305**	**517305**	**517308**
Potassium (ug/l)							
Selenium (Filtered) (ug/l)							
Selenium (ug/l)							
Silver (Filtered) (ug/l)							
Silver (ug/l)							
Sodium (Filtered) (ug/l)							
Sodium (ug/l)							
Thallium (Filtered) (ug/l)							
Thallium (ug/l)							
Vanadium (Filtered) (ug/l)							
Vanadium (ug/l)							
Zinc (Filtered) (ug/l)							
Zinc (ug/l)							
Indicator Parameters							
Fluoride (mg/l)	0.503	0.51	0.447	0.43	0.387	0.39	0.42
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)	0.17	0.15	0.09	0.03 J	0.11	0.13	0.08
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)	1.66 J		1.7 J		3.5 J		12.9
Gross Alpha (pCi/l)	2.35 J	2.25 J	2.52 J	1.55 U	4.95 J	2.6 J	3.64 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)	2.12 J		4.95 J		3.12 J		9.69
Nonvolatile Beta (pCi/l)	2.79 J	2.42 U	5.71	4.71 J	4.17 J	3.98 J	2.83 U
Radium-226 (Filtered) (pCi/l)	0.526 J		0.725 J		0.832 J		1.38
Radium-226 (pCi/l)	0.775 U	0.71 J	0.428 U	0.76 J	1.06	0.19 U	1.81
Radium-228 (Filtered) (pCi/l)	0.388 U		0.0921 U		0.563 U		0.576 U
Radium-228 (pCi/l)	-0.125 U	0.69 U	0.665 U	0.63 U	0.591 U	0.04 U	0.627 U
Weight of Sample, A&B (Filtered) (mg)	56		53.4		77.6		59.8
Weight of Sample, A&B (mg)	57.3	59.2	60.3	41.1	73.6	66.5 J	54.2
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)	0.117 U		0.124 J		0.123 J		-0.0117 U
Actinium-227 (pCi/l)	0.119 U	-0.41 U	0.0625 U	0.12 U	0.0259 U	0.23 U	0.0692 U
Thorium-228 (Filtered) (pCi/l)	0.132 U		0.126 U		-0.0264 U		0.0272 U
Thorium-228 (pCi/l)	0.102 U	0.34 U	0.0614 U	0.43 J	0.216 U	0.56 J	0.179 J
Thorium-230 (Filtered) (pCi/l)	0.0558 U		0.0476 U		0.0507 J		0.0221 U
Thorium-230 (pCi/l)	0.0112 U	0.06 U	0.125 J	0.13 J	0.0507 U	0.02 U	0.115 U

Station	**IA09-OMW-29(I)**	**IA09-OMW-29(I)**	**IA09-OMW-30(B)**	**IA09-OMW-30(B)**	**IA09-OMW-31(I)**	**IA09-OMW-31(I)**	**IA09-OMW-32(B)**
Sample No	**LUGW0025**	**LUGW0119**	**LUGW0026**	**LUGW0120**	**LUGW0027**	**LUGW0121**	**LUGW0028**
Collection Date	**11/18/98**	**04/12/99**	**11/18/98**	**04/12/99**	**11/17/98**	**04/06/99**	**11/17/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID							
Northing	**199684**	**199684**	**199687**	**199687**	**199712**	**199712**	**199712**
Easting	**517109**	**517109**	**517109**	**517109**	**517305**	**517305**	**517308**
Thorium-232 (Filtered) (pCi/l)	0 U		-0.0038 U		-0.003 U		-0.003 U
Thorium-232 (pCi/l)	0 U	0 U	0.0119 U	0.02 U	-0.0073 U	-0.01 U	0.0061 U
Uranium-233/234 (Filtered) (pCi/l)	0.297 J		0.0263 U		0.387 J		0.163 U
Uranium-233/234 (pCi/l)	0.165 UJ	0.68 J	0.381 J	0.1 U	0.558 J	0.42 J	0.281 J
Uranium-235 (Filtered) (pCi/l)	0.0242 U		0 U		-0.0191 U		-0.0078 U
Uranium-235 (pCi/l)	0 UJ	0.06 U	0.0979 UJ	0 U	0.0755 UJ	0.02 U	0.0282 UJ
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)	0.184 J		0.282 J		0.317 J		0.0649 U
Uranium-238 (pCi/l)	0.244 J	0.19 U	0.293 J	0.05 U	0.316 J	0.39 J	0.197 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)	5.95 U		6.47 U		6.87 U		6.21 U
Actinium-228 (pCi/l)	13.3 U	14.64 U	12.4 U	13 U	3.33 U	0.74 U	5.26 U
Cesium-137 (Filtered) (pCi/l)	0.678 U		1.29 U		-0.0719 U		0.434 U
Cesium-137 (pCi/l)	2.06 U	3.01 U	-0.594 U	0.22 U	1.05 U	-1.95 U	0.214 U
Cobalt-60 (Filtered) (pCi/l)	-1.55 U		1.09 U		-0.491 U		0.755 U
Cobalt-60 (pCi/l)	-1.21 U	-0.29 U	1.36 U	-0.03 U	0.685 U	0.42 U	0.273 U
Potassium-40 (Filtered) (pCi/l)	15.3 U		18.6 U		1.34 U		12.4 U
Potassium-40 (pCi/l)	14.4 U	22.53 U	14.6 U	39.21 U	17.1 U	0 U	7.91 U
Protactinium-231 (Filtered) (pCi/l)	-27.4 U		-73.3 U		61.1 U		82.8 U
Protactinium-231 (pCi/l)	1.55 U	-27.36 U	-29.7 U	27.83 U	-16.7 U	-50.7 U	32.8 U
Thorium-234 (Filtered) (pCi/l)	9.36 U		42.1 U		87.3 U		0 U
Thorium-234 (pCi/l)	42.9 U	132.7 U	4.26 U	2.57 U	27.1 U	37.1 U	2.32 U
Uranium-235 (Filtered) (pCi/l)	-0.945 U		-11.1 U		-2.16 U		7.95 U
Uranium-235 (pCi/l)	5.99 U	12.66 U	10.4 U	12.01 U	3.94 U	2.32 U	3.8 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-OMW-32(B)**	**IA09-OMW-32(B)**	**IA09-OMW-33(I)**	**IA09-OMW-33(I)**	**IA09-OMW-34(B)**	**IA09-OMW-34(B)**	**IA09-OMW-35(I)**
Sample No	**LUGW0122**	**LUGW0028D**	**LUGW0029**	**LUGW0123**	**LUGW0030**	**LUGW0124**	**LUGW0031**
Collection Date	**04/07/99**	**11/17/98**	**11/19/98**	**04/13/99**	**11/19/98**	**04/13/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID		**LUGW9187**					
Northing	**199712**	**199712**	**199801**	**199801**	**199801**	**199801**	**199796**
Easting	**517308**	**517308**	**517203**	**517203**	**517206**	**517206**	**517506**
Metals							
Aluminum (Filtered) (ug/l)							
Aluminum (ug/l)							
Antimony (Filtered) (ug/l)							
Antimony (ug/l)							
Arsenic (Filtered) (ug/l)	6	8 U	4 U	2.7 U	4 U	2.7 U	4 U
Arsenic (ug/l)	3.2 B	8 U	4 U	2.7 U	4 U	2.7 U	4 U
Barium (Filtered) (ug/l)	98.5	98.1	81.7	76.7	493	399	120
Barium (ug/l)	104	103	83.7	81.4	562	439	120
Beryllium (Filtered) (ug/l)	0.14 U	0.27 U	0.15 U	0.14 U	0.13 U	0.14 U	0.13 U
Beryllium (ug/l)	0.14 U	0.27 U	0.13 U	0.14 U	0.13 U	0.14 U	0.13 U
Cadmium (Filtered) (ug/l)							
Cadmium (ug/l)							
Calcium (Filtered) (ug/l)							
Calcium (ug/l)							
Chromium (Filtered) (ug/l)							
Chromium (ug/l)							
Cobalt (Filtered) (ug/l)							
Cobalt (ug/l)							
Copper (Filtered) (ug/l)							
Copper (ug/l)							
Iron (Filtered) (ug/l)							
Iron (ug/l)							
Lead (Filtered) (ug/l)	1.3 U	3 U	1.7 B	1.3 U	3.5	4.8	1.5 U
Lead (ug/l)	5	5.1 B	1.5 U	1.3 U	7.9	5.2	1.5 U
Magnesium (Filtered) (ug/l)							
Magnesium (ug/l)							
Manganese (Filtered) (ug/l)							
Manganese (ug/l)							
Mercury (Filtered) (ug/l)							
Mercury (ug/l)							
Nickel (Filtered) (ug/l)							
Nickel (ug/l)							
Phosphorus (Filtered) (ug/l)							
Phosphorus (ug/l)							
Potassium (Filtered) (ug/l)							

Station	IA09-OMW-32(B)	IA09-OMW-32(B)	IA09-OMW-33(I)	IA09-OMW-33(I)	IA09-OMW-34(B)	IA09-OMW-34(B)	IA09-OMW-35(I)
Sample No	**LUGW0122**	**LUGW0028D**	**LUGW0029**	**LUGW0123**	**LUGW0030**	**LUGW0124**	**LUGW0031**
Collection Date	**04/07/99**	**11/17/98**	**11/19/98**	**04/13/99**	**11/19/98**	**04/13/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID		**LUGW9187**					
Northing	**199712**	**199712**	**199801**	**199801**	**199801**	**199801**	**199796**
Easting	**517308**	**517308**	**517203**	**517203**	**517206**	**517206**	**517506**
Potassium (ug/l)							
Selenium (Filtered) (ug/l)							
Selenium (ug/l)							
Silver (Filtered) (ug/l)							
Silver (ug/l)							
Sodium (Filtered) (ug/l)							
Sodium (ug/l)							
Thallium (Filtered) (ug/l)							
Thallium (ug/l)							
Vanadium (Filtered) (ug/l)							
Vanadium (ug/l)							
Zinc (Filtered) (ug/l)							
Zinc (ug/l)							
Indicator Parameters							
Fluoride (mg/l)	0.43	0.432	0.46	0.46	0.263	0.31	0.327
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)	0.02 U	0.07	0.06	0.11	0.13	0.04 J	0.06
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)		3.56 J	2.34 U		7.09		6.35
Gross Alpha (pCi/l)	3.1 J	2.02 U	2.85 J	1.22 U	3.77 J	1.16 U	1.59 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)		3.25 J	3.06 J		34		5.45
Nonvolatile Beta (pCi/l)	2.79 J	3.55 J	3.62 J	3.02 J	46.4	14.73	8.29
Radium-226 (Filtered) (pCi/l)		1.06	1.38		1.82		0.999 J
Radium-226 (pCi/l)	2	0.83 J	1.38	1.03	3.59	4.06	2.43
Radium-228 (Filtered) (pCi/l)		0.554 U	0.454 U		1.01 U		0.342 U
Radium-228 (pCi/l)	0.02 U	0.54 U	0.631 U	0.28 U	1.04	0.6 U	0.618 U
Weight of Sample, A&B (Filtered) (mg)		55.5	58.5		77.6		59.3
Weight of Sample, A&B (mg)	97.9	52.9	67	64.9	91.7	59.1	63.9
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)		0.0346 U	0.194 U		0.0248 U		0.0482 U
Actinium-227 (pCi/l)	-0.04 U	0.0977 U	-0.0095 U	0.36 U	-0.0079 U	0.61 U	-0.014 U
Thorium-228 (Filtered) (pCi/l)		0.0655 U	0.0202 U		0.189 U		0.117 U
Thorium-228 (pCi/l)	0.25 U	0.108 U	0.113 U	0.27 U	0.191 J	0.56 U	0.148 U
Thorium-230 (Filtered) (pCi/l)		0.0475 U	0.0719 U		0.0717 U		0.0124 U
Thorium-230 (pCi/l)	0.21 U	0.0617 U	0.0902 U	0.03 U	0.066 J	0.16 U	0.0256 U

Station	**IA09-OMW-32(B)**	**IA09-OMW-32(B)**	**IA09-OMW-33(I)**	**IA09-OMW-33(I)**	**IA09-OMW-34(B)**	**IA09-OMW-34(B)**	**IA09-OMW-35(I)**
Sample No	**LUGW0122**	**LUGW0028D**	**LUGW0029**	**LUGW0123**	**LUGW0030**	**LUGW0124**	**LUGW0031**
Collection Date	**04/07/99**	**11/17/98**	**11/19/98**	**04/13/99**	**11/19/98**	**04/13/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID		**LUGW9187**					
Northing	**199712**	**199712**	**199801**	**199801**	**199801**	**199801**	**199796**
Easting	**517308**	**517308**	**517203**	**517203**	**517206**	**517206**	**517506**
Thorium-232 (Filtered) (pCi/l)		-0.0024 U	0 U		-0.0038 U		-0.0039 U
Thorium-232 (pCi/l)	0.02 U	-0.0157 U	0.015 U	0.05 U	0 U	0.04 U	0.0547 U
Uranium-233/234 (Filtered) (pCi/l)		0.155 U	0.261 J		0.0063 U		0.171 U
Uranium-233/234 (pCi/l)	0.15 U	0.29 J	0.259 UJ	0.26 U	0.0701 UJ	-0.01 U	0.235 J
Uranium-235 (Filtered) (pCi/l)		-0.0213 U	0.0388 U		-0.0108 U		-0.013 U
Uranium-235 (pCi/l)	0.01 U	0.105 U	0.0029 UJ	0.05 U	-0.0192 UJ	0.02 U	0.0299 UJ
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)		0.0671 U	0.0681 U		0.017 U		0.14 U
Uranium-238 (pCi/l)	0.21 U	0.174 U	0.0729 UJ	0 U	0 UJ	0.02 U	0.0988 UJ
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)		7.5 U	0 U		1.85 U		6.86 U
Actinium-228 (pCi/l)	2.56 U	4.36 U	3.56 U	-0.56 U	0.326 U	1.04 U	10.2 U
Cesium-137 (Filtered) (pCi/l)		0.522 U	1.07 U		-0.793 U		0 U
Cesium-137 (pCi/l)	0 U	2.85 J	0.313 U	-0.04 U	-0.67 U	0.5 U	1.95 U
Cobalt-60 (Filtered) (pCi/l)		0.519 U	-0.502 U		-0.264 U		-1.11 U
Cobalt-60 (pCi/l)	1.13 U	0.538 U	0.26 U	-0.02 U	-0.36 U	0.17 U	1.4 U
Potassium-40 (Filtered) (pCi/l)		5.91 U	0.372 U		54.6 J		41.4 U
Potassium-40 (pCi/l)	0.19 U	19 U	7.92 U	12.55 U	51.7 J	26.41 J	14.2 U
Protactinium-231 (Filtered) (pCi/l)		25.3 U	-75.9 U		39.6 U		14.7 U
Protactinium-231 (pCi/l)	-9.38 U	16.7 U	18.8 U	-19.91 U	15.7 U	5.18 U	-74.7 U
Thorium-234 (Filtered) (pCi/l)		104 U	53.4 U		68.5 U		40.1 U
Thorium-234 (pCi/l)	108 U	19.9 U	54.9 U	76.67 U	20.8 U	43.62 U	16.6 U
Uranium-235 (Filtered) (pCi/l)		1.6 U	8.28 U		-10.7 U		7.71 U
Uranium-235 (pCi/l)	10.2 U	10.4 U	4.3 U	4.52 U	1.18 U	1.19 U	13.8 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-OMW-35(I)**	**IA09-OMW-36(B)**	**IA09-OMW-36(B)**	**IA09-OMW-36(B)**	**IA09-OMW-37(I)**	**IA09-OMW-37(I)**	**IA09-OMW-38(B)**
Sample No	**LUGW0125**	**LUGW0032**	**LUGW0126**	**LUGW0126D**	**LUGW0043**	**LUGW0127**	**LUGW0044**
Collection Date	**04/07/99**	**11/19/98**	**04/06/99**	**04/06/99**	**11/18/98**	**04/06/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9195**			
Northing	**199796**	**199799**	**199799**	**199799**	**199914**	**199914**	**199915**
Easting	**517506**	**517506**	**517506**	**517506**	**517179**	**517179**	**517182**
Metals							
Aluminum (Filtered) (ug/l)							
Aluminum (ug/l)							
Antimony (Filtered) (ug/l)							
Antimony (ug/l)							
Arsenic (Filtered) (ug/l)	8.8	4 U	2.7 U	3.7 B	4 U	4.6 B	4 U
Arsenic (ug/l)	4.9 B	4 U	6.7	4.3 B	4.2 B	2.9 B	5.2
Barium (Filtered) (ug/l)	119	206	171	165	72.7	68.7	81.8
Barium (ug/l)	122	300	256	246	83.3	73.6	86
Beryllium (Filtered) (ug/l)	0.14 U	0.13 U	0.14 U	0.14 U	0.13 U	0.14 U	0.13 U
Beryllium (ug/l)	0.14 U	0.13 U	0.14 U	0.14 U	0.2 B	0.14 U	0.13 U
Cadmium (Filtered) (ug/l)							
Cadmium (ug/l)							
Calcium (Filtered) (ug/l)							
Calcium (ug/l)							
Chromium (Filtered) (ug/l)							
Chromium (ug/l)							
Cobalt (Filtered) (ug/l)							
Cobalt (ug/l)							
Copper (Filtered) (ug/l)							
Copper (ug/l)							
Iron (Filtered) (ug/l)							
Iron (ug/l)							
Lead (Filtered) (ug/l)	1.3 U	2.1 B	1.3 U	1.3 U	5.3	1.3 U	1.5 U
Lead (ug/l)	1.3 U	2.8 B	1.6 B	2.5 B	4.8	3.1	1.7 B
Magnesium (Filtered) (ug/l)							
Magnesium (ug/l)							
Manganese (Filtered) (ug/l)							
Manganese (ug/l)							
Mercury (Filtered) (ug/l)							
Mercury (ug/l)							
Nickel (Filtered) (ug/l)							
Nickel (ug/l)							
Phosphorus (Filtered) (ug/l)							
Phosphorus (ug/l)							
Potassium (Filtered) (ug/l)							

Station	IA09-OMW-35(I)	IA09-OMW-36(B)	IA09-OMW-36(B)	IA09-OMW-36(B)	IA09-OMW-37(I)	IA09-OMW-37(I)	IA09-OMW-38(B)
Sample No	**LUGW0125**	**LUGW0032**	**LUGW0126**	**LUGW0126D**	**LUGW0043**	**LUGW0127**	**LUGW0044**
Collection Date	**04/07/99**	**11/19/98**	**04/06/99**	**04/06/99**	**11/18/98**	**04/06/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9195**			
Northing	**199796**	**199799**	**199799**	**199799**	**199914**	**199914**	**199915**
Easting	**517506**	**517506**	**517506**	**517506**	**517179**	**517179**	**517182**
Potassium (ug/l)							
Selenium (Filtered) (ug/l)							
Selenium (ug/l)							
Silver (Filtered) (ug/l)							
Silver (ug/l)							
Sodium (Filtered) (ug/l)							
Sodium (ug/l)							
Thallium (Filtered) (ug/l)							
Thallium (ug/l)							
Vanadium (Filtered) (ug/l)							
Vanadium (ug/l)							
Zinc (Filtered) (ug/l)							
Zinc (ug/l)							
Indicator Parameters							
Fluoride (mg/l)	0.29	0.179	0.2	0.19	0.621	0.63	0.53
Nitrate/Nitrite (mg/l)							
Nitrogen, Ammonia (mg/l)	0.03 J	0.08	0.12	0.12	0.18	0.13	0.1
Radiological Parameters							
Gross Alpha (Filtered) (pCi/l)		3.31 J			2.53 J		4.94 J
Gross Alpha (pCi/l)	3 J	4.23 J	4.59 J	5.7 J	4.58 J	1.59 J	3.83 J
Gross Beta (pCi/l)							
Nonvolatile Beta (Filtered) (pCi/l)		16.4			2.44 J		4.1 J
Nonvolatile Beta (pCi/l)	3.22 J	20	13.8 J	16.2 J	1.18 U	2.29 J	1.56 U
Radium-226 (Filtered) (pCi/l)		2.37			1.06		0.695 J
Radium-226 (pCi/l)	1.05	3.24	2.06	5.23	4.12	1.55	1.72
Radium-228 (Filtered) (pCi/l)		0.791 U			0.32 U		-0.203 U
Radium-228 (pCi/l)	0.49 U	0.644 U	0.24 U	0.28 U	0.748 U	0.1 U	-0.0516 U
Weight of Sample, A&B (Filtered) (mg)		60.2			64.8		61.2
Weight of Sample, A&B (mg)	78.5	85.5	53.1 J	60.1 J	38.3	70.6 J	63.7
Radiological Parameters (AlphaSpec)							
Actinium-227 (Filtered) (pCi/l)		-0.0166 U			0.0915 U		0.0603 U
Actinium-227 (pCi/l)	-0.03 U	-0.0746 U	0.15 U	0.06 U	0.0179 U	0.1 U	0.0258 U
Thorium-228 (Filtered) (pCi/l)		0.223 J			0.0871 U		0.117 U
Thorium-228 (pCi/l)	0.59 J	0.155 U	0.42 J	0.29 U	0.234 J	0.49 J	0.0872 U
Thorium-230 (Filtered) (pCi/l)		0.0007 U			0.0856 U		-0.0077 U
Thorium-230 (pCi/l)	0.22 J	-0.0043 U	-0.01 U	0.08 U	0.31 J	0.15 U	0.0007 U

Station	**IA09-OMW-35(I)**	**IA09-OMW-36(B)**	**IA09-OMW-36(B)**	**IA09-OMW-36(B)**	**IA09-OMW-37(I)**	**IA09-OMW-37(I)**	**IA09-OMW-38(B)**
Sample No	**LUGW0125**	**LUGW0032**	**LUGW0126**	**LUGW0126D**	**LUGW0043**	**LUGW0127**	**LUGW0044**
Collection Date	**04/07/99**	**11/19/98**	**04/06/99**	**04/06/99**	**11/18/98**	**04/06/99**	**11/18/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID				**LUGW9195**			
Northing	**199796**	**199799**	**199799**	**199799**	**199914**	**199914**	**199915**
Easting	**517506**	**517506**	**517506**	**517506**	**517179**	**517179**	**517182**
Thorium-232 (Filtered) (pCi/l)		-0.0036 U			-0.0081 U		-0.0042 U
Thorium-232 (pCi/l)	0.03 U	-0.0085 U	0.04 U	-0.01 U	0.151 J	0.04 U	-0.0081 U
Uranium-233/234 (Filtered) (pCi/l)		-0.0094 U			0.32 J		1.41
Uranium-233/234 (pCi/l)	0.37 J	0.585 J	0.64 J	0.32 J	0.207 UJ	0.24 U	0.92 J
Uranium-235 (Filtered) (pCi/l)		0.0789 U			-0.0043 U		0.0726 U
Uranium-235 (pCi/l)	0.04 U	0.021 UJ	0.07 U	0.06 U	0.0203 UJ	0.04 U	0.0405 UJ
Uranium-235/236 (pCi/l)							
Uranium-238 (Filtered) (pCi/l)		0.0299 U			0.281 J		0.7 J
Uranium-238 (pCi/l)	0.34 J	0.464 J	0.12 U	0.23 J	0.545 J	0.24 U	0.263 J
Radiological Parameters (GammaSpec)							
Actinium-227 (pCi/l)							
Actinium-228 (Filtered) (pCi/l)		13.6 U			5.48 U		1.27 U
Actinium-228 (pCi/l)	15.4 U	4.11 U	10.2 U	0.76 U	6.43 U	-0.96 U	4.49 U
Cesium-137 (Filtered) (pCi/l)		44.1			2.25 U		1.28 U
Cesium-137 (pCi/l)	-0.27 U	0.122 U	0 U	0.64 U	0 U	0.62 U	-1.15 U
Cobalt-60 (Filtered) (pCi/l)		63.2			-0.224 U		0.561 U
Cobalt-60 (pCi/l)	-0.58 U	0.991 U	1.14 U	0.47 U	0.303 U	-1.26 U	-0.0845 U
Potassium-40 (Filtered) (pCi/l)		40.3 U			15.6 U		5.92 U
Potassium-40 (pCi/l)	23.8 U	0 U	29 U	48.5 J	20.8 U	8.73 U	29.4 U
Protactinium-231 (Filtered) (pCi/l)		-89.6 U			11.9 U		-5.29 U
Protactinium-231 (pCi/l)	-28.4 U	-63.3 U	13.7 U	-53.1 U	34.4 U	80.1 U	95.7 U
Thorium-234 (Filtered) (pCi/l)		155 U			79.1 U		130 U
Thorium-234 (pCi/l)	232 J	0 U	138 J	0 U	0 U	136 U	82.5 U
Uranium-235 (Filtered) (pCi/l)		-4.83 U			2.81 U		7.18 U
Uranium-235 (pCi/l)	4.55 U	5.88 U	6.66 U	1.42 U	4.22 U	8.23 U	6.16 U
Wet Chemistry							
Fluoride (mg/l)							
Nitrogen, Ammonia (mg/l)							

Station	**IA09-OMW-38(B)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(W)**	**IA09-PW(W)**	**IA09-PW(W)**
Sample No	**LUGW0128**	**LUGW0055**	**LUGW0079**	**LUGW0134**	**LUGW0147**	**LUGW0054**	**LUGW0080**	**LUGW0148**
Collection Date	**04/06/99**	**07/16/98**	**10/22/98**	**07/21/99**	**10/14/99**	**07/16/98**	**10/22/98**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199915**	**199487**	**199487**	**199487**	**199487**	**199457**	**199457**	**199457**
Easting	**517182**	**517225**	**517225**	**517225**	**517225**	**517142**	**517142**	**517142**
Metals								
Aluminum (Filtered) (ug/l)								
Aluminum (ug/l)								6.5 U
Antimony (Filtered) (ug/l)								
Antimony (ug/l)								3 B
Arsenic (Filtered) (ug/l)	7.4							
Arsenic (ug/l)	5.4	3 U	4 U	2.7 U	2.7 U	3 U	4 U	2.7 U
Barium (Filtered) (ug/l)	84.9							
Barium (ug/l)	88.7	47.4	50.1	47.7	53.5	31.5	31.5	35.1
Beryllium (Filtered) (ug/l)	0.14 U							
Beryllium (ug/l)	0.14 U	0.42 U	0.13 UE	0.07999 U	0.09 U	10.2	9.7 E	12.4
Cadmium (Filtered) (ug/l)								
Cadmium (ug/l)								0.36 U
Calcium (Filtered) (ug/l)								
Calcium (ug/l)								127000
Chromium (Filtered) (ug/l)								
Chromium (ug/l)								1.7 B
Cobalt (Filtered) (ug/l)								
Cobalt (ug/l)								5.6
Copper (Filtered) (ug/l)								
Copper (ug/l)								1.5 U
Iron (Filtered) (ug/l)								
Iron (ug/l)								817
Lead (Filtered) (ug/l)	1.3 U							
Lead (ug/l)	1.9 B	1.5 U	1.5 U	1.6 U	1.6 U	3.4 B	7.1	12.2
Magnesium (Filtered) (ug/l)								
Magnesium (ug/l)								83600
Manganese (Filtered) (ug/l)								
Manganese (ug/l)								217
Mercury (Filtered) (ug/l)								
Mercury (ug/l)								0.03999 U
Nickel (Filtered) (ug/l)								
Nickel (ug/l)								116
Phosphorus (Filtered) (ug/l)								
Phosphorus (ug/l)								
Potassium (Filtered) (ug/l)								

Station	IA09-OMW-38(B)	IA09-PW(E)	IA09-PW(E)	IA09-PW(E)	IA09-PW(E)	IA09-PW(W)	IA09-PW(W)	IA09-PW(W)
Sample No	**LUGW0128**	**LUGW0055**	**LUGW0079**	**LUGW0134**	**LUGW0147**	**LUGW0054**	**LUGW0080**	**LUGW0148**
Collection Date	**04/06/99**	**07/16/98**	**10/22/98**	**07/21/99**	**10/14/99**	**07/16/98**	**10/22/98**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199915**	**199487**	**199487**	**199487**	**199487**	**199457**	**199457**	**199457**
Easting	**517182**	**517225**	**517225**	**517225**	**517225**	**517142**	**517142**	**517142**
Potassium (ug/l)								7700
Selenium (Filtered) (ug/l)								
Selenium (ug/l)								2.9 U
Silver (Filtered) (ug/l)								
Silver (ug/l)								1.5 B
Sodium (Filtered) (ug/l)								
Sodium (ug/l)								178000 E
Thallium (Filtered) (ug/l)								
Thallium (ug/l)								3.9 U
Vanadium (Filtered) (ug/l)								
Vanadium (ug/l)								0.76999 U
Zinc (Filtered) (ug/l)								
Zinc (ug/l)								36.9 E
Indicator Parameters								
Fluoride (mg/l)	0.61	0.59		0.67199		0.77		
Nitrate/Nitrite (mg/l)								
Nitrogen, Ammonia (mg/l)	0.07			1.51				
Radiological Parameters								
Gross Alpha (Filtered) (pCi/l)								
Gross Alpha (pCi/l)	4.55 J	4.28 J	-0.443 U	1.84 J	0.73799 U	10.2	6.54	
Gross Beta (pCi/l)								
Nonvolatile Beta (Filtered) (pCi/l)								
Nonvolatile Beta (pCi/l)	3.43 J	4.61 J	4.13 J	3.82 J	5.4	7.19	10.8	
Radium-226 (Filtered) (pCi/l)								
Radium-226 (pCi/l)	0.92 J	0.88 J	0.701 J	1.09	2.95	0.368 U	0.774 J	
Radium-228 (Filtered) (pCi/l)								
Radium-228 (pCi/l)	0.3 U	0.111 U	0.462 U	0.21999 U	0.503 U	0.0847 U	0.471 U	
Weight of Sample, A&B (Filtered) (mg)								
Weight of Sample, A&B (mg)	67.5 J	90.8	76.9	78.5		91	96.7	
Radiological Parameters (AlphaSpec)								
Actinium-227 (Filtered) (pCi/l)								
Actinium-227 (pCi/l)	-0.05 U	0.108 U		-0.0147 U	-0.15 U	-0.0125 U		
Thorium-228 (Filtered) (pCi/l)								
Thorium-228 (pCi/l)	0.43 J	0.252 J		0.0982 U	-0.05139 U	0.227 J		
Thorium-230 (Filtered) (pCi/l)								
Thorium-230 (pCi/l)	-0.02 U	0.122 J		0.11299 U	0 U	0.0681 U		

Station	**IA09-OMW-38(B)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(E)**	**IA09-PW(W)**	**IA09-PW(W)**	**IA09-PW(W)**
Sample No	**LUGW0128**	**LUGW0055**	**LUGW0079**	**LUGW0134**	**LUGW0147**	**LUGW0054**	**LUGW0080**	**LUGW0148**
Collection Date	**04/06/99**	**07/16/98**	**10/22/98**	**07/21/99**	**10/14/99**	**07/16/98**	**10/22/98**	**10/14/99**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID								
Northing	**199915**	**199487**	**199487**	**199487**	**199487**	**199457**	**199457**	**199457**
Easting	**517182**	**517225**	**517225**	**517225**	**517225**	**517142**	**517142**	**517142**
Thorium-232 (Filtered) (pCi/l)								
Thorium-232 (pCi/l)	0.02 U	0.0162 U		0 U	0.0507 U	0.0193 U		
Uranium-233/234 (Filtered) (pCi/l)								
Uranium-233/234 (pCi/l)	1.17 J	0.218 J	0.06 U	-0.02559 U	0.09539 U	3.81	3.38	
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	0.18 U	0.0524 U	-0.019 U	-0.0181 U	0.02239 U	0.104 J	0.0391 U	
Uranium-235/236 (pCi/l)								
Uranium-238 (Filtered) (pCi/l)								
Uranium-238 (pCi/l)	0.43 J	0.113 J	0.149 U	0.02859 U	0.118 U	3.21	3.47	
Radiological Parameters (GammaSpec)								
Actinium-227 (pCi/l)				-9.08 U	-23.8 U			
Actinium-228 (Filtered) (pCi/l)								
Actinium-228 (pCi/l)	0.63 U	3.48 U		3.02 U	5.94 U	2.02 U		
Cesium-137 (Filtered) (pCi/l)								
Cesium-137 (pCi/l)	2.89 U	1.01 U		0.15 U	-0.404 U	0.836 U		
Cobalt-60 (Filtered) (pCi/l)								
Cobalt-60 (pCi/l)	2.66 U	0.46 U		0.128 U	-0.98699 U	0.302 U		
Potassium-40 (Filtered) (pCi/l)								
Potassium-40 (pCi/l)	20.4 U	24.3 U		10.3 U	65.7 U	48.8 J		
Protactinium-231 (Filtered) (pCi/l)								
Protactinium-231 (pCi/l)	-32.2 U	-90.8 U		1.15 U	23.9 U	-7.05 U		
Thorium-234 (Filtered) (pCi/l)								
Thorium-234 (pCi/l)	56.4 U	0 U		26.6 U	154 U	4 U		
Uranium-235 (Filtered) (pCi/l)								
Uranium-235 (pCi/l)	-0.64 U	11.4 U		4.62 U	7.55 U	5.64 U		
Wet Chemistry								
Fluoride (mg/l)					0.638			
Nitrogen, Ammonia (mg/l)					1.55			

Phase IV IA09 Groundwater

Station	**IA09-GW0001**	**IA09-GW0002**	**IA09-GW0002**	**IA09-GW0003**	**IA09-MW-01(I)**	**IA09-MW-01(I)**
Sample No	**LUGW0083**	**LUGW0057**	**LUGW0058**	**LUGW0060**	**LUGW0015**	**LUGW0077**
Collection Date	**11/20/98**	**08/10/98**	**08/10/98**	**08/10/98**	**11/19/98**	**07/23/98**
Depth (ft)	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**	**0.0-0.0**
Duplicate ID						
Northing	**199430**	**199316**	**199316**	**200063**	**199583**	**199583**
Easting	**517223**	**517063**	**517063**	**517141**	**517402**	**517402**
Metals						
Beryllium (ug/l)	0.27 U	0.13 U	0.13 U	0.13 U	39.5	31.5

Station	**IA09-PW(W)**	**IA09-PW(W)**	**IA09-MW-02(S)**	**IA09-MW-02(S)**	**IA09-PW(W)**	**IA09-PW(W)**
Sample No	**LUGW0136**	**LUGW0137**	**LUGW0016**	**LUGW0078**	**LUGW0138**	**LUGW0139**
Collection Date	**10/14/99**	**10/14/99**	**11/19/98**	**07/23/98**	**10/14/99**	**10/14/99**
Depth (ft)	**28.0-28.0**	**81.0-81.0**	**0.0-0.0**	**0.0-0.0**	**110-110**	**175-175**
Duplicate ID						
Northing	**199457**	**199457**	**199581**	**199581**	**199457**	**199457**
Easting	**517142**	**517142**	**517398**	**517398**	**517142**	**517142**
Metals						
Beryllium (ug/l)	13.1	13.2	14	13.9	11.3	10.6

Station	**IA09-PW(W)**
Sample No	**LUGW0140**
Collection Date	**10/15/99**
Depth (ft)	**185-185**
Duplicate ID	
Northing	**199457**
Easting	**517142**
Metals	
Beryllium (ug/l)	10.7

APPENDIX 4A.5:
Analytical TCLP Sample Results

Phase II TCLP Analysis

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Metals		
Aluminum (ug/l)	733	731
Aluminum (ug/l)	733	731
Antimony (ug/l)	2 U	2 U
Antimony (ug/l)	2 U	2 U
Arsenic (ug/l)	2.5 U	2.5 U
Arsenic (ug/l)	2.5 U	2.5 U
Barium (ug/l)	38.8	31.5
Barium (ug/l)	38.8	31.5
Beryllium (ug/l)	0.5 U	0.5 U
Beryllium (ug/l)	0.5 U	0.5 U
Boron (ug/l)	20 U	20 U
Boron (ug/l)	20 U	20 U
Cadmium (ug/l)	0.5 U	0.5 U
Cadmium (ug/l)	0.5 U	0.5 U
Calcium (ug/l)	89400	73400
Calcium (ug/l)	89400	73400
Chromium (ug/l)	1	1.2
Chromium (ug/l)	1	1.2
Cobalt (ug/l)	1 U	1 U
Cobalt (ug/l)	1 U	1 U
Copper (ug/l)	4.6	1 U
Copper (ug/l)	4.6	1 U
Iron (ug/l)	810	871
Iron (ug/l)	810	871
Lead (ug/l)	1.2	1.5 U
Lead (ug/l)	1.2	1.5 U
Magnesium (ug/l)	27000	20800
Magnesium (ug/l)	27000	20800
Manganese (ug/l)	19.7	14.8
Manganese (ug/l)	19.7	14.8
Mercury (ug/l)	0 R	0 R
Mercury (ug/l)	0 R	0 R
Molybdenum (ug/l)	5.7	11.1
Molybdenum (ug/l)	5.7	11.1
Nickel (ug/l)	0.5 U	0.5 U
Nickel (ug/l)	0.5 U	0.5 U
Potassium (ug/l)	1530	1570
Potassium (ug/l)	1530	1570
Selenium (ug/l)	2.5 U	2.5 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Selenium (ug/l)	2.5 U	2.5 U
Silicon (ug/l)	3620	2020
Silicon (ug/l)	3620	2020
Silver (ug/l)	1 U	1 U
Silver (ug/l)	1 U	1 U
Sodium (ug/l)	10500	18500
Sodium (ug/l)	10500	18500
Strontium (ug/l)	1130	1450
Strontium (ug/l)	1130	1450
Thallium (ug/l)	2.5 U	2.5 U
Thallium (ug/l)	2.5 U	2.5 U
Tin (ug/l)	10 U	10 U
Tin (ug/l)	10 U	10 U
Vanadium (ug/l)	2.2	1.9
Vanadium (ug/l)	2.2	1.9
Zinc (ug/l)	2 U	2 U
Zinc (ug/l)	2 U	2 U
Indicator Parameters		
Alkalinity (mg/l)	207	146
Alkalinity (mg/l)	207	146
Chloride (mg/l)	36.3 R	44.5 R
Chloride (mg/l)	36.3 R	44.5 R
Fluoride (mg/l)	0.16	0.08
Fluoride (mg/l)	0.16	0.08
Nitrate, as N (mg/l)	10.3 R	7.2 R
Nitrate, as N (mg/l)	10.3 R	7.2 R
Phosphorus (mg/l)	0 R	0 R
Phosphorus (mg/l)	0 R	0 R
Sulfate (mg/l)	60 R	67.8 R
Sulfate (mg/l)	60 R	67.8 R
Total dissolved solids (mg/l)	434	398
Total dissolved solids (mg/l)	434	398
Total suspended solids (mg/l)	16	20
Total suspended solids (mg/l)	16	20
Semivolatile Organics		
1,2,4-Trichlorobenzene (ug/l)	0.63 U	0.63 U
1,2,4-Trichlorobenzene (ug/l)	0.63 U	0.63 U
1,2-Dichlorobenzene (ug/l)	1.18 U	1.18 U
1,2-Dichlorobenzene (ug/l)	1.18 U	1.18 U
1,3-Dichlorobenzene (ug/l)	1.2 U	1.2 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
1,3-Dichlorobenzene (ug/l)	1.2 U	1.2 U
1,4-Dichlorobenzene (ug/l)	1.32 U	1.32 U
1,4-Dichlorobenzene (ug/l)	1.32 U	1.32 U
2,2'-oxybis (1-chloropropane) (ug/l)	1.73 U	1.73 U
2,2'-oxybis (1-chloropropane) (ug/l)	1.73 U	1.73 U
2,4,5-Trichlorophenol (ug/l)	1.17 U	1.17 U
2,4,5-Trichlorophenol (ug/l)	1.17 U	1.17 U
2,4,6-Trichlorophenol (ug/l)	0.54 U	0.54 U
2,4,6-Trichlorophenol (ug/l)	0.54 U	0.54 U
2,4,6-tribromophenol (%)	52	54
2,4,6-tribromophenol (%)	52	54
2,4-Dichlorophenol (ug/l)	0.87 U	0.87 U
2,4-Dichlorophenol (ug/l)	0.87 U	0.87 U
2,4-Dimethylphenol (ug/l)	1.1 U	1.1 U
2,4-Dimethylphenol (ug/l)	1.1 U	1.1 U
2,4-Dinitrophenol (ug/l)	3.27 U	3.27 U
2,4-Dinitrophenol (ug/l)	3.27 U	3.27 U
2,4-Dinitrotoluene (ug/l)	2.27 U	2.27 U
2,4-Dinitrotoluene (ug/l)	2.27 U	2.27 U
2,6-Dinitrotoluene (ug/l)	1.88 U	1.88 U
2,6-Dinitrotoluene (ug/l)	1.88 U	1.88 U
2-Chloronaphthalene (ug/l)	0.65 U	0.65 U
2-Chloronaphthalene (ug/l)	0.65 U	0.65 U
2-Chlorophenol (ug/l)	1.46 U	1.46 U
2-Chlorophenol (ug/l)	1.46 U	1.46 U
2-Methylnaphthalene (ug/l)	0.85 U	0.85 U
2-Methylnaphthalene (ug/l)	0.85 U	0.85 U
2-Methylphenol (ug/l)	1.92 U	1.92 U
2-Methylphenol (ug/l)	1.92 U	1.92 U
2-Nitroaniline (ug/l)	1.85 U	1.85 U
2-Nitroaniline (ug/l)	1.85 U	1.85 U
2-Nitrophenol (ug/l)	1.15 U	1.15 U
2-Nitrophenol (ug/l)	1.15 U	1.15 U
2-fluorobiphenyl (%)	64	67
2-fluorobiphenyl (%)	64	67
2-fluorophenol (%)	34	38
2-fluorophenol (%)	34	38
3,3'-Dichlorobenzidine (ug/l)	1.42 U	1.42 U
3,3'-Dichlorobenzidine (ug/l)	1.42 U	1.42 U
3-Nitroaniline (ug/l)	1.79 U	1.79 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
3-Nitroaniline (ug/l)	1.79 U	1.79 U
4,6-Dinitro-2-methylphenol (ug/l)	2.84 U	2.84 U
4,6-Dinitro-2-methylphenol (ug/l)	2.84 U	2.84 U
4-Chloroaniline (ug/l)	1.25 U	1.25 U
4-Chloroaniline (ug/l)	1.25 U	1.25 U
4-Methylphenol (ug/l)	2.78 U	2.78 U
4-Methylphenol (ug/l)	2.78 U	2.78 U
4-Nitroaniline (ug/l)	2.44 U	2.44 U
4-Nitroaniline (ug/l)	2.44 U	2.44 U
4-Nitrophenol (ug/l)	3.55 U	3.55 U
4-Nitrophenol (ug/l)	3.55 U	3.55 U
4-bromophenyl phenyl ether (ug/l)	1.13 U	1.13 U
4-bromophenyl phenyl ether (ug/l)	1.13 U	1.13 U
4-chloro-3-methyl phenol (ug/l)	1.64 U	1.64 U
4-chloro-3-methyl phenol (ug/l)	1.64 U	1.64 U
4-chlorophenylphenylether (ug/l)	0.9 U	0.9 U
4-chlorophenylphenylether (ug/l)	0.9 U	0.9 U
Acenaphthene (ug/l)	0.7 U	0.7 U
Acenaphthene (ug/l)	0.7 U	0.7 U
Acenaphthylene (ug/l)	0.55 U	0.55 U
Acenaphthylene (ug/l)	0.55 U	0.55 U
Anthracene (ug/l)	1.2 U	1.2 U
Anthracene (ug/l)	1.2 U	1.2 U
Benzo(a)anthracene (ug/l)	0.8 U	0.8 U
Benzo(a)anthracene (ug/l)	0.8 U	0.8 U
Benzo(a)pyrene (ug/l)	0.6 U	0.6 U
Benzo(a)pyrene (ug/l)	0.6 U	0.6 U
Benzo(b)fluoranthene (ug/l)	1.35 U	1.35 U
Benzo(b)fluoranthene (ug/l)	1.35 U	1.35 U
Benzo(ghi)perylene (ug/l)	1.35 U	1.35 U
Benzo(ghi)perylene (ug/l)	1.35 U	1.35 U
Benzo(k)fluoranthene (ug/l)	1.65 U	1.65 U
Benzo(k)fluoranthene (ug/l)	1.65 U	1.65 U
Butylbenzylphthalate (ug/l)	0.55 U	0.55 U
Butylbenzylphthalate (ug/l)	0.55 U	0.55 U
Carbazole (ug/l)	0.9 U	0.9 U
Carbazole (ug/l)	0.9 U	0.9 U
Chrysene (ug/l)	1 U	1 U
Chrysene (ug/l)	1 U	1 U
Di-n-butylphthalate (ug/l)	1 U	1 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Di-n-butylphthalate (ug/l)	1 U	1 U
Di-n-octylphthalate (ug/l)	1 U	1 U
Di-n-octylphthalate (ug/l)	1 U	1 U
Dibenz(a,h)anthracene (ug/l)	1.2 U	1.2 U
Dibenz(a,h)anthracene (ug/l)	1.2 U	1.2 U
Dibenzofuran (ug/l)	0.76 U	0.76 U
Dibenzofuran (ug/l)	0.76 U	0.76 U
Diethyl phthalate (ug/l)	0.18 U	0.18 U
Diethyl phthalate (ug/l)	0.18 U	0.18 U
Dimethyl phthalate (ug/l)	0.4 U	0.4 U
Dimethyl phthalate (ug/l)	0.4 U	0.4 U
Fluoranthene (ug/l)	1.35 U	1.35 U
Fluoranthene (ug/l)	1.35 U	1.35 U
Fluorene (ug/l)	0.95 U	0.95 U
Fluorene (ug/l)	0.95 U	0.95 U
Hexachlorobenzene (ug/l)	1.29 U	1.29 U
Hexachlorobenzene (ug/l)	1.29 U	1.29 U
Hexachlorobutadiene (ug/l)	0.68 U	0.68 U
Hexachlorobutadiene (ug/l)	0.68 U	0.68 U
Hexachlorocyclopentadiene (ug/l)	0 U	0 U
Hexachlorocyclopentadiene (ug/l)	0 U	0 U
Hexachloroethane (ug/l)	1.22 U	1.22 U
Hexachloroethane (ug/l)	1.22 U	1.22 U
Indeno(1,2,3-c,d)pyrene (ug/l)	1.05 U	1.05 U
Indeno(1,2,3-c,d)pyrene (ug/l)	1.05 U	1.05 U
Isophorone (ug/l)	1.41 U	1.41 U
Isophorone (ug/l)	1.41 U	1.41 U
N-nitroso-di-n-propylamine (ug/l)	3.08 U	3.08 U
N-nitroso-di-n-propylamine (ug/l)	3.08 U	3.08 U
N-nitrosodiphenylamine (ug/l)	0.82 U	0.82 U
N-nitrosodiphenylamine (ug/l)	0.82 U	0.82 U
Naphthalene (ug/l)	0.8 U	0.8 U
Naphthalene (ug/l)	0.8 U	0.8 U
Nitrobenzene (ug/l)	0.59 U	0.59 U
Nitrobenzene (ug/l)	0.59 U	0.59 U
Nitrobenzene-d5 (%)	64	63
Nitrobenzene-d5 (%)	64	63
Pentachlorophenol (ug/l)	2.41 U	2.41 U
Pentachlorophenol (ug/l)	2.41 U	2.41 U
Phenanthrene (ug/l)	0.9 U	0.9 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Phenanthrene (ug/l)	0.9 U	0.9 U
Phenol (ug/l)	1.88 U	1.88 U
Phenol (ug/l)	1.88 U	1.88 U
Phenol-d5 (%)	27	31
Phenol-d5 (%)	27	31
Pyrene (ug/l)	1.6 U	1.6 U
Pyrene (ug/l)	1.6 U	1.6 U
Terphenyl-d14 (%)	75	77
Terphenyl-d14 (%)	75	77
bis(2-chloroethoxy)methane (ug/l)	0.9 U	0.9 U
bis(2-chloroethoxy)methane (ug/l)	0.9 U	0.9 U
bis(2-chloroethyl) ether (ug/l)	1.63 U	1.63 U
bis(2-chloroethyl) ether (ug/l)	1.63 U	1.63 U
bis(2-ethylhexyl)phthalate (ug/l)	3.04 U	3.04 U
bis(2-ethylhexyl)phthalate (ug/l)	3.04 U	3.04 U
Volatile Organics		
1,1,1-Trichloroethane (ug/l)	0.31 U	0.31 U
1,1,1-Trichloroethane (ug/l)	0.31 U	0.31 U
1,1,2,2-Tetrachloroethane (ug/l)	0 U	0 U
1,1,2,2-Tetrachloroethane (ug/l)	0 U	0 U
1,1,2-Trichloroethane (ug/l)	0.4 U	0.4 U
1,1,2-Trichloroethane (ug/l)	0.4 U	0.4 U
1,1-Dichloroethane (ug/l)	0 U	0 U
1,1-Dichloroethane (ug/l)	0 U	0 U
1,1-Dichloroethene (ug/l)	0 U	0 U
1,1-Dichloroethene (ug/l)	0 U	0 U
1,2-Dichloroethane (ug/l)	0 U	0 U
1,2-Dichloroethane (ug/l)	0 U	0 U
1,2-Dichloropropane (ug/l)	0 U	0 U
1,2-Dichloropropane (ug/l)	0 U	0 U
1,2-dichloroethylene(total) (ug/l)	0 U	0 U
1,2-dichloroethylene(total) (ug/l)	0 U	0 U
2-Butanone (ug/l)	0 UJ	0 UJ
2-Butanone (ug/l)	0 UJ	0 UJ
2-Hexanone (ug/l)	0 UJ	0 UJ
2-Hexanone (ug/l)	0 UJ	0 UJ
4-Methyl-2-pentanone (ug/l)	0 UJ	0 UJ
4-Methyl-2-pentanone (ug/l)	0 UJ	0 UJ
Acetone (ug/l)	0 R	0 R
Acetone (ug/l)	0 R	0 R

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Benzene (ug/l)	0 U	0 U
Benzene (ug/l)	0 U	0 U
Bromodichloromethane (ug/l)	0 U	0 U
Bromodichloromethane (ug/l)	0 U	0 U
Bromofluorobenzene (%)	102	90
Bromofluorobenzene (%)	102	90
Bromomethane (ug/l)	0 U	0 U
Bromomethane (ug/l)	0 U	0 U
Carbon disulfide (ug/l)	0 U	0 U
Carbon disulfide (ug/l)	0 U	0 U
Carbon tetrachloride (ug/l)	0 U	0 U
Carbon tetrachloride (ug/l)	0 U	0 U
Chlorobenzene (ug/l)	0 U	0 U
Chlorobenzene (ug/l)	0 U	0 U
Chloroethane (ug/l)	0 U	0 U
Chloroethane (ug/l)	0 U	0 U
Chloroform (ug/l)	0 U	2 J
Chloroform (ug/l)	0 U	2 J
Chloromethane (ug/l)	0 U	0 U
Chloromethane (ug/l)	0 U	0 U
Dibromochloromethane (ug/l)	0 U	0 U
Dibromochloromethane (ug/l)	0 U	0 U
Dibromofluoromethane (%)	106	95
Dibromofluoromethane (%)	106	95
Ethylbenzene (ug/l)	0 U	0 U
Ethylbenzene (ug/l)	0 U	0 U
Methylene chloride (ug/l)	0 U	0 U
Methylene chloride (ug/l)	0 U	0 U
Styrene (ug/l)	0 U	0 U
Styrene (ug/l)	0 U	0 U
Tetrachloroethene (ug/l)	0 U	0 U
Tetrachloroethene (ug/l)	0 U	0 U
Toluene (ug/l)	0 U	0 U
Toluene (ug/l)	0 U	0 U
Toluene-d8 (%)	105	92
Toluene-d8 (%)	105	92
Tribromomethane (ug/l)	0 U	0 U
Tribromomethane (ug/l)	0 U	0 U
Trichloroethene (ug/l)	0 U	0 U
Trichloroethene (ug/l)	0 U	0 U

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Vinyl chloride (ug/l)	0 U	0 U
Vinyl chloride (ug/l)	0 U	0 U
Xylenes (total) (ug/l)	0.1 U	0.1 U
Xylenes (total) (ug/l)	0.1 U	0.1 U
cis-1,3-dichloropropene (ug/l)	0 U	0 U
cis-1,3-dichloropropene (ug/l)	0 U	0 U
trans-1,3-dichloropropene (ug/l)	0 U	0 U
trans-1,3-dichloropropene (ug/l)	0 U	0 U
Radiological Parameters (AlphaSpec)		
Actinium-227 (pCi/l)	0.36	0.5 UJ
Actinium-227 (pCi/l)	0.36	0.5 UJ
Radium-226 (pCi/l)	0.24	0.5 UJ
Radium-226 (pCi/l)	0.24	0.5 UJ
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ
Radium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-227 (pCi/l)	0.36	0.5 UJ
Thorium-227 (pCi/l)	0.36	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-228 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-230 (pCi/l)	0.41	0.57
Thorium-230 (pCi/l)	0.41	0.57
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ
Thorium-232 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-234 (pCi/l)	0.51	0.78
Uranium-234 (pCi/l)	0.51	0.78
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-235 (pCi/l)	0.5 UJ	0.5 UJ
Uranium-238 (pCi/l)	0.62	1.02
Uranium-238 (pCi/l)	0.62	1.02
Radiological Parameters GammaSpec)		
Actinium-227 (pCi/l)	0 UJ	0 UJ
Actinium-227 (pCi/l)	0 UJ	0 UJ
Americium-241 (pCi/l)	0 UJ	0 UJ
Americium-241 (pCi/l)	0 UJ	0 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ
Cesium-137 (pCi/l)	5 UJ	5 UJ
Potassium-40 (pCi/l)	0 UJ	0 UJ
Potassium-40 (pCi/l)	0 UJ	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ
Protactinium-231 (pCi/l)	0 UJ	0 UJ

Phase II TCLP Analysis

Station	**SWSD0001**	**SWSD0002**
Sample No	**LU00037**	**LU00039**
Collection Date	**05/14/97**	**05/15/97**
Depth (ft)	**0.0-0.0**	**0.0-0.0**
Northing	**0**	**0**
Easting	**0**	**0**
Radium-226 (pCi/l)	0 UJ	0 UJ
Radium-226 (pCi/l)	0 UJ	0 UJ
Radium-228 (pCi/l)	0 UJ	0 UJ
Radium-228 (pCi/l)	0 UJ	0 UJ
Thorium-228 (pCi/l)	0 UJ	0 UJ
Thorium-228 (pCi/l)	0 UJ	0 UJ
Thorium-230 (pCi/l)	0 UJ	0 UJ
Thorium-230 (pCi/l)	0 UJ	0 UJ
Thorium-232 (pCi/l)	0 UJ	0 UJ
Thorium-232 (pCi/l)	0 UJ	0 UJ
Uranium-235 (pCi/l)	0 UJ	0 UJ
Uranium-235 (pCi/l)	0 UJ	0 UJ
Uranium-238 (pCi/l)	0 UJ	0 UJ
Uranium-238 (pCi/l)	0 UJ	0 UJ

Phase IV TCLP Analysis

Station	**IA02-SB0001**	**IA01-SB0001**	**IA05-SB0002**	**IA01-SB0002**	**IA02-SB0003**	**IA03-SB0003**	**IA05-SB0003**	**IA07-SB0003**	**IA01-SB0003**
Sample No	**LUSB0255**	**LUSB1019**	**LUSB0542**	**LUSB1020**	**LUSB0257**	**LUSB0383**	**LUSB0543**	**LUSB0681**	**LUSB1022**
Collection Date	**07/06/98**	**07/08/98**	**07/01/98**	**07/10/98**	**06/30/98**	**07/08/98**	**07/14/98**	**06/22/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**
Duplicate ID									
Northing	**199310**	**199502**	**199515**	**199521**	**199314**	**199415**	**199522**	**199545**	**199494**
Easting	**517440**	**517588**	**517403**	**517565**	**517310**	**517577**	**517473**	**517346**	**517528**
Herbicides									
2,4,5-TP (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-D (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Metals									
Arsenic (ug/l)	20 U	15 U	15 U	15 U	8 U	15 U	20.2 B	8 U	15 U
Barium (ug/l)	52.4 U	14.7 B	827 B	426 B	932 B	212 B	521 B	685 B	753 B
Beryllium (ug/l)	9560 J	5670		4760		12.4 B	3.2 B	11900	43.8 B
Cadmium (ug/l)	2400 J	5.7 U	5.7 U*	5.7 U	7.5 B	5.7 U	6.6 B	2.3 B	5.7 U
Chromium (ug/l)	11 B	11 B	3.5 U	3.5 U	2.7 B	3.5 U	3.5 U	7.5 B	3.5 U
Lead (ug/l)	7.5 U	7.5 U	7.7 B	7.5 U	3.3 B	7.5 U	47.2 B	43.9 B	7.5 U
Mercury (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9 B	1 U
Selenium (ug/l)	12 U	12 U	12 U	12 U	4.8 U	12 U	12 U	5.8 B	12 U
Silver (ug/l)	4 U	10 U	4 U	10 U	4 U	10 U	10 U	4 U	10 U
Semivolatile Organics									
1,4-Dichlorobenzene (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,5-Trichlorophenol (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,6-Trichlorophenol (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4-Dinitrotoluene (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobenzene (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobutadiene (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Nitrobenzene (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Pentachlorophenol (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Pyridine (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
m,p-Cresol (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
o-Cresol (ug/l)	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Volatile Organics									
1,1-Dichloroethene (ug/l)	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U
1,2-Dichloroethane (ug/l)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/l)	750 U	750 U	11.4 J	58 J	750 U	750 U	750 U	750 U	750 U
2-Butanone (ug/l)	5.5 U	2000 U	2000 U	10.7 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzene (ug/l)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Carbon tetrachloride (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Chlorobenzene (ug/l)	1000 U	1000 U	1000 U	78.8 J	8.1 J	1000 U	1000 U	1000 U	1000 U
Chloroform (ug/l)	600 U	600 U	600 U	600 U	6.1 J	600 U	600 U	600 U	600 U
Tetrachloroethene (ug/l)	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U
Toluene (ug/l)	10 U		10 U		10 U			10 U	

Phase IV TCLP Analysis

Station	**IA02-SB0001**	**IA01-SB0001**	**IA05-SB0002**	**IA01-SB0002**	**IA02-SB0003**	**IA03-SB0003**	**IA05-SB0003**	**IA07-SB0003**	**IA01-SB0003**
Sample No	**LUSB0255**	**LUSB1019**	**LUSB0542**	**LUSB1020**	**LUSB0257**	**LUSB0383**	**LUSB0543**	**LUSB0681**	**LUSB1022**
Collection Date	**07/06/98**	**07/08/98**	**07/01/98**	**07/10/98**	**06/30/98**	**07/08/98**	**07/14/98**	**06/22/98**	**07/14/98**
Depth (ft)	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**5.0-6.0**	**1.0-2.0**	**3.0-4.0**	**1.0-2.0**	**1.0-2.0**	**8.5-9.5**
Duplicate ID									
Northing	**199310**	**199502**	**199515**	**199521**	**199314**	**199415**	**199522**	**199545**	**199494**
Easting	**517440**	**517588**	**517403**	**517565**	**517310**	**517577**	**517473**	**517346**	**517528**
Trichloroethene (ug/l)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Vinyl chloride (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Pesticides									
Chlordane (ug/l)	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U
Endrin (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Heptachlor epoxide (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methoxychlor (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toxaphene (ug/l)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
gamma-BHC (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Phase IV TCLP Analysis

Station	**IA01-SB0004**	**IA02-SB0005**	**IA05-SB0007**
Sample No	**LUSB1025**	**LUSB0259**	**LUSB0548**
Collection Date	**07/20/98**	**06/29/98**	**07/07/98**
Depth (ft)	**6.0-7.0**	**1.0-2.0**	**5.5-6.5**
Duplicate ID			
Northing	**199554**	**199315**	**199565**
Easting	**517519**	**517267**	**517447**
Herbicides			
2,4,5-TP (ug/l)	20 U	20 U	20 U
2,4-D (ug/l)	20 U	20 U	20 U
Metals			
Arsenic (ug/l)	37.3 B	20 U	15 U
Barium (ug/l)	780 B	475 B	437 B
Beryllium (ug/l)	2000		1580
Cadmium (ug/l)	2.4 B	5.7 U	5.7 U
Chromium (ug/l)	4.9 B	3.5 U	3.5 U
Lead (ug/l)	179 B	7.5 U	319 B
Mercury (ug/l)	1 U	0.1 U	1 U
Selenium (ug/l)	9.6 B	12 U	12 U
Silver (ug/l)	7.6 B		10 U
Semivolatile Organics			
1,4-Dichlorobenzene (ug/l)	100 U	100 U	100 U
2,4,5-Trichlorophenol (ug/l)	100 U	100 U	100 U
2,4,6-Trichlorophenol (ug/l)	100 U	100 U	100 U
2,4-Dinitrotoluene (ug/l)	100 U	100 U	100 U
Hexachlorobenzene (ug/l)	100 U	100 U	100 U
Hexachlorobutadiene (ug/l)	100 U	100 U	100 U
Hexachloroethane (ug/l)	100 U	100 U	100 U
Nitrobenzene (ug/l)	100 U	100 U	100 U
Pentachlorophenol (ug/l)	100 U	100 U	100 U
Pyridine (ug/l)	76.7 J	100 U	100 U
m,p-Cresol (ug/l)	100 U	100 U	100 U
o-Cresol (ug/l)	100 U	100 U	100 U
Volatile Organics			
1,1-Dichloroethene (ug/l)	70 U	70 U	70 U
1,2-Dichloroethane (ug/l)	50 U	50 U	50 U
1,4-Dichlorobenzene (ug/l)	6.2 J	9.8 JB	750 U
2-Butanone (ug/l)	2000 U	2000 U	2000 U
Benzene (ug/l)	50 U	50 U	50 U
Carbon tetrachloride (ug/l)	20 U	20 U	20 U
Chlorobenzene (ug/l)	1000 U	1000 U	1000 U
Chloroform (ug/l)	14.4 J	600 U	600 U
Tetrachloroethene (ug/l)	70 U	70 U	70 U
Toluene (ug/l)		10 U	

Phase IV TCLP Analysis

Station	**IA01-SB0004**	**IA02-SB0005**	**IA05-SB0007**
Sample No	**LUSB1025**	**LUSB0259**	**LUSB0548**
Collection Date	**07/20/98**	**06/29/98**	**07/07/98**
Depth (ft)	**6.0-7.0**	**1.0-2.0**	**5.5-6.5**
Duplicate ID			
Northing	**199554**	**199315**	**199565**
Easting	**517519**	**517267**	**517447**
Trichloroethene (ug/l)	5.8 J	50 U	50 U
Vinyl chloride (ug/l)	20 U	20 U	20 U
Pesticides			
Chlordane (ug/l)	12.5 U	12.5 U	12.5 U
Endrin (ug/l)	2 U	2 U	2 U
Heptachlor (ug/l)	1 U	1 U	1 U
Heptachlor epoxide (ug/l)	1 U	1 U	1 U
Methoxychlor (ug/l)	10 U	10 U	10 U
Toxaphene (ug/l)	50 U	50 U	50 U
gamma-BHC (ug/l)	1 U	1 U	1 U