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**IMPLEMENTATION PLAN FOR
PADDYS RUN DEBRIS REMOVAL/BANK
STABILIZATION AND AREA 1, PHASE III**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO**



FEBRUARY 2001

**U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE**

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LIST OF ACRONYMS AND ABBREVIATIONS

A1PIII	Area 1, Phase III
A2PI	Area 2, Phase I
ACA	Amended Consent Agreement
ACGIH	American Conference of Governmental and Industrial Hygienists
ACHP	Advisory Council on Historic Preservation
ARAR	applicable or relevant and appropriate requirement
BAT	best available technology
CDL	Certification Design Letter
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	constituent of concern
COE	U.S. Army Corps of Engineers
CU	certification unit
dBA	decibel level adjusted
DOE	U.S. Department of Energy
EM	electromagnetic conductivity
EPA	U.S. Environmental Protection Agency
FEMP	Fernald Environmental Management Project
FRL	final remediation level
HPGe	high-purity germanium (detector)
IEMP	Integrated Environmental Monitoring Plan
IRDP	Integrated Remedial Design Package
µg/kg	micrograms per kilogram
mg/kg	milligram per kilogram
NaI	sodium iodide
NPDES	National Pollutant Discharge Elimination System
NRRP	Natural Resource Restoration Plan
OEPA	Ohio Environmental Protection Agency
OHPO	Ohio Historic Preservation Office
OMTA	OSDF Material Transfer Area
OSDF	On-Site Disposal Facility
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
pCi/g	picoCuries per gram
PSP	Project Specific Plan
RCRA	Resource Conservation and Recovery Act
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RWP	Radiological Work Permit
SDFP	Soil and Disposal Facility Project
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
SP	Soil Stockpile
V/FCN	Variance/Field Change Notice

LIST OF ACRONYMS AND ABBREVIATIONS
(Continued)

WAC	waste acceptance criteria
WAO	Waste Acceptance Organization
yd ³	cubic yards

EXECUTIVE SUMMARY

This Implementation Plan describes the remediation of at- and below-grade debris in a portion of Paddys Run located adjacent to Area 1, Phase III (A1PIII) Part One, as well as designated locations within A1PIII Part One at the Fernald Environmental Management Project (FEMP). A1PIII Part One represents approximately 108 acres located in the northwest portion of the FEMP site, bounded by Paddys Run to the west, Area 6 and A1PIII Part Three to the south, the old access road to the east, and the FEMP property line to the north.

During development of the A1PIII Certification Design Letter (CDL; DOE 2000a), visible debris, consisting primarily of concrete, was discovered within Paddys Run. The debris was found to extend from Paddys Run eastern bank into the A1PIII Part One area referred to as the southwest fill area. In response to an Ohio Environmental Protection Agency (OEPA) comment on the visible debris, the U.S. Department of Energy (DOE) conducted a geophysical investigation within A1PIII Part One adjacent to Paddys Run bank. This investigation revealed anomalies at depth in the vicinity of the visible surface concrete, indicating the presence of fill and metallic debris. The DOE has prepared this Implementation Plan in response to the OEPA to present the path forward for debris removal within A1PIII Part One southwest fill area, the adjacent section of Paddys Run, and miscellaneous debris found in A1PIII Part One.

This Implementation Plan addresses the remedial design/remedial action steps discussed in the Sitewide Excavation Plan (SEP; DOE 1998a) (i.e., predesign investigation, remedial design, remedial action, precertification and interim grading activities) as they pertain to the remediation of at- and below-grade debris. Additional precertification and certification activities within the A1PIII Part One excavated areas will be presented in the revised A1PIII Part One CDL.

The remedial action involves removing at- and below-grade debris and segregating it from the soil. An estimated 1,000 cubic yards (yd³) of surface and subsurface debris will be excavated, size-reduced to meet the physical waste acceptance criteria (WAC), and transported to Soil Stockpile 1 (SP-1) for eventual disposal in the On-Site Disposal Facility (OSDF). Control mechanisms and monitoring/inspection requirements will be established to minimize impacts on natural resources, cultural resources, and on the air, surface water, and groundwater pathways.

1.0 INTRODUCTION

This Implementation Plan describes the intended remediation of impacted at- and below-grade debris in Area 1, Phase III (A1PIII) Part One, and an adjacent section of Paddys Run, at the Fernald Environmental Management Project (FEMP) in southwestern Ohio. It details how the general remediation strategies set forth by the U.S. Department of Energy (DOE) in the Sitewide Excavation Plan (SEP; DOE 1998a) will be applied to remediation of these areas. A1PIII Part One covers approximately 108 acres north of the Former Production Area, between the old access road and Paddys Run (see Figure 1-1).

Following the discovery of debris in Paddys Run immediately west of the southwest corner of A1PIII Part One, a review of aerial photographs and visual examinations of the area found several soil disturbances. Aerial photos from the mid-1970s show earthwork in the southwest corner of A1PIII Part One just north of the railroad tracks where an approximate 3.3-acre area of dispersed fill is evident upon visual inspection. This area is now referred to as the A1PIII Part One southwest fill area. In addition, aerial photos taken during plant construction in the early 1950s show fill deposited over the hillside in the northeast corner of A1PIII, known as the northeast fill area (see Figure 1-2). The amount of bedrock in this fill indicates it originated from where the old access road was cut through the hillside. More recently, during construction of the railyard, several brush piles and small soil piles containing concrete debris were placed along the southern edge of A1PIII Part One (see Figure 1-2). Information on these piles was documented in a Variance/Field Change Notice (V/FCN) 20720-PSP-0001-1 to Revision 0 of the A1PIII Certification Sampling Project Specific Plan (PSP; DOE 1999). The scope of this remediation is, therefore, broken down into three main items: A1PIII Part One southwest fill area, the adjacent section of Paddys Run, and miscellaneous debris found in A1PIII Part One.

A1PIII Part One was not previously identified as an excavation area until debris was identified during development of the A1PIII Certification Design Letter (CDL; DOE 2000a). Excavation activities to remediate A1PIII Part One and Paddys Run adjacent to A1PIII Part One southwest fill area will be performed in accordance with the concepts described in this Implementation Plan, and the associated construction traveler package, as guided by the SEP. As the integrating document, this Implementation Plan provides a comprehensive description of planned remediation activities, which will facilitate

regulatory agency review and define the scope of work necessary to procure remediation equipment, supplies, and services.

Remedial activities stated herein are in accordance with the Operable Unit (OU) 5 Record of Decision (ROD; DOE 1996a). This Implementation Plan and the SEP satisfy the Amended Consent Agreement (ACA; EPA 1991) requirement for a remedial action (RA) work plan. In addition, this Implementation Plan and the remedial design (RD) constitute the Integrated Remedial Design Package (IRDP); as outlined in the OU5 RD/RA Work Plan (DOE 1996b). In this case, the RD is illustrated by design sketches presented as figures in this Implementation Plan that will be incorporated into the construction traveler package. Upon agency approval of this Implementation Plan, the construction traveler package will be completed to provide the contractor with specific direction regarding implementation of the scope of work presented herein. The construction contractor will work under the direction of Fluor Fernald, and all methods employed will be approved and supervised by Fluor Fernald. Therefore, the purpose of the Implementation Plan is to facilitate regulatory agency review of the RD and to summarize the scope of work. Activities described in this plan will be conducted in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and corrective action requirements of the Resource Conservation and Recovery Act (RCRA). This Implementation Plan conforms to the general model outline for IRDPs provided in Section 7 of the SEP.

1.1 SCOPE AND GENERAL APPROACH OF THE IMPLEMENTATION PLAN

This Implementation Plan consists of the following sections:

- Section 1.0 - Introduction, summarizes the purpose and scope of this Implementation Plan and describes the programmatic strategies and requirements for implementation of this remedial action project
- Section 2.0 - Predesign Investigations and Characterization Data, describes the historical, analytical and real-time data, the surface and subsurface conditions, the nature and extent of contamination, and the anticipated excavation boundaries
- Section 3.0 - Remedial Action Approach, presents the work associated with site preparation, removal of at- and below-grade debris, real-time monitoring of the excavation surface, certification and interim restoration
- Section 4.0 - Project-Specific Environmental Controls and Monitoring, discusses environmental controls and associated monitoring established with respect to natural resources and air, surface water and groundwater pathways

- Section 5.0 - Project-Specific Health and Safety, summarizes project-specific health and safety requirements and procedures
- Appendix A - Substantive Requirements for Nationwide Permit 38 Under Section 404 of the Clean Water Act
- Appendix B - RI/FS Historical Data for A1PIII Part One
- Appendix C - Real-Time Scanning/Analytical Data for the A1PIII Part One Fill Area Certification Units (CUs)

The area-specific RD/RA process at the FEMP is illustrated on Figure 1-1 of the SEP and involves the following steps:

- Predesign investigations
- Remedial design
- Remedial action
- Precertification of excavated areas
- Certification of excavated areas
- Post-remedial action.

This Implementation Plan covers all of the steps except certification and post-remedial action. In accordance with the SEP, a CDL was prepared and submitted to the regulatory agencies following completion of an initial precertification process. Since debris was discovered during preparation of the CDL, A1PIII Part One remediation activities began with the predesign investigation to determine the limits of the debris. This was accomplished through geophysical surveying conducted in A1PIII Part One as summarized in a separate submittal to the agencies (Grumman 2000a). Geophysical surveys focused on identifying anomalies that must be investigated due to their nature (i.e., fill and metallic debris). Excavation boundaries depicted in this implementation plan and subsequent design sketches are based on visual identification of surface debris and data collected during geophysical surveys. The final extent of excavation will be based on actual field conditions, radiological field survey measurements and real-time surveys.

Remediation of the areas addressed by this plan will involve excavating at- and below-grade debris, segregating it from the soil, size-reducing it to meet physical waste acceptance criteria (WAC), and transporting it to Soil Stockpile 1 (SP-1) for eventual disposal in the On-Site Disposal Facility (OSDF). Impacted material is defined as soil with above-final remediation level (FRL) contamination or man-made, non-native materials (e.g., concrete). Precertification and certification data of A1PIII Part

One and existing historical data from Paddys Run demonstrate that surface sediments and soils are within FRLs and, therefore, are not impacted within the scope of this Implementation Plan. Impacted material that meets the chemical, radiological, and physical WAC established for the OSDF will be hauled to SP-1 for future placement into the OSDF for disposal. Impacted material that meets the chemical/radiological WAC, but not the physical WAC, will be size-reduced prior to placement into SP-1. Items that are prohibited from disposal in the OSDF will be hauled to SP-7 prior to shipment to a permitted commercial disposal facility.

1.2 REMEDIATION AREA BACKGROUND AND DESCRIPTION

A1PIII Part One covers approximately 108 acres north of the FEMP Former Production Area. It is bounded by Paddys Run to the west, the old access road to the east, Area 6 and A1PIII Part Three to the south and the FEMP property line to the north. The area of Paddys Run covered by this plan is immediately west of the A1PIII Part One southwest fill area and north of the train trestle. In addition, at-grade debris (e.g., concrete, metal, etc.) is present in isolated areas of A1PIII Part One.

Sampling and analysis for certification of surface soil has been completed in A1PIII Part One, including the southwest and northeast fill areas, and all certification criteria have been met. The resulting draft Certification Report (DOE 2000b) has been completed and submitted to the DOE for review. Real-time scans and data from soil sampling and analysis demonstrate FRL attainment. Therefore, removal of debris, rather than above-FRL contamination, is the driver for remediation of these areas. Section 2.0 presents a summary of predesign investigations and introduces soil certification data for A1PIII Part One fill areas.

1.3 SUMMARY OF THE REGULATORY DRIVERS

The regulatory requirements and other legal obligations described in this Implementation Plan are contained in the applicable or relevant and appropriate requirements (ARARs) tables from the OU5 ROD. The mechanisms for complying with ARARs pertinent to the A1PIII Part One scope of work are described in detail in other sections of this Implementation Plan and summarized in Appendix A, Substantive Requirements for Nationwide Permit 38 Under Section 404 of the Clean Water Act.

1.3.1 Permits

Storm water discharge from the A1PIII Part One are covered under the existing National Pollution Discharge Elimination System (NPDES) permit [Ohio Environmental Protection Agency (OEPA) Permit Number 1I000004*FD] through the implementation of the permit-required, sitewide Storm Water Pollution Prevention Plan (PL-3083).

A1PIII Part One is exempt from the administrative requirement of obtaining a permit relative to Section 404 of the Clean Water Act. Appendix A documents the manner in which the project will comply with the substantive requirements under the U.S. Army Corps of Engineers (COE) Nationwide Permit Program [Appendix A to 33 Code of Federal Regulations (CFR) 330] and OEPA's Section 401, State Water Quality Program (OAC 3745-32).

Air permits are not required for this activity.

1.3.2 Natural Resource Trusteeship and Related Natural and Cultural Resource Regulations

Two mechanisms drive the protection of natural resources during remediation: the Natural Resource Trusteeship process and compliance with pertinent federal and state regulations. Both of these mechanisms were incorporated into the A1PIII Area remedial design. Impacts to A1PIII will be documented in the Integrated Environmental Monitoring Plan (IEMP) and factored into the amount of restoration required at the FEMP. DOE, in agreement with the Fernald Natural Resource Trustee, is implementing restoration at the FEMP to resolve liability for natural resource injuries under CERCLA.

Regulatory drivers for the protection of natural and cultural resources and associated surveys are grouped into three areas: threatened and endangered species protection, wetlands/floodplain protection, and cultural resources management.

1.3.2.1 Threatened and Endangered Species

Two threatened and endangered species are present in the vicinity of Paddys Run and the A1PIII Part One project area. Suitable habitat exists for the federally-endangered Indiana bat (*Myotis sodalis*) along Paddys Run north of the railroad trestle. In 1999, an adult female was caught and released approximately 450 feet from the project area. Whitaker (1999) stated that "...likely there is an Indiana bat colony within a couple miles of the site." Indiana bats use the FEMP and surrounding areas for summer

roosting habitat. By late November, most Indiana bats have returned to their winter cave for hibernation (Barbour 1969). Therefore, excavation activities in January will not impact individuals. The removal of large, loose bark trees will be avoided pursuant to management recommendations (Whitaker 1999). DOE has also consulted with the U.S. Fish and Wildlife Service to ensure that these avoidance measures are adequate. Additional recommendations will be implemented to the extent practicable.

A large population of the state-threatened Sloan's crayfish (*Orconectes sloanii*) inhabits Paddys Run in the vicinity of the project area. One hundred seventeen Sloan's crayfish were identified in Paddys Run during a 1999 survey (St. John 1999). Sloan's crayfish hibernate under rocks during the winter months, therefore, they are less susceptible to siltation and turbid conditions (St. John 2000). Nevertheless, appropriate erosion and sediment controls will be implemented throughout the duration of the project. Because of the location of debris in Paddys Run, some individual crayfish may be lost during construction activities. Since the crayfish are hibernating, relocation would not be effective (St. John 2000). Efforts will be taken to minimize disturbance to the stream channel during the removal of debris. Pursuant to Appendix D of the IEMP (DOE 2000c), crayfish habitat will be restored in the Paddys Run stream channel following debris removal (DOE 2000c). Habitat restoration will involve regrading as necessary and replacing rocks in order to reconstruct the present pool-riffle structure of Paddys Run. Finally, the IEMP survey for the Sloan's crayfish scheduled for 2002 will be accelerated to 2001 to assess any impacts to the existing population that may have resulted from this activity.

1.3.2.2 Wetlands/Floodplains

Jurisdictional wetlands and waters of the United States that are identified on the FEMP property are delineated in the 1993 FEMP Wetland Delineation Report (COE 1993), officially approved by the U.S. Army Corps of Engineers on August 19, 1993, and shown on Figure 1-3. Jurisdictional Wetlands are located in proximity to the project area and will be avoided as practical. Access to and removal of debris out of Paddys Run and the A1PIII Part One southwest fill area will result in minor excavation in Paddys Run (water of the United States), truck traffic in close proximity to wetland areas, and minimal truck traffic through narrow bands delineated as wetlands on an existing gravel road, as shown on Figure 1-3. These activities are authorized by Nationwide Permit 38 (Cleanup of Hazardous and Toxic Waste) under 33 CFR 330.1(c).

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The debris within Paddys Run and the adjacent eastern stream bank is located within the 100- and 500-year floodplain of Paddys Run. Potential impacts will be minimized through the implementation of appropriate erosion and sedimentation controls as indicated in the Floodplain Statement of Findings for OU5 (Federal Regulations, Volume 62, Number 22, February 3, 1997). No changes in the elevation of the 100- and 500-year floodplain in Paddys Run are anticipated as a result of work activities in the Paddys Run and A1PIII Part One work areas.

1.3.3 Cultural Resource Management

DOE, the Ohio Historic Preservation Office (OHPO), and the Advisory Council on Historic Preservation (ACHP) have entered into a "Programmatic Agreement regarding Archaeological Investigations at the Fernald Environmental Management Project" (DOE 1997). Pursuant to this Programmatic Agreement, A1PIII Part One requires a Cultural Resource Survey.

A Phase I Cultural Resource Survey is intended to describe the archaeological resources within A1PIII Part One. A portion of A1PIII Part One previously underwent a Phase I Cultural Resources Survey. The methodology of a research design for a Phase I survey must, therefore, be adequate to make it highly probable that all sites will be detected. Therefore, the remaining portions will be summarized and identified prior to excavation. Sites may be identified through a combination of documentary research, informant interviews, surface reconnaissance, and subsurface testing. Since information on modern environmental conditions may be important for understanding the pre-historic environment, the Phase I survey should, at a minimum, assemble pertinent data on the following aspects of the project area: geomorphology, fauna, flora, soils, climate, hydrology and geology.

In project areas of less than 15 degrees slope, where adequate ground surface visibility is not readily available (less than 50 percent), hand excavations at 15-meter intervals must be employed. All shovel units should be excavated in natural stratigraphic or 10-cm levels within natural levels. All soil from each level must be screened through ¼ inch mesh hardware cloth to test for the presence of archaeological resources. The results of the Phase I survey will be incorporated in a report meeting the standards and specifications of the OHPO.

1.4 LESSONS LEARNED

A lessons learned program has been implemented to apply knowledge accumulated during successive remedial efforts conducted under the SEP. Lessons learned from past remedial activities in Areas 1

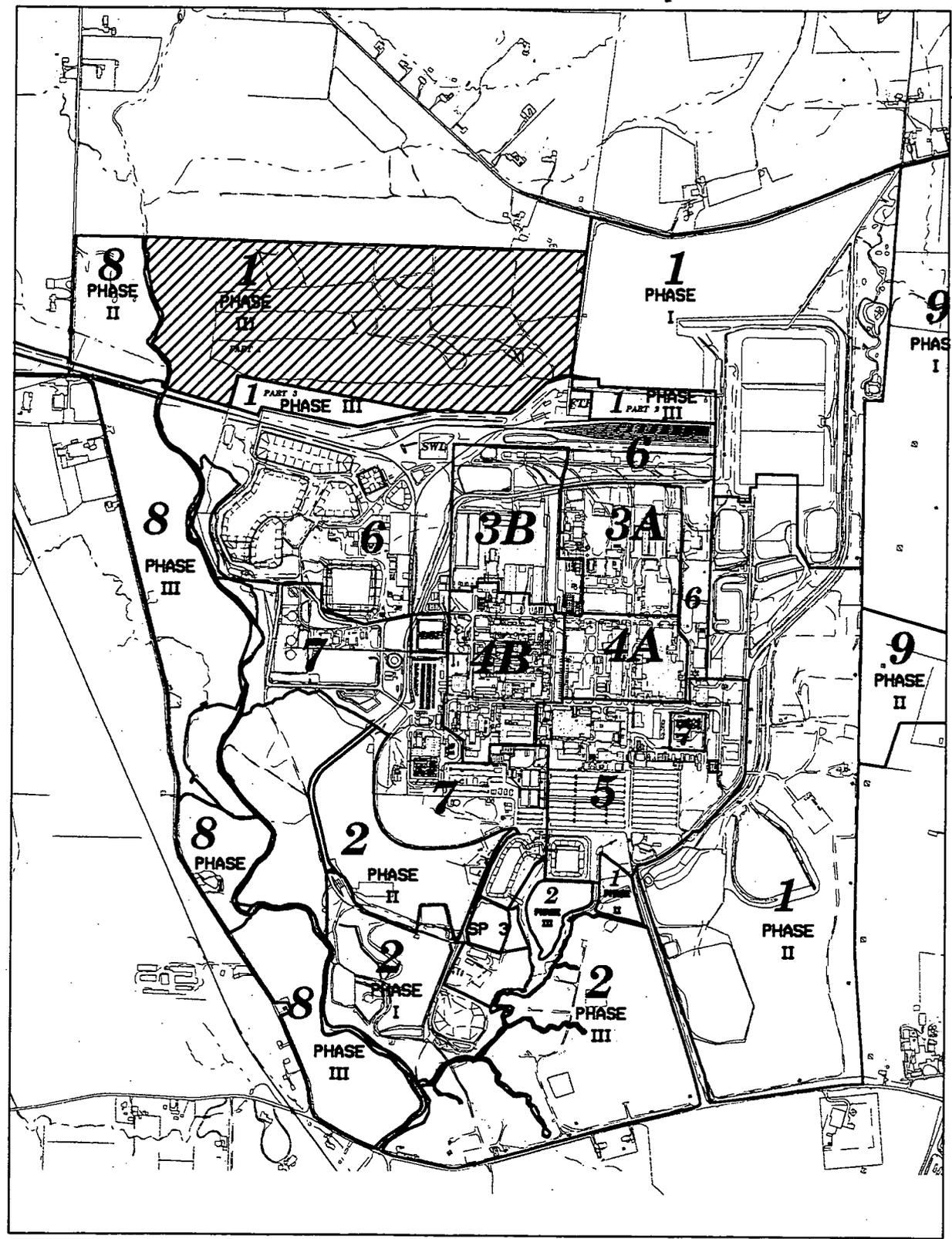
and 2 [Area 1 Phase I, Area 1 Phase II, Area 2, Phase I (A2PI) Southern Waste Units, A2PI Non-Waste Units, and Area 2 Phase III Part Two] have been incorporated into this IRDP to ensure that remedial activities carried out under this plan meet all applicable requirements and achieve the highest quality level possible. Some of the most important lessons include:

- Obtain regulatory approval on PSPs prior to beginning work
- Complete sampling and analysis activities before submitting IRDP (if possible), and include all data in the Implementation Plan
- If possible, determine through adequate predesign activities the necessity to excavate surrounding soil material with debris
- Perform comprehensive walkdowns of project area to identify the presence of surface debris and remove debris prior to certification activities
- Excavate prohibited items in such a manner that they are transported to the appropriate stockpile location at the time of their removal from the excavation area
- Perform continuous visual observation of the excavation to identify and segregate special material
- Install downgradient storm water controls prior to upgradient disturbance.

Because the general complexity of remedial activities varies from area to area, soil remediation approaches at the FEMP will continue to evolve with each successive remedial effort.

1.5 SCHEDULE

The remediation of Paddys Run and A1PIII Part One covered by this Implementation Plan are scheduled for Winter 2001. Field activities for the Phase I Cultural Resource Survey began on December 6, 2000. Excavation mobilization activities are anticipated to begin on February 5, 2001, upon review of Phase I Cultural Resources survey results and agency approval of this Implementation Plan. This schedule is dependent upon weather, funding, and regulatory approval.



LEGEND:
 [Hatched Box] PROJECT LIMITS
 [Solid Line] AREA BOUNDARY

SCALE
 1500 750 0 1500 FEET

FIGURE 1-1. PADDYS RUN DEBRIS REMOVAL/BANK STABILIZATION AND A1P.III PART ONE LOCATION MAP

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LEGEND:



DEBRIS REMOVAL AREA

☆ A1P111 MISCELLANEOUS DEBRIS PILE LOCATIONS



A1P111 PART 1 BOUNDARY

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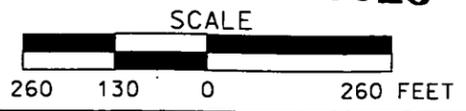
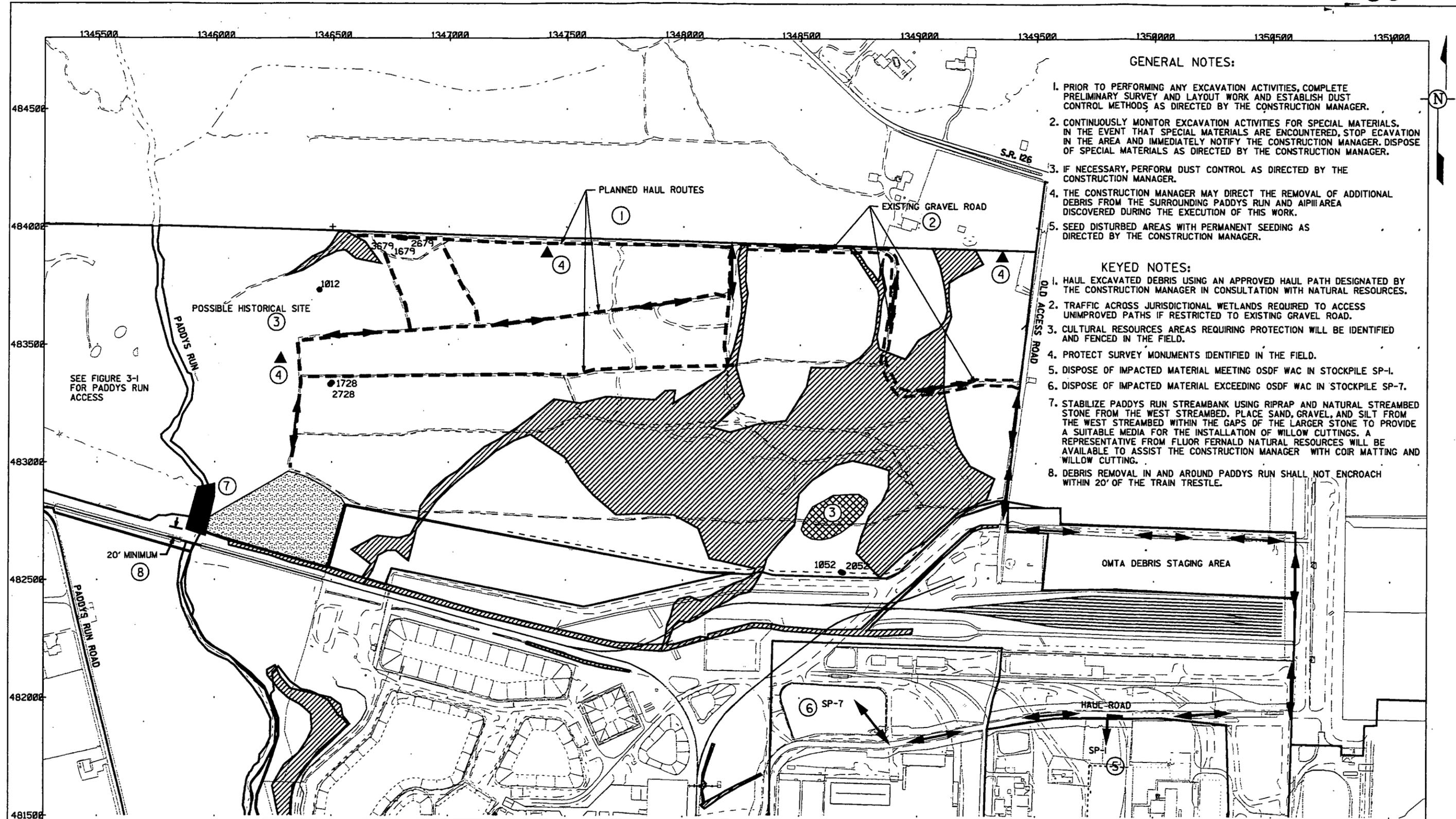


FIGURE 1-2. FILL AND DEBRIS AREAS



GENERAL NOTES:

1. PRIOR TO PERFORMING ANY EXCAVATION ACTIVITIES, COMPLETE PRELIMINARY SURVEY AND LAYOUT WORK AND ESTABLISH DUST CONTROL METHODS AS DIRECTED BY THE CONSTRUCTION MANAGER.
2. CONTINUOUSLY MONITOR EXCAVATION ACTIVITIES FOR SPECIAL MATERIALS. IN THE EVENT THAT SPECIAL MATERIALS ARE ENCOUNTERED, STOP EXCAVATION IN THE AREA AND IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER. DISPOSE OF SPECIAL MATERIALS AS DIRECTED BY THE CONSTRUCTION MANAGER.
3. IF NECESSARY, PERFORM DUST CONTROL AS DIRECTED BY THE CONSTRUCTION MANAGER.
4. THE CONSTRUCTION MANAGER MAY DIRECT THE REMOVAL OF ADDITIONAL DEBRIS FROM THE SURROUNDING PADDYS RUN AND AIPIII AREA DISCOVERED DURING THE EXECUTION OF THIS WORK.
5. SEED DISTURBED AREAS WITH PERMANENT SEEDING AS DIRECTED BY THE CONSTRUCTION MANAGER.

KEYED NOTES:

1. HAUL EXCAVATED DEBRIS USING AN APPROVED HAUL PATH DESIGNATED BY THE CONSTRUCTION MANAGER IN CONSULTATION WITH NATURAL RESOURCES.
2. TRAFFIC ACROSS JURISDICTIONAL WETLANDS REQUIRED TO ACCESS UNIMPROVED PATHS IF RESTRICTED TO EXISTING GRAVEL ROAD.
3. CULTURAL RESOURCES AREAS REQUIRING PROTECTION WILL BE IDENTIFIED AND FENCED IN THE FIELD.
4. PROTECT SURVEY MONUMENTS IDENTIFIED IN THE FIELD.
5. DISPOSE OF IMPACTED MATERIAL MEETING OSDF WAC IN STOCKPILE SP-1.
6. DISPOSE OF IMPACTED MATERIAL EXCEEDING OSDF WAC IN STOCKPILE SP-7.
7. STABILIZE PADDYS RUN STREAMBANK USING RIPRAP AND NATURAL STREAMBED STONE FROM THE WEST STREAMBED. PLACE SAND, GRAVEL, AND SILT FROM THE WEST STREAMBED WITHIN THE GAPS OF THE LARGER STONE TO PROVIDE A SUITABLE MEDIA FOR THE INSTALLATION OF WILLOW CUTTINGS. A REPRESENTATIVE FROM FLUOR FERNALD NATURAL RESOURCES WILL BE AVAILABLE TO ASSIST THE CONSTRUCTION MANAGER WITH COIR MATTING AND WILLOW CUTTING.
8. DEBRIS REMOVAL IN AND AROUND PADDYS RUN SHALL NOT ENCROACH WITHIN 20' OF THE TRAIN TRESTLE.

LEGEND:

- | | | | | | |
|--|--|--|-------------------------------|--|------------------|
| | JURISDICTIONAL WETLANDS | | IDENTIFIED ARCHEOLOGICAL SITE | | UNIMPROVED ROADS |
| | AIPIII SOUTHWEST FILL AREA | | PROPERTY LINE | | GRAVEL ROADS |
| | PADDYS RUN DEBRIS REMOVAL AND BANK STABILIZATION | | SURVEY MONUMENTS | | |
| | | | MONITORING WELL | | |

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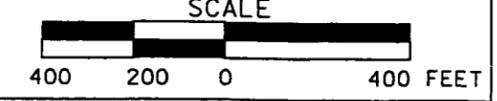


FIGURE 1-3. HAUL ROUTES

2.0 PREDESIGN INVESTIGATIONS AND CHARACTERIZATION DATA

Based on existing soil analytical data, historical land use and location, no soil excavation was anticipated in A1PIII Part One prior to final certification of the area. The only required activity, as stated in the A1PIII CDL (DOE 2000a), is the removal of debris from the area.

2.1 SUMMARY OF RI/FS DATA

Before initiating certification activities, all historical soil data pertinent to A1PIII Part One were pulled from the Sitewide Environmental Database (SED). Soil samples were analyzed from a total of 37 borings in A1PIII Part One, including monitoring well installations. The historical soil COC data collected within A1PIII Part One are presented in Appendix B.

Historical data indicate that thorium-228 and beryllium are present in above-FRL concentrations, none of which are located in the areas affected by this implementation plan, as shown in Figure 2-1. No historical sample locations fall within the southwest or northeast fill areas. Three historical sample locations fall in close proximity to the 14 A1PIII miscellaneous debris pile locations. These three sample locations are below FRL. No historical sampling locations fall within Paddys Run.

It is unlikely that A1PIII Part One has been impacted from former FEMP production activities for several reasons. First, A1PIII Part One is located to the north and northwest (generally upwind) of the Former Production Area and, therefore, should have minimal impacts from airborne contamination. Secondly, A1PIII Part One does not receive drainage from any other part of the FEMP site. Finally, as stated in the OU5 Remedial Investigation Report (DOE 1995a), no known disposal or plant related activities were associated with this region of the FEMP. However, a review of aerial photographs taken in the mid-1970s show earthwork in the southwest corner of A1PIII Part One just north of the railroad tracks.

2.1.1 Geophysical Survey Methods

In response to an OEPA comment issued during development of the A1PIII CDL, Electromagnetic Conductivity profiling (EM) was conducted in the A1PIII Part One southwest and northeast fill areas as a reconnaissance-level screening method for the exploration and mapping of buried anomalies (both metallic and non-metallic) and subsurface conditions. The specific interpretative profiling results and colored mapping defining surface and subsurface anomalies targeted for excavation, investigation, and

potential removal, if confirmed to be non-native debris, are provided as a separate document (Grumman 2000b).

The EM exploration depth was estimated to be 15 feet to 25 feet of the subsurface in the fill areas. Anomalies were observed and more pronounced on the high-frequency data, suggesting their existence either at or just below the ground surface. It is unlikely that other geophysical tools, such as ground-penetrating radar, would significantly enhance the anomaly characterization (as experienced in the A2PI Carolina Area) and were, therefore, not used in A1PIII Part One (Grumman 2000a).

Southwest Fill Area

Within the designated southwest fill area, two locations were surveyed, as shown in Figure 2-2. The larger of the two contains surface debris (large broken concrete slabs) located along a distinguishable 3 to 4-foot tall embankment running east to west at Excavation Locations 2 and 3. This survey location extended west, terrain and vegetation permitting, near a livestock fence located along the east bank of Paddys Run. Additionally, the survey extended south to an existing ditch, where no surface debris was evident, and to the north and east to natural terrain features. Subsequently, a smaller location was surveyed to the east of the previous survey, where no surface debris was evident but a small mound was visible.

The anomalies in Excavation Locations 1, 2 and 3 appear as both isolated objects and as clusters. Interpretation of the clusters indicates the existence of small metallic targets, such as rebar and/or reinforced concrete, buried together. These clusters are prevalent in the Excavation Locations 1 and 2. Excavation Location 2 was the location where surface debris was previously identified. Additionally, interpretation of the depths to the clusters and the isolated objects was determined to be in the upper zero to 4 feet zone of the subsurface and resulted in the delineation of Excavation Locations 1, 2, 3 and 4. Only one small isolated anomaly was observed in the smaller surveyed location, Excavation Location 4. Excavation Location 5 represents concrete debris visible at the toe and top of the vertical stream bank. Two small pieces of transite (approximately 6 inches wide by 1 foot long) are visible at the top of the bank within Excavation Location 5.

Northeast Fill Area

Within the designated northeast fill area, only the flatter slopes, along with its western slope where surface rubbish was evident (believed to be from a pre-site farm including several metal fence posts, one concrete block, and small concrete fragments), were profiled. This rubbish will be addressed as part of miscellaneous debris to be removed. A heavily vegetative, steeper slope bounded the EM survey to the southwest and south (top of slope approximately 628 feet; mean sea level and bottom of slope approximately 607 feet). This steep slope was not surveyed but was visually inspected. No non-native debris was identified on this slope. Based on the EM survey results, surface debris will be removed without the need for extensive excavation.

2.2 A1PIII PART ONE CERTIFICATION SUMMARY

2.2.1 Real-Time Scanning

A supplemental real-time scan of A1PIII Part One was conducted in conjunction with certification sampling activities. The mobile sodium iodide (NaI) detectors were used to scan the existing "roadways." The high-purity germanium (HPGe) was used to scan the soil and debris in the southwest and northeast fill areas and along the southern border.

HPGe results, as well as the total gamma activity (as counts per second) for total uranium, radium-226, and thorium-232 are presented in Appendix C. Results demonstrate total uranium, radium-226 and thorium-232 concentrations to be below their respective FRLs. No mobile NaI results exceeded three times the FRL, and no HPGe readings of the fill areas and debris piles exceeded one time the FRL; therefore, no hot spots were identified. Details of the supplemental scan of A1PIII Part One are presented in the A1PIII Certification Sampling PSP.

2.2.2 Soil Sampling

Prior to development of plans for debris removal presented in this implementation plan, certification sampling was conducted in the entire A1PIII Part One area. The southwest fill area, the northeast fill area and the area along the rail yard fence where the 14 miscellaneous debris piles are located were set up as three individual CUs. Sixteen sub-CUs were established within each CU. The depth of certification sampling was based on the real-time scanning results. Because no hot spot concentrations were detected, samples were collected from the 0 to 6-inch interval from 12 of the 16 sub-CUs. The remaining four samples were identified as archive samples, but were not collected.

All CUs for A1PIII Part One met the certification criteria, including the three fill area CUs described above. Final certification data and the CU map for these three CUs are presented in Appendix C.

2.3 IDENTIFICATION OF EXCAVATION COCs

Analytical data show no above-FRL soil concentrations in any of the fill or debris pile areas. Therefore, there are no excavation constituents of concern (COCs) for A1PIII Part One. Excavation in A1PIII Part One is driven by the requirement to remove non-native debris.

2.4 SUMMARY OF SURFACE AND SUBSURFACE CONDITIONS

The A1PIII Part One southwest fill area consists of a wooded area approximately 3.3 acres in size that is sloped to the southwest. Existing drainage is uncontrolled and flows southwest to an existing ditch which flows directly west into Paddys Run. Debris has been located at the surface and is partially exposed within the fill area at Excavation Locations 2 and 5. Additional surface debris can be observed in the adjacent Paddys Run streambed. There are no known underground structures or utilities in the area that require attention or protection during debris removal activities.

2.5 ANTICIPATED EXCAVATION BOUNDARIES

Excavation boundaries for A1PIII Part One are defined by geophysical surveys conducted in the area. The depth of excavations to remove debris from the A1PIII Part One southwest fill area is not expected to exceed 4 feet. The excavation limits proposed for the portion of the southwest fill area on Paddys Run bank are based on visual observation of surface debris on the bank. No excavation is expected within Paddys Run beyond the removal of surface debris observed in the field. Excavation boundaries for both the Paddys Run and A1PIII Part One work areas are illustrated on Figure 2-2. Additional miscellaneous non-native debris (e.g., concrete, livestock fencing, etc.) will be removed from isolated areas of A1PIII Part One, including the northeast corner and along the southern fence boundary.

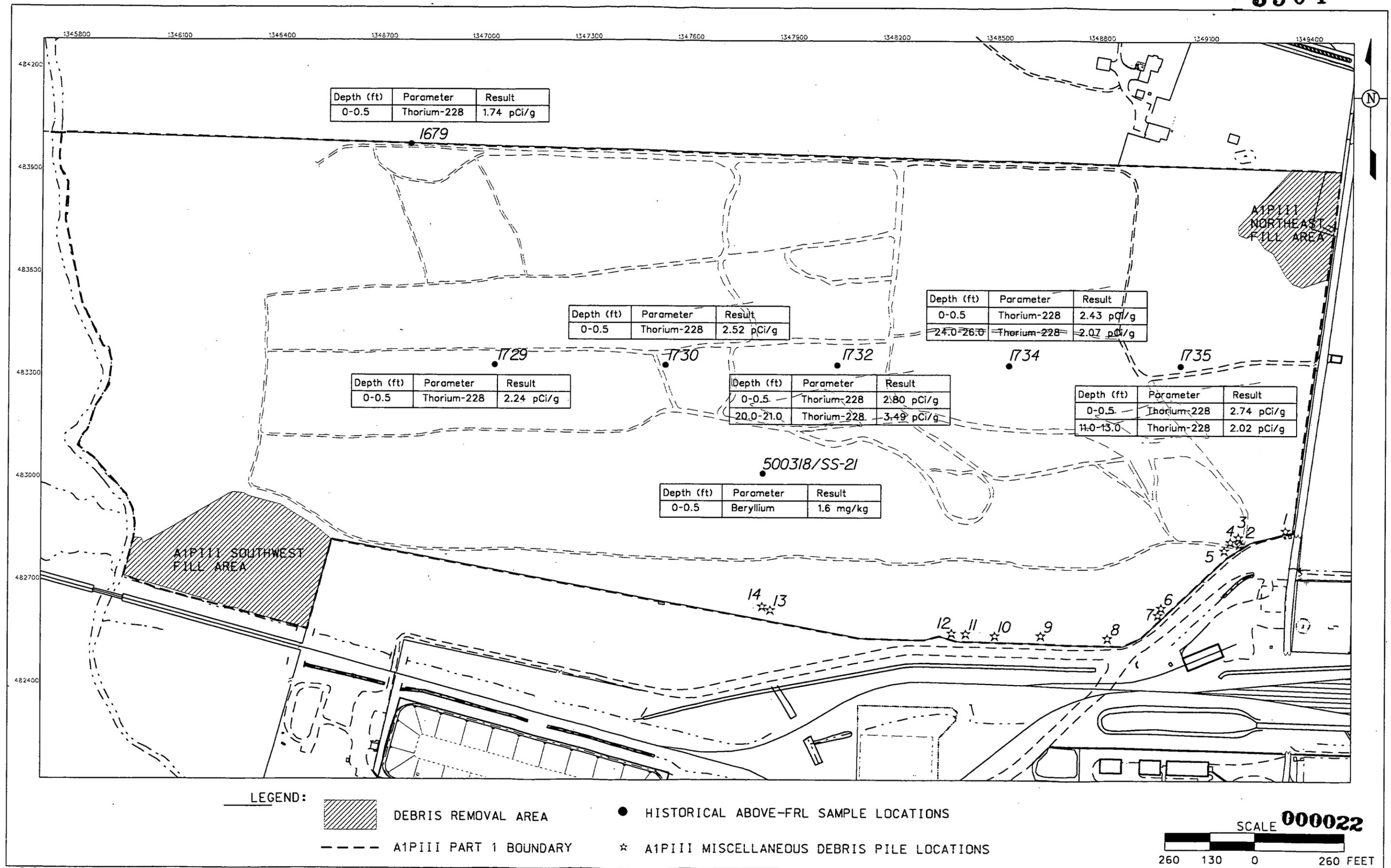
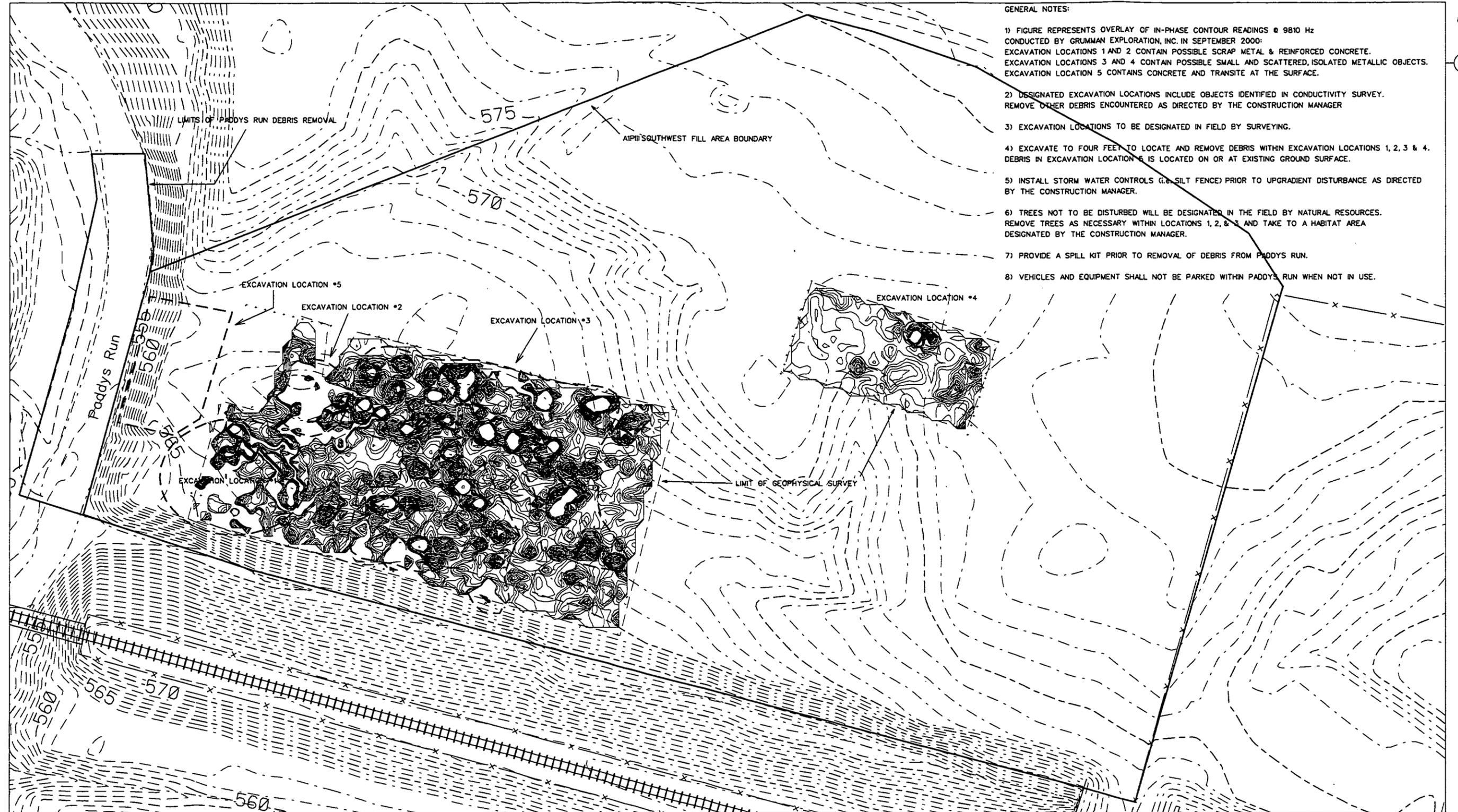


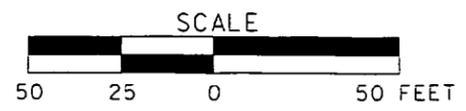
FIGURE 2-1. A1P111 PART ONE DEBRIS REMOVAL AREAS AND HISTORICAL ABOVE-FRL SAMPLE LOCATIONS



- GENERAL NOTES:
- 1) FIGURE REPRESENTS OVERLAY OF IN-PHASE CONTOUR READINGS @ 9810 Hz CONDUCTED BY GRUMMAN EXPLORATION, INC. IN SEPTEMBER 2000. EXCAVATION LOCATIONS 1 AND 2 CONTAIN POSSIBLE SCRAP METAL & REINFORCED CONCRETE. EXCAVATION LOCATIONS 3 AND 4 CONTAIN POSSIBLE SMALL AND SCATTERED, ISOLATED METALLIC OBJECTS. EXCAVATION LOCATION 5 CONTAINS CONCRETE AND TRANSITE AT THE SURFACE.
 - 2) DESIGNATED EXCAVATION LOCATIONS INCLUDE OBJECTS IDENTIFIED IN CONDUCTIVITY SURVEY. REMOVE OTHER DEBRIS ENCOUNTERED AS DIRECTED BY THE CONSTRUCTION MANAGER
 - 3) EXCAVATION LOCATIONS TO BE DESIGNATED IN FIELD BY SURVEYING.
 - 4) EXCAVATE TO FOUR FEET TO LOCATE AND REMOVE DEBRIS WITHIN EXCAVATION LOCATIONS 1, 2, 3 & 4. DEBRIS IN EXCAVATION LOCATION 5 IS LOCATED ON OR AT EXISTING GROUND SURFACE.
 - 5) INSTALL STORM WATER CONTROLS (I.E. SILT FENCE) PRIOR TO UPGRADIENT DISTURBANCE AS DIRECTED BY THE CONSTRUCTION MANAGER.
 - 6) TREES NOT TO BE DISTURBED WILL BE DESIGNATED IN THE FIELD BY NATURAL RESOURCES. REMOVE TREES AS NECESSARY WITHIN LOCATIONS 1, 2, 3 AND TAKE TO A HABITAT AREA DESIGNATED BY THE CONSTRUCTION MANAGER.
 - 7) PROVIDE A SPILL KIT PRIOR TO REMOVAL OF DEBRIS FROM PADDYS RUN.
 - 8) VEHICLES AND EQUIPMENT SHALL NOT BE PARKED WITHIN PADDYS RUN WHEN NOT IN USE.

LEGEND:

- PROJECT AREA BOUNDARIES
- - - - EXCAVATION BOUNDARIES



000023

3.0 REMEDIAL ACTION APPROACH

The general approach described in this Implementation Plan is in accordance with "Excavation Approach A - Shallow Excavation of Impacted On-Property Area Outside the Former Production Area and other Waste Storage/Management Areas," described in Section 4.1 of the SEP. The performance requirements for implementing this approach are presented in this implementation plan and associated figures. Upon agency approval of this plan, these requirements will be communicated in a construction traveler package for excavation and debris removal activities. The work will be executed in accordance with the Safety Performance Requirements Manual (RM-0021, SPR 2-12).

The remedial actions in Paddys Run and A1PIII Part One involve the removal of identified impacted material, consisting of surface and subsurface debris. These remediation activities are scheduled for Winter 2001. Excavated debris will be stockpiled in the work area until there is sufficient volume to warrant hauling to SP-1.

3.1 ESTABLISHING SITE BOUNDARIES AND CONTROLS

The project boundary will be posted as a construction area since a radiological boundary is not needed due to the absence of above-FRL material. However, a radiological materials area will be established in the event that radiologically contaminated materials are discovered during excavation. Vehicle entry/exit routes will be as shown in Figure 1-3 and controlled by the Construction Manager. Trucks hauling debris from both the A1PIII Part One southwest fill area and Paddys Run will travel an existing cleared path, as designated by the Construction Manager, to the existing gravel road shown in Figure 1-3. The restriction of traffic to the gravel road from this point over to the old access road will avoid the jurisdictional wetlands. If the unimproved portion of the designated path becomes rutted, an alternate route may be identified by the Construction Manager to provide a more stable haul route without placing an aggregate roadbase. All exiting vehicles will then travel east to south on the Old Access Road, east across the gravel road north of the OSDF Material Transfer Area (OMTA) expansion, south across the OMTA Debris Staging Area, then west on the Impacted Material Haul Road to the appropriate soil pile destination.

Access to the Paddys Run streambed will follow a designated path from Paddys Run Road through Area 8, Phase II, as shown on Figure 3-1. Construction will enter/exit the stream using a rubber tired Caterpillar 416, 426, 436 or equivalent backhoe to remove surface debris from the stream bank toe. The backhoe will place debris at a location along Paddys Run eastern bank that is easily accessible to equipment working in the A1PIII Part One southwest fill area for load-out and hauling to the east.

3.2 SURVEYING AND SITE LAYOUT

Surveys will be used to identify the areas to be excavated. Surveys will also be used to verify the remediation of areas identified through geophysical surveying as having surface or buried debris. Upon the completion of excavation, the depth and lateral extent of each excavation location will be surveyed and recorded.

3.3 EXCAVATION, MONITORING AND SEGREGATION

General excavation elements involve excavation and removal of the following:

- 900 cubic yards (yd³) of surface and subsurface debris from the 4-foot tall (maximum) A1PIII Part One southwest fill
- 50 yd³ of surface debris from Paddys Run streambed adjacent to A1PIII Part One southwest fill area and north of the railroad trestle
- 50 yd³ of surface debris (fence posts, concrete block, rolled up livestock fence) from the northeast fill area and miscellaneous debris piles throughout A1PIII Part One.

The Waste Acceptance Organization (WAO) and radiological technicians will provide visual observation for special materials, prohibited items or elevated contamination levels. Any debris not passing visual inspection will be managed at SP-7. Debris or soil identified during radiological monitoring as being radiologically contaminated will be transported to SP-1 (or SP-7 for above-WAC materials) for placement. Debris will be size reduced, if necessary, to meet size criteria for placement in either SP-1 or SP-7.

3.3.1 A1PIII Part One Southwest Fill Area

As shown on Figure 2-2, five general excavation locations have been identified within the 3.3-acre southwest fill area. The general approach and sequencing of excavations in the A1PIII Part One southwest fill area is shown from two different perspectives in Figure 3-2 (looking west) and Figure 3-3

(looking north). Each excavation will be performed by excavating the soil to a depth of 4 feet and sifting through it to segregate debris. A field geologist will be made available to assist construction personnel in determining where fill ends and native soil begins. Approximately 3,200 yd³ of soil will be excavated to segregate an estimated 900 yd³ of debris anticipated to be excavated from this area. Debris will be stockpiled adjacent to the excavation in the vicinity of the work area until there is sufficient quantity to warrant hauling to SP-1 or SP-7. Soil removed during excavation of the debris will be placed back into the excavation. The excavation areas will be backfilled using non-impacted excavated material after real-time monitoring and surveying is completed. Real-time excavation monitoring during, and collection of physical samples following, the excavation described above will be documented in a V/FCN to the existing, approved PSP for A1PIII Part One certification.

3.3.2 Paddys Run Debris Removal and Bank Stabilization

Approximately 50 yd³ of debris will be excavated and hauled to SP-1 or SP-7. The debris consists primarily of concrete, although some metal and two pieces of transite have been identified. Figure 3-2 depicts the approach and sequencing of debris removal from Paddys Run along with A1PIII Part One southwest fill area. As in the southwest fill area, debris will be stockpiled adjacent to the work area until there is sufficient quantity to warrant hauling to SP-1 or SP-7. Debris will be moved using approved equipment previously specified to a location along the east streambed toe where additional loose and embedded concrete debris exists. A tracked Caterpillar 325 or equal excavator located on top of the eastern stream bank will then remove all the debris from above using an extended bucket. This debris will be loaded out and hauled to the east with debris removed from the A1PIII Part One southwest fill area. Any non-impacted material excavated during the removal of debris will be placed back into the area.

In the place of the excavated debris at the eastern stream bank toe, a combination of riprap and natural streambed stone from the western stream bank will be installed as discussed during the field walkdown with representatives from OEPA on January 11, 2001. Riprap will either be delivered through Area 8 via the route shown in Figure 3-1 or through A1PIII via the designated debris haul route. Additionally, sand, gravel, and silt from the western stream bank will be placed within the gaps of the larger stone to provide a suitable media for the installation of willow cuttings prior to the demobilization of equipment and construction personnel from A1PIII. Extensive resloping of the vertical face of the eastern stream bank will not be necessary since no debris is evident. Disturbed areas on the top of the eastern stream

bank will be reseeded and coir matting will be installed, as necessary. Riprap will be installed downstream near the eastern stream bank railroad trestle for additional erosion protection. DOE will provide sufficient prior notification for in-stream work so that OEPA representatives can be present. In addition, deviations from the above plan will be brought to the attention of OEPA, and input will be requested for contingency planning for any unforeseen problem that may arise.

3.3.3 Miscellaneous Debris and Debris Piles

In addition to the northeast fill area, there are 14 miscellaneous wood and metal debris piles identified throughout A1PIII Part One based on visual observation. The volume of this miscellaneous debris is estimated to be 50 yd³. It is acknowledged, as will be addressed in the construction traveler, that additional debris not already identified may be encountered during the execution of this work. The debris will be size reduced, if necessary, loaded and hauled to SP-1 for ultimate disposal in the OSDF in the same manner as debris removed from Paddys Run and A1PIII Part One southwest fill area.

3.4 IMPACTED MATERIAL MANAGEMENT

Impacted material removed from Paddys Run and A1PIII Part One will be placed in SP-1 for temporary holding prior to disposal in the OSDF. If field radiological monitoring indicates elevated contamination in the soil surrounding the debris, the affected soil will be removed and transported to either SP-1 or SP-7. Otherwise, impacted material from the execution of this work is expected to consist almost entirely of miscellaneous concrete and metal debris. The ultimate transfer of impacted material from SP-1 to the OSDF will be coordinated with the OSDF project and performed in accordance with the Impacted Materials Placement Plan (DOE 2000d).

3.4.1 Other Materials

Section 3.3.2.2 of the SEP identifies special materials that, when encountered, require WAO input before the contractor can determine their disposition. While these special materials are not anticipated, the unknown nature of the buried debris requires that a contingency plan be in place if they are encountered.

Special materials include:

- Asbestos
- Drums and tanks
- Piping and pumps
- Process residues
- Uranium metal

- Miscellaneous debris
- Acid brick.

Some of these materials (asbestos, piping, and debris) may be placed in the OSDF if they meet the WAC and pass a visual inspection of any pipe interiors. Materials that do not meet the OSDF WAC will either be placed at SP-7 or packaged into containers and staged within the project area until transfer to Fluor Fernald Waste Generator Services except for process residues, friable asbestos and uranium metal; these will be containerized and staged in the project area. Fluor Fernald Waste Generator Services will pick up the containers from the area for characterization of the material and eventual shipment to an off-site disposal facility. Information on the identification, management, and tracking of these materials is provided in the SEP (Section 3.6 and Appendix F).

3.5 REAL-TIME MONITORING/CERTIFICATION

Once debris is removed, HPGe monitoring will be conducted over the debris excavation footprint. Real-time monitoring activities will be documented in a V/FCN to the existing, approved PSP for A1PIII certification. The sampling and operation parameters are the same as those described in the PSP for A1PIII Certification Sampling.

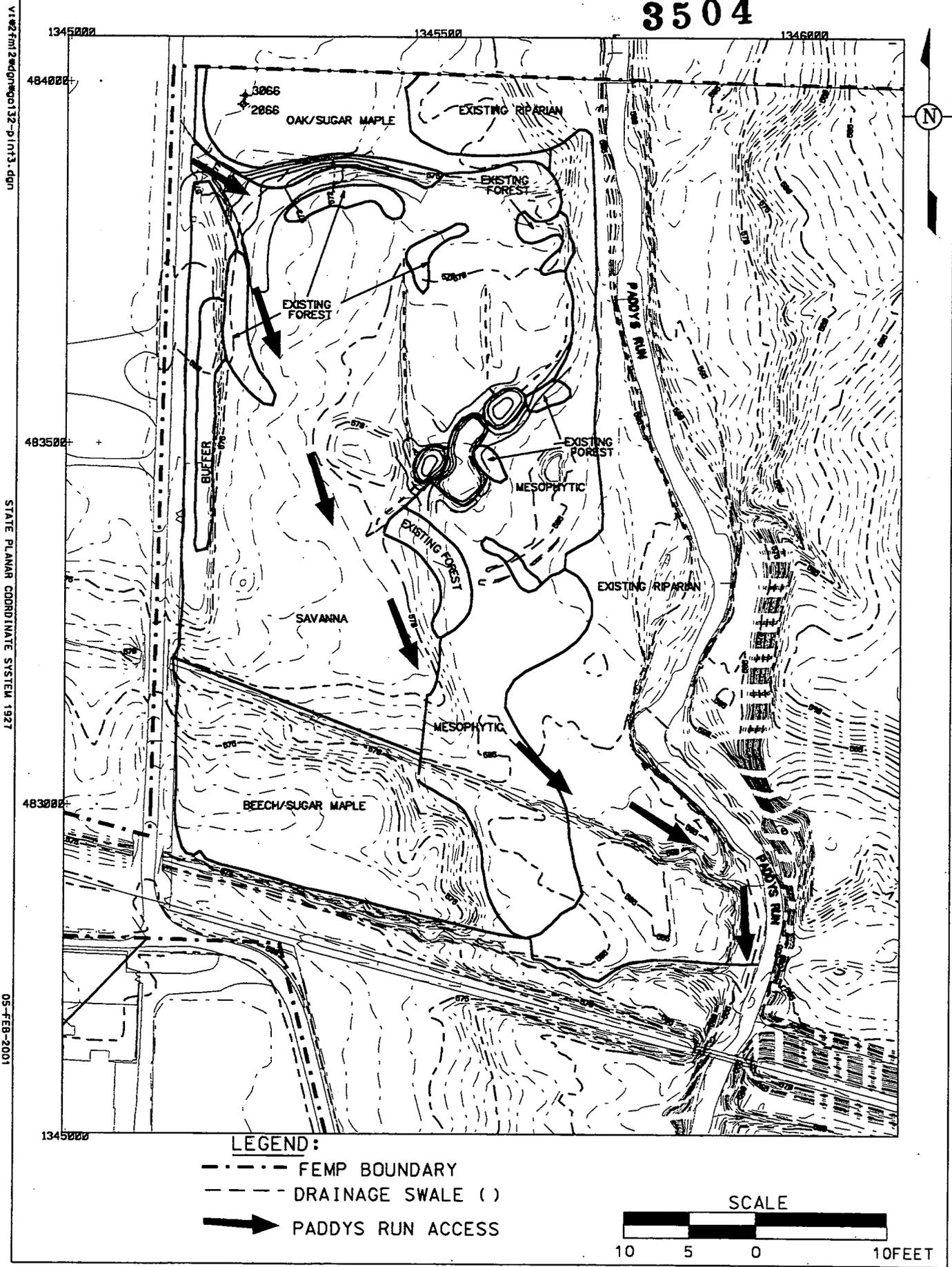
Once the debris in the southwest fill area is removed and the area backfilled and graded, the excavated area will be considered one CU, divided into 16 sub-CUs, with sample locations selected per the SEP. The sub-CU grid will be illustrated in a figure attached to a forthcoming V/FCN to the existing A1PIII certification PSP.

Further sampling within the northeast fill area and along the southern fence line will not be required since the debris is at surface and the surface soil has passed certification.

3.6 INTERIM RESTORATION

Interim restoration consists of activities intended to stabilize the project area in a manner consistent with future design plans for final restoration. Stabilization of Paddys Run consists of methods previously detailed in Section 3.3.2. Additional disturbed areas resulting from excavation and construction activities will be re-graded (if necessary) and seeded. A representative from Fluor Fernald Natural Resources will be available to assist the Construction Manager in the performance of all interim restoration activities.

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STATE PLANAR COORDINATE SYSTEM 1927

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- LEGEND:**
- FEMP BOUNDARY
 - DRAINAGE SWALE ()
 - ➔ PADDY'S RUN ACCESS

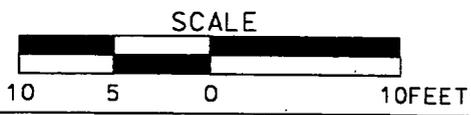
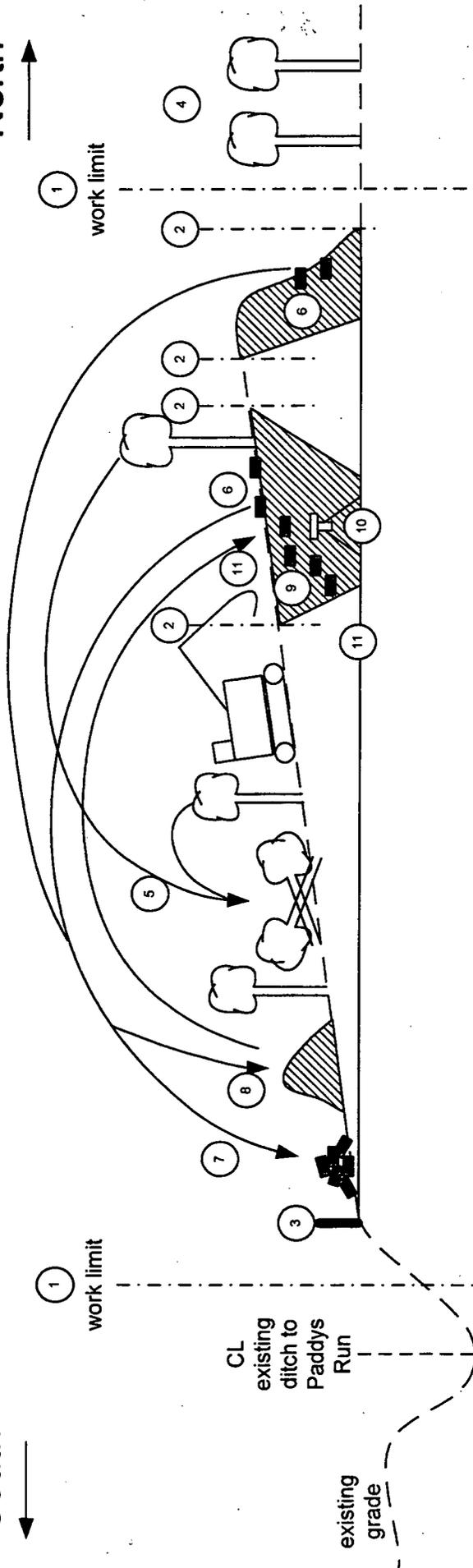


FIGURE 3-1. PADDY'S RUN ACCESS

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South

North



STEP DESCRIPTION

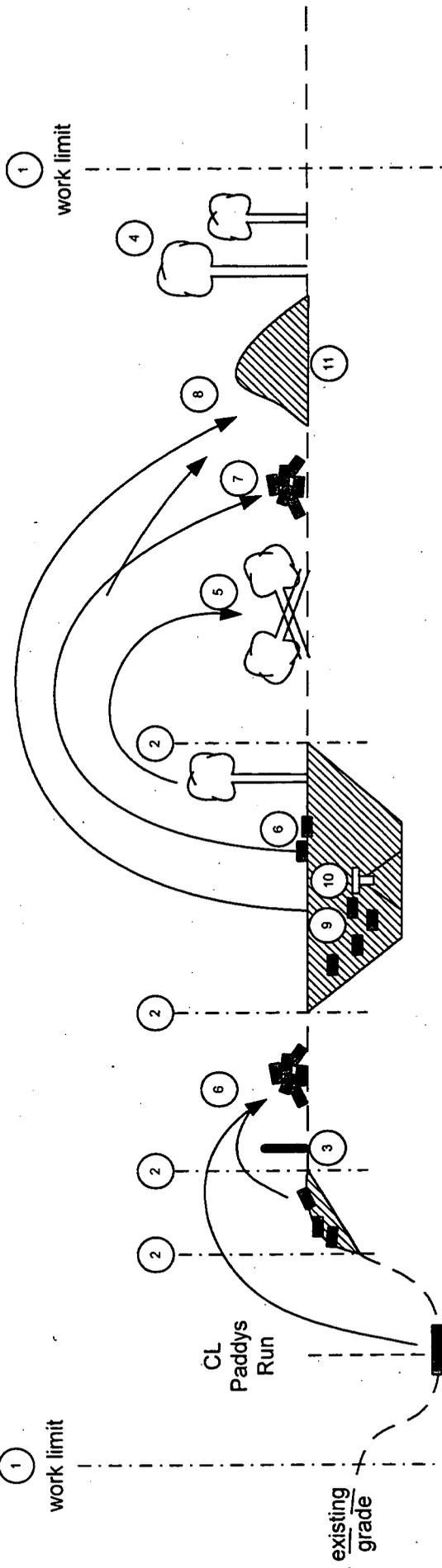
- 1 Establish work limits.
- 2 Establish excavation limits.
- 3 Establish silt fence where necessary.
- 4 Identify and protect mature trees adjacent to and within the work limit.
- 5 Cut or push over trees and relocate within the work area as directed by the Construction Manager.
- 6 Excavate debris at surface.
- 7 Segregate debris from soil and size reduce as necessary. Stockpile debris in a separate working stockpile until there is sufficient quantity to transport to SP-1.
- 8 Segregate soil from debris and place in a separate stockpile.
- 9 Excavate soil within areas determined by geophysical methods to an estimated depth of 4 feet. If buried debris is encountered, radiologically survey (i.e. frisk), separate from soil, size reduce if necessary, and place in stockpile created in Step 8.
- 10 Backfill, or spread in place, excavated soil upon completion of after real-time scan of excavated area.
- 11 Seed disturbed areas.

000030

FIGURE 3-2: GENERALIZED EXCAVATION OF PADDYS RUN/ A1PIII SW FILL AREA
LOOKING WEST

West ←

→ East



STEP DESCRIPTION

- 1 Establish work limits.
- 2 Establish excavation limits.
- 3 Establish silt fence where necessary after concrete removal.
- 4 Identify and protect mature trees adjacent to and within the work limit.
- 5 Cut or push over trees as necessary and relocate within the work area as directed by the Construction Manager.
- 6 Excavate debris at surface.
- 7 Segregate debris from soil and size reduce as necessary. Stockpile debris in a separate working stockpile until there is sufficient quantity to transport to SP-1.
- 8 Segregate soil from debris and place in a separate stockpile.
- 9 Excavate soil within areas determined by geophysical methods to an estimated depth of 4 feet. If buried debris is encountered, radiologically survey (i.e. frisk), separate from soil, size reduce if necessary, and place in stockpile created in Step 8.
- 10 Backfill, or spread in place, excavated soil upon completion of real-time scan of excavated area.
- 11 Seed disturbed areas.

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**FIGURE 3-3: GENERALIZED EXCAVATION OF PADDY'S RUN/A1P/III SW FILL AREA
LOOKING NORTH**

4.0 PROJECT-SPECIFIC ENVIRONMENTAL CONTROLS AND MONITORING

This section defines the project-specific environmental controls and monitoring that will be performed as part of remediation of A1PIII Part One, how the resulting information will be used by the project organization, and how it will be integrated with sitewide monitoring and reporting requirements.

The IEMP provides a summary report and a cumulative feedback function for the project-specific monitoring conducted by the individual remediation projects. This link will assist with interpretation of project-specific results from a sitewide perspective. However, routine "process-adjustment" decisions, which will be made by the Soil and Disposal Facility Project (SDFP) to react and respond to project-specific operating conditions and process-control objectives, will not be reported as part of the IEMP reporting cycles. Rather, these types of routine decisions will be maintained as part of the project organization's daily operations log and are considered to be a normal course of day-to-day practice to achieve project-specific operating objectives. Figure 5-1 of the SEP summarizes the FEMP sitewide and project-specific environmental monitoring and control mechanisms.

4.1 NATURAL RESOURCE IMPACTS

Potential impacts to natural resources include those associated with threatened and endangered species, cultural resources, and wetlands/floodplains. In general, efforts will be made to avoid and minimize natural resource impacts associated with A1PIII Part One. Appendix A summarizes the actions that will be undertaken to minimize impacts to wetlands and waters of the United States.

In summary, the project area is located in the vicinity of two threatened and endangered species found at the FEMP. The winter construction season minimizes impacts to both the federally endangered Indiana bat and the state-threatened Sloan's crayfish. Also, the potential exists for cultural resources to be present across A1PIII Part One. A Phase I Cultural Resources survey will be conducted prior to excavation activities, and any archeological sites potentially eligible for inclusion on the National Register of Historic Places would be avoided. Wetlands within A1PIII Part One will be avoided except as restricted to the existing gravel road (see Figure 1-3).

4.1.1 Control Mechanisms

The SEP establishes a four-component strategic control mechanism for natural resource impacts. The first component is to identify the unavoidable potential natural resource impacts that are anticipated due to A1PIII Part One remediation activities to be initiated under the SEP.

The second component, avoidance of impacts to FEMP natural resources as practicable, has been controlled through planning and design. Sensitive natural resource areas have been delineated at the FEMP. These "Priority Natural Resource Areas" are illustrated in the Natural Resource Impact Monitoring Plan (briefly discussed below) and Figure 5-2 of the SEP. Priority Natural Resource Areas are located within A1PIII Part One; however, all access points, laydown areas, etc., for the A1PIII Part One soil remediation project have been located outside Priority Areas. Potential impacts to other FEMP natural resources will be minimized through the incorporation of appropriate environmental control mechanisms as well. These are addressed in the subsequent, media-specific discussions.

The third component, monitoring to document the actual extent of impacts, is addressed in Section 4.1.2. The extent of impacts is reported in the IEMP quarterly and annual reports.

The fourth component, natural resource restoration, is briefly described in Section 3.6, and is the subject of the Natural Resources Restoration Plan (NRRP; DOE 1998b). Impacts not originally anticipated in the development of the NRRP, may result in a requirement for additional restoration as determined appropriate by the Fernald Natural Resource Trustees.

4.1.2 Monitoring

Monitoring natural resource impacts associated with A1PIII Part One and other sitewide remedial activities will be conducted under the Natural Resources Impact Monitoring Plan (part of the IEMP). Descriptions of the objectives, regulatory drivers, monitoring, data evaluation, and reporting requirements for the program are provided therein. Sitewide monitoring of natural resource impacts will continue under the IEMP during A1PIII Part One soil remediation activities. This program will verify and document the actual extent of natural resource impacts anticipated by, and identified in, the RODs and will identify any unanticipated impacts to wetlands and floodplains associated with Paddys Run and its tributaries and threatened and endangered species habitat. Specifically, the IEMP survey for the Sloan's crayfish scheduled for 2002 will be accelerated to 2001 to assess any impacts to the existing

population that may have resulted from this activity. The natural resource monitoring data collected from the FEMP will be updated in the NRRP as it is relevant to restoration.

4.2 AIR PATHWAY

This subsection presents the air pathway control and monitoring requirements for fugitive dust emissions. Certification sample analysis in A1PIII Part One showed that ambient conditions already meet FRLs for COCs in all but one sample. One sample contained uranium concentrations slightly above cleanup levels but located outside the excavation area. Therefore, the risk of encountering airborne radiological particulates, radon, and exposure to direct radiation during excavation is remote, and local air monitoring will only be conducted by project staff if directed by radiological control/engineering based on discovery of unexpected radiological contamination. The existing perimeter monitoring program described in Section 6.0 of the IEMP will be used to demonstrate compliance with effluent release limits.

4.2.1 Noise

Noise control and abatement for this activity will include noise control devices (mufflers) and proper maintenance for equipment and machinery. This project is located in a remote area within the Federal Reservation and there are no receptors from the general public to noise from this project. Therefore, exposure to noise is being treated exclusively as an occupational exposure issue.

4.2.1.1 Control Mechanisms

Noise control and abatement during the remediation of A1PIII Part One will include noise control devices (mufflers) and proper maintenance for equipment and machinery, and also may include rescheduling the time periods during which heavy equipment is used in the field. Currently, no remediation activities are anticipated after sunset.

To ensure that Occupational Safety and Health Administration (OSHA) and American Conference of Governmental and Industrial Hygienists (ACGIH) noise limits are met, an administrative action level below these limits will be specified in the health and safety documents for the traveler package. This administrative action level will be used to assess the need for hearing protection for field personnel in the areas of remediation activities, the need for maintenance of equipment and machinery, and the need for additional noise control and abatement.

4.2.1.2 Monitoring

Noise monitoring will be conducted to implement the A1PIII Part One project-specific health and safety requirements. Noise measurements will be made in the field by Fluor Fernald health and safety personnel, using health and safety protocols for noise monitoring, to determine whether administrative action levels are exceeded; the need for hearing protection; the need for maintenance of equipment and machinery; the need for additional noise control or abatement; and compliance with OSHA and ACGIH occupational noise limits.

Components of noise monitoring will include establishing remediation area-specific background levels prior to the start of excavation activities, and occasional monitoring during implementation of remedial activities. If the environmental noise level falls within 5 decibel level adjusted (dBA) of the administrative action level (85 dBA, as specified in the health and safety requirements), health and safety personnel will contact the project field manager to begin appropriate corrective actions. Field managers will be responsible for documenting noise monitoring as well as for initiating noise abatement measures.

4.2.2 Fugitive Emissions

Administrative and engineering control techniques, in accordance with the Fugitive Dust Control Requirements (RM-0047), developed from the FEMP fugitive dust control "best available technology" (BAT) determination, will be implemented during excavation, hauling, and placement of soil to mitigate potential fugitive dust emissions.

The number or types of dust suppression equipment in operation will not preclude stopping work if there is visible dust or excessive visible dust. Visible dust indicates a need to increase the level of dust control effort, including possible alteration, slowdown, or temporary suspension of the work activities generating the visible dust. The work activity(ies) observed to be generating the visible dust will be temporarily suspended if the visible dust exceeds the site-specific limit or Ohio standard [see Fugitive Dust Control Requirements (RM-0047)]. Dust controls will be increased and/or work practices will be modified to bring the fugitive emissions to a level below the limit/standard during dust-generating activities.

4.2.3 Airborne Radiological Particulates

Based on certification sample analysis, airborne radiological particulate emissions are not anticipated to be associated with this project.

4.2.4 Radon

There is no known source of radon associated with this project other than local soils. There are no structures for radon gas to accumulate in this project. Radiological control staff will observe wind direction to ensure appropriate evacuation in the event of a radon release from the Silos Project.

4.2.5 Direct Radiation

Environmental radiation levels associated with remediation activities will be monitored via the sitewide environmental direct radiation monitoring program, presented in Section 6.0 of the IEMP. No project-specific direct radiation control mechanisms are expected to be required for environmental or public safety concerns.

4.3 SURFACE WATER PATHWAY

All surface water within A1PIII Part One exits the site via ditches to, or directly into, Paddys Run. Stormwater and erosion control will be accomplished in accordance with the NPDES permit, the FEMP Storm Water Pollution Prevention Plan (PL-3083), and other regulatory drivers as reflected in Appendix A.

Construction activity inspections mandated by the SWPPP will be conducted by SDFP Compliance in the excavation area. Inspections will be conducted within all construction areas weekly and after any rain events totaling 0.5 inch or more within a 24-hour period after notification.

4.4 GROUNDWATER PATHWAY

Certification samples indicate that there is no source term for contaminants and, consequently, no risk that this project will impact the Great Miami Aquifer.

5.0 PROJECT-SPECIFIC HEALTH AND SAFETY

All DOE and Fluor Fernald employees, visitors, vendors, and contractors are required to abide by the provisions of a Fluor Fernald-prepared, applicable traveler package, Fluor Fernald work permits, and the Fluor Fernald Safety Requirements Manual (RM-0021). Managers and supervisors are responsible for ensuring that health and safety requirements, including training requirements, are met as set forth in the traveler package and Fluor Fernald work permits. In addition to the traveler package requirements, the Safety Performance Requirements Manual, and permits, the contractor will comply with all federal, state, and local requirements (e.g., OSHA, ACGIH). All personnel have stop-work authority for imminent safety hazards resulting from noncompliance with the applicable health and safety practices.

The traveler package will be developed in accordance with Control of Verification of Construction Support Contractor Work (CT-3.7.5) and the Safety Performance Requirements Manual (RM-0021, SPR 2-12). The applicable traveler package will provide the contractors with work instruction, training requirements, and information related to the possible hazards and safety requirements to execute each task. All contractor activities conducted in support of this project are governed by the safety requirements specified in the traveler package, which addresses occupational, industrial, and construction health and safety. Each worker or visitor entering the work area is briefed on the traveler package and signs an acknowledgement form. The traveler package may be revised as tasks and/or associated hazards and mitigating circumstances are identified, added, or deleted, and will be reviewed on an annual basis (if applicable to length of project) to ensure current applicability. The traveler package and Fluor Fernald work permits will be maintained at the project site. The original completed packages are returned to Engineering/Construction Document Control as a record.

The Fluor Fernald Safety and Health Department will develop a project-specific, occupational monitoring strategy. Occupational monitoring for the project area will comply with all federal, state, and local requirements (e.g., OSHA, ACGIH).

Fluor Fernald will provide all radiological occupational monitoring for the contractor. Fluor Fernald Radiological Control Technicians will provide the necessary support for the project activities. The radiological control requirements for the performance of the work will be documented in Fluor Fernald job-specific radiological work permits (RWPs). Personnel performing work that requires a RWP will be

briefed on the specific hazards and requirements for the task prior to commencing work. Fluor Fernald radiological control personnel will evaluate the data obtained from the monitoring to determine the effectiveness of the radiological controls and relay this information to the contractor.

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APPENDIX A

**SUBSTANTIVE REQUIREMENTS FOR
NATIONWIDE PERMIT 38 UNDER SECTION 404
OF THE CLEAN WATER ACT**

Appendix A
Substantive Requirements for Permit 38 Under Section 404 of the Clean Water Act
Nationwide Permit for the State of Ohio
Paddys Run Debris Removal Bank Stabilization/A1PIII Area

Condition	Substantive Requirement	Compliance Plan
Nationwide Permit 38 - Cleanup of Hazardous and Toxic Waste - General Conditions		
Navigation	No activity may cause more than a minimal effect on navigation.	No work will occur within any water bodies used for navigation, either in commerce or recreation. Therefore, the proposed activity will not have an adverse impact on navigation.
Proper Maintenance	Any structure or fill authorized shall be maintained to ensure public safety.	Public access to the project area is restricted by the site perimeter fence. No structures are being built or installed during this activity. If necessary, fill will be limited to clean gravel for road base and will be removed upon project completion.
Erosion and Siltation Controls	Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date.	Silt fence and/or other appropriate methods of sedimentation and erosion control will be used as necessary to minimize potential erosion and sediment transport during construction. The project area will be inspected during construction under the site SWPPP construction inspection program to ensure erosion and sedimentation controls are properly maintained.
Aquatic Life Movement	No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species, which normally migrate through the area, unless the activity's primary purpose is to impound water.	No disruption in the movement of aquatic species is anticipated as a result of the project.
Equipment	Heavy equipment working within wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.	Heavy equipment within jurisdictional wetlands will be restricted to an existing gravel road.
Regional and Case-by-Case	Activities must comply with any regional or case by case conditions added by the Division Engineer.	Not Applicable.

Appendix A
Substantive Requirements for Permit 38 Under Section 404 of the Clean Water Act
Nationwide Permit for the State of Ohio
Paddys Run Debris Removal Bank Stabilization/AIPIII Area
(Continued)

Condition	Substantive Requirement	Compliance Plan
Wild and Scenic Rivers	No activity may occur in a component of the National Wild and Scenic River System.	Not applicable.
Tribal Rights	No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.	Not applicable.
Water Quality Certification	Section 401 State Water Certification must be obtained or waived.	Ohio EPA issued its corresponding Section 401 State Water Quality Certification for NWP 38 in January 1992. The citation for this certification and Ohio EPA's implementing regulations for its Section 401 Program (OAC 3745-32) are identified in the OUSARARs.
Coastal Zone Management	State coastal zone management consistency concurrence must be obtained or waived.	Not applicable.
Endangered Species	No activity is authorized under any NWP, which is likely to jeopardize the continued existence or modify the critical habitat of a threatened or endangered species or species proposed for such designation.	There is no critical habitat in the project area. The Federally Endangered Indiana Bat and the State Threatened Sloan's Crayfish have been found in the vicinity of the FEMP. This activity is being undertaken during the winter when the Indiana Bat is not present (hibernating) and the Sloan's Crayfish is dormant. Efforts will be made to minimize impacts by avoiding large trees and by restoring the streambed in Paddys Run.
Historic Properties	No activity which may affect historic properties listed, eligible of listing, in the National Register of Historic Places in authorized.	The project area is being surveyed in accordance with the Programmatic Agreement Regarding Archaeological Investigations at the Fernald Environmental Management Project (March 6, 1997). Any unanticipated discoveries encountered during actual fieldwork will be addressed in accordance with that programmatic agreement between DOE, the Ohio Historic Preservation Office, and the Advisory Council on Historic Preservation.

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<p align="center">Appendix A Substantive Requirements for Permit 38 Under Section 404 of the Clean Water Act Nationwide Permit for the State of Ohio Paddys Run Debris Removal Bank Stabilization/AIPIII Area (Continued)</p>		
Condition	Substantive Requirement	Compliance Plan
Notification	When required by the terms of a NWP, the permittee must notify the ACOE in accordance these provisions.	Not applicable. ACOE notification is not required for CERCLA remedial actions regulated by USEPA.
Nationwide Permit 38 - Cleanup of Hazardous and Toxic Waste¹ - Section 404 Conditions		
Water Supply Intakes	No discharges of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structure or adjacent bank stabilization.	Not applicable. No public water supply intakes are located in the vicinity of the proposed project.
Shellfish Production	No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to shellfish harvesting authorized by NWP 4.	Not applicable. The project area is not used for shellfish production.
Suitable Material	No discharge of dredged or fill material may consist of unsuitable material (e.g. trash, debris, car bodies, asphalt, etc.) and material discharged must be free from toxic pollutants in toxic amounts.	If gravel fill is used, it will meet the ODOT specifications for clean stone and will not contain trash, debris, toxic pollutants, etc. Appropriate erosion and sedimentation controls will also be used as necessary to minimize sediment transport from the project area.
Mitigation	Discharges of dredged or fill material into waters of the United States must be minimized and avoided to the maximum extent practicable at the project site.	Work and vehicle traffic within wetland areas will be prohibited. Appropriate erosion and sedimentation controls will be used as necessary to minimize sediment transport.
Spawning Areas	Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.	No adverse impacts to spawning areas are anticipated. Appropriate erosion and sedimentation controls will also be used as necessary to minimize sediment transport in downstream portions of the watershed.

Appendix A
Substantive Requirements for Permit 38 Under Section 404 of the Clean Water Act
Nationwide Permit for the State of Ohio
Paddys Run Debris Removal Bank Stabilization/A1PIII Area
(Continued)

Condition	Substantive Requirement	Compliance Plan
Obstruction of High Flows	To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).	No permanent restrictions or impediments to normal or expected high flows are anticipated.
Adverse Effects from Impoundments	If the discharge creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.	No temporary or permanent impoundments or structures are planned as part of this project.
Waterfowl Breeding Areas	Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.	Not applicable. The project area is not used extensively by waterfowl during the breeding season.
Removal of Temporary Fills	Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.	Fill material (stone) will not be used in the jurisdictional wetland.
Ohio State Certification General Conditions for Nationwide Permits (Clean Water Act Section 401)		
Bank Stabilization	Steps shall be taken, upon completion of the project, to ensure bank stability. This may include, but is not limited to, the placement of rip-rap or bank seeding.	Disturbed soils associated with debris removal will be stabilized upon completion of the project.
Mitigation	Any damages to the immediate environment (stream) of the project by equipment for construction or hauling will be repaired immediately.	The movement of heavy equipment will be limited to the immediate project area. Disturbed soils associated with material removal will be re-stabilized upon completion of the project.

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Appendix A
Substantive Requirements for Permit 38 Under Section 404 of the Clean Water Act
Nationwide Permit for the State of Ohio
Paddys Run Debris Removal Bank Stabilization/A1PIII Area
(Continued)

Condition	Substantive Requirement	Compliance Plan
Adverse Impacts to Water Quality and Aquatic Life	Care must be employed throughout the course of the project to avoid the creation of unnecessary turbidity which may degrade water quality or adversely affect aquatic life outside of the project area.	The movement of heavy equipment will be limited to the immediate project vicinity. Appropriate erosion and sedimentation controls will also be used to minimize sediment transport from the project area.
Streams designated as Exceptional Warm water Habitat or Coldwater Habitat	NWP 38 shall not authorize impacts to streams designated Exceptional Warm water Habitat or Coldwater Habitat in Ohio's Water Quality Standards (Rule 3745-1 of the OAC).	Paddys Run is not classified as Exceptional Warm Water Habitat or Coldwater Habitat.
Discharge Restrictions within Bogs and Fens	No discharges of dredged or fill material shall occur within bogs or fens.	No work will occur within a bog or fen system.
Stream Channelization	Channelization of natural, previously unmodified streams is limited to 1000 linear feet or less.	No stream channelization will occur as a result of this project.
Notification	The Corps of Engineers shall provide copies of the pre-discharge notifications to both the Ohio EPA and the Ohio Department of Natural Resources pursuant to the notification procedures outlined in Appendix A to 33 CFR Part 330.	Not applicable. A COE notification is not required for CERCLA remedial actions regulated by USEPA. Pre-discharge notification to U.S. EPA and Ohio EPA will be conducted by DOE.
10 CFR 1022 - Compliance with Floodplain/Wetlands Environmental Review Requirements		
Avoidance and Minimization of Wetland Impacts and Incorporation of Flood Plain Management	Federal agencies undertaking actions within wetlands must take appropriate steps to avoid and minimize potential wetland impacts and incorporate flood plain management into planning decisions. Federal agencies are to provide the opportunity for public involvement.	The proposed project will remove small amounts of debris from Paddys Run which is located within the 100-yr and 500-yr flood plain. Project equipment will be prohibited from entering the adjacent jurisdictional wetlands to the extent possible. Opportunity for public involvement was provided during Federal Register publication of the Wetland/Floodplain Assessment.

¹ See 61 FR 65874 and Appendix B of the OU5 ROD for additional detail.

² Ohio EPA granted Section 401 State Water Quality Certification for NWP - 38 on February 11, 1997 and modified the conditions pursuant to the NWP 38 Settlement on May 20, 1998. See OAC 3745-32 and Appendix B of the OU5 ROD for additional details.

APPENDIX B

RI/FS HISTORICAL DATA FOR A1PIII PART ONE

APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Eastings	QA Type
1,1,2-Trichloroethane	4300	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
1,1,2-Trichloroethane	4300	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
1,1,2-Trichloroethane	4300	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
1,1,2-Trichloroethane	4300	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
1,1,2-Trichloroethane	4300	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
1,1,2-Trichloroethane	4300	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
1,1,2-Trichloroethane	4300	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
1,1,2-Trichloroethane	4300	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
1,1,2-Trichloroethane	4300	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
1,1,2-Trichloroethane	4300	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
1,1,2-Trichloroethane	4300	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
1,1,2-Trichloroethane	4300	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
1,1,2-Trichloroethane	4300	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
1,1,2-Trichloroethane	4300	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
1,1,2-Trichloroethane	4300	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482336.6	1348670.7	DUPLICATE
1,1,2-Trichloroethane	4300	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
1,1-Dichloroethene	410	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
1,1-Dichloroethene	410	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
1,1-Dichloroethene	410	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
1,1-Dichloroethene	410	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
1,1-Dichloroethene	410	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
1,1-Dichloroethene	410	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
1,1-Dichloroethene	410	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
1,1-Dichloroethene	410	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
1,1-Dichloroethene	410	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
1,1-Dichloroethene	410	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
1,1-Dichloroethene	410	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
1,1-Dichloroethene	410	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
1,1-Dichloroethene	410	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
1,1-Dichloroethene	410	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
1,1-Dichloroethene	410	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482336.6	1348670.7	DUPLICATE
1,1-Dichloroethene	410	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
1,2-Dichloroethane	160	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
1,2-Dichloroethane	160	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
1,2-Dichloroethane	160	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
1,2-Dichloroethane	160	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
1,2-Dichloroethane	160	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
1,2-Dichloroethane	160	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
1,2-Dichloroethane	160	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
1,2-Dichloroethane	160	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
1,2-Dichloroethane	160	7	ug/kg	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
1,2-Dichloroethane	160	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
1,2-Dichloroethane	160	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
1,2-Dichloroethane	160	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
1,2-Dichloroethane	160	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
1,2-Dichloroethane	160	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
1,2-Dichloroethane	160	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
1,2-Dichloroethane	160	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
3,3'-Dichlorobenzidine	550	900	ug/kg	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
3,3'-Dichlorobenzidine	550	890	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
3,3'-Dichlorobenzidine	550	860	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
3,3'-Dichlorobenzidine	550	860	ug/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
3,3'-Dichlorobenzidine	550	860	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
3,3'-Dichlorobenzidine	550	850	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
3,3'-Dichlorobenzidine	550	820	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
3,3'-Dichlorobenzidine	550	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
3,3'-Dichlorobenzidine	550	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
3,3'-Dichlorobenzidine	550	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
3,3'-Dichlorobenzidine	550	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
3,3'-Dichlorobenzidine	550	440	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
3,3'-Dichlorobenzidine	550	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
3,3'-Dichlorobenzidine	550	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
4-Methyl-2-pentanone	2500000	14	ug/kg	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
4-Methyl-2-pentanone	2500000	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
4-Methyl-2-pentanone	2500000	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
4-Methyl-2-pentanone	2500000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL

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APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
4-Methyl-2-pentanone	2500000	12	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
4-Methyl-2-pentanone	2500000	12	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
4-Methyl-2-pentanone	2500000	12	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
4-Methyl-2-pentanone	2500000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
4-Nitroaniline	150000	2200	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
4-Nitroaniline	150000	2200	ug/kg	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
4-Nitroaniline	150000	2100	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
4-Nitroaniline	150000	2100	ug/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
4-Nitroaniline	150000	2100	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
4-Nitroaniline	150000	2100	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
4-Nitroaniline	150000	2000	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
4-Nitroaniline	150000	1200	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
4-Nitroaniline	150000	1100	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
4-Nitroaniline	150000	1100	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
4-Nitroaniline	150000	1100	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
4-Nitroaniline	150000	1100	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
4-Nitroaniline	150000	1000	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
4-Nitroaniline	150000	1000	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Acetone	43000000	14	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Acetone	43000000	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Acetone	43000000	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Acetone	43000000	13	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Acetone	43000000	13	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Acetone	43000000	13	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Acetone	43000000	13	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Acetone	43000000	13	ug/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Acetone	43000000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Acetone	43000000	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Acetone	43000000	13	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Acetone	43000000	13	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Acetone	43000000	12	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Acetone	43000000	12	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Acetone	43000000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Acetone	43000000	10	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
alpha-Chlordane	190	110	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
alpha-Chlordane	190	110	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
alpha-Chlordane	190	110	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL

APPENDIX B
R/IFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
alpha-Chlordane	190	110	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
alpha-Chlordane	190	100	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
alpha-Chlordane	190	100	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
alpha-Chlordane	190	100	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
alpha-Chlordane	190	2.3	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
alpha-Chlordane	190	2.2	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
alpha-Chlordane	190	2.1	ug/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Antimony	96	8.2	mg/kg	UJ	101372	1735	19920107	0	0.5	4833329.4	1349031.0	NORMAL
Antimony	96	7.9	mg/kg	UJ	101409	1729	19920113	0	0.5	4833329.4	1347031.0	NORMAL
Antimony	96	7.7	mg/kg	UJ	100865	1730	19920109	0	0.5	4833329.4	1347531.0	NORMAL
Antimony	96	7.7	mg/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Antimony	96	7.6	mg/kg	UJ	100841	1734	19920108	0	0.5	4833329.4	1348531.0	NORMAL
Antimony	96	7.5	mg/kg	UJ	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Antimony	96	7.4	mg/kg	UJ	101385	1732	19920108	0	0.5	4833329.4	1348031.0	NORMAL
Antimony	96	3.9	mg/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Antimony	96	3.9	mg/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Antimony	96	3.8	mg/kg	UJ	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Antimony	96	3.7	mg/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Antimony	96	3.7	mg/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Antimony	96	3.7	mg/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Antimony	96	3.5	mg/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Antimony	96	3.5	mg/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Antimony	96	3.5	mg/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Aroclor-1254	130	220	ug/kg	U	101372	1735	19920107	0	0.5	4833329.4	1349031.0	NORMAL
Aroclor-1254	130	210	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Aroclor-1254	130	210	ug/kg	U	101409	1729	19920113	0	0.5	4833329.4	1347031.0	NORMAL
Aroclor-1254	130	210	ug/kg	U	100865	1730	19920109	0	0.5	4833329.4	1347531.0	NORMAL
Aroclor-1254	130	210	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Aroclor-1254	130	200	ug/kg	U	101385	1732	19920108	0	0.5	4833329.4	1348031.0	NORMAL
Aroclor-1254	130	200	ug/kg	U	100841	1734	19920108	0	0.5	4833329.4	1348531.0	NORMAL
Aroclor-1254	130	45	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Aroclor-1254	130	43	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Aroclor-1254	130	41	ug/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Aroclor-1260	130	220	ug/kg	U	101372	1735	19920107	0	0.5	4833329.4	1349031.0	NORMAL
Aroclor-1260	130	210	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Aroclor-1260	130	210	ug/kg	U	101409	1729	19920113	0	0.5	4833329.4	1347031.0	NORMAL
Aroclor-1260	130	210	ug/kg	U	100865	1730	19920109	0	0.5	4833329.4	1347531.0	NORMAL

**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Aroclor-1260	130	210	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Aroclor-1260	130	200	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Aroclor-1260	130	200	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Aroclor-1260	130	45	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Aroclor-1260	130	43	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Aroclor-1260	130	41	ug/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Arsenic	12	7.2	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Arsenic	12	6.7	mg/kg	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Arsenic	12	5.8	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Arsenic	12	5.1	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Arsenic	12	4.3	mg/kg	J	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Arsenic	12	4.3	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Arsenic	12	4	mg/kg	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Arsenic	12	3.9	mg/kg	J	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Arsenic	12	3.9	mg/kg	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Arsenic	12	3.8	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Arsenic	12	3.8	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Arsenic	12	3.8	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Arsenic	12	3.6	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Arsenic	12	3.2	mg/kg	J	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Arsenic	12	3.2	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Arsenic	12	3.1	mg/kg	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Arsenic	12	2.9	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Arsenic	12	2.4	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Barium	68000	185	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Barium	68000	131	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Barium	68000	107	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Barium	68000	105	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Barium	68000	105	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Barium	68000	97.4	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Barium	68000	95.1	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Barium	68000	94.7	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Barium	68000	91.1	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Barium	68000	82.4	mg/kg	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Barium	68000	81.7	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Barium	68000	77.9	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Barium	68000	77.7	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Barium	68000	76	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Barium	68000	67.8	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Barium	68000	63.3	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Barium	68000	60.5	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Barium	68000	53.9	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Benzene	850000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Benzene	850000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Benzene	850000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Benzene	850000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Benzene	850000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Benzene	850000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Benzene	850000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Benzene	850000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Benzene	850000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Benzene	850000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Benzene	850000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Benzene	850000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Benzene	850000	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Benzene	850000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Benzene	850000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Benzene	850000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Benzene	20000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Benzo(a)anthracene	20000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Benzo(a)anthracene	20000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Benzo(a)anthracene	20000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Benzo(a)anthracene	20000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Benzo(a)anthracene	20000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Benzo(a)anthracene	20000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Benzo(a)anthracene	20000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Benzo(a)anthracene	20000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Benzo(a)anthracene	20000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Benzo(a)anthracene	20000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Benzo(a)anthracene	20000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Benzo(a)anthracene	20000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Benzo(a)anthracene	20000	48	ug/kg	J	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Benzo(a)pyrene	2000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Benzo(a)pyrene	2000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Benzo(a)pyrene	2000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Benzo(a)pyrene	2000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Benzo(a)pyrene	2000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Benzo(a)pyrene	2000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Benzo(a)pyrene	2000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Benzo(a)pyrene	2000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Benzo(a)pyrene	2000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Benzo(a)pyrene	2000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Benzo(a)pyrene	2000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Benzo(a)pyrene	2000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Benzo(a)pyrene	2000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Benzo(a)pyrene	2000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Benzo(b)fluoranthene	20000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Benzo(b)fluoranthene	20000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Benzo(b)fluoranthene	20000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Benzo(b)fluoranthene	20000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Benzo(b)fluoranthene	20000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Benzo(b)fluoranthene	20000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Benzo(b)fluoranthene	20000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Benzo(b)fluoranthene	20000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Benzo(b)fluoranthene	20000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Benzo(b)fluoranthene	20000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Benzo(b)fluoranthene	20000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Benzo(b)fluoranthene	20000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Benzo(b)fluoranthene	20000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Benzo(b)fluoranthene	20000	56	ug/kg	J	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Benzo(k)fluoranthene	200000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Benzo(k)fluoranthene	200000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Benzo(k)fluoranthene	200000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Benzo(k)fluoranthene	200000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Benzo(k)fluoranthene	200000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Benzo(k)fluoranthene	200000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Benzo(k)fluoranthene	200000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Benzo(k)fluoranthene	200000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Benzo(k)fluoranthene	200000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Benzo(k)fluoranthene	200000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Benzo(k)fluoranthene	200000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Benzo(k)fluoranthene	20000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Benzo(k)fluoranthene	20000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Benzo(k)fluoranthene	20000	60	ug/kg	J	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Beryllium	1.5	1.6	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Beryllium	1.5	1.4	mg/kg	U	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Beryllium	1.5	1.4	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Beryllium	1.5	1.4	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Beryllium	1.5	1.3	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Beryllium	1.5	1.3	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Beryllium	1.5	1.3	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Beryllium	1.5	1.2	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Beryllium	1.5	1.2	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Beryllium	1.5	0.86	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Beryllium	1.5	0.75	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Beryllium	1.5	0.74	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Beryllium	1.5	0.64	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Beryllium	1.5	0.61	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Beryllium	1.5	0.55	mg/kg	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Beryllium	1.5	0.53	mg/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Beryllium	1.5	0.51	mg/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Beryllium	1.5	0.23	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
bis(2-Chloroisopropyl) ether	42000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
bis(2-Chloroisopropyl) ether	42000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
bis(2-Chloroisopropyl) ether	42000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
bis(2-Chloroisopropyl) ether	42000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
bis(2-Chloroisopropyl) ether	42000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
bis(2-Chloroisopropyl) ether	42000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	430	ug/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
bis(2-Chloroisopropyl) ether	42000	420	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
bis(2-Chloroisopropyl) ether	42000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
bis(2-Ethylhexyl)phthalate	82000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
bis(2-Ethylhexyl)phthalate	82000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
bis(2-Ethylhexyl)phthalate	82000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
bis(2-Ethylhexyl)phthalate	82000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
bis(2-Ethylhexyl)phthalate	82000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
bis(2-Ethylhexyl)phthalate	82000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
bis(2-Ethylhexyl)phthalate	82000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
bis(2-Ethylhexyl)phthalate	82000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
bis(2-Ethylhexyl)phthalate	82000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
bis(2-Ethylhexyl)phthalate	82000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
bis(2-Ethylhexyl)phthalate	82000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
bis(2-Ethylhexyl)phthalate	82000	65	ug/kg	J	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
bis(2-Ethylhexyl)phthalate	82000	64	ug/kg	J	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
bis(2-Ethylhexyl)phthalate	82000	57	ug/kg	J	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Boron	7400	14.3	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Bromodichloromethane	4000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Bromodichloromethane	4000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Bromodichloromethane	4000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Bromodichloromethane	4000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Bromodichloromethane	4000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Bromodichloromethane	4000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Bromodichloromethane	4000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Bromodichloromethane	4000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Bromodichloromethane	4000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Bromodichloromethane	4000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Bromodichloromethane	4000	6	ug/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Bromodichloromethane	4000	6	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Bromodichloromethane	4000	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Bromodichloromethane	4000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Bromodichloromethane	4000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Bromodichloromethane	4000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Bromoform	31000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Bromoform	31000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Bromoform	31000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Bromoform	31000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Bromoform	31000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Bromoform	31000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Bromoform	31000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Bromoform	31000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL

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APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Bromoform	31000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Bromoform	31000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Bromoform	31000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Bromoform	31000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Bromoform	31000	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Bromoform	31000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Bromoform	31000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Bromoform	31000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Bromomethane	8200000	14	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Bromomethane	8200000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Bromomethane	8200000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Bromomethane	8200000	13	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Bromomethane	8200000	13	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Bromomethane	8200000	13	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Bromomethane	8200000	13	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Bromomethane	8200000	13	ug/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Bromomethane	8200000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Bromomethane	8200000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Bromomethane	8200000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Bromomethane	8200000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Bromomethane	8200000	12	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Bromomethane	8200000	12	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Bromomethane	8200000	12	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Bromomethane	8200000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Bromomethane	8200000	12	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Cadmium	82	1.9	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Cadmium	82	1.7	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Cadmium	82	1.6	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Cadmium	82	1.4	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Cadmium	82	1.4	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Cadmium	82	1.3	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Cadmium	82	1.3	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Cadmium	82	1.3	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Cadmium	82	1.3	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Cadmium	82	0.54	mg/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Cadmium	82	0.53	mg/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Cadmium	82	0.51	mg/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Cadmium	82	0.51	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Cadmium	82	0.51	mg/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cadmium	82	0.49	mg/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Cadmium	82	0.14	mg/kg	U	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Cadmium	82	0.04	mg/kg	UJ	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Carbazole	12000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Carbon disulfide	5000000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Carbon disulfide	5000000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Carbon disulfide	5000000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Carbon disulfide	5000000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Carbon disulfide	5000000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Carbon disulfide	5000000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Carbon disulfide	5000000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Carbon disulfide	5000000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Carbon disulfide	5000000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Carbon disulfide	5000000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Carbon disulfide	5000000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Carbon disulfide	5000000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Carbon disulfide	5000000	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Carbon disulfide	5000000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Carbon disulfide	5000000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Carbon disulfide	5000000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Carbon Tetrachloride	2100	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Carbon Tetrachloride	2100	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Carbon Tetrachloride	2100	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Carbon Tetrachloride	2100	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Carbon Tetrachloride	2100	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Carbon Tetrachloride	2100	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Carbon Tetrachloride	2100	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Carbon Tetrachloride	2100	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Carbon Tetrachloride	2100	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Carbon Tetrachloride	2100	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Carbon Tetrachloride	2100	6	ug/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Carbon Tetrachloride	2100	6	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Carbon Tetrachloride	2100	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Carbon Tetrachloride	2100	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Carbon Tetrachloride	2100	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE

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APPENDIX B
RIFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Carbon Tetrachloride	2100	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cesium-137	1.4	1	pCi/g	J	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Cesium-137	1.4	0.9	pCi/g	J	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Cesium-137	1.4	0.8	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Cesium-137	1.4	0.8	pCi/g	J	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Cesium-137	1.4	0.8	pCi/g	J	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Cesium-137	1.4	0.7	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Cesium-137	1.4	0.7	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Cesium-137	1.4	0.6	pCi/g	J	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Cesium-137	1.4	0.6	pCi/g	J	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Cesium-137	1.4	0.6	pCi/g	J	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Cesium-137	1.4	0.565	pCi/g	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Cesium-137	1.4	0.51	pCi/g	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Cesium-137	1.4	0.5	pCi/g	J	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Cesium-137	1.4	0.5	pCi/g	J	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Cesium-137	1.4	0.5	pCi/g	J	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Cesium-137	1.4	0.5	pCi/g	J	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Cesium-137	1.4	0.47	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Cesium-137	1.4	0.43	pCi/g	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Cesium-137	1.4	0.37	pCi/g	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cesium-137	1.4	0.33	pCi/g	J	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Cesium-137	1.4	0.3	pCi/g	J	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	U	100413	1679	19920124	19	20.5	483953.9	1346795.6	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	101429	1729	19920113	16	18	483329.4	1347031.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	100879	1730	19920109	14.5	16.5	483329.4	1347531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	101397	1732	19920109	14	16	483329.4	1348031.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	100859	1734	19920108	14	16	483329.4	1348531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	101384	1735	19920108	11	13	483329.4	1348531.0	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	100378	2728	15-Jan-92	14	14.5	483331.0	1346491.6	NORMAL
Cesium-137	1.4	0.2	pCi/g	UJ	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Cesium-137	1.4	0.01	pCi/g	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Chlorobenzene	340000	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL

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APPENDIX B
R/IFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Chlorobenzene	34000	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Chlorobenzene	34000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Chlorobenzene	34000	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Chlorobenzene	34000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Chlorobenzene	34000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Chlorobenzene	34000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Chlorobenzene	34000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Chlorobenzene	34000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Chlorobenzene	34000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Chlorobenzene	34000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Chlorobenzene	34000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Chlorobenzene	34000	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Chlorobenzene	34000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Chlorobenzene	34000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Chlorobenzene	34000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Chloroform	45000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Chloroform	45000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Chloroform	45000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Chloroform	45000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Chloroform	45000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Chloroform	45000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Chloroform	45000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Chloroform	45000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Chloroform	45000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Chloroform	45000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Chloroform	45000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Chloroform	45000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Chloroform	45000	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Chloroform	45000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Chloroform	45000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Chloroform	45000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Chromium	300	19.4	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Chromium	300	17.7	mg/kg	J	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Chromium	300	17.2	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Chromium	300	16.8	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Chromium	300	15.7	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Chromium	300	15.5	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Chromium	300	15.3	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Chromium	300	14.7	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Chromium	300	14.7	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Chromium	300	13.6	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Chromium	300	12.9	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Chromium	300	10.6	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Chromium	300	10	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Chromium	300	9.7	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Chromium	300	9.5	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Chromium	300	9.3	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Chromium	300	8.9	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Chromium	300	7.6	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Chrysene	2000000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Chrysene	2000000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Chrysene	2000000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Chrysene	2000000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Chrysene	2000000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Chrysene	2000000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Chrysene	2000000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Chrysene	2000000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Chrysene	2000000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Chrysene	2000000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Chrysene	2000000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Chrysene	2000000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Chrysene	2000000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Chrysene	2000000	77	ug/kg	J	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Cobalt	740	17.9	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Cobalt	740	16.5	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Cobalt	740	15.7	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Cobalt	740	12.7	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Cobalt	740	12.5	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Cobalt	740	12	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cobalt	740	11.9	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Cobalt	740	10.9	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Cobalt	740	10.8	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Cobalt	740	10.6	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Cobalt	740	10.6	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL

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APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Cobalt	740	9.4	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Cobalt	740	9.2	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Cobalt	740	9	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Cobalt	740	8.6	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Cobalt	740	8.6	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Cobalt	740	7.2	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Cobalt	740	4	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Copper	22000	23.6	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Copper	22000	22.1	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Copper	22000	20.8	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Copper	22000	18.7	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Copper	22000	17.4	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Copper	22000	15.9	mg/kg	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Copper	22000	14.9	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Copper	22000	14.7	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Copper	22000	13.5	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Copper	22000	13.4	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Copper	22000	12.8	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Copper	22000	12.5	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Copper	22000	11.9	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Copper	22000	11.4	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Copper	22000	11.2	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Copper	22000	9.2	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Copper	22000	8.9	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Copper	22000	6.8	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cyanide	12000	1.7	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Cyanide	12000	0.43	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Cyanide	12000	0.42	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Cyanide	12000	0.35	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Cyanide	12000	0.34	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Cyanide	12000	0.33	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Cyanide	12000	0.33	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Cyanide	12000	0.33	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Cyanide	12000	0.31	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Cyanide	12000	0.31	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Cyanide	12000	0.24	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Cyanide	12000	0.18	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL

**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Cyanide	120000	0.18	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Cyanide	120000	0.15	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Cyanide	120000	0.13	mg/kg	U	100422	1679	19920127	0	0.5	4833953.9	1346795.6	NORMAL
Cyanide	120000	0.13	mg/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Dibenzo(a,h)anthracene	2000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Dibenzo(a,h)anthracene	2000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Dibenzo(a,h)anthracene	2000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Dibenzo(a,h)anthracene	2000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Dibenzo(a,h)anthracene	2000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Dibenzo(a,h)anthracene	2000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Dibenzo(a,h)anthracene	2000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Dibenzo(a,h)anthracene	2000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Dibenzo(a,h)anthracene	2000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Dibenzo(a,h)anthracene	2000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Dibenzo(a,h)anthracene	2000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Dibenzo(a,h)anthracene	2000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Dibenzo(a,h)anthracene	2000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Dibenzo(a,h)anthracene	2000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Dieldrin	15	22	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Dieldrin	15	21	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Dieldrin	15	21	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Dieldrin	15	21	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Dieldrin	15	21	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Dieldrin	15	20	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Dieldrin	15	20	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Dieldrin	15	4.5	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Dieldrin	15	4.3	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Dieldrin	15	4.1	ug/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Di-n-octyl phthalate	1100000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Di-n-octyl phthalate	1100000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Di-n-octyl phthalate	1100000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Di-n-octyl phthalate	1100000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Di-n-octyl phthalate	1100000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Di-n-octyl phthalate	1100000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Di-n-octyl phthalate	1100000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Di-n-octyl phthalate	1100000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Di-n-octyl phthalate	1100000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL

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**APPENDIX B
RIFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Di-n-octyl phthalate	1100000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Di-n-octyl phthalate	1100000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Di-n-octyl phthalate	1100000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Di-n-octyl phthalate	1100000	410	ug/kg	U	101385	1732	19920108	0	0.5	4833329.4	1348031.0	NORMAL
Di-n-octyl phthalate	1100000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Ethylbenzene	5100000	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Ethylbenzene	5100000	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Ethylbenzene	5100000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Ethylbenzene	5100000	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Ethylbenzene	5100000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Ethylbenzene	5100000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Ethylbenzene	5100000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Ethylbenzene	5100000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Ethylbenzene	5100000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Ethylbenzene	5100000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Ethylbenzene	5100000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Ethylbenzene	5100000	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Ethylbenzene	5100000	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Ethylbenzene	5100000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Ethylbenzene	5100000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Ethylbenzene	5100000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
gamma-Chlordane	190	110	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
gamma-Chlordane	190	110	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
gamma-Chlordane	190	110	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
gamma-Chlordane	190	110	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
gamma-Chlordane	190	100	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
gamma-Chlordane	190	100	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
gamma-Chlordane	190	100	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
gamma-Chlordane	190	2.3	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
gamma-Chlordane	190	2.2	ug/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
gamma-Chlordane	190	2.1	ug/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Indeno(1,2,3-cd)pyrene	20000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Indeno(1,2,3-cd)pyrene	20000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Indeno(1,2,3-cd)pyrene	20000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Indeno(1,2,3-cd)pyrene	20000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Indeno(1,2,3-cd)pyrene	20000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Indeno(1,2,3-cd)pyrene	20000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Indeno(1,2,3-cd)pyrene	20000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Indeno(1,2,3-cd)pyrene	20000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Indeno(1,2,3-cd)pyrene	20000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Lead	400	33.3	mg/kg	J	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Lead	400	28.1	mg/kg	J	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Lead	400	26.4	mg/kg	J	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Lead	400	24.9	mg/kg	J	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Lead	400	24.8	mg/kg	J	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Lead	400	23.6	mg/kg	J	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Lead	400	21.7	mg/kg	J	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Lead	400	20.9	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Lead	400	20.1	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Lead	400	20	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Lead	400	17.3	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Lead	400	17.3	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Lead	400	16.2	mg/kg	J	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Lead	400	16.1	mg/kg	J	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Lead	400	12.7	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Lead	400	12.7	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Lead	400	6	mg/kg	-	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Manganese	4600	1470	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Manganese	4600	1320	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Manganese	4600	1190	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Manganese	4600	1140	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Manganese	4600	1010	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Manganese	4600	943	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Manganese	4600	926	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Manganese	4600	823	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Manganese	4600	797	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Manganese	4600	787	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Manganese	4600	718	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Manganese	4600	662	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL

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APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Manganese	4600	599	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Manganese	4600	593	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Manganese	4600	570	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Manganese	4600	531	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Manganese	4600	294	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Manganese	4600	238	mg/kg	-	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Mercury	7.5	0.14	mg/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Mercury	7.5	0.13	mg/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Mercury	7.5	0.13	mg/kg	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Mercury	7.5	0.13	mg/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Mercury	7.5	0.13	mg/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Mercury	7.5	0.13	mg/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Mercury	7.5	0.12	mg/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Mercury	7.5	0.09	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Mercury	7.5	0.07	mg/kg	U	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Mercury	7.5	0.07	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Mercury	7.5	0.07	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Mercury	7.5	0.07	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Mercury	7.5	0.07	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Mercury	7.5	0.06	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Mercury	7.5	0.06	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Mercury	7.5	0.06	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Mercury	7.5	0.05	mg/kg	U	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Mercury	7.5	0.02	mg/kg	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Methylene chloride	37000	25	ug/kg	-	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Methylene chloride	37000	24	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Methylene chloride	37000	23	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Methylene chloride	37000	21	ug/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Methylene chloride	37000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Methylene chloride	37000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Methylene chloride	37000	13	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Methylene chloride	37000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Methylene chloride	37000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Methylene chloride	37000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Methylene chloride	37000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Methylene chloride	37000	12	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Methylene chloride	37000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Methylene chloride	37000	9	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Methylene chloride	37000	7	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Methylene chloride	37000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Molybdenum	2900	13.3	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Molybdenum	2900	11.7	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Molybdenum	2900	10.8	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Molybdenum	2900	8.9	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Molybdenum	2900	8.8	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Molybdenum	2900	6.9	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Molybdenum	2900	4.8	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Molybdenum	2900	4.7	mg/kg	U	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Molybdenum	2900	4.7	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Molybdenum	2900	4.6	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Molybdenum	2900	4.5	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Molybdenum	2900	4.5	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Molybdenum	2900	4.3	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Molybdenum	2900	4.2	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Molybdenum	2900	4.2	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Molybdenum	2900	2.6	mg/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Molybdenum	2900	1.1	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Molybdenum	2900	0.9	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Neptunium-237	3.2	1	pCi/g	UJ	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Neptunium-237	3.2	0.6	pCi/g	UJ	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Neptunium-237	3.2	0.6	pCi/g	U	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Neptunium-237	3.2	0.6	pCi/g	UJ	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	UJ	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	UJ	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Neptunium-237	3.2	0.6	pCi/g	U	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Neptunium-237	3.2	0.6	pCi/g	U	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Neptunium-237	3.2	0.2	pCi/g	U	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Neptunium-237	3.2	0.13	pCi/g	UJ	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Neptunium-237	3.2	0.018	pCi/g	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Nickel	15000	25.8	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Nickel	15000	21.6	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Nickel	15000	21.1	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Nickel	15000	19.5	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Nickel	15000	19	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Nickel	15000	17.9	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Nickel	15000	16.1	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Nickel	15000	15.8	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Nickel	15000	15.1	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Nickel	15000	14.4	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Nickel	15000	12.7	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Nickel	15000	12.2	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Nickel	15000	11.1	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Nickel	15000	10.3	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Nickel	15000	9.4	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Nickel	15000	9.2	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Nickel	15000	6.2	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Nickel	15000	5.5	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
N-Nitroso-di-n-propylamine	200	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
N-Nitroso-di-n-propylamine	200	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
N-Nitroso-di-n-propylamine	200	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
N-Nitroso-di-n-propylamine	200	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
N-Nitroso-di-n-propylamine	200	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
N-Nitroso-di-n-propylamine	200	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
N-Nitroso-di-n-propylamine	200	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
N-Nitroso-di-n-propylamine	200	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
N-Nitroso-di-n-propylamine	200	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
N-Nitroso-di-n-propylamine	200	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
N-Nitroso-di-n-propylamine	200	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
N-Nitroso-di-n-propylamine	200	420	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL

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**APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
N-Nitroso-di-n-propylamine	200	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
N-Nitroso-di-n-propylamine	200	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
N-Nitrosodiphenylamine	51000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
N-Nitrosodiphenylamine	51000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
N-Nitrosodiphenylamine	51000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
N-Nitrosodiphenylamine	51000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
N-Nitrosodiphenylamine	51000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
N-Nitrosodiphenylamine	51000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
N-Nitrosodiphenylamine	51000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
N-Nitrosodiphenylamine	51000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
N-Nitrosodiphenylamine	51000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
N-Nitrosodiphenylamine	51000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
N-Nitrosodiphenylamine	51000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
N-Nitrosodiphenylamine	51000	420	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
N-Nitrosodiphenylamine	51000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
N-Nitrosodiphenylamine	51000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Pentachlorophenol	2300	2200	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Pentachlorophenol	2300	2200	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Pentachlorophenol	2300	2100	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Pentachlorophenol	2300	2100	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Pentachlorophenol	2300	2100	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Pentachlorophenol	2300	2100	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Pentachlorophenol	2300	2000	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Pentachlorophenol	2300	1200	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Pentachlorophenol	2300	1100	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Pentachlorophenol	2300	1100	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Pentachlorophenol	2300	1100	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Pentachlorophenol	2300	1100	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Pentachlorophenol	2300	1000	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Pentachlorophenol	2300	1000	ug/kg	UJ	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Plutonium-238	78	1	pCi/g	UJ	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Plutonium-238	78	0.6	pCi/g	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Plutonium-238	78	0.6	pCi/g	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Plutonium-238	78	0.6	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Plutonium-238	78	0.6	pCi/g	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Plutonium-238	78	0.6	pCi/g	UJ	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Plutonium-238	78	0.6	pCi/g	UJ	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Plutonium-238	78	0.6	pCi/g	UJ	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	UJ	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	UJ	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Plutonium-238	78	0.6	pCi/g	U	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Plutonium-238	78	0.288	pCi/g	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Plutonium-238	78	0.2	pCi/g	UJ	121135	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Plutonium-238	78	0.02	pCi/g	UJ	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Plutonium-239/240	77	2.331	pCi/g	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Plutonium-239/240	77	1	pCi/g	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Plutonium-239/240	77	0.6	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Plutonium-239/240	77	0.6	pCi/g	UJ	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	UJ	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	UJ	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Plutonium-239/240	77	0.6	pCi/g	UJ	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Plutonium-239/240	77	0.6	pCi/g	U	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	UJ	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	UJ	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Plutonium-239/240	77	0.6	pCi/g	U	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Plutonium-239/240	77	0.2	pCi/g	UJ	121135	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Plutonium-239/240	77	0.059	pCi/g	UJ	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
p-Methylphenol	250000	470	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
p-Methylphenol	250000	460	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
p-Methylphenol	250000	450	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
p-Methylphenol	250000	450	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
p-Methylphenol	250000	450	ug/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
p-Methylphenol	250000	440	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
p-Methylphenol	250000	440	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
p-Methylphenol	250000	430	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
p-Methylphenol	250000	430	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
p-Methylphenol	250000	430	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
p-Methylphenol	250000	430	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
p-Methylphenol	250000	420	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
p-Methylphenol	250000	410	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
p-Methylphenol	250000	410	ug/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Radium-226	1.7	1.2	pCi/g	-	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL

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**APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Radium-226	1.7	1.2	pCi/g	-	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Radium-226	1.7	1.2	pCi/g	J	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Radium-226	1.7	1.13	pCi/g	J	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Radium-226	1.7	1.12	pCi/g	J	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Radium-226	1.7	1.1	pCi/g	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Radium-226	1.7	1.1	pCi/g	J	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Radium-226	1.7	1.1	pCi/g	J	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Radium-226	1.7	1.037	pCi/g	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Radium-226	1.7	1	pCi/g	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Radium-226	1.7	1	pCi/g	J	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Radium-226	1.7	1	pCi/g	J	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Radium-226	1.7	1	pCi/g	J	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Radium-226	1.7	0.99	pCi/g	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Radium-226	1.7	0.93	pCi/g	J	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Radium-226	1.7	0.9	pCi/g	J	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Radium-226	1.7	0.9	pCi/g	J	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Radium-226	1.7	0.9	pCi/g	J	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Radium-226	1.7	0.89	pCi/g	J	101397	1732	19920109	14	16	483329.4	1348031.0	NORMAL
Radium-226	1.7	0.88	pCi/g	J	100378	2728	15-Jan-92	14	14.5	483331.0	1346491.6	NORMAL
Radium-226	1.7	0.86	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Radium-226	1.7	0.85	pCi/g	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Radium-226	1.7	0.84	pCi/g	J	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Radium-226	1.7	0.81	pCi/g	J	100859	1734	19920108	14	16	483329.4	1348531.0	NORMAL
Radium-226	1.7	0.81	pCi/g	J	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Radium-226	1.7	0.8	pCi/g	J	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Radium-226	1.7	0.8	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Radium-226	1.7	0.8	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Radium-226	1.7	0.8	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Radium-226	1.7	0.78	pCi/g	J	100879	1730	19920109	14.5	16.5	483329.4	1347531.0	NORMAL
Radium-226	1.7	0.776	pCi/g	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Radium-226	1.7	0.72	pCi/g	J	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Radium-226	1.7	0.7	pCi/g	J	101429	1729	19920113	16	18	483329.4	1347031.0	NORMAL
Radium-226	1.7	0.69	pCi/g	-	100413	1679	19920124	19	20.5	483953.9	1346795.6	NORMAL
Radium-226	1.7	0.6	pCi/g	J	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Radium-228	1.8	1.55	pCi/g	J	101397	1732	19920109	14	16	483329.4	1348031.0	NORMAL
Radium-228	1.8	1.45	pCi/g	J	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Radium-228	1.8	1.35	pCi/g	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL

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**APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Radium-228	1.8	1.3	pCi/g	J	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Radium-228	1.8	1.2	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Radium-228	1.8	1.2	pCi/g	J	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Radium-228	1.8	1.18	pCi/g	J	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Radium-228	1.8	1.13	pCi/g	J	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Radium-228	1.8	1.11	pCi/g	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Radium-228	1.8	1.1	pCi/g	J	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Radium-228	1.8	1.1	pCi/g	J	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Radium-228	1.8	1.1	pCi/g	J	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Radium-228	1.8	1.1	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Radium-228	1.8	1.1	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Radium-228	1.8	1.1	pCi/g	J	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Radium-228	1.8	1.087	pCi/g	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Radium-228	1.8	1.08	pCi/g	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Radium-228	1.8	1	pCi/g	J	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Radium-228	1.8	1	pCi/g	J	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Radium-228	1.8	1	pCi/g	J	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Radium-228	1.8	1	pCi/g	J	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Radium-228	1.8	0.92	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Radium-228	1.8	0.9	pCi/g	J	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Radium-228	1.8	0.81	pCi/g	J	100378	2728	15-Jan-92	14	14.5	483331.0	1346491.6	NORMAL
Radium-228	1.8	0.8	pCi/g	UJ	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Radium-228	1.8	0.79	pCi/g	-	100413	1679	19920124	19	20.5	483953.9	1346795.6	NORMAL
Radium-228	1.8	0.78	pCi/g	J	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Radium-228	1.8	0.77	pCi/g	J	100879	1730	19920109	14.5	16.5	483329.4	1347531.0	NORMAL
Radium-228	1.8	0.76	pCi/g	J	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Radium-228	1.8	0.73	pCi/g	J	101429	1729	19920113	16	18	483329.4	1347031.0	NORMAL
Radium-228	1.8	0.7	pCi/g	UJ	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Radium-228	1.8	0.679	pCi/g	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Radium-228	1.8	0.66	pCi/g	J	100859	1734	19920108	14	16	483329.4	1348531.0	NORMAL
Radium-228	1.8	0.6	pCi/g	J	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Radium-228	1.8	0.6	pCi/g	UJ	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Selenium	5400	1.2	mg/kg	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Selenium	5400	0.77	mg/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Selenium	5400	0.77	mg/kg	J	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Selenium	5400	0.76	mg/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Selenium	5400	0.58	mg/kg	UJ	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL

APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Selenium	5400	0.54	mg/kg	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Selenium	5400	0.52	mg/kg	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Selenium	5400	0.52	mg/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Selenium	5400	0.5	mg/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Selenium	5400	0.49	mg/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Selenium	5400	0.48	mg/kg	J	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Selenium	5400	0.32	mg/kg	J	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Selenium	5400	0.28	mg/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Selenium	5400	0.27	mg/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Selenium	5400	0.26	mg/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Selenium	5400	0.26	mg/kg	UJ	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Selenium	5400	0.25	mg/kg	UJ	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Selenium	5400	0.25	mg/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Selenium	5400	0.25	mg/kg	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Selenium	5400	0.25	mg/kg	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Selenium	5400	0.26	mg/kg	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Selenium	5400	0.26	mg/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Selenium	5400	0.25	mg/kg	UJ	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Selenium	5400	0.25	mg/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Selenium	5400	0.25	mg/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Selenium	5400	0.56	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Selenium	5400	0.55	mg/kg	U	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Selenium	5400	0.55	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Selenium	5400	0.54	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Selenium	5400	0.53	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Selenium	5400	0.52	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Selenium	5400	0.5	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Selenium	5400	0.49	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Selenium	5400	0.05	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Selenium	5400	0.05	mg/kg	U	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Selenium	5400	0.05	mg/kg	UJ	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Selenium	5400	6.6	pCi/g	-	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Strontium-90	14	2.5	pCi/g	-	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Strontium-90	14	1.1	pCi/g	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Strontium-90	14	1	pCi/g	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Strontium-90	14	1	pCi/g	J	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Strontium-90	14	0.9	pCi/g	J	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL

APPENDIX B
R/IFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Strontium-90	14	0.9	pCi/g	J	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Strontium-90	14	0.83	pCi/g	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Strontium-90	14	0.7	pCi/g	-	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Strontium-90	14	0.7	pCi/g	J	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Strontium-90	14	0.7	pCi/g	J	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Strontium-90	14	0.6	pCi/g	-	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Strontium-90	14	0.6	pCi/g	J	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Strontium-90	14	0.5	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Strontium-90	14	0.5	pCi/g	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Strontium-90	14	0.5	pCi/g	U	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Strontium-90	14	0.5	pCi/g	UJ	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Strontium-90	14	0.5	pCi/g	U	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Strontium-90	14	0.5	pCi/g	U	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Strontium-90	14	0.5	pCi/g	UJ	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Strontium-90	14	0.015	pCi/g	UJ	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Strontium-90	14	0.015	pCi/g	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Technetium-99	30	2.3	pCi/g	UJ	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Technetium-99	30	2.1	pCi/g	U	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Technetium-99	30	2	pCi/g	U	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Technetium-99	30	1.9	pCi/g	UJ	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Technetium-99	30	1.6	pCi/g	-	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Technetium-99	30	1.1	pCi/g	UJ	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Technetium-99	30	1.04	pCi/g	J	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Technetium-99	30	1	pCi/g	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Technetium-99	30	1	pCi/g	UJ	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL

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APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Technetium-99	30	1	pCi/g	UJ	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Technetium-99	30	1	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Technetium-99	30	1	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Technetium-99	30	1	pCi/g	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Technetium-99	30	1	pCi/g	U	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Technetium-99	30	1	pCi/g	UJ	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348281.0	NORMAL
Technetium-99	30	1	pCi/g	U	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Technetium-99	30	1	pCi/g	UNV	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Technetium-99	30	1	pCi/g	UNV	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Technetium-99	30	1	pCi/g	U	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Technetium-99	30	1	pCi/g	U	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Technetium-99	30	1	pCi/g	U	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Technetium-99	30	0.9	pCi/g	UJ	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Technetium-99	30	0.9	pCi/g	UJ	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Technetium-99	30	0.059	pCi/g	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Technetium-99	30	0.015	pCi/g	U	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Tetrachloroethene	3600	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Tetrachloroethene	3600	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Tetrachloroethene	3600	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Tetrachloroethene	3600	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Tetrachloroethene	3600	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Tetrachloroethene	3600	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Tetrachloroethene	3600	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Tetrachloroethene	3600	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Tetrachloroethene	3600	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Tetrachloroethene	3600	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Tetrachloroethene	3600	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Tetrachloroethene	3600	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Tetrachloroethene	3600	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Tetrachloroethene	3600	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Tetrachloroethene	3600	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Tetrachloroethene	3600	6	ug/kg	UJ	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Thallium	91	0.67	mg/kg	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Thallium	91	0.56	mg/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Thallium	91	0.54	mg/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Thallium	91	0.52	mg/kg	UJ	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Thallium	91	0.52	mg/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Thallium	91	0.52	mg/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Thallium	91	0.5	mg/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Thallium	91	0.31	mg/kg	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Thallium	91	0.28	mg/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Thallium	91	0.28	mg/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Thallium	91	0.27	mg/kg	U	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Thallium	91	0.27	mg/kg	U	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Thallium	91	0.26	mg/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Thallium	91	0.26	mg/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Thallium	91	0.25	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Thallium	91	0.25	mg/kg	U	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Thallium	91	0.25	mg/kg	U	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Thallium	91	0.25	mg/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Thorium-228	1.7	3.49	pCi/g	-	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Thorium-228	1.7	2.8	pCi/g	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Thorium-228	1.7	2.74	pCi/g	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Thorium-228	1.7	2.52	pCi/g	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Thorium-228	1.7	2.43	pCi/g	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Thorium-228	1.7	2.24	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Thorium-228	1.7	2.07	pCi/g	-	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Thorium-228	1.7	2.02	pCi/g	-	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Thorium-228	1.7	1.74	pCi/g	J	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Thorium-228	1.7	1.5	pCi/g	-	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Thorium-228	1.7	1.5	pCi/g	-	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Thorium-228	1.7	1.5	pCi/g	-	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Thorium-228	1.7	1.4	pCi/g	-	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Thorium-228	1.7	1.4	pCi/g	-	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Thorium-228	1.7	1.4	pCi/g	-	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Thorium-228	1.7	1.3	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Thorium-228	1.7	1.226	pCi/g	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Thorium-228	1.7	1.2	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Thorium-228	1.7	1.2	pCi/g	-	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Thorium-228	1.7	1.1	pCi/g	-	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Thorium-228	1.7	1.1	pCi/g	-	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE

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APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Thorium-228	1.7	1.1	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Thorium-228	1.7	1.1	pCi/g	-	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Thorium-228	1.7	1	pCi/g	-	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Thorium-228	1.7	1	pCi/g	-	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Thorium-228	1.7	0.93	pCi/g	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Thorium-228	1.7	0.9	pCi/g	-	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Thorium-228	1.7	0.9	pCi/g	-	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Thorium-228	1.7	0.8	pCi/g	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Thorium-228	1.7	0.62	pCi/g	-	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Thorium-228	1.7	0.6	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Thorium-228	1.7	0.6	pCi/g	U	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Thorium-230	280	3.14	pCi/g	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Thorium-230	280	2.52	pCi/g	J	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Thorium-230	280	2.4	pCi/g	-	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Thorium-230	280	2.3	pCi/g	-	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Thorium-230	280	2.2	pCi/g	-	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Thorium-230	280	1.9	pCi/g	-	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Thorium-230	280	1.8	pCi/g	-	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Thorium-230	280	1.8	pCi/g	-	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Thorium-230	280	1.7	pCi/g	-	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Thorium-230	280	1.69	pCi/g	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Thorium-230	280	1.66	pCi/g	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Thorium-230	280	1.6	pCi/g	-	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Thorium-230	280	1.6	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483993.4	1349245.9	NORMAL
Thorium-230	280	1.6	pCi/g	-	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Thorium-230	280	1.51	pCi/g	-	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Thorium-230	280	1.5	pCi/g	-	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Thorium-230	280	1.5	pCi/g	-	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Thorium-230	280	1.5	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Thorium-230	280	1.5	pCi/g	-	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Thorium-230	280	1.5	pCi/g	-	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Thorium-230	280	1.5	pCi/g	-	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Thorium-230	280	1.48	pCi/g	-	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Thorium-230	280	1.45	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Thorium-230	280	1.4	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Thorium-230	280	1.38	pCi/g	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Thorium-230	280	1.35	pCi/g	-	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL

**APPENDIX B
R/IFS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Thorium-230	280	1.32	pCi/g	J	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Thorium-230	280	1.2	pCi/g	-	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Thorium-230	280	1.176	pCi/g	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Thorium-230	280	1.1	pCi/g	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Thorium-230	280	1	pCi/g	-	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Thorium-230	280	0.93	pCi/g	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Thorium-232	1.5	1.24	pCi/g	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Thorium-232	1.5	1.23	pCi/g	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Thorium-232	1.5	1.2	pCi/g	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Thorium-232	1.5	1.2	pCi/g	-	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Thorium-232	1.5	1.2	pCi/g	-	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Thorium-232	1.5	1.12	pCi/g	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	J	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	-	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	-	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	-	5879	ZONE 3-473	6-Oct-88	0	0.5	482529.5	1348766.0	DUPLICATE
Thorium-232	1.5	1.1	pCi/g	-	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL
Thorium-232	1.5	1.1	pCi/g	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Thorium-232	1.5	1.1	pCi/g	-	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Thorium-232	1.5	1	pCi/g	-	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Thorium-232	1.5	1	pCi/g	-	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Thorium-232	1.5	0.97	pCi/g	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Thorium-232	1.5	0.95	pCi/g	-	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Thorium-232	1.5	0.945	pCi/g	-	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Thorium-232	1.5	0.9	pCi/g	-	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Thorium-232	1.5	0.9	pCi/g	-	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Thorium-232	1.5	0.9	pCi/g	-	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Thorium-232	1.5	0.9	pCi/g	-	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Thorium-232	1.5	0.9	pCi/g	-	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Thorium-232	1.5	0.8	pCi/g	-	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Thorium-232	1.5	0.8	pCi/g	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Thorium-232	1.5	0.8	pCi/g	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Thorium-232	1.5	0.8	pCi/g	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Thorium-232	1.5	0.73	pCi/g	-	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Thorium-232	1.5	0.7	pCi/g	-	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Thorium-232	1.5	0.611	pCi/g	-	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL

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APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE

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Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Thorium-232	1.5	0.6	pCi/g	U	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Toluene	1E+08	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Toluene	1E+08	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Toluene	1E+08	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Toluene	1E+08	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Toluene	1E+08	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Toluene	1E+08	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Toluene	1E+08	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Toluene	1E+08	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Toluene	1E+08	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Toluene	1E+08	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Toluene	1E+08	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Toluene	1E+08	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Toluene	1E+08	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Toluene	1E+08	4	ug/kg	J	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Toluene	1E+08	2	ug/kg	J	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Toluene	1E+08	2	ug/kg	J	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Trichloroethene	25000	14	ug/kg	U	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Trichloroethene	25000	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Trichloroethene	25000	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Trichloroethene	25000	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Trichloroethene	25000	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Trichloroethene	25000	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Trichloroethene	25000	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Trichloroethene	25000	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Trichloroethene	25000	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Trichloroethene	25000	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Trichloroethene	25000	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Trichloroethene	25000	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Trichloroethene	25000	6	ug/kg	UJ	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Trichloroethene	25000	6	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Trichloroethene	25000	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Trichloroethene	25000	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Trichloroethene	25000	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Uranium, Total	50	59.66249	mg/kg	NV	SS2231	LIT8926	19860424	0	0.167	482974.4	1348608.0	NORMAL
Uranium, Total	50	39.01585	mg/kg	-	5429	ZONE 3-474	19880920	0	0.1667	482559.4	1348581.0	NORMAL
Uranium, Total	50	26	mg/kg	J	15473	1500	19900110	0	0.5	483029.4	1347531.0	NORMAL
Uranium, Total	50	23.38865	mg/kg	J	5106	ZONE 3-511	19871111	0	0.1667	483029.4	1347531.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Uranium, Total	50	20.3901	mg/kg	-	5878	ZONE 3-473	19881006	0	0.5	482549.4	1348781.0	NORMAL
Uranium, Total	50	18.59098	mg/kg	-	5359	ZONE 3-538	19880423	0	0.1667	483990.4	1346033.0	NORMAL
Uranium, Total	50	16.49199	mg/kg	-	5362	ZONE 3-539	19880423	0	0.1667	483994.4	1345799.0	NORMAL
Uranium, Total	50	14.72941	mg/kg	J	5103	ZONE 3-512	19871111	0	0.1667	483029.4	1348531.0	NORMAL
Uranium, Total	50	14.09316	mg/kg	-	6052	ZONE 3-506	19881026	0	0.5	482779.4	1348531.0	NORMAL
Uranium, Total	50	14	mg/kg	J	6053	ZONE 3-506	26-Oct-88	0	0.5	482759.5	1348516.0	DUPLICATE
Uranium, Total	50	13.7933	mg/kg	-	6058	ZONE 3-505	19881026	0	0.5	482779.4	1348281.0	NORMAL
Uranium, Total	50	13.7933	mg/kg	J	5329	ZONE 3-528	19880420	0	0.1667	483929.4	1348281.9	NORMAL
Uranium, Total	50	13.7933	mg/kg	J	5332	ZONE 3-530	19880420	0	0.1667	483938.4	1348032.0	NORMAL
Uranium, Total	50	12.89374	mg/kg	-	100862	1734	19920108	24	26	483329.4	1348531.0	NORMAL
Uranium, Total	50	12.6	mg/kg	NV	200003	11367	11-Jul-94	0	0.5	482839.9	1346631.1	ARCHIVE
Uranium, Total	50	11	mg/kg	UNV	101455	1729	14-Jan-92	0	30	483329.4	1347031.0	NORMAL
Uranium, Total	50	11	mg/kg	UNV	101453	1732	10-Jan-92	0	21	483329.4	1348031.0	NORMAL
Uranium, Total	50	11	mg/kg	UNV	101451	1735	10-Jan-92	0	13	483329.4	1349031.0	NORMAL
Uranium, Total	50	10.9	mg/kg	NV	200006	11367	11-Jul-94	0.5	1	482839.9	1346631.1	ARCHIVE
Uranium, Total	50	10.79476	mg/kg	J	5317	ZONE 3-522	19880419	0	0.1667	483903.4	1349245.9	NORMAL
Uranium, Total	50	10.6	mg/kg	NV	200001D	11367	28-Jul-94	0	0.17	482839.9	1346631.1	DUPLICATE
Uranium, Total	50	10.49491	mg/kg	-	5426	ZONE 3-449	19880920	0	0.1667	482529.4	1348231.0	NORMAL
Uranium, Total	50	10.05754	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Uranium, Total	50	10	mg/kg	NV	100425	1679	27-Jan-92			483953.9	1346795.6	ILL CUTTIN
Uranium, Total	50	9.655313	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Uranium, Total	50	9.295488	mg/kg	-	5350	ZONE 3-535	19880421	0	0.1667	483973.4	1346781.0	NORMAL
Uranium, Total	50	9.205531	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Uranium, Total	50	9.175546	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Uranium, Total	50	9.14556	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Uranium, Total	50	9	mg/kg	NV	200008	11367	11-Jul-94	1	1.5	482839.9	1346631.1	ARCHIVE
Uranium, Total	50	8.9	mg/kg	NV	90S-14	11367	19-Sep-94	0	0.17	482839.9	1346631.1	NORMAL
Uranium, Total	50	8.42591	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Uranium, Total	50	8.036099	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Uranium, Total	50	7.8	mg/kg	NV	200010	11367	11-Jul-94	1.5	2	482839.9	1346631.1	ARCHIVE
Uranium, Total	50	7	mg/kg	J	15476	1500	19900110	1.5	2	483029.4	1347531.0	NORMAL
Uranium, Total	50	7	mg/kg	-	15496	1501	19900111	0.5	1	482804.4	1346531.0	NORMAL
Uranium, Total	50	6.896652	mg/kg	J	5112	ZONE 3-510	19871111	0	0.1667	483029.4	1346531.0	NORMAL
Uranium, Total	50	6.296943	mg/kg	-	5356	ZONE 3-537	19880423	0	0.1667	483985.4	1346281.0	NORMAL
Uranium, Total	50	6	mg/kg	J	15475	1500	19900110	1	1.5	483029.4	1347531.0	NORMAL
Uranium, Total	50	6	mg/kg	J	15482	1500	19900110	4.5	5	483029.4	1347531.0	NORMAL
Uranium, Total	50	6	mg/kg	-	15498	1501	19900111	1.5	2	482804.4	1346531.0	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Uranium, Total	50	6	mg/kg	-	51131	1501	19900111	19	19.5	482804.4	1346531.0	NORMAL
Uranium, Total	50	5.997089	mg/kg	-	5353	ZONE 3-536	19880421	0	0.1667	483979.4	1346531.0	NORMAL
Uranium, Total	50	5.508	mg/kg	-	90S-14	11367	19-Sep-94	0	0.17	482839.9	1346631.1	NORMAL
Uranium, Total	50	5.3	mg/kg	U	100424	1679	27-Jan-92			483953.9	1346795.6	ILL CUTTIN
Uranium, Total	50	5.06754	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Uranium, Total	50	5	mg/kg	J	15474	1500	19900110	0.5	1	483029.4	1347531.0	NORMAL
Uranium, Total	50	5	mg/kg	J	51102	1500	19900110	14.5	15	483029.4	1347531.0	NORMAL
Uranium, Total	50	5	mg/kg	J	51112	1500	19900110	19.5	20	483029.4	1347531.0	NORMAL
Uranium, Total	50	5	mg/kg	-	15497	1501	19900111	1	1.5	482804.4	1346531.0	NORMAL
Uranium, Total	50	5	mg/kg	NV	38300	2679	22-Jan-92			483952.5	1346809.4	ILL CUTTIN
Uranium, Total	50	4.9069	pCi/g	UJ	100378	2728	15-Jan-92	14	14.5	483331.0	1346491.6	NORMAL
Uranium, Total	50	4.617758	mg/kg	J	101397	1732	19920109	14	16	483329.4	1348031.0	NORMAL
Uranium, Total	50	4.3	mg/kg	NV	200002D	11367	28-Jul-94	2	2.5	482839.9	1346631.1	DUPLICATE
Uranium, Total	50	4.09	mg/kg	-	100893	1730	9-Jan-92	0	30.5	483329.4	1347531.0	NORMAL
Uranium, Total	50	4	mg/kg	-	15495	1501	19900111	0	0.5	482804.4	1346531.0	NORMAL
Uranium, Total	50	4	mg/kg	-	15504	1501	19900111	4.5	5	482804.4	1346531.0	NORMAL
Uranium, Total	50	4	mg/kg	-	15514	1501	19900111	9.5	10	482804.4	1346531.0	NORMAL
Uranium, Total	50	3.92	mg/kg	-	101454	1729	14-Jan-92	0	30	483329.4	1347031.0	NORMAL
Uranium, Total	50	3.778166	mg/kg	J	101429	1729	19920113	16	18	483329.4	1347031.0	NORMAL
Uranium, Total	50	3.508297	mg/kg	-	101407	1732	19920109	20	21	483329.4	1348031.0	NORMAL
Uranium, Total	50	3.45	mg/kg	J	38411	3679	3-Feb-92			483956.2	1346781.5	ILL CUTTIN
Uranium, Total	50	3.38	mg/kg	-	101450	1735	10-Jan-92	0	13	483329.4	1349031.0	NORMAL
Uranium, Total	50	3.268413	mg/kg	J	100859	1734	19920108	14	16	483329.4	1348531.0	NORMAL
Uranium, Total	50	3.2	mg/kg	NV	9S-14-B2	11367	19-Sep-94	2	2.5	482839.9	1346631.1	NORMAL
Uranium, Total	50	3	mg/kg	J	15492	1500	19900110	9.5	10	483029.4	1347531.0	NORMAL
Uranium, Total	50	3	mg/kg	-	51126	1501	19900111	16.5	17	482804.4	1346531.0	NORMAL
Uranium, Total	50	2.872606	mg/kg	-	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Uranium, Total	50	2.818632	mg/kg	-	100413	1679	19920124	19	20.5	483953.9	1346795.6	NORMAL
Uranium, Total	50	2.63	mg/kg	J	101452	1732	10-Jan-92	0	21	483329.4	1348031.0	NORMAL
Uranium, Total	50	2.578748	mg/kg	J	100879	1730	19920109	14.5	16.5	483329.4	1347531.0	NORMAL
Uranium, Total	50	2.4	mg/kg	NV	200002D	11367	28-Jul-94	2	2.5	482839.9	1346631.1	DUPLICATE
Uranium, Total	50	2.278894	mg/kg	-	101384	1735	19920108	11	13	483329.4	1349031.0	NORMAL
Uranium, Total	50	2.18	mg/kg	-	100863	1734	8-Jan-92	0	26	483329.4	1348531.0	NORMAL
Uranium, Total	50	2.098981	mg/kg	-	7260	2052	19871101	13.5	15	482536.6	1348670.7	NORMAL
Uranium, Total	50	2.098981	mg/kg	J	7269	2052	19871102	27	28.5	482536.6	1348670.7	NORMAL
Uranium, Total	50	1.616	mg/kg	-	9S-14-B2	11367	19-Sep-94	2	2.5	482839.9	1346631.1	NORMAL
Vanadium	5100	29.2	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL

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**APPENDIX B
R/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Vanadium	5100	28.8	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Vanadium	5100	26.5	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Vanadium	5100	26.2	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Vanadium	5100	24.2	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Vanadium	5100	22.1	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Vanadium	5100	22	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Vanadium	5100	21.6	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Vanadium	5100	21.1	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Vanadium	5100	20.3	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Vanadium	5100	20.2	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Vanadium	5100	20.1	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Vanadium	5100	18.1	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Vanadium	5100	16.8	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Vanadium	5100	16.8	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Vanadium	5100	15.6	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL
Vanadium	5100	13.2	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Vanadium	5100	13.1	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Vinyl chloride	130	14	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Vinyl chloride	130	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Vinyl chloride	130	14	ug/kg	U	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Vinyl chloride	130	13	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Vinyl chloride	130	13	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Vinyl chloride	130	13	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Vinyl chloride	130	13	ug/kg	U	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Vinyl chloride	130	13	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Vinyl chloride	130	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Vinyl chloride	130	13	ug/kg	U	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Vinyl chloride	130	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Vinyl chloride	130	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Vinyl chloride	130	12	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Vinyl chloride	130	12	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Vinyl chloride	130	12	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Vinyl chloride	130	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Xylenes, Total	9.2E+08	14	ug/kg	UJ	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Xylenes, Total	9.2E+08	14	ug/kg	UJ	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Xylenes, Total	9.2E+08	13	ug/kg	UJ	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Xylenes, Total	9.2E+08	13	ug/kg	UJ	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL

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**APPENDIX B
RI/FS HISTORICAL DATA COLLECTED FOR AREA 1, PHASE III PART ONE**

Parameter	FRL	Result	Units	Qual.	Sample ID	Location	Date	Top	Bottom	Northing	Easting	QA Type
Xylenes, Total	9.2E+08	13	ug/kg	U	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Xylenes, Total	9.2E+08	13	ug/kg	U	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Xylenes, Total	9.2E+08	12	ug/kg	UJ	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Xylenes, Total	9.2E+08	7	ug/kg	U	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Xylenes, Total	9.2E+08	7	ug/kg	U	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Xylenes, Total	9.2E+08	6	ug/kg	U	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Xylenes, Total	9.2E+08	6	ug/kg	U	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Xylenes, Total	9.2E+08	6	ug/kg	U	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Xylenes, Total	9.2E+08	6	ug/kg	UJ	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Xylenes, Total	9.2E+08	6	ug/kg	U	7253	2052	1-Nov-87	4.5	6	482536.6	1348670.7	DUPLICATE
Xylenes, Total	9.2E+08	6	ug/kg	U	7255	2052	1-Nov-87	6	7.5	482536.6	1348670.7	DUPLICATE
Xylenes, Total	9.2E+08	6	ug/kg	U	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Zinc	120000	137	mg/kg	-	121124	500318/SS-16	19930701	0	0.5	483065.5	1349020.3	NORMAL
Zinc	120000	80.4	mg/kg	-	121130	500318/SS-02	19930701	0	0.5	483914.2	1348910.7	NORMAL
Zinc	120000	76.8	mg/kg	-	121126	500318/SS-17	19930701	0	0.5	483041.7	1348624.3	NORMAL
Zinc	120000	66.7	mg/kg	-	121137	500318/SS-18	19930702	0	0.5	483078.9	1348199.6	NORMAL
Zinc	120000	62.5	mg/kg	-	121144	500318/SS-22	19930702	0	0.5	483110.0	1347780.5	NORMAL
Zinc	120000	62.1	mg/kg	-	121128	500318/SS-01	19930701	0	0.5	483921.0	1348519.9	NORMAL
Zinc	120000	61.8	mg/kg	-	101372	1735	19920107	0	0.5	483329.4	1349031.0	NORMAL
Zinc	120000	54.2	mg/kg	-	100865	1730	19920109	0	0.5	483329.4	1347531.0	NORMAL
Zinc	120000	52.7	mg/kg	-	121139	500318/SS-21	19930702	0	0.5	483012.2	1347815.0	NORMAL
Zinc	120000	51.6	mg/kg	-	121136	500318/SS-20	19930702	0	0.5	482756.5	1348238.4	NORMAL
Zinc	120000	47.7	mg/kg	J	200001	11367	19940711	0	0.17	482839.9	1346631.0	NORMAL
Zinc	120000	47.4	mg/kg	-	100422	1679	19920127	0	0.5	483953.9	1346795.6	NORMAL
Zinc	120000	40.8	mg/kg	-	100841	1734	19920108	0	0.5	483329.4	1348531.0	NORMAL
Zinc	120000	39.8	mg/kg	-	121146	500318/SS-19	19930702	0	0.5	483167.2	1347978.5	NORMAL
Zinc	120000	38.4	mg/kg	-	100371	2728	19920319	0	0.5	483331.0	1346491.6	NORMAL
Zinc	120000	37.1	mg/kg	-	101385	1732	19920108	0	0.5	483329.4	1348031.0	NORMAL
Zinc	120000	28.5	mg/kg	-	101409	1729	19920113	0	0.5	483329.4	1347031.0	NORMAL
Zinc	120000	25.7	mg/kg	J	200002	11367	19940711	2	2.5	482839.9	1346631.0	NORMAL

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APPENDIX C

**REAL-TIME SCANNING/ANALYTICAL DATA
FOR THE A1PIII PART ONE
FILL AREA CERTIFICATION UNITS**

APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA

CU	Sample ID	Sample Date	Depth		East 83	North 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Moisture Content	12.3	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Radium-228	0.753	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Uranium, Total	5.764	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Thorium-232	0.753	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Thorium-228	0.748	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-10R	5/11/00	0	0.5	1349275	483805.5	Radium-226	0.894	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Moisture Content	11.5	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Uranium, Total	5.09	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Thorium-232	0.838	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Thorium-228	0.849	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Radium-228	0.838	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-11R	5/11/00	0	0.5	1349337	483776.8	Radium-226	0.893	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Moisture Content	12.5	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Radium-226	0.894	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Radium-228	0.634	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Uranium, Total	5.572	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Thorium-232	0.634	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-13R	5/11/00	0	0.5	1349390	483783.2	Thorium-228	0.626	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Moisture Content	18.9	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Radium-226	1.162	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Thorium-228	1.123	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Radium-228	1.136	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Thorium-232	1.136	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-15R	5/11/00	0	0.5	1349386	483881.2	Uranium, Total	11.98	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Moisture Content	18.9	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Radium-228	1.212	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Uranium, Total	11.556	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Thorium-232	1.212	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Thorium-228	1.214	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-16R	5/11/00	0	0.5	1349464	483867.7	Radium-226	1.356	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Moisture Content	15.3	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Thorium-228	1.178	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Thorium-232	1.206	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Uranium, Total	8.72	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Radium-228	1.206	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-1R	5/11/00	0	0.5	1349359	483589.3	Radium-226	1.007	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Moisture Content	17.6	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Radium-228	1.156	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Thorium-228	1.12	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Uranium, Total	9.677	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Thorium-232	1.156	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-2R	5/11/00	0	0.5	1349416	483620.2	Radium-226	0.982	pCi/g dry	-	NORMAL

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**APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA**

CU	Sample ID	Sample Date	Depth		East 83	North 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Moisture Content	17	PERCENT	NV	DUPLICATE
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Uranium, Total	8.905	ug/g dry	-	DUPLICATE
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Thorium-232	1.168	pCi/g dry	-	DUPLICATE
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Radium-226	0.99	pCi/g dry	-	DUPLICATE
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Thorium-228	1.168	pCi/g dry	-	DUPLICATE
A1P3-C-21	A1P3-C-21-2R-D	5/11/00	0	0.5	1349416	483620.2	Radium-228	1.168	pCi/g dry	-	DUPLICATE
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Moisture Content	12.9	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Uranium, Total	5.287	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Thorium-232	0.857	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Thorium-228	0.847	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Radium-228	0.857	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-3R	5/11/00	0	0.5	1349363	483666.6	Radium-226	0.911	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Moisture Content	17	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Radium-226	0.773	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Radium-228	0.594	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Uranium, Total	9.435	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Thorium-232	0.594	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-5R	5/11/00	0	0.5	1349264	483694.7	Thorium-228	0.599	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Moisture Content	10.9	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Radium-226	0.824	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Thorium-228	0.714	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Radium-228	0.745	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Thorium-232	0.745	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-7R	5/11/00	0	0.5	1349392	483745.7	Uranium, Total	4.828	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Moisture Content	12.4	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Radium-228	0.895	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Uranium, Total	4.018	ug/g dry	J	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Thorium-232	0.895	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Thorium-228	0.868	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-8R	5/11/00	0	0.5	1349444	483722.9	Radium-226	0.878	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Moisture Content	15.4	PERCENT	NV	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Uranium, Total	9.635	ug/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Thorium-232	0.916	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Thorium-228	0.922	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Radium-228	0.916	pCi/g dry	-	NORMAL
A1P3-C-21	A1P3-C-21-9R	5/11/00	0	0.5	1349219	483745.5	Radium-226	0.992	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Moisture Content	15.3	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Thorium-228	0.579	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Thorium-232	0.609	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Uranium, Total	3.724	ug/g dry	J	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Radium-228	0.609	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-10R	5/15/00	0	0.5	1346376	482604.8	Radium-226	0.799	pCi/g dry	-	NORMAL

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**APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA**

CU	Sample ID	Sample Date	Depth		North 83	East 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Moisture Content	23.2	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Radium-228	1.047	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Thorium-228	1.034	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Uranium, Total	8.61	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Thorium-232	1.047	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-11R	5/15/00	0	0.5	482735.4	1346332	Radium-226	1.179	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Moisture Content	22.6	PERCENT	NV	DUPLICATE
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Uranium, Total	7.291	ug/g dry	-	DUPLICATE
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Thorium-232	0.947	pCi/g dry	-	DUPLICATE
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Radium-226	1.058	pCi/g dry	-	DUPLICATE
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Thorium-228	0.909	pCi/g dry	-	DUPLICATE
A1P3-C-24	A1P3-C-24-11R-D	5/15/00	0	0.5	482735.4	1346332	Radium-228	0.947	pCi/g dry	-	DUPLICATE
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Moisture Content	21.2	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Radium-228	0.887	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Thorium-228	0.839	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Thorium-232	0.887	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Uranium, Total	8.829	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-14R	5/11/00	0	0.5	482767.7	1346465	Radium-226	1.029	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Moisture Content	23	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Uranium, Total	6.906	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Radium-226	1.15	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Radium-228	0.961	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Thorium-232	0.961	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-15R	5/11/00	0	0.5	482902.6	1346387	Thorium-228	0.963	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Moisture Content	21	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Thorium-232	0.896	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Uranium, Total	8.428	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Thorium-228	0.889	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Radium-226	1.026	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-16R	5/11/00	0	0.5	482795.5	1346528	Radium-228	0.896	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Moisture Content	13.2	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Radium-228	0.51	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Thorium-232	0.51	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Uranium, Total	1.722	ug/g dry	U	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Thorium-228	0.503	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-1R	5/15/00	0	0.5	482701.4	1346021	Radium-226	0.625	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Moisture Content	21.5	PERCENT	NV	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Radium-228	1.087	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Thorium-228	1.062	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Thorium-232	1.087	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Uranium, Total	14.227	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-2R	5/15/00	0	0.5	482741.8	1346140	Radium-226	1.17	pCi/g dry	-	NORMAL

**APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA**

CU	Sample ID	Sample Date	Depth		East 83	North 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Moisture Content	19.8	PERCENT	INV	NORMAL
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Uranium, Total	13.41	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Radium-226	1.108	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Radium-228	0.839	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Thorium-232	0.839	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-3R	5/15/00	0	0.5	1345975	482790.3	Thorium-228	0.828	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Moisture Content	13.7	PERCENT	INV	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Thorium-232	0.6	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Uranium, Total	2.608	ug/g dry	U	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Thorium-228	0.576	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Radium-226	0.859	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-5R	5/15/00	0	0.5	1346182	482667.8	Radium-228	0.6	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-6R	5/15/00	0	0.5	1346209	482773.9	Moisture Content	33.6	PERCENT	INV	NORMAL
A1P3-C-24	A1P3-C-24-6R	5/15/00	0	0.5	1346209	482773.9	Radium-228	0.892	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-6R	5/15/00	0	0.5	1346209	482773.9	Thorium-232	0.892	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-6R	5/15/00	0	0.5	1346209	482773.9	Uranium, Total	7.719	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-6R	5/15/00	0	0.5	1346209	482773.9	Thorium-228	0.9	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Radium-226	1.165	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Moisture Content	24	PERCENT	INV	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Radium-228	0.973	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Thorium-228	0.99	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Thorium-232	0.973	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Uranium, Total	7.454	ug/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-7R	5/15/00	0	0.5	1346272	482788.2	Radium-226	1.097	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Moisture Content	13.3	PERCENT	INV	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Uranium, Total	0.884	ug/g dry	U	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Radium-226	0.922	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Radium-228	0.683	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Thorium-232	0.683	pCi/g dry	-	NORMAL
A1P3-C-24	A1P3-C-24-9R	5/15/00	0	0.5	1346314	482649.1	Thorium-228	0.671	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Beryllium	0.31	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Radium-228	0.951	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Thorium-228	0.96	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Uranium, Total	11.07	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Radium-226	1.16	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-10RM	5/9/00	0	0.5	1348822	482519.8	Moisture Content	7.9	PERCENT	INV	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Beryllium	0.03	mg/kg dry	U	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Uranium, Total	36.608	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Moisture Content	8.4	PERCENT	INV	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Radium-228	0.444	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Thorium-228	0.433	pCi/g dry	-	NORMAL

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APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA

CU	Sample ID	Sample Date	Depth		East 83	North 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Thorium-232	0.444	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-12RM	5/10/00	0	0.5	1348969	482619.1	Radium-226	0.618	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Beryllium	0.19	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Uranium, Total	10.846	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Thorium-232	0.55	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Moisture Content	7.3	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Radium-226	0.785	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Thorium-228	0.545	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-13RM	5/10/00	0	0.5	1349065	482691.3	Radium-228	0.55	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Beryllium	0.31	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Thorium-232	0.77	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Uranium, Total	16.878	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Thorium-228	0.737	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Moisture Content	16.6	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Radium-226	0.906	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-15RM	5/10/00	0	0.5	1349230	482847.3	Radium-228	0.77	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Beryllium	0.03	mg/kg dry	U	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Thorium-228	0.493	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Uranium, Total	17.838	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Thorium-232	0.502	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Radium-228	0.502	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Moisture Content	18.9	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-16RM	5/10/00	0	0.5	1349296	482833.9	Radium-226	0.815	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Beryllium	0.09	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Radium-226	1.177	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Thorium-228	0.917	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Thorium-232	0.936	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Uranium, Total	12.058	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347796	482611.7	Radium-228	0.936	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-1RM	5/9/00	0	0.5	1347923	482602.7	Moisture Content	14.6	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Beryllium	0.03	mg/kg dry	U	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Uranium, Total	20.98	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Radium-226	0.99	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Radium-228	0.959	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Thorium-232	0.959	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Thorium-228	0.949	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-2RM	5/9/00	0	0.5	1347923	482602.7	Moisture Content	16.4	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	1348049	482554.9	Beryllium	0.31	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	1348049	482554.9	Uranium, Total	17.062	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	1348049	482554.9	Thorium-232	0.992	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	1348049	482554.9	Radium-226	1.242	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	1348049	482554.9	Radium-228	0.992	pCi/g dry	-	NORMAL

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APPENDIX C
AREA 1, PHASE III PART ONE ANALYTICAL DATA

CU	Sample ID	Sample Date	Depth		North 83	East 83	Parameter	Result	Units	Val. Qual.	QA Type
			Top	Bottom							
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	482554.9	1348049	Thorium-228	0.985	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-3RM	5/9/00	0	0.5	482554.9	1348049	Moisture Content	13.2	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Beryllium	0.4	mg/kg dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Thorium-232	1.089	pCi/g dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Uranium, Total	17.041	ug/g dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Thorium-228	1.061	pCi/g dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Moisture Content	13	PERCENT	NV	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Radium-228	1.089	pCi/g dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-3RM-D	5/9/00	0	0.5	482554.9	1348049	Radium-226	1.274	pCi/g dry	-	DUPLICATE
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Beryllium	0.03	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Thorium-228	0.995	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Uranium, Total	82.686	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Thorium-232	1.002	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Radium-228	1.002	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Moisture Content	21	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-5RM	5/9/00	0	0.5	482549	1348256	Radium-226	1.167	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Beryllium	0.03	mg/kg dry	U	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Moisture Content	11.3	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Radium-226	1.042	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Radium-228	0.891	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Thorium-228	0.875	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Thorium-232	0.891	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-7RM	5/9/00	0	0.5	482541.5	1348412	Uranium, Total	5.13	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Beryllium	0.04	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Moisture Content	13.5	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Radium-226	1.09	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Radium-228	0.976	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Thorium-228	0.949	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Thorium-232	0.976	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-8RM	5/9/00	0	0.5	482537.1	1348584	Uranium, Total	23.758	ug/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Beryllium	0.34	mg/kg dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Moisture Content	13.9	PERCENT	NV	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Radium-226	1.175	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Radium-228	0.826	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Thorium-228	0.805	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Thorium-232	0.826	pCi/g dry	-	NORMAL
A1P3-C-25	A1P3-C-25-9RM	5/9/00	0	0.5	482528	1348679	Uranium, Total	15.795	ug/g dry	-	NORMAL

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