

**CERTIFICATION REPORT
FOR AREA 1, PHASE III PART ONE**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO**



AUGUST 2001

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

**20720-RP-0003
REVISION 0
FINAL**

000001

TABLE OF CONTENTS

| | |
|--|--|
| Executive Summary | ES-1 |
| 1.0 Introduction | 1-1 |
| 1.1 Purpose | 1-1 |
| 1.2 Background | 1-1 |
| 1.3 Area Description | 1-2 |
| 1.4 Scope | 1-4 |
| 1.5 Objectives | 1-4 |
| 1.6 Report Format | 1-5 |
| 1.7 FEMP Certification Master Map | 1-5 |
| 2.0 Certification Approach | 2-1 |
| 2.1 Certification Strategy | 2-1 |
| 2.1.1 Selection of Area-Specific Constituents of Concern | 2-1 |
| 2.1.2 ASCOC Selection Process for A1PIII Part One | 2-2 |
| 2.2 Certification Approach | 2-3 |
| 2.2.1 Certification Design | 2-3 |
| 2.2.2 Supplemental Real-Time Scanning | 2-4 |
| 2.2.3 Sample Selection Process | 2-5 |
| 2.2.4 Certification Sampling and Analysis | 2-6 |
| 2.2.5 Statistical Analysis | 2-7 |
| 3.0 Overview of Field Activities | 3-1 |
| 3.1 Data Evaluation, Supplemental Real-Time Scan, and Debris Removal | 3-1 |
| 3.2 Changes to Scope of Work | 3-2 |
| 4.0 Analytical Methodologies, Data Validation Processes and Data Reduction | 4-1 |
| 4.1 Analytical Methodologies | 4-1 |
| 4.1.1 Radiochemical Methods | 4-1 |
| 4.1.2 Chemical Methods | 4-2 |
| 4.2 Data Verification and Validation | 4-2 |
| 4.3 Data Reduction | 4-4 |
| 5.0 Certification Evaluation and Conclusions | 5-1 |
| 5.1 Certification Results and Evaluation | 5-1 |
| 5.2 A1PIII Part One Certification Conclusions | 5-1 |
| 5.3 Lessons Learned | 5-1 |
| 6.0 Protection of Certified Areas | 6-1 |
| References | R-1 |
| Appendix A | Data Tables and Maps from "Supplemental" Real-Time Scan |
| Appendix B | Variances/Field Change Notices for A1PIII Certification Sampling PSP |
| Appendix C | Certification Samples, Analytical Results and Statistics Tables |

LIST OF TABLES

| | |
|-----------|--|
| Table 2-1 | ASCOC List for All A1PIII Part One Certification Units |
| Table 3-1 | Project Costs for A1PIII |

LIST OF FIGURES

| | |
|------------|--|
| Figure 1-1 | Area 1, Phase III Location Map |
| Figure 1-2 | Area 1, Phase III Topography and Surface Features |
| Figure 1-3 | FEMP Controlled Certification Map |
| Figure 2-1 | A1PIII Part One Certification Units |
| Figure 2-2 | CU 26 Certification Sampling Locations |
| Figure 2-3 | A1PIII Part One Sub-CUs and Certification Sampling Locations |

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---------|---|
| A1PIII | Area 1, Phase III |
| ASCOC | area-specific constituent of concern |
| ASL | analytical support level |
| CDL | Certification Design Letter |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| COC | constituent of concern |
| CRDL | contract required detection limit |
| CU | certification unit |
| DOE | U.S. Department of Energy |
| EM | electromagnetic conductivity |
| EPA | U.S. Environmental Protection Agency |
| FEMP | Fernald Environmental Management Project |
| FRL | final remediation level |
| HAMDC | highest allowable minimum detectable concentration |
| HPGe | high-purity germanium detector |
| ICP-AES | inductively coupled plasma – atomic emission spectroscopy |
| LCS | laboratory control sample |
| µg/g | micrograms per gram |
| MDC | minimum detectable concentration |
| mg/kg | milligrams per kilogram |
| NaI | sodium iodide |
| OEPA | Ohio Environmental Protection Agency |
| OSDF | On-Site Disposal Facility |
| OU | Operable Unit |
| pCi/g | picoCuries per gram |
| PSP | Project Specific Plan |
| QA/QC | Quality Assurance/Quality Control |
| RAWP | Remedial Action Work Plan |
| ROD | Record of Decision |
| RSS | Radiation Scanning System |
| RTRAK | Radiation Tracking System |
| SCQ | Sitewide CERCLA Quality Assurance Project Plan |
| SED | Sitewide Environmental Database |
| SEP | Sitewide Excavation Plan |
| TPU | total propagated uncertainty |
| UCL | upper confidence level |
| V/FCN | Variance/Field Change Notice |
| V&V | verification and validation |
| WAC | waste acceptance criteria |

EXECUTIVE SUMMARY

This certification report presents the information and data used by the U.S. Department of Energy (DOE) to determine that existing area-specific constituents of concern (ASCOCs) concentrations do not exceed the final remediation levels (FRLs) in Area 1, Phase III (A1PIII) Part One at the Fernald Environmental Management Project (FEMP). On the basis of this reported information and supporting project files, DOE has determined that no remedial action and no further debris removal is required in this area of the site and, therefore, it can be considered "certified." A1PIII Part One will be considered certified when the U.S. Environmental Protection Agency (EPA) and Ohio Environmental Protection Agency (OEPA) agree that the certification criteria have been achieved within all 26 relevant certification units (CUs) into which the area was divided. Upon approval from the regulatory agencies, DOE will proceed with planning the natural resource restoration activities for A1PIII Part One, as outlined in the Natural Resource Restoration Plan (DOE 1998a).

A1PIII Part One was initially divided into 25 CUs. However, during development of the Certification Design Letter (CDL) for A1PIII Part One, non-native debris was discovered within the area. The debris, both surface and subsurface, was removed and an additional CU was established within the footprint of the subsurface debris removal. Delineation of CUs 01 through 25 is described in the CDL for A1PIII (DOE 2000a) (This certification area was not identified as "part one" until after the submittal of the CDL and the Project Specific Plan). Delineation of CU 26 is described in Variance/Field Change Notice (V/FCN) 20720-PSP-0001-4. Certification sampling was conducted in this area of the site to verify that the certification criteria were achieved. These criteria state that: 1) the mean concentrations or activities of the primary ASCOCs within a CU are less than the FRLs at the 95 percent upper confidence level; and 2) no certification result can exceed two-times the FRL (i.e., the hot spot criterion). If either of these criteria is not met, then further investigation and possible excavation is required. If both of these criteria are met for a CU, then it can be released for development of the final land use.

A1PIII Part One is heavily wooded, making it impractical to conduct a precertification scan without extensive clearing of vegetation. Therefore, existing historical data and land use information were used to verify the certification readiness and to establish CU boundaries. Based on this information, certification began without conducting remedial activities. A "supplemental" real-time scan was conducted in conjunction with certification sampling activities. The "supplemental" real-time scanning

data indicated no above-FRL radiological contamination present. The A1PIII Part One certification samples were analyzed at the FEMP on-site laboratory, following guidelines outlined in the Sitewide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Quality Assurance Project Plan (SCQ, Procedure FD-1000) and the Sitewide Excavation Plan (SEP, DOE 1998b). Samples from twelve locations in each CU were analyzed and reported at the required analytical support level. Analytical data packages included sample results with associated quality assurance/quality control data and all applicable raw data. The data were also subjected to the required validation and verification process, which did not identify any significant quality concerns. All A1PIII Part One CUs achieved the certification criteria. The determination of passing or failing certification was based on a review of certification sample analytical results from each CU against the certification criteria. Statistical analysis was required for only one ASCOC in one CU to determine if it passed certification. All other results were below their associated FRLs. Based on the analytical results, and the one statistical analysis, all 26 CUs under the scope of this certification effort achieved the certification criteria. DOE has restricted access to certified areas in order to maintain their integrity prior to development of the final land use.

000006

1.0 INTRODUCTION

1.1 PURPOSE

This Certification Report presents the information and data used by the U.S. Department of Energy (DOE) to determine that existing concentrations of area-specific constituents of concern (ASCOC) in soils do not exceed the final remediation levels (FRLs) within Area 1, Phase III (A1PIII) Part One. As discussed in the Certification Design Letter (CDL, DOE 2000a) for A1PIII Part One, this soil is being certified in order to proceed with final land use activities.

1.2 BACKGROUND

In the 1996 Operable Unit (OU) 5 Record of Decision (ROD, DOE 1996a), DOE committed to excavating contaminated soil that exceeds health-based FRLs, with final disposition of the excavated material in the On-Site Disposal Facility (OSDF) or at an off-site disposal facility if the material exceeds OSDF waste acceptance criteria (WAC). The OU5 Remedial Investigation Report (DOE 1995) defined the extent of soil contamination exceeding the FRLs and, in general, indicated widespread contamination occurring in approximately 430 acres of the 1,050-acre Fernald Environmental Management Project (FEMP). In the OU5 Remedial Action Work Plan (RAWP, DOE 1996b), DOE committed to preparing a Sitewide Excavation Plan (SEP, DOE 1998b) to define the overall approach to implementing the soil and at- and below-grade debris cleanup obligations identified in the OU2, OU3, and OU5 RODs.

In the SEP, the FEMP has been divided into distinct remedial areas and phases for soil remediation, based on the operable units' remediation schedule. After all necessary remediation is completed within each area/phase, the soil is certified as having attained all clean up goals (i.e., FRLs). The SEP describes the general soil remediation and certification process at the FEMP. Based on existing soil analytical data, historical land use and location, no soil excavation was anticipated in A1PIII Part One.

Consequently, excavation Approach E was followed in A1PIII Part One, and no Integrated Remedial Design Package was submitted. However, during development of the A1PIII Part One CDL, surface and subsurface, non-native debris (fencing, concrete, metal, etc.) was discovered in previously disturbed areas. Per the Ohio Environmental Protection Agency (OEPA), removal of the non-native debris was necessary to complete certification of the area. The general approach for the removal of the debris followed "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 the Implementation Plan for Paddys Run Debris Removal/Bank Stabilization and Area 1, Phase III (DOE 2001).

Typically, a precertification scan is conducted prior to issuance of the CDL. The data from these scans are used to: 1) verify that no localized contamination (i.e., "hot spots") are present, 2) provide a preliminary indication if an area will likely pass certification, and 3) bias CU boundaries so pockets of elevated activity are contained. Because A1PIII Part One is primarily wooded, it was not practical to conduct a precertification scan without large-scale vegetation removal. This would not support natural resource restoration goals, considering this area contains a sensitive habitat, the forested wetland, in the center and a mature forest in the west. Existing historical data and land use information were used to verify the certification readiness and to establish CU boundaries.

As an added measure to verify that no hot spots are present, real-time scanning was conducted as part of the certification process in the A1PIII Part One disturbed areas. This "supplemental" real-time scanning is discussed further in Section 2.2.2, and details of the fieldwork are presented in the Project Specific Plan (PSP) for A1PIII Certification Sampling (DOE 2000b). (This certification area was not identified as "part one" until after the submittal of the CDL and the PSP.) Following the review of the historical data and land use information, a CDL (DOE 2000a) was developed to proceed with the certification process.

Location of debris and associated field activities, which were required prior to final certification, are described in the Implementation Plan for Paddys Run Debris Removal/Bank Stabilization and Area 1, Phase III, and are also discussed in Section 2.2.2. All certification activities for this area were conducted in compliance with the SEP.

1.3 AREA DESCRIPTION

A1PIII Part One includes the northern portion of the FEMP between Paddys Run and the old north access road. The A1PIII Part One boundary has been modified from the SEP to follow the existing fence around the northern wood lot. This fence was installed following construction of the rail yard (located just south of A1PIII Part One). Several acres adjacent to the railroad line that were formerly part of

A1PIII Part One are no longer part of this certification effort. This land will now be considered A1PIII Part Three. These areas are identified on Figure 1-1.

With the revised boundary, A1PIII Part One is a 107.4-acre parcel of primarily wooded land with a forested wetland habitat and several open areas of formerly grazed meadow. The topography of A1PIII Part One is variable, with an overall slope to the south-southwest. Several small drainage ditches enter A1PIII Part One from an off-property agricultural area and eventually disperse within A1PIII Part One to form the wetlands.

It is unlikely that the majority of 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 (DOE 1995), no known disposal or plant-related activities were associated with this region of the FEMP. While this is the case, a review of aerial photographs and visual examinations of the area show several soil disturbances in A1PIII Part One, as follows:

- During plant construction (early 1950s prior to operations), fill was deposited over the hillside in the northeast corner of this area (Northeast Fill Area, Figure 1-2). The amount of bedrock in this fill indicates it likely originated from where the old access road (a.k.a., construction road) was cut through the hillside.
- Aerial photos from the mid-1970s show earthwork in the southwest corner of A1PIII Part One just north of the railroad tracks (Northeast Fill Area, Figure 1-2). A large area of dispersed fill is evident in this area upon visual inspection.
- Aerial photos from the 1960s and 1970s show several cleared paths running throughout this area that were used for security patrols during production.
- A 1977 aerial photo showed a small excavation beginning at the north property boundary, approximately 700 feet east of Paddys Run, and extending in a southwest direction toward Paddys Run. Based on the trenched shape of the excavation and the saturated soil conditions in this area, this was probably an effort to divert drainage toward Paddys Run.

- More recently during construction of the railyard, several brush piles and small soil piles containing concrete debris were placed along the southern edge of what is now A1PIII Part One (located inside the new fence, Figure 1-2). Information on these piles was documented in Variance/Field Change Notice (V/FCN) 20720-PSP-0001-1 to the A1PIII Certification Sampling PSP (DOE 1999).

For the purpose of this certification report, these areas collectively will be referred to as the “A1PIII Part One disturbed areas.” There is some uncertainty as to the origin of the fill material. Figure 1-2 shows the fill areas, topography, and surface features of the area. As previously mentioned in Section 1.2, all identified, accessible non-native debris in A1PIII Part One was removed. All accessible anomalies in the northeast fill area were removed. Since the 1970s, a local farmer has been using this area for grazing cattle.

1.4 SCOPE

The scope of this report includes the certification of A1PIII Part One. A1PIII Part One was initially divided into 25 certification units (CUs). The certification design for these 25 CUs was completed in accordance with Section 3.4 of the SEP. An additional CU (CU 26) was established following removal of the non-native subsurface debris located within CU 24. The certification design for CU 26 was also completed in accordance with Section 3.4 of the SEP.

1.5 OBJECTIVES

The objectives of this Certification Report are:

- Describe the analytical methods, data validation processes, data reduction and statistical processes used to support the certification process;
- Present certification sampling results for the 26 CUs;
- Present the statistical analysis showing that all 26 CUs have passed the certification criteria, including FRL attainment and hot spot criteria;
- Describe “supplemental” real-time scanning; and
- Describe access controls implemented to prevent recontamination.

1.6 REPORT FORMAT

This certification report is presented in six sections with supporting documentation and data in the appendices. These sections are as follows:

- Section 1.0 Introduction: Purpose, background, area description, scope, and objectives of the report
- Section 2.0 Certification Approach: The approach to sampling and analysis used for certification
- Section 3.0 Overview of Field Activities: Historical data evaluation, "supplemental" real-time scanning, debris removal, certification sampling, and changes to work scope
- Section 4.0 Analytical Methodologies, Data Validation Processes, and Data Reduction
- Section 5.0 Certification Evaluation and Conclusions
- Section 6.0 Protection of Certified Areas
- Appendix A Data Tables and Maps from Supplemental Real-Time Scans
- Appendix B Variances/Field Change Notices for A1PIII Certification Sampling PSP
- Appendix C Certification Samples, Results and Statistics Tables

1.7 FEMP CERTIFICATION MASTER MAP

In order to track the status of certification at the FEMP, DOE will include a site map showing the status of the soil remediation areas and phased areas with all Certification Reports. This map is included in this Certification Report as Figure 1-3, and has been revised to reflect the status of A1PIII Part One.

3830

V:\#50131\#dgn\hamp\#50131-01.dgn

STATE PLANNING COORDINATE SYSTEM 1983

30-JUL-2001

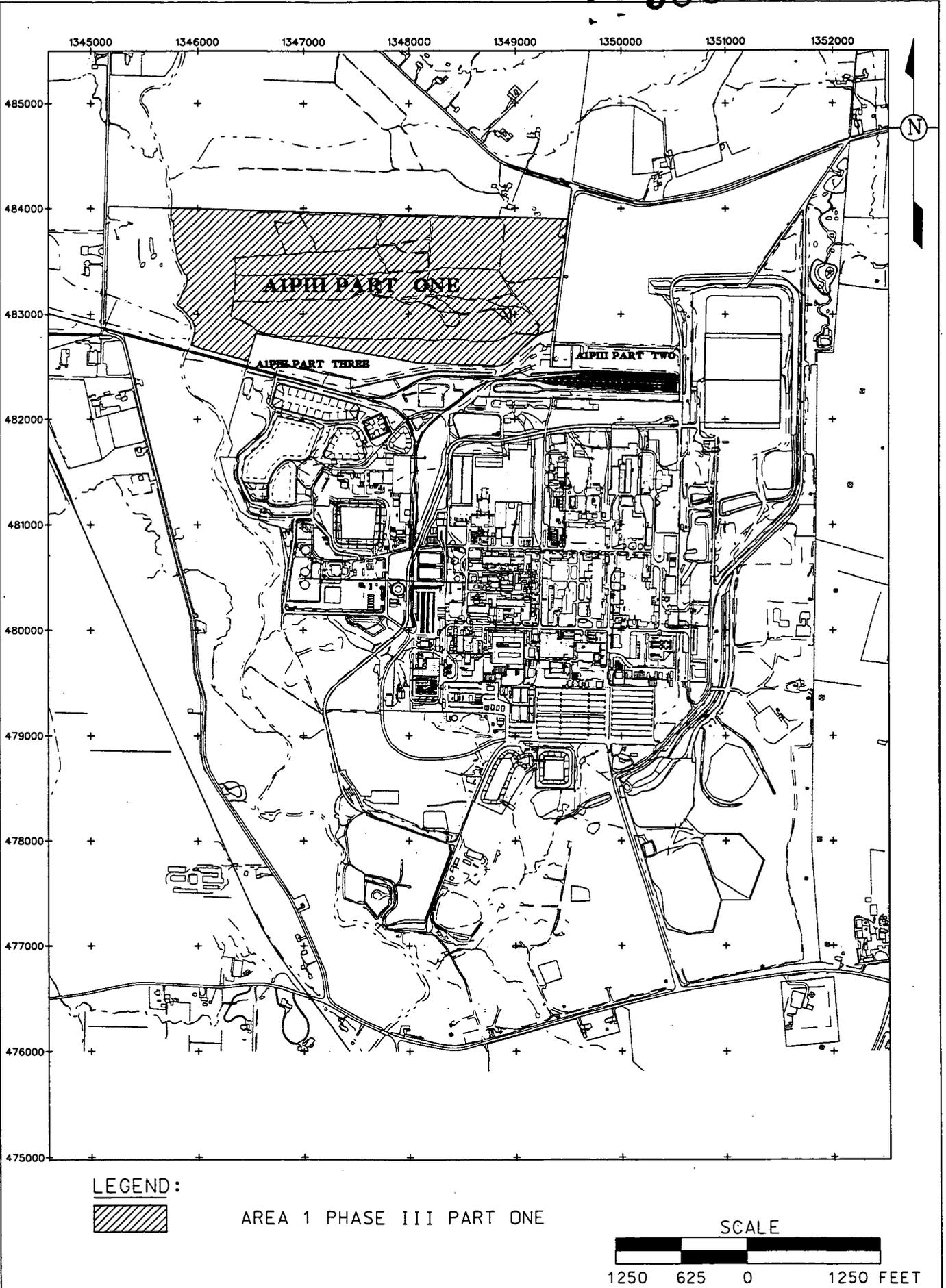
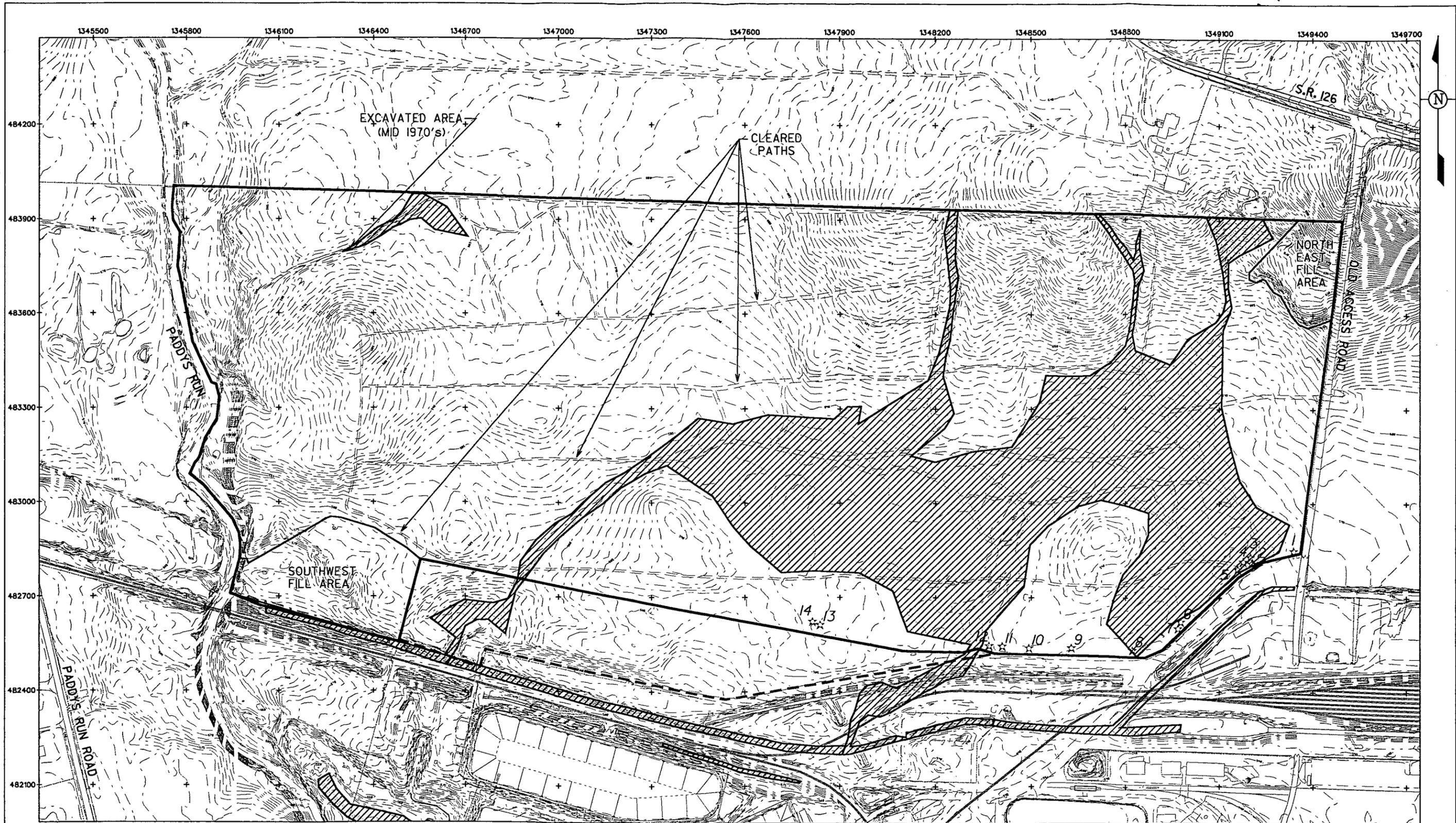


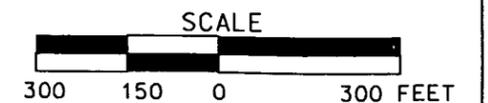
FIGURE 1-1. AREA 1, PHASE III LOCATION MAP

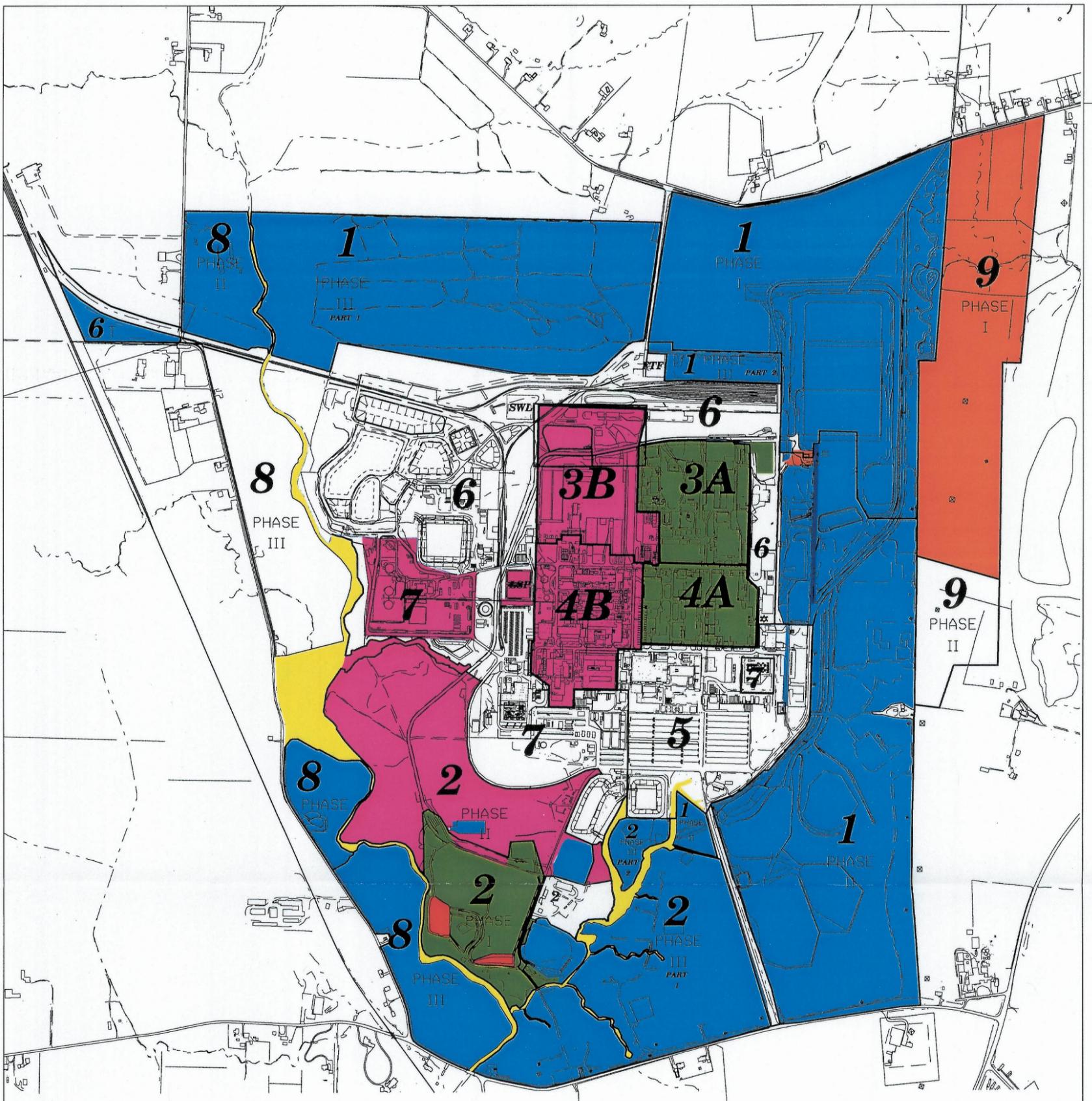
000012



LEGEND:

- AREA 1, PHASE III BOUNDARY
- 1★ A1P3 PILE LOCATION (HPGE SHOT)
- ▨ WETLAND





| AREAS | TOTAL ACRES | APPROVED CERT. ACRES | CERT. ACRES IN PROGRESS | REMEDIATION ACRES IN PROGRESS | PREDESIGN ACRES IN PROGRESS | REMAINING ACRES |
|----------------|-------------|----------------------|-------------------------|-------------------------------|-----------------------------|-----------------|
| AREA 1 | 389.2 | 388.4 | 0.7 | 0 | 0 | * 0.8 |
| AREA 2 | 175.2 | 82.6 | 0 | 26.0 | 57.9 | **8.7 |
| AREA 3A/4A | 42.8 | 0 | 0 | 42.8 | 0 | 0 |
| AREA 3B/4B | 56.9 | 0 | 0 | 0 | 56.9 | 0 |
| AREA 5 | 53.2 | 0 | 0 | 0 | 0 | 53.2 |
| AREA 6 | 135.3 | 4.4 | 0 | 0 | 0 | 130.2 |
| AREA 7 | 70.1 | 0 | 0 | 0 | 19.1 | 51.0 |
| AREA 8 | 98.5 | 60.2 | 0 | 0 | 0 | 38.3 |
| PR/SSOD/PPDD | *** 27.7 | 0 | 0 | 0 | 2.1 | 25.6 |
| TOTAL ON SITE | 1048.9 | 535.6 | 0.7 | 68.8 | 136.0 | 307.8 |
| AREA 9 | 89.6 | 0 | 71.9 | 0 | 0 | 17.7 |
| TOTAL OFF SITE | 89.6 | 0 | 71.9 | 0 | 0 | 17.7 |

* AREA 1 REMAINING ACRES INCLUDES THE DISSOLVED OXYGEN FACILITY AREA. THE INTERIM LEACHATE LINE CORRIDOR IS INCLUDED IN AREA 6

** AREA 2 REMAINING ACRES INCLUDES 2.3 ACRES OF CHARACTERIZED FOR REUSE AREAS (BASIN 1 AND 2), THE CONSTRUCTION SUPPORT AREA, AND SUBSURFACE SOIL FOR THE UTILITY CORRIDORS/TRANSFER LINES WITHIN THE AFP CERTIFICATION AREA.

*** PADDYS RUN/STORMSEWER OUTFALL DITCH CORRIDOR IS IDENTIFIED IN .

API ROADS EXCLUDED FROM CERTIFICATION.

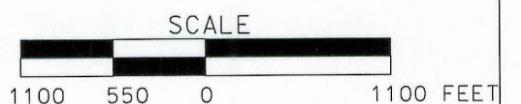


FIGURE 1-3. FEMP CONTROLLED CERTIFICATION MAP

2.0 CERTIFICATION APPROACH

2.1 CERTIFICATION STRATEGY

This section summarizes the ASCOC selection process and the certification approach, including CU establishment, sampling design, and statistical analysis. The general purpose of certification sampling is to verify that the mean concentrations or activities of primary ASCOCs remaining in the soil of a CU following remedial activities are less than the FRLs at the 95 percent upper confidence level (UCL), and at the 90 percent UCL for secondary ASCOCs. The certification process also includes the hot spot criterion, which states that if any of the certification results exceeds two-times the FRL, then further action is required, as discussed in Section 3.4.5 of the SEP. If the mean residual ASCOC concentrations or activities are below the FRLs within the respective confidence bounds, and the hot spot criterion is met, then the remedial objectives have been achieved for the CU. It can then be released for restoration and development of a final land use as appropriate. The general certification strategy is described in Section 3.4 of the SEP, and the A1PIII Part One specific strategy is described in the CDL for A1PIII Part One.

2.1.1 Selection of Area-Specific Constituents of Concern

The OU5 ROD lists 80 soil constituents of concern (COCs) with established FRLs. These COCs were retained for further investigation based on a screening process that considered the presence of the constituent in site soil and the potential risk to a receptor exposed to soil containing that contaminant. Many of the COCs with established FRLs have a limited distribution in site soil, or the presence of the COC is based on high contract required detection limits (CRDLs). When FRLs were established for these COCs in the OU5 ROD, they were initially screened against site data presented on spatial maps to establish a picture of potential remediation areas.

By reviewing existing remedial investigation data presented on spatial distribution maps, it was possible to reduce the sitewide list of soil COCs from the 80 listed in the OU5 ROD to 30. This reduction was possible because the majority of the COCs with FRLs listed in the OU5 ROD have no on-site detections above their corresponding FRL, thus eliminating them from further consideration. The 30 remaining sitewide COCs account for over 99 percent of the combined risk to a site receptor model, and they comprise the list from which all of the remediation ASCOCs are drawn.

As stated in the SEP, the primary radiological COCs (i.e., total uranium, radium-226, radium-228, thorium-228, and thorium-232) will be retained sitewide as ASCOCs in each remediation area. The selection process for retaining secondary ASCOCs for a remediation area is driven by applying a set of decision criteria, as follows:

- It is listed as a soil COC in the OU5 ROD, and it is listed as an ASCOC in Table 2-7 of the SEP for the Remediation Area of Interest;
- Analytical results show that a contaminant is present above its FRL, and the above-FRL concentrations are not attributable to false positives or elevated CRDLs;
- It can be traced to site use, either through process knowledge or known release of the constituent to the environment; and
- Physical characteristics of the contaminant, such as degradation rate and volatility, indicate it is likely to persist in the soil between time of release and remediation.

2.1.2 ASCOC Selection Process for A1PIII Part One

Total uranium, radium-226, radium-228, thorium-228 and thorium-232 are sitewide primary COCs, and were retained as ASCOCs throughout A1PIII Part One. Beryllium was also retained as an ASCOC in specific CUs since an above-FRL result was found in the historical data set. As stated earlier (Section 1.3), it is unlikely that the majority of A1PIII Part One has been impacted from former FEMP production activities. Below-FRL results bound the above-FRL result to the north, east, and west, thus demonstrating that beryllium contamination is not widespread. However, there is still uncertainty about concentrations in soil to the south. Therefore, beryllium was retained as an ASCOC in the CU that contains the above-FRL result (CU 15), as well as in the CUs located to the south (CUs 05, 16, 23, 25 and 26). As an added conservative measure, it was also retained as an ASCOC in the CUs adjacent to the above-FRL beryllium concentration (CUs 04, 14 and 19). Aroclor-1254, aroclor-1260, dieldrin, 3,3-dichlorobenzidine, and N-nitroso-di-n-propylamine are COCs that had results greater than the FRL because the CRDL was higher than the FRL. There is no evidence to include that these COCs would be found in A1PIII Part One given its location and historical land use. Per ASCOC selection criteria, they were not retained as ASCOCs.

In conclusion, the sitewide primary COCs were retained as the ASCOCs for all A1PIII Part One CUs. In addition, beryllium was retained as an ASCOC in nine selected CUs based on an above-FRL result from

the historical data set. The selected A1PIII Part One ASCOCs are listed on Table 2-1 along with their applicable FRLs.

2.2 CERTIFICATION APPROACH

The certification design for A1PIII Part One follows the general approach outlined in Section 3.4 of the SEP. Because A1PIII Part One is considered a "non-impacted area," Excavation Approach E, Section 4.5 of the SEP was used as a basis for the certification design. As a result, 25 Group 2 CUs, which can be as large as 250,000 square feet, have been located within A1PIII Part One.

However, due to the debris discovered during the development of the CDL, additional activities were required prior to certification. Excavation Approach A, Section 4.1 of the SEP was followed for the removal of the debris within CU 24. An additional CU (CU 26) was established in the post-debris removal footprint. CU 26 was also a Group 2 CU.

2.2.1 Certification Design

Taking into account the limited historical data, land uses and the inability to perform a comprehensive precertification scan, the following eight objectives were used to establish the CU design for A1PIII Part One:

1. Isolate the cleared paths and a 25-foot area around them, to the extent practical, into CUs since these areas are potential locations for isolated contamination.
2. Isolate the excavated strip near the northwest corner of A1PIII Part One into one CU.
3. Isolate the fill areas in the northeast and southwest corners of A1PIII Part One into CUs.
4. Isolate the disturbed area along the southern boundary (adjacent to the rail yard) into a single CU, which will also contain the small soil/debris piles found in this area.
5. Contain the soil closest to the fire training facility (excluding the CU from Objective 4, above) into a CU, since this represents the most likely part of A1PIII Part One to have been affected by airborne contamination.
6. Divide the remaining portions of A1PIII Part One into logical CUs no larger than 250,000 square feet.

7. Remove all identified non-native surface and subsurface debris.
8. Establish an additional CU, no larger than 250,000 square feet, in the post subsurface debris removal footprint within the southwest fill area.

CUs 01 through 05 have been established to meet Objective 1, while CU 07 was established to meet Objective 2. To meet Objective 3, CU 21 isolates the fill in the northeast corner of A1PIII Part One, and CU 24 isolates the fill in the southwest corner. To meet Objective 4, CU 25 was established. The boundary of CU 25 follows the old cattle fence where it is still present, thereby containing portions of A1PIII Part One that were not enclosed in the woodlot by the old cattle fence during the production years. Otherwise the boundary extends 40 feet north of the southern A1PIII Part One boundary. Objective 5 is met by CU 23, which (along with CU 16) will also serve as a buffer to CU 25. The remaining CUs (6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, and 22) were established per Objective 6 to include the remaining portions of A1PIII Part One. All initial 25 A1PIII Part One CUs are shown in Figure 2-1 along with their sizes.

Following removal of the non-native, subsurface debris (Objective 7) within CU 24 (southwest fill areas), CU 26 was established (Objective 8) and is illustrated in Figure 2-2.

2.2.2 Supplemental Real-Time Scanning

As added verification that no hot spots would be missed during certification, real-time data were collected to supplement soil certification in the A1PIII Part One disturbed areas (Section 1.3). This "supplemental scanning" was a logical alternative to traditional precertification since the disturbed areas in A1PIII Part One are the most likely locations for contamination. It is important to note that this scan was conducted in conjunction with certification sampling.

The supplemental real-time scan followed the precertification parameters except for complete coverage of the entire area. Data Quality Objectives of this scan were the same as precertification scanning with an action level of three times the FRL hot spot level for the mobile sodium iodide (NaI) detectors, and one times the FRL trigger level for the HPGe. If a result exceeded these values, then a hot spot confirmation would be required per the User Guidelines, Measurement Strategies, and Operational Factors for Deployment of In Situ Gamma Spectrometry at the Fernald Site (User's Manual, DOE 1998c). If a hot spot were confirmed during the supplemental scan, then it would be excavated before the area is considered certified. The results of this supplemental real-time scan are presented in

the form of data tables and maps in this A1PIII Part One Certification Report (Appendix A). Details of this scan are presented in the PSP for A1PIII Certification. The results are included in Section 3.1 of this Certification Report.

In addition, HPGe measurements were collected from the subsurface debris removal footprint within the southwest fill area following all debris removal activities. All precertification parameters described above applied. The results of the post debris removal scan are also presented in the form of tables and maps in Appendix A and the results are discussed in Section 3.1

2.2.3 Sample Selection Process

For unimpacted areas such as A1PIII Part One, two certification approaches have been applied, one for open field and one for fill areas (such as the stockpiles in Area 2, Phase III). Most A1PIII Part One CUs are open field, however CUs 21, 24, and 25 contain fill material. The extent of the fill is difficult to determine through visual inspection because the fill is spread out, rather than stockpiled, and is covered with vegetation.

These factors, combined with the fact that Geoprobe® access to most of these areas is impossible without a large scale removal of trees, meant the approach used to certify stockpiles in A2PIII was not applied in A1PIII Part One. Instead, a supplemental scan was completed to certify the areas containing fill. The HPGe results in CUs 21, 24 and 25 were evaluated as follows:

- If HPGe results indicate the area was not impacted above the FRL, then the CU will be certified as an open field CU (i.e., surface samples collected and analyzed at 12 of 16 locations, etc).
- If the HPGe scan reveals isolated above-FRL results (but no hot spots), then the fill CU will be certified as an open field CU; however, all 16 locations will be collected and analyzed as an added measure to verify that the CU is not impacted above the FRL.
- If the HPGe readings show hot spots of a pattern or widespread above-FRL results, then the CU will be certified similar to a stockpile CU. A boring will be conducted at each of the 16 predetermined locations to a depth of 6 inches below native soil. The entire core will then be frisked with a beta/gamma frisker, and the 6-inch interval with the highest activity will be submitted for analysis. If no fill is present, then a 6-inch sample will be collected as usual.

The results of the HPGe supplemental scan of the CUs containing fill material (CUs 21, 24, 25) were all below the FRLs. Therefore, CUs 21, 24 and 25 were certified as open field and standard certification sampling was conducted in these areas. In addition, subsurface debris removal was conducted within CU 24 and certification samples were collected over the debris removal footprint, using standard certification methods.

The selection of certification sampling locations was conducted according to Section 3.4.2 of the SEP. Each CU was first divided into 16 approximately equal sub-CUs. Sample locations were then generated by randomly selecting an easting and northing coordinate within the boundaries of each sub-CU, then testing those locations against the minimum distance criterion for the CU. If the minimum distance was not achieved, then an alternative random location was selected for that sub-CU, and all the locations were re-tested. This process continued, until all 16 random locations met the minimum distance criterion. All 26 CUs in the scope of this report, and the selected certification sampling locations for all the CUs, are shown in Figures 2-2 and 2-3.

Prior to certification sampling, all 16 sample locations in each CU were surveyed to verify that no surface obstacle would prevent sample collection. During sample collection, planned sampling locations may be moved up to 3 feet from the original location to avoid subsurface obstacles such as tree roots and rocks, which are both quite prevalent in A1PIII Part One. Any sampling point that is moved a distance greater than 3 feet must be documented by a V/FCN, which was not required for A1PIII Part One (Section 3.2). Also, the new location must remain within the same CU and sub-CU boundary and meet the minimum distance requirement.

2.2.4 Certification Sampling and Analysis

Each sample was collected from the 0 to 6-inch (surface) soil interval at the designated and surveyed location. Four of the 16 certification locations per CU (one per each quadrant of the CU) were randomly selected for archiving (identified in the field, but not collected), and the other 12 locations were collected and submitted for analysis. All samples were analyzed at the FEMP on-site laboratory for the ASCOCs (Table 2-1).

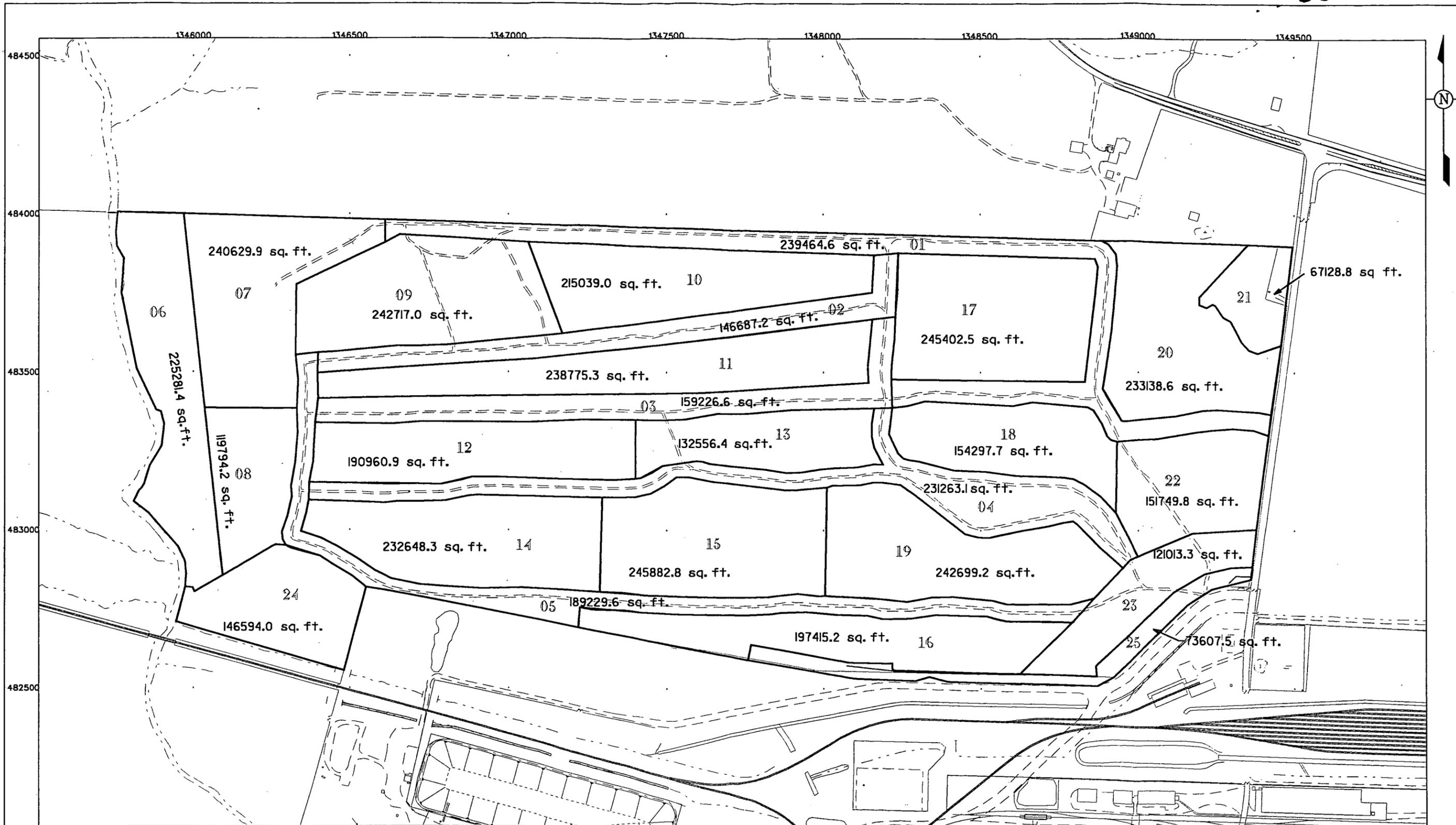
2.2.5 Statistical Analysis

The statistical analysis of certification samples is discussed in Appendix G of the SEP. Per Section G.2.3 of the SEP, statistical analysis of certification results is not necessary to determine if an ASCOC passed certification in a CU if all of the results for that ASCOC in that CU were below the FRL. If any sample result(s) does exceed the associated FRL, then statistical analyses will be performed and two criteria must be met for the CU to pass certification. If the data distribution is normal or lognormal, then the first criterion is to compare the 95 percent UCL on the mean of each primary ASCOC and the 90 percent UCL on the mean of each secondary ASCOC, to their respective FRLs, resulting in the pass/fail decision on each individual CU. If the data distribution is not normal or lognormal, then the appropriate nonparametric approach discussed in Appendix G of the SEP is used to evaluate the 95 percent UCL on the mean. The second criterion is related to the hot spot criterion, which states that if a certification sample for a primary radiological ASCOC exceeds two times the FRL, then further action is necessary per Section 3.4.5 and Figure 3-11 of the SEP. When the given UCL on the mean for each COC is less than its FRL, and the hot spot criterion is met, the CU will be considered certified.

TABLE 2-1
ASCOC LIST FOR ALL A1PIII PART ONE CERTIFICATION UNITS

| ASCOC | FRL | Reason Retained |
|---------------|-----------|--|
| Total Uranium | 82 mg/kg | Retained as a primary ASCOC sitewide |
| Radium-226 | 1.7 pCi/g | Retained as a primary ASCOC sitewide |
| Radium-228 | 1.8 pCi/g | Retained as a primary ASCOC sitewide |
| Thorium-228 | 1.7 pCi/g | Retained as a primary ASCOC sitewide |
| Thorium-232 | 1.5 pCi/g | Retained as a primary ASCOC sitewide |
| Beryllium* | 1.5 mg/kg | FRL exceedances found in historical data set |

* Beryllium will only be retained as an ASCOC in CUs 04, 05, 14, 15, 16, 19, 23, 25 and 26.
 mg/kg – milligrams per kilogram; also equal to $\mu\text{g/g}$ (micrograms per gram)
 pCi/g – picoCuries per gram



LEGEND:

- CU BOUNDARY
- 23 CU NUMBERS
- EXISTING CLEARED PATH

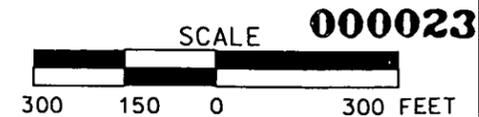
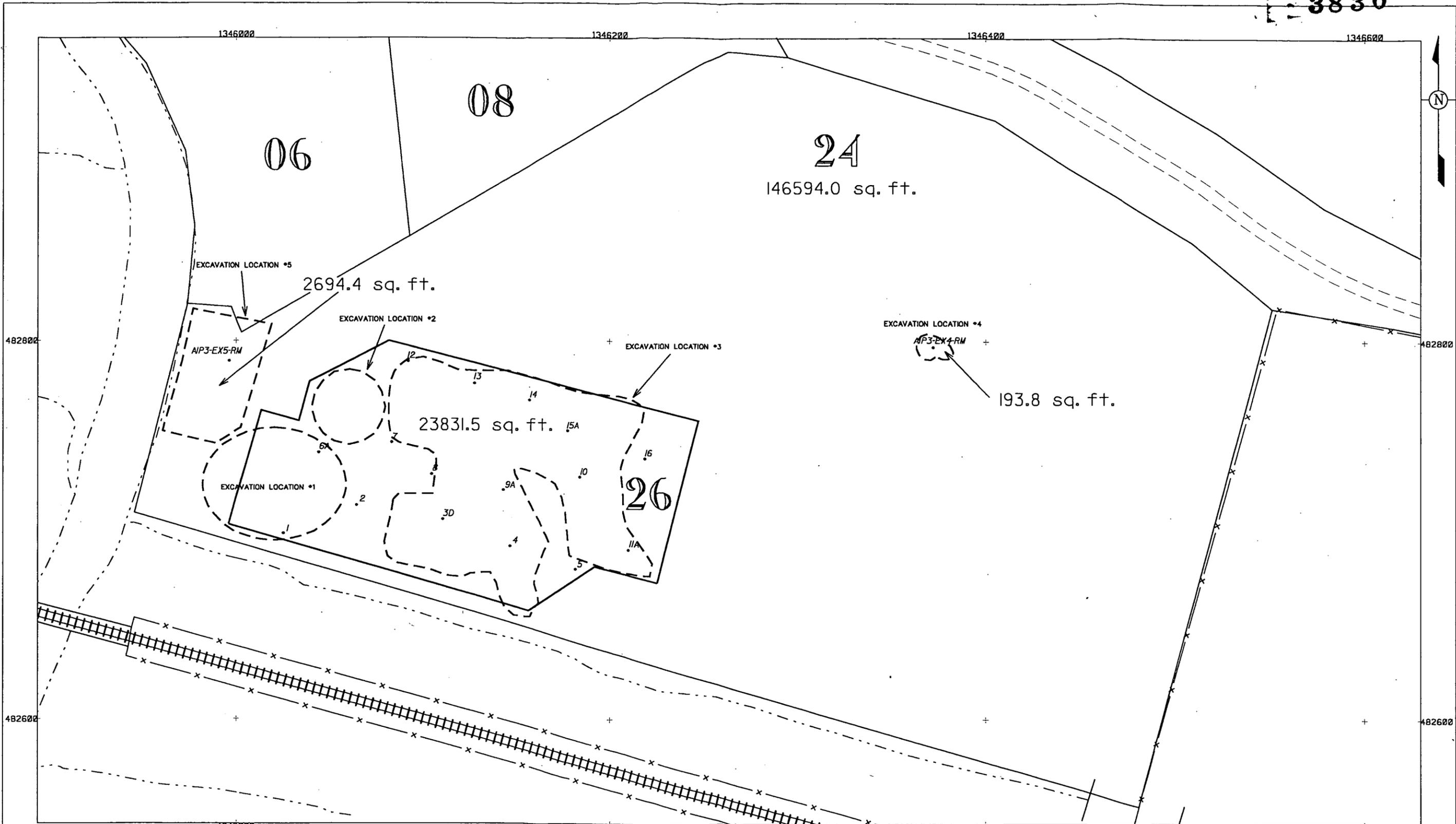


FIGURE 2-1. A1PIII PART ONE CERTIFICATION UNITS



LEGEND:
 IIA SAMPLE LOCATION
 ——— CU BOUNDARY
 - - - - EXCAVATION BOUNDARY

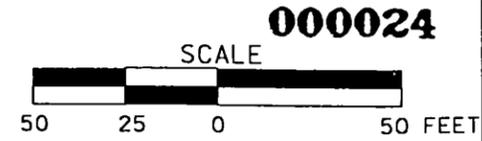
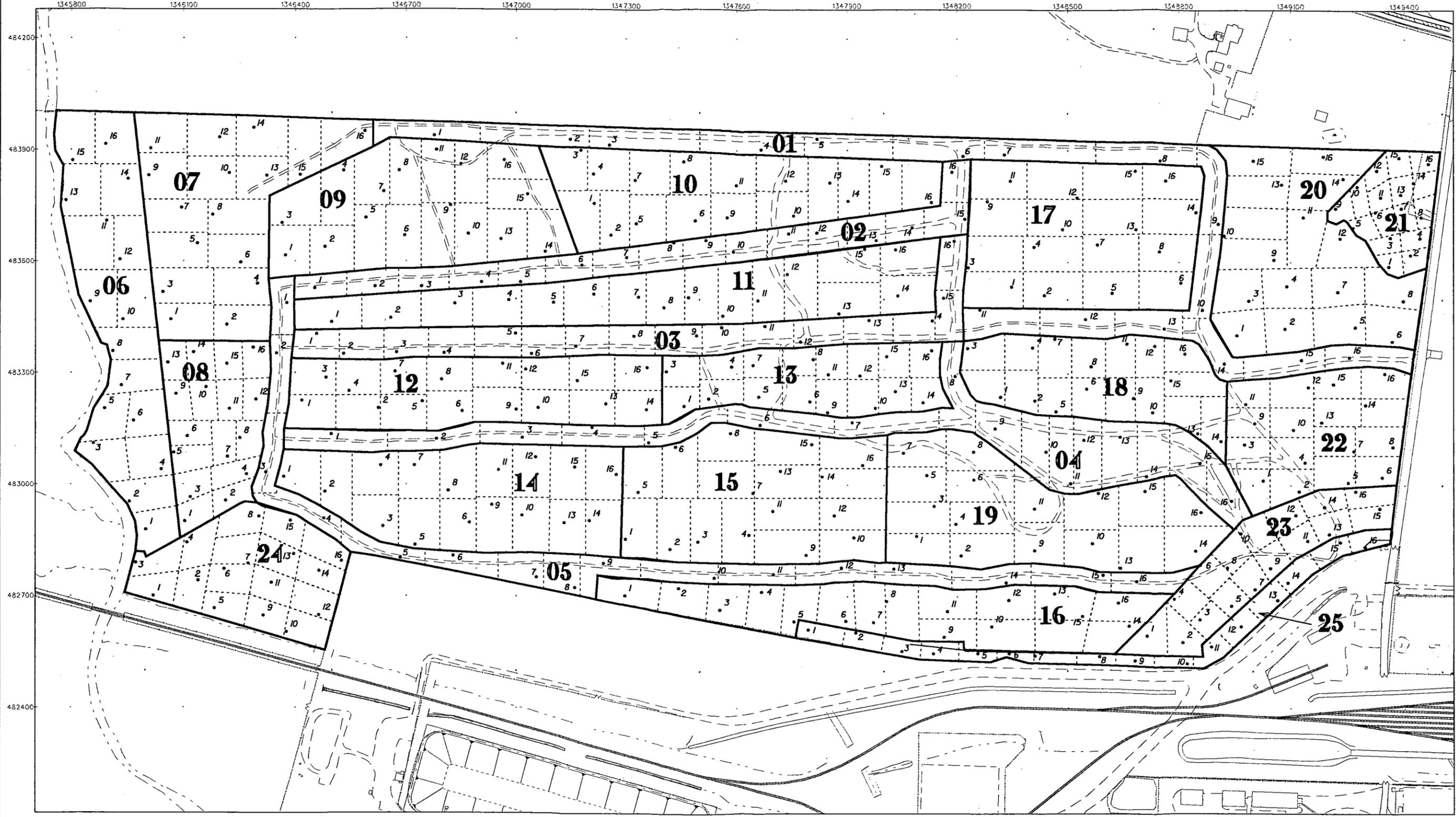


FIGURE 2-2. CU-26 CERTIFICATION SAMPLING LOCATIONS



LEGEND:

- SAMPLE LOCATION
- CU BOUNDARY
- 18** CU NUMBER

- SUB CU BOUNDARY
- === EXISTING CLEARED PATH

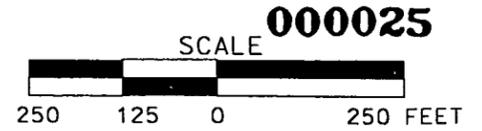


FIGURE 2-3. A1PIII SUB-CUs AND CERTIFICATION SAMPLING LOCATIONS

3.0 OVERVIEW OF FIELD ACTIVITIES

3.1 DATA EVALUATION, SUPPLEMENTAL REAL-TIME SCAN, AND DEBRIS REMOVAL

Based on historical data from A1PIII Part One, no soil remediation activities were required prior to certification sampling (see Section 1.2). The historical data from this part of the FEMP site are discussed in detail in the A1PIII Part One CDL.

Beginning in August 1999, supplemental real-time scans of A1PIII Part One were conducted using the Radiation Tracking System (RTRAK), the Radiation Scanning System (RSS) and the high-purity germanium (HPGe) detectors. The mobile NaI detectors (RTRAK and RSS) were used to scan existing "roadways." The HPGe was used to scan the debris in the NE (CU 21) and SW (CU 24) corners and along the southern border (CU 25). From February 8 through February 20, 2001, the HPGe was also used to scan the footprint of the subsurface debris removal area within CU 26.

Data collected during these scans were displayed for total gamma activity (as counts per second), total uranium, radium-226, and thorium-232. Results demonstrate total uranium, thorium-232, and radium-226 to be below their respective FRLs. With regard to the total uranium, thorium-232, and radium-226, no mobile NaI results exceeded three times the FRL, and no HPGe readings of the debris piles and fill areas exceeded one time the FRL; therefore, no hot spots were identified. Tables and maps demonstrating the results of these supplemental real-time scans are included as Appendix A.

In May 2000, certification sampling began in the majority of the A1PIII Part One area. All the required samples associated with CUs 01 through 25 were collected.

In response to an OEPA comment issued during development of the CDL, Electromagnetic Conductivity (EM) profiling was conducted in the southwest and northeast fill areas in September 2000. Using the EM information regarding potential surface and subsurface anomalies, an Implementation Plan was developed for the debris removal and bank stabilization along Paddys Run. The draft Implementation Plan was completed in December 2000 and the final Implementation Plan was issued in February 2001. In preparation for truck routes, cultural resource surveying was conducted during the winter months.

Under the direction of Fluor Fernald construction personnel, field implementation of the debris removal by WISE Construction was initiated in February 2001. The subsurface debris removal and investigation in the southwest area along Paddys Run was completed by the end of February. In the northeast fill area, many of the anomalies identified during the electromagnetic survey were investigated. The following types of debris were removed: wood, fragments of clay pipe and glass, rebar and concrete, bricks, and scrap metal (t-post). Some of the anomalies were not evident at the surface and were not further investigated due to the fact that potential excavation would require extensive clearing of vegetation. This agreement was determined in the field between Fluor Fernald personnel and OEPA representatives.

All the discovered debris was temporarily staged prior to hauling to the OMTA (OSD-035). Approximately 70 cubic yards of debris (Category 2) was excavated and dispositioned to OMTA with final disposition into the OSDF. The debris was tracked under material tracking log MTL-A13-002. All the debris removed, except for one wire choker cable (approximately 8 feet long), had no detectable activity. The wire choker was staged in a separate controlled area prior to disposition in the OSDF.

Upon removal of the subsurface debris, supplemental HPGe measurements were collected prior to regrading of the subsurface debris footprint (noted as Excavation locations 1, 2, and 3 in Figure 2-3). In April 2001, certification samples associated with CU 26 and excavation locations 4 and 5 were collected, and the soil displaced during debris removal was regraded into the existing topography. A summary of complete project costs can be found in Table 3-1. This chronological summary of the field work meets the requirements for a project closeout report.

3.2 CHANGES TO SCOPE OF WORK

The scope of work for A1PIII Part One certification sampling was documented in the final CDL. All final certification sampling locations and CU boundaries remained as identified in the CDL, and all analyses were carried out as planned. There were additions and changes to the scope as documented in V/FCNs 20720-PSP-0001-2 through -4. These V/FCNs, with the exception of V/FCN 20720-PSP-0001-1, are included in this Certification Report as Appendix B. V/FCN 20720-PSP-0001-1 was written against Revision 0 of the PSP and was incorporated into Revision 1 on February 17, 2000. The remaining V/FCNs were written against Revision 1 of the PSP.

- **V/FCN 20720-PSP-0001-1** - The area along the southern boundary (CU 25) of AIP3PT1 was added to the scope of the mobile NaI scan. The two fill areas in the NE (CU 21) and SW (CU 24) corners and the small soil/concrete debris piles along the southern boundary (CU 25) of AIP3PT1 were added to the scope of the HPGe readings.
- **V/FCN 20720-PSP-0001-2** - Rinsates and container blanks will be listed on a separate chain of custody form. Also, rinsates should include the CU number in the ID
- **V/FCN 20720-PSP-0001-4** - Directed real-time monitoring and PID measurements for excavation locations in the southwest fill area. Also defined the boundaries of CU 26 and directed sampling and analysis of samples collected in the CU and other (smaller) excavation locations.

TABLE 3-1
PROJECT COSTS FOR A1PIII

| ACTIVITY | COST |
|-------------------------------------|-----------|
| Engineering/debris removal | \$134,200 |
| Supplemental scanning/certification | \$188,500 |

Note: These costs are a summary of A1PIII Part One and Part Two activities.

4.0 ANALYTICAL METHODOLOGIES, DATA VALIDATION PROCESSES AND DATA REDUCTION

4.1 ANALYTICAL METHODOLOGIES

The samples for A1PIII Part One were analyzed at the FEMP on-site laboratory, which meets requirements of the Sitewide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Quality Assurance Project Plan (SCQ, Procedure FD-1000). The SCQ is the source for analytical methodologies (Appendix G), data validation and verification, and analytical and field quality assurance/quality control (QA/QC) requirements.

For all the certification data, laboratory analysis met all requirements for Analytical Support Level (ASL) D. Because a different level of detection (10 percent of the FRL) was used for all target analytes, these analyses are classified as ASL E, though all ASL D analytical requirements were achieved per Appendix G of the SCQ. Also, the on-site laboratory prepared an ASL D data package, which included sample results with associated QA/QC data and all applicable raw data. Certification analytical results are provided in Appendix B, and a summary of the analytical methods follows.

4.1.1 Radiochemical Methods

Gamma spectrometry was the analytical method used. Performance-based specification criteria included highest allowable minimum detectable concentration (HAMDC), percent overall tracer/chemical recovery, percent matrix spike recovery, method blank concentration, percent recovery of laboratory control sample, and percent recovery for duplicate samples were specified for each analyte. Laboratories were required to meet these specifications using the methodologies described below.

Total Uranium

Samples were analyzed for uranium-238 using gamma spectrometry, and the results were used to calculate the total uranium value. The calculation used was as follows:

$$\text{Total uranium (mg/kg)} = (2.998544) \times \text{uranium-238 gamma spectrometry result (pCi/g)}$$

The validation qualifier assigned to the total uranium value was the same as the uranium-238 qualifier.

Radium-226

Samples were analyzed by gamma spectrometry, and radium-226 was quantified by measuring gamma rays emitted by members of its decay chain. This method does not require chemical separation, but the samples must be allowed a 20-day progeny ingrowth period before counting. The on-site laboratory used the same gamma ray emission lines and error weighted average methodology to calculate all A1PIII Part One certification results.

Radium-228

Following gamma spectrometry analysis, radium-228 was also quantified by measuring gamma rays emitted by members of its decay chain. The on-site laboratory used the same gamma ray emission lines and error weighted average methodology to calculate all A1PIII Part One certification results.

Isotopic Thorium

Isotopic thorium was also quantified by gamma spectrometry. The on-site laboratory used the same gamma ray emission lines and error weighted average methodology to calculate all A1PIII Part One certification results.

4.1.2 Chemical Methods

Samples were analyzed for beryllium using inductively coupled plasma – atomic emission spectroscopy (ICP-AES) which is a SEP-approved method of analysis.

4.2 DATA VERIFICATION AND VALIDATION

This section discusses the data verification and validation (V&V) process used to examine the quality of field and laboratory results. Data were qualified to indicate the level of data usability, or level of confidence in the reported analytical results. The U.S. Environmental Protection Agency's (EPA's) National Functional Guidelines for Data Review (EPA 1994), as adapted and approved by EPA Region V, was used for this process.

Specific parameters associated with the data were evaluated during V&V to determine whether or not the data quality objectives were met. Five principal quality assurance parameters, i.e., precision, accuracy, completeness, comparability, and representativeness, were addressed during V&V. Field sampling and

handling, laboratory analysis and reporting, and nonconformances and discrepancies in the data were examined to ensure compliance with appropriate and applicable procedures.

The V&V process evaluated the following parameters:

- Specific Field Forms for sample collection and handling
- Chain of Custody forms
- Completeness of Laboratory Data Deliverable.

The data validation process examined the data to determine the level of confidence of the results.

General areas examined include the following:

- Holding Times
- Instrument calibrations
- Calculation of results
- Laboratory/field duplicate precision
- Field/Laboratory Blank contamination
- Dry weight correction for solid samples
- Correct detection limits reported
- Laboratory control sample (LCS) recoveries and compliance with established limits.

Parameters unique to the evaluation of radiochemical analyses include:

- Calibration data for specific energies
- Background checks
- Relative Error ratios
- Tracer yields
- Detector efficiencies
- Background count correction.

All laboratory results were validated to ASL B, and a minimum 10 percent of the results were validated to ASL D. Since each CU represents one analytical release, an ASL D package was provided for each sample from three of the 25 CUs (CU 20, 22 and 04), including one CU where beryllium was analyzed (CU 04).

Following V&V, qualifier codes were applied to specific data points, reflecting the level of confidence assigned to the particular datum. These codes can include the following:

- No qualification; the positive result or detection limit is confident as reported
- J** Positive result is estimated or imprecise; data point is usable for decision-making purposes. Positive results less than the contract required reporting limit are also qualified in this manner
- R** Positive result or detection limit is considered unreliable - data point should NOT be used for decision-making purposes
- U** Undetected result at the stated limit of detection
- UJ** Undetected result; detection limit is considered estimated or imprecise; the data point is usable for decision-making purposes
- N** Positive result is tentatively identified - that is, there is some question regarding the actual identification and quantification of the result. Compound reported is best professional judgement of the interpretation of the supporting data, such as mass spectra. Caution must be exercised with the use of this data
- NV** Not Validated. The results for this sample were not validated
- Z** This result, or detection limit in this analysis, is not the best one to use; another analysis (e.g., the dilution or re-analysis) contains a more confident and usable result.

The V&V of this data set did not identify any problems. The majority of the results received no qualification (a - qualifier). Some of the total uranium results received a J qualifier due to elevated uncertainty or a U qualifier when the result was reported at the minimum detectable concentration. Some of the beryllium results received a U qualifier when the result was reported at the minimum detectable concentration. Some of the thorium and radium results received a J qualifier due to elevated uncertainty. No results for any of the analytes were qualified as rejected.

4.3 DATA REDUCTION

Each sample used to support the A1PIII Part One certification decision was entered into the FEMP Sitewide Environmental Database (SED) with the following information.

Field Information

- Sample Identification Number - A unique number assigned to each discrete sample point
- Coordinate Information - Northing and Easting locations
- Certification Unit - Each sample is assigned to a CU based on location

Laboratory Information

For each sample result the following information is entered:

- Laboratory Result - The reported analytical value from the laboratory
- Laboratory Qualifier - The qualifier reported from the lab. For radiological parameters non-detect values are assigned a U qualifier
- Total Propagated Uncertainty (TPU) - This value represents the uncertainty associated with the reported result. TPU includes the counting error, as well as uncertainty from other laboratory measurements and data reduction. (Applicable to radiological parameters only)
- Units - The units in which the Laboratory Result is reported

Validation Information

- Validation Result - The result based on the validation process. During the validation process, sample results may be adjusted. If the laboratory result is less than the associated minimum detectable concentration (MDC), the validation result becomes the MDC value
- Validation TPU - The TPU based on the validation process
- Validation Qualifier - The qualifier assigned as a result of the data validation process
- Validation Units - The units in which the Validation Result is reported

Using the information as summarized above, the following actions were taken for data reduction of each CU data set.

1. All the data for each CU were queried from SED. All the data were used even if the CU had more than the minimum required data points (though this is not the case for any of the CUs under this scope).
2. The data from the validation fields were used for statistical calculations.
3. Data with a qualifier of R or Z was not used in the statistical calculations.
4. The highest of the two duplicate results was used in the statistical calculations.
5. One half of the non-detect (U or UJ) values was used in the statistical calculations.

5.0 CERTIFICATION EVALUATION AND CONCLUSIONS

5.1 CERTIFICATION RESULTS AND EVALUATION

All CUs for A1PIII Part One met the certification criteria. The determination of successful certification or certification failure was based on a review of certification sample data from each CU against criteria discussed in Section 2.2.4. All but one result for one of the 26 CUs were below the FRLs. Sample A1P3-C-25-05RM (CU 25, location 5) had a result of 82.69 $\mu\text{g/g}$ for total uranium. The FRL for total uranium is 82 $\mu\text{g/g}$ (or mg/kg as in Table 2-1). However, the statistical analysis of the total uranium results for samples collected in CU 26 determined that the CU met all certification criteria discussed in Section 2.2.4. Therefore, all 26 CUs passed on the first round of certification. No additional corrective actions were necessary, and the archive samples were not necessary for analysis. Final certification data are presented in Appendix C. A statistical analysis was only required for total uranium results from CU 25 due to the above-FRL result at sample point 05. All other results were below the FRLs and no statistical analysis of the data was required (as is indicated on Tables C-2 through C-27, Note 1).

5.2 A1PIII PART ONE CERTIFICATION CONCLUSIONS

Based on the analytical results, and completion of surface and subsurface non-native debris removal, DOE has determined that the remedial objectives in the OU5 ROD have been achieved in A1PIII Part One. Therefore, upon EPA and OEPA concurrence, this portion of the site will be released for final land use.

5.3 LESSONS LEARNED

A new approach to the real-time scan was utilized, along with subsurface investigations using ground penetrating radar and electromagnetic surveying. Since the area is so heavily wooded, only the accessible and high traffic areas were scanned with the RTRAK and RSS. The use of EM to identify debris focused the excavation and reduced vegetation and tree disturbance. Another lesson learned is the importance of thorough walk-downs of isolated areas prior to implementation of field work. A more complete walk-down of the isolated areas in A1PIII Part One could have resulted in the investigation of debris and its removal prior to precertification and certification activities.

6.0 PROTECTION OF CERTIFIED AREAS

DOE has restricted access to certified areas in order to maintain their integrity prior to transferal for final land use. FEMP Procedure EP-0008, Access to a Certified Area, has been developed to implement a process to protect certified areas.

The procedure is summarized as follows:

- Prior to the initiation of certification sampling activities for a remediation area, temporary fencing will be installed to delineate the perimeter of the "certified" area if existing fencing is not already present.
- Signs indicating approval for entry into the "certified" area is required will be posted along the perimeter at all access points.
- Personnel desiring admittance to a "certified area to conduct work will submit a written request to gain access, using Form FS-F-4878, to the Stewardship Management Section.
- The purpose of the entry, including any proposed chemical applications such as pesticides or herbicides, must be described on the form.
- Any equipment to be used within the "certified" area must be free of contamination. If the equipment is used off-road in an uncertified area, it must be washed and/or decontaminated per applicable requirements prior to entering a certified area.
- Entry team members must be briefed on conditions for entry listed on the approved Form FS-F-4878.

Following approval of this certification report by the EPA and OEPA, DOE will proceed with planning the natural resource restoration and the development of final land use for the area.

REFERENCES

U.S. Department of Energy, 1995, "Remedial Investigation Report for Operable Unit 5," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1996a, "Record of Decision for Remedial Actions at Operable Unit 5," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1996b, "Remedial Design Work Plan for Remedial Actions at Operable Unit 5," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998a, "Natural Resource Restoration Plan," Draft Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998b, "Sitewide Excavation Plan," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998c, "User Guidelines, Measurement Strategies, and Operational Factors for Deployment of In Situ Gamma Spectrometry at the Fernald Site," Draft, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1999, "Project Specific Plan for Certification Sampling of Area 1, Phase III" Revision 0, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 2000a, "Certification Design Letter for Area 1, Phase III," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 2000b, "Project Specific Plan for Certification Sampling of Area 1, Phase III Part Two," Revision 0, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 2001, "Implementation Plan for Paddys Run Debris Removal/Bank Stabilization and Area 1, Phase III," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Environmental Protection Agency, 1994, "National Functional Guidelines for Data Review," U.S. EPA Office of Solid Waste and Emergency Response, Washington, DC.

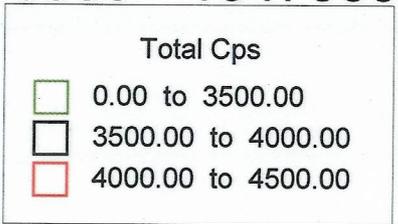
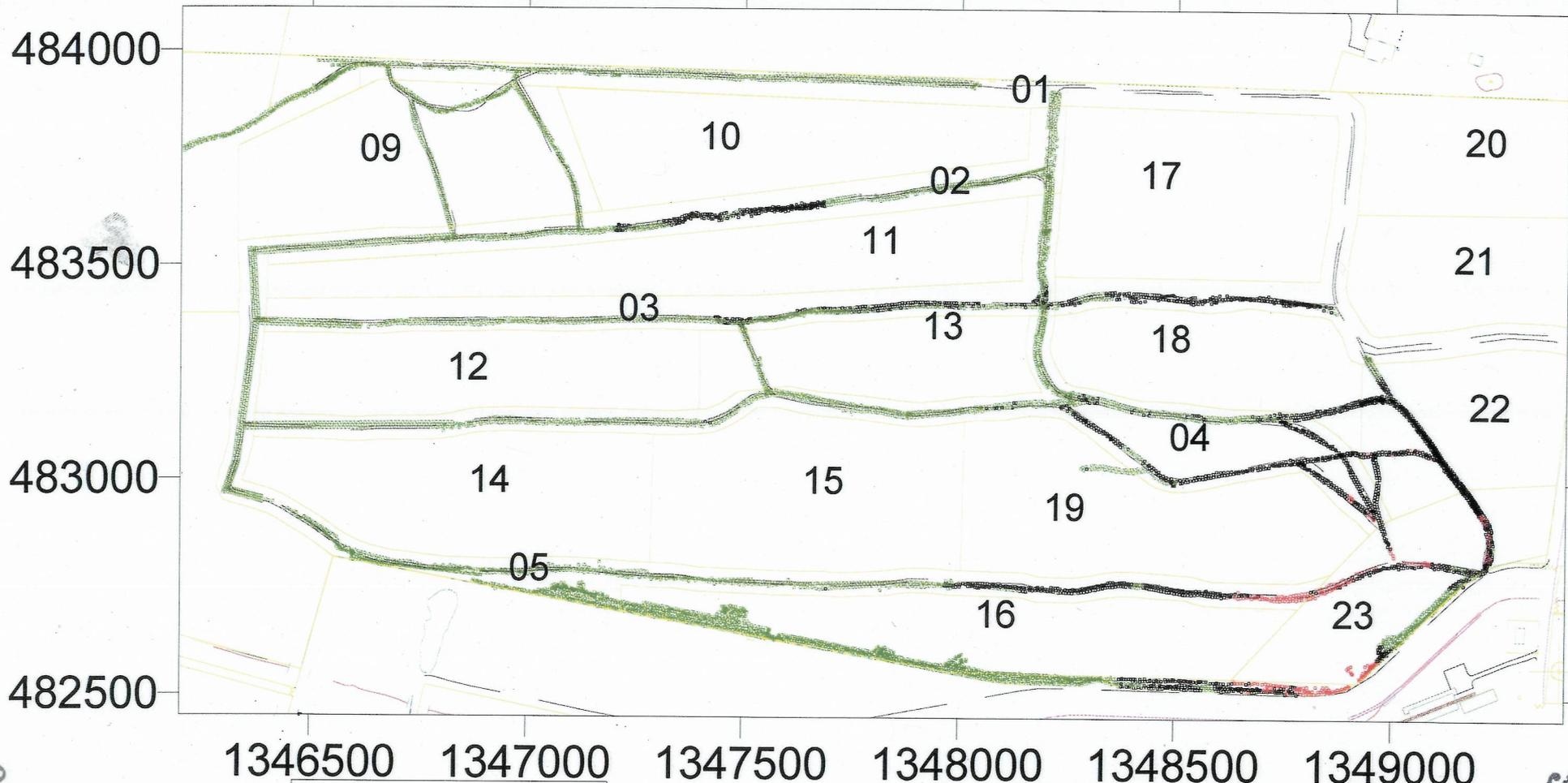
APPENDIX A

**DATA TABLES AND MAPS FROM
SUPPLEMENTAL REAL-TIME SCANS**

A1P3

Total Counts per Second (cps)

One point, no running average
RSS Batches # 338, 342, 343, 346-353, 358
& 360, 361, 363, 366-368, 372-374, 383, 384
Field of View to scale
Measurement Dates between: 8/4/99 & 9/16/99



RTIMP DWG Title: A1P3-SS-TC-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SS_TC_1PT_MC.srf
Date Prepared: 9/20/99

000039

3830

MAXIMUM RSS READINGS PER CERTIFICATION UNIT

3830

| CU | TOTAL COUNTS (CPS) | RA 226 (PCI/G) | TH 232 (PCI/G) | TOTAL U (PPM) |
|----|--------------------|----------------|----------------|---------------|
| 01 | 3760 | 2.288 | 1.37 | 89.31 |
| 02 | 3729 | 2.416 | 1.48 | 98.75 |
| 03 | 3657 | 2.482 | 1.35 | 90.24 |
| 04 | 4211 | 2.572 | 1.49 | 95.6 |
| 05 | 4347 | 2.885 | 1.45 | 87.41 |
| 09 | 3226 | 2.622 | 1.34 | 78.94 |
| 13 | 3322 | 2.074 | 1.28 | 58.46 |
| FE | 5159 | 2.156 | 1.54 | 97.66 |

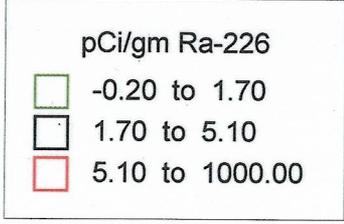
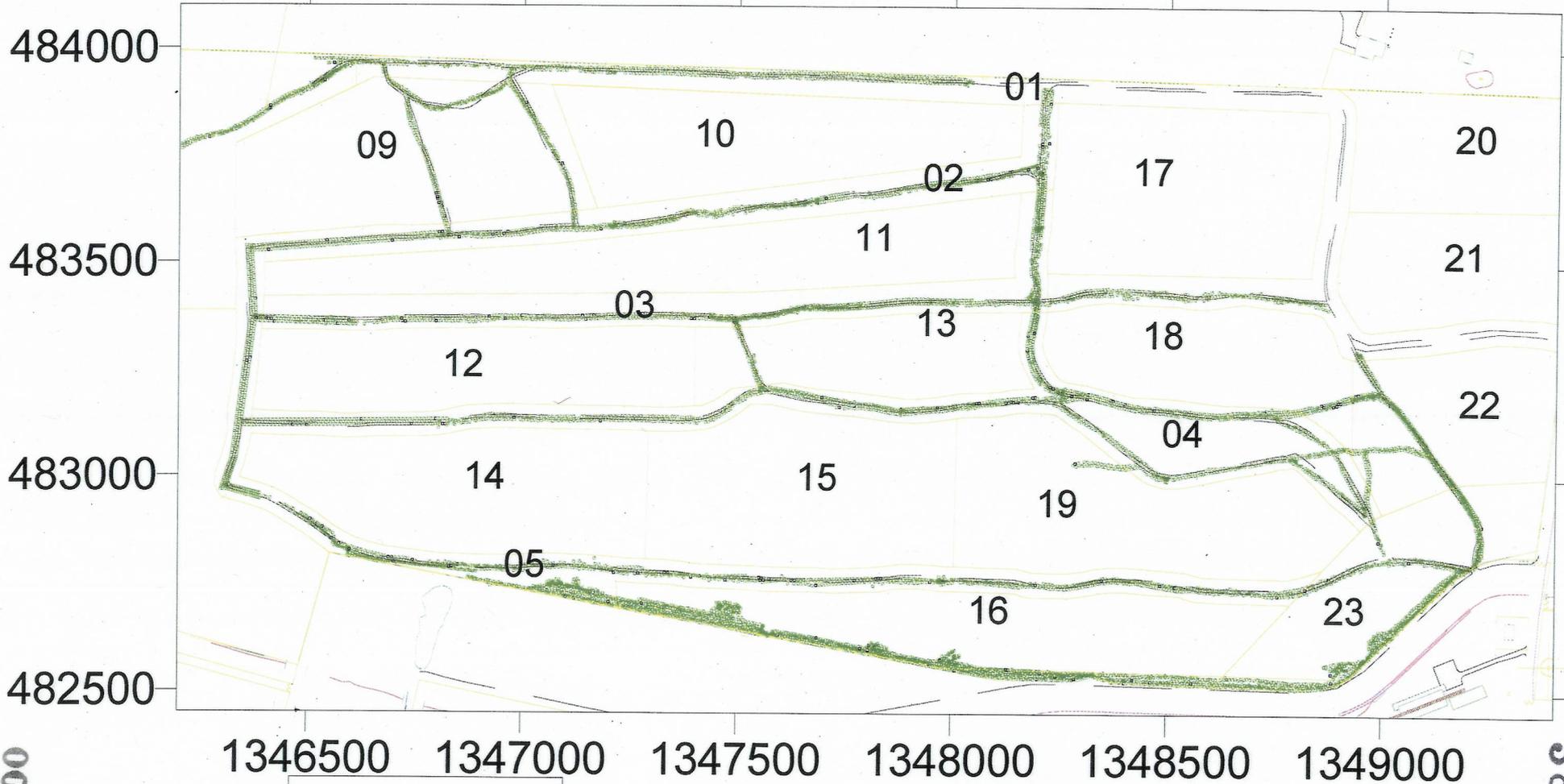
FE = CUs 16 and 25 along the fence at the southern boundary of A1PIII

000040

A1P3

Moisture and Radon corrected Radium 226

Two point running average
RSS Batches # 338, 342, 343, 346-353, 358
& 360, 361, 363, 366-368, 372-374, 383, 384
Field of View to scale
Measurement Dates between: 8/4/99 & 9/16/99



RTIMP DWG Title: A1P3-SS-RA-2PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SS_RA_2PT_MC.srf
Date Prepared: 9/20/99

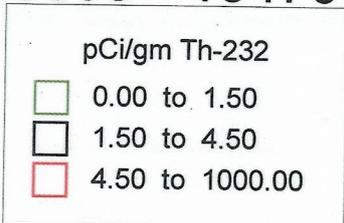
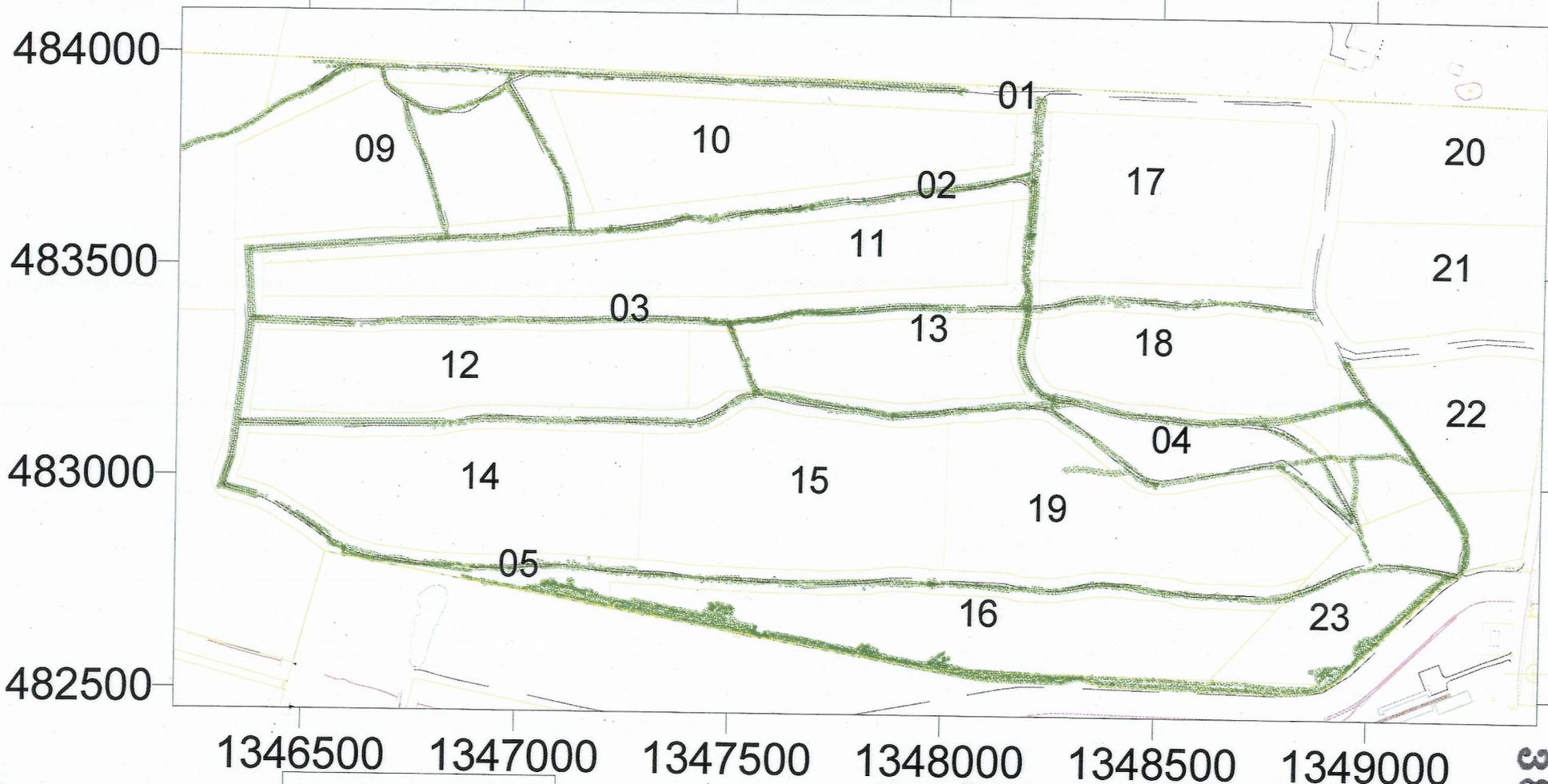
000041

3830

A1P3

Moisture corrected Thorium 232

Two point running average
RSS Batches # 338, 342, 343, 346-353, 358
& 360, 361, 363, 366-368, 372-374, 383, 384
Field of View to scale
Measurement Dates between: 8/4/99 & 9/16/99



RTIMP DWG Title: A1P3-SS-TH-2PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SS_TH_2PT_MC.srf
Date Prepared: 9/20/99

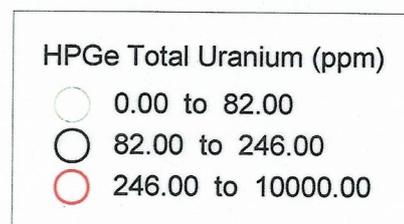
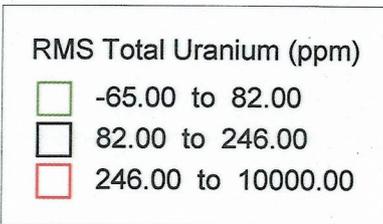
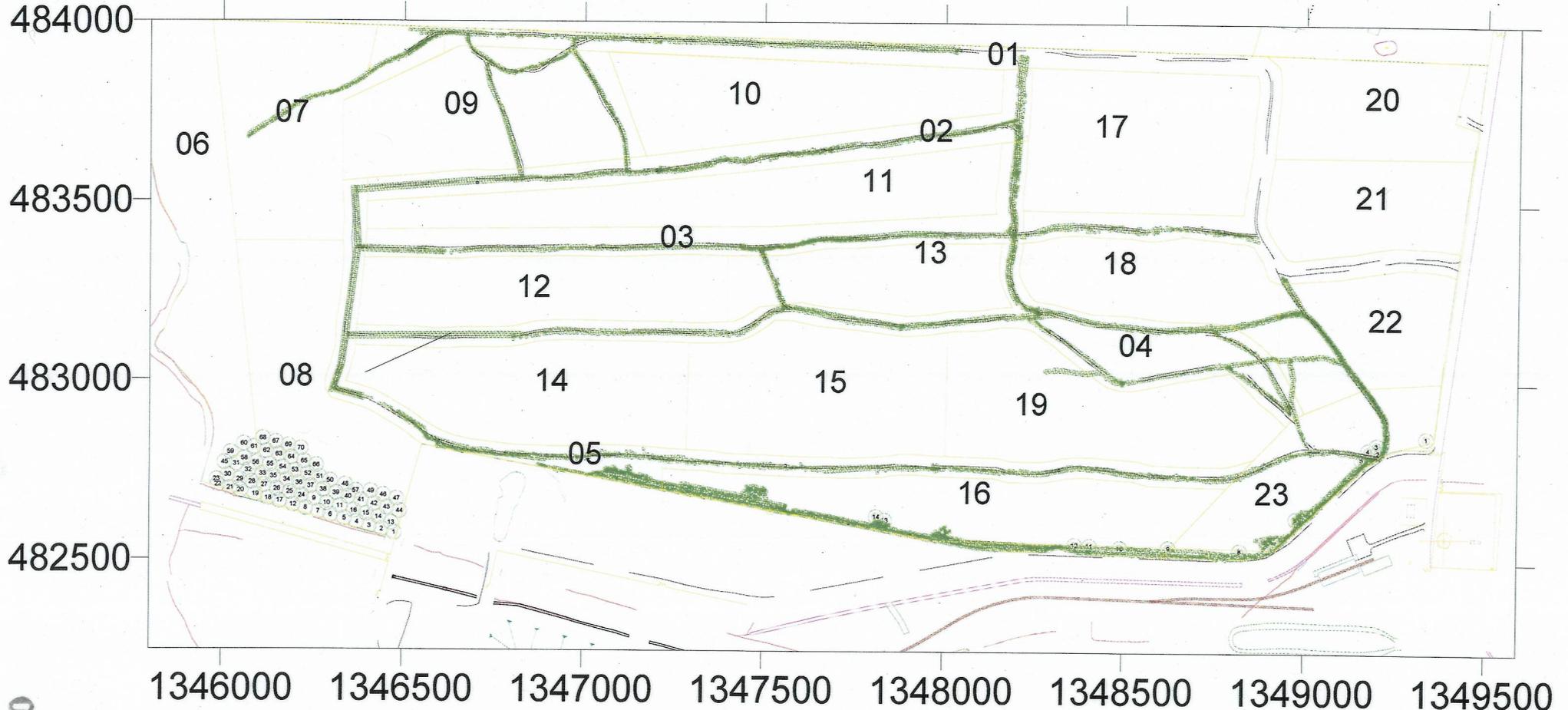
000042

3830

A1P3

Moisture corrected Total Uranium

Two point running average
RSS Batches # 338, 342, 343, 346-353, 358
& 360, 361, 363, 366-368, 372-374, 383, 384
Field of View to scale
Measurement Dates between: 8/4/99 & 9/16/99



RTIMP DWG Title: A1P3-SS-TU-2PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SS_TU_2PT_MC.srf
Date Prepared: 06/27/00

000043

3830

A1PIII NORTHEAST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 1 | A1P3-P1-NE-1-1G | 483552.28 | 1349404.5 | 100cm | 1.186 | 0.843 | 14.5 |
| 2 | A1P3-P1-NE-2-1G | 483557.67 | 1349369.29 | 100cm | 1.289 | 0.959 | 11.8 |
| 3 | A1P3-P1-NE-3-1G | 483576.26 | 1349341.58 | 100cm | 1.138 | 0.812 | 11.5 |
| 4 | A1P3-P1-NE-4-1G | 483603.27 | 1349320.96 | 100cm | 1.221 | 0.746 | 15 |
| 5 | A1P3-P1-NE-5-1G | 483638.29 | 1349307.79 | 100cm | 1.082 | 0.672 | 12.3 |
| 6 | A1P3-P1-NE-6-1G | 483661.33 | 1349285.67 | 100cm | 1.044 | 0.669 | 12.2 |
| 7 | A1P3-P1-NE-7-1G | 483685.26 | 1349260.91 | 100cm | 1.137 | 0.756 | 15.2 |
| 8 | A1P3-P1-NE-8-1G | 483711.68 | 1349237.36 | 100cm | 0.986 | 0.779 | 13.9 |
| 9 | A1P3-P1-NE-9-1G | 483739.7 | 1349215.88 | 100cm | 0.962 | 0.743 | 16.5 |
| 10 | A1P3-P1-NE-10-1G | 483775.52 | 1349211.28 | 100cm | 1.077 | 0.699 | 14.7 |
| 10 | A1P3-P1-NE-10-1G-D | 483775.52 | 1349211.28 | 100cm | 0.956 | 0.701 | 14.9 |
| 11 | A1P3-P1-NE-11-1G | 483748.36 | 1349416.07 | 100cm | 0.949 | 0.741 | 11.4 |
| 12 | A1P3-P1-NE-12-1G | 483755.2 | 1349378 | 100cm | 0.586 | 0.814 | 8.51E-02 |
| 13 | A1P3-P1-NE-13-1G | 483741.4 | 1349450.78 | 100cm | 0.741 | 0.535 | 2.66E-02 |
| 14 | A1P3-P1-NE-14-1G | 483768.65 | 1349473.21 | 100cm | 0.943 | 0.878 | 7.48 |
| 15 | A1P3-P1-NE-15-1G | 483775.2 | 1349437 | 100cm | 1.003 | 0.729 | 13 |
| 16 | A1P3-P1-NE-16-1G | 483781.8 | 1349400.9 | 100cm | 0.862 | 0.79 | 11 |
| 17 | A1P3-P1-NE-17-1G | 483810 | 1349427.56 | 100cm | 1.101 | 0.932 | 15.8 |
| 18 | A1P3-P1-NE-18-1G | 483805.39 | 1349459.21 | 100cm | 1.034 | 0.838 | 14.4 |
| 19 | A1P3-P1-NE-19-1G | 483813.3 | 1349390 | 100cm | 1.009 | 0.826 | 13.6 |
| 20 | A1P3-P1-NE-20-1G | 483841.6 | 1349413 | 100cm | 0.92 | 0.908 | 16.3 |
| 21 | A1P3-P1-NE-21-1G | 483868.5 | 1349436.92 | 100cm | 0.778 | 0.987 | 16.6 |
| 22 | A1P3-P1-NE-22-1G | 483872.18 | 1349401.62 | 100cm | 0.632 | 0.986 | 14.2 |
| 23 | A1P3-P1-NE-23-1G | 483901.04 | 1349421.69 | 100cm | 0.966 | 0.959 | 14.1 |
| 23 | A1P3-P1-NE-23-1G-D | 483901.04 | 1349421.69 | 100cm | 0.999 | 1 | 14.6 |
| 24 | A1P3-P1-NE-24-1G | 483901.44 | 1349445.18 | 100cm | 1.149 | 1.03 | 15 |
| 25 | A1P3-P1-NE-25-1G | 483901.51 | 1349388.69 | 100cm | 1.063 | 1.04 | 14.1 |
| 26 | A1P3-P1-NE-26-1G | 483873.4 | 1349367.98 | 100cm | 1.071 | 0.987 | 17.1 |
| 27 | A1P3-P1-NE-27-1G | 483903.4 | 1349350.7 | 100cm | 1.041 | 0.992 | 17.2 |
| 28 | A1P3-P1-NE-28-1G | 483875.58 | 1349341.86 | 100cm | 0.989 | 1.01 | 21.6 |
| 29 | A1P3-P1-NE-29-1G | 483844.2 | 1349387 | 100cm | 0.995 | 0.936 | 14.1 |
| 30 | A1P3-P1-NE-30-1G | 483841.4 | 1349344 | 100cm | 0.959 | 0.907 | 20.4 |
| 31 | A1P3-P1-NE-31-1G | 483736.3 | 1349484 | 100cm | 0.778 | 0.438 | 9.5 |
| 34 | A1P3-P1-NE-34-1G | 483707.8 | 1349461 | 100cm | 0.885 | 0.5 | 9.65 |
| 35 | A1P3-P1-NE-35-1G | 483714.4 | 1349426 | 100cm | 0.91 | 0.633 | 8.73 |

000044

3830

A1P1111 NORTHEAST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 36 | A1P3-P1-NE-36-1G | 483722.3 | 1349390.82 | 100cm | 0.92 | 0.762 | 14.3 |
| 37 | A1P3-P1-NE-37-1G | 483729.3 | 1349356.13 | 100cm | 0.887 | 0.83 | 12.3 |
| 38 | A1P3-P1-NE-38-1G | 483734.3 | 1349320 | 100cm | 0.997 | 0.745 | 13.7 |
| 39 | A1P3-P1-NE-39-1G | 483702.35 | 1349330.67 | 100cm | 0.939 | 0.702 | 12.2 |
| 40 | A1P3-P1-NE-40-1G | 483694.69 | 1349368.66 | 100cm | 1.002 | 0.855 | 13.4 |
| 41 | A1P3-P1-NE-41-1G | 483686.39 | 1349403.16 | 100cm | 1.121 | 0.779 | 12.5 |
| 42 | A1P3-P1-NE-42-1G | 483680.7 | 1349439 | 100cm | 0.977 | 0.782 | 15.2 |
| 43 | A1P3-P1-NE-43-1G | 483649.3 | 1349451 | 100cm | 0.859 | 0.59 | 9.68 |
| 44 | A1P3-P1-NE-44-1G | 483653.2 | 1349416 | 100cm | 1.073 | 0.865 | 14.7 |
| 44 | A1P3-P1-NE-44-1G-D | 483653.2 | 1349416 | 100cm | 0.98 | 0.843 | 13.5 |
| 45 | A1P3-P1-NE-45-1G | 483657.8 | 1349380 | 100cm | 1.044 | 0.864 | 13.8 |
| 46 | A1P3-P1-NE-46-1G | 483666.05 | 1349345.7 | 100cm | 0.959 | 0.821 | 12.6 |
| 47 | A1P3-P1-NE-47-1G | 483633 | 1349358 | 100cm | 1.03 | 0.895 | 13.1 |
| 48 | A1P3-P1-NE-48-1G | 483626 | 1349401 | 100cm | 1.078 | 0.989 | 14.3 |
| 49 | A1P3-P1-NE-49-1G | 483621.4 | 1349430 | 100cm | 1.02 | 0.89 | 14.1 |
| 50 | A1P3-P1-NE-50-1G | 483594.05 | 1349403.03 | 100cm | 0.996 | 0.791 | 11.2 |
| 51 | A1P3-P1-NE-51-1G | 483790.7 | 1349241 | 100cm | 0.929 | 0.731 | 12 |
| 52 | A1P3-P1-NE-52-1G | 483796.3 | 1349274 | 100cm | 0.939 | 0.662 | 13.6 |
| 53 | A1P3-P1-NE-53-1G | 483826.2 | 1349276 | 100cm | 1.017 | 0.729 | 12.8 |
| 54 | A1P3-P1-NE-54-1G | 483841.3 | 1349314 | 100cm | 0.943 | 0.815 | 14.8 |
| 55 | A1P3-P1-NE-55-1G | 483763.8 | 1349343.78 | 100cm | 0.99 | 0.691 | 14.7 |
| 56 | A1P3-P1-NE-56-1G | 483769.4 | 1349307 | 100cm | 0.987 | 0.726 | 8.27 |
| 57 | A1P3-P1-NE-57-1G | 483797.1 | 1349330 | 100cm | 1.062 | 0.736 | 13.8 |
| 58 | A1P3-P1-NE-58-1G | 483777.5 | 1349272 | 100cm | 0.968 | 0.811 | 15.3 |
| 59 | A1P3-P1-NE-59-1G | 483786.3 | 1349364 | 100cm | 1.017 | 0.687 | 11.7 |
| 60 | A1P3-P1-NE-60-1G | 483816.1 | 1349354 | 100cm | 1.115 | 0.743 | 13.6 |
| 60 | A1P3-P1-NE-60-1G-D | 483816.1 | 1349354 | 100cm | 1.086 | 0.772 | 17.5 |
| 61 | A1P3-P1-NE-61-1G | 483816.8 | 1349307 | 100cm | 0.973 | 0.694 | 11.8 |

000045

A1P3

3830

Northeast Fill Area

Moisture & Radon corrected Radium-226

HPGE

Field of View to scale

Measurement Dates between: 9-15-2000 through 9-19-2000

484000

20

21

Numbers indicate measurement locations

483500

1349000

1349500

Ra-226 (pCi/g)

- 0.00 to 1.70
- 1.70 to 3.40
- 3.40 to 5.10
- 5.10 to 1000.00

RTIMP DWG Title: A1P3-NE-RA-1PT-MC

Project: 20720-PSP-0001

Name: Area 1, Phase III Certification Sampling

Prepared by: David Allen

File: A1P3_NE_RA_1PT_MC.srf

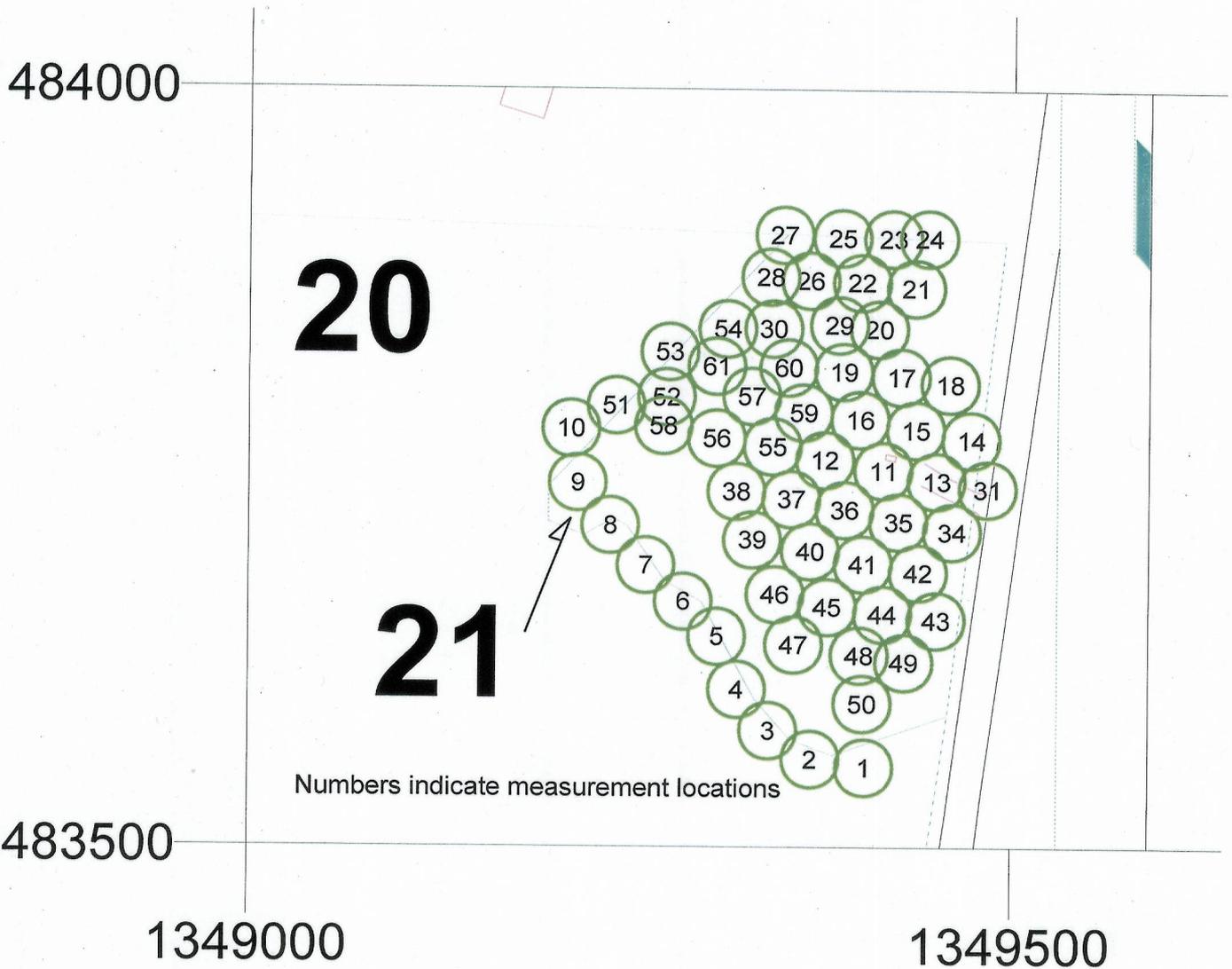
Date Prepared: 10/2/00

000046

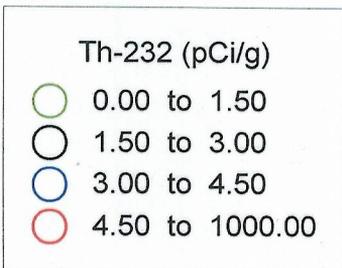
A1P3 Northeast Fill Area

Moisture corrected Thorium-232

HPGE
Field of View to scale
Measurement Dates between: 9-15-2000 through 9-19-2000



Numbers indicate measurement locations

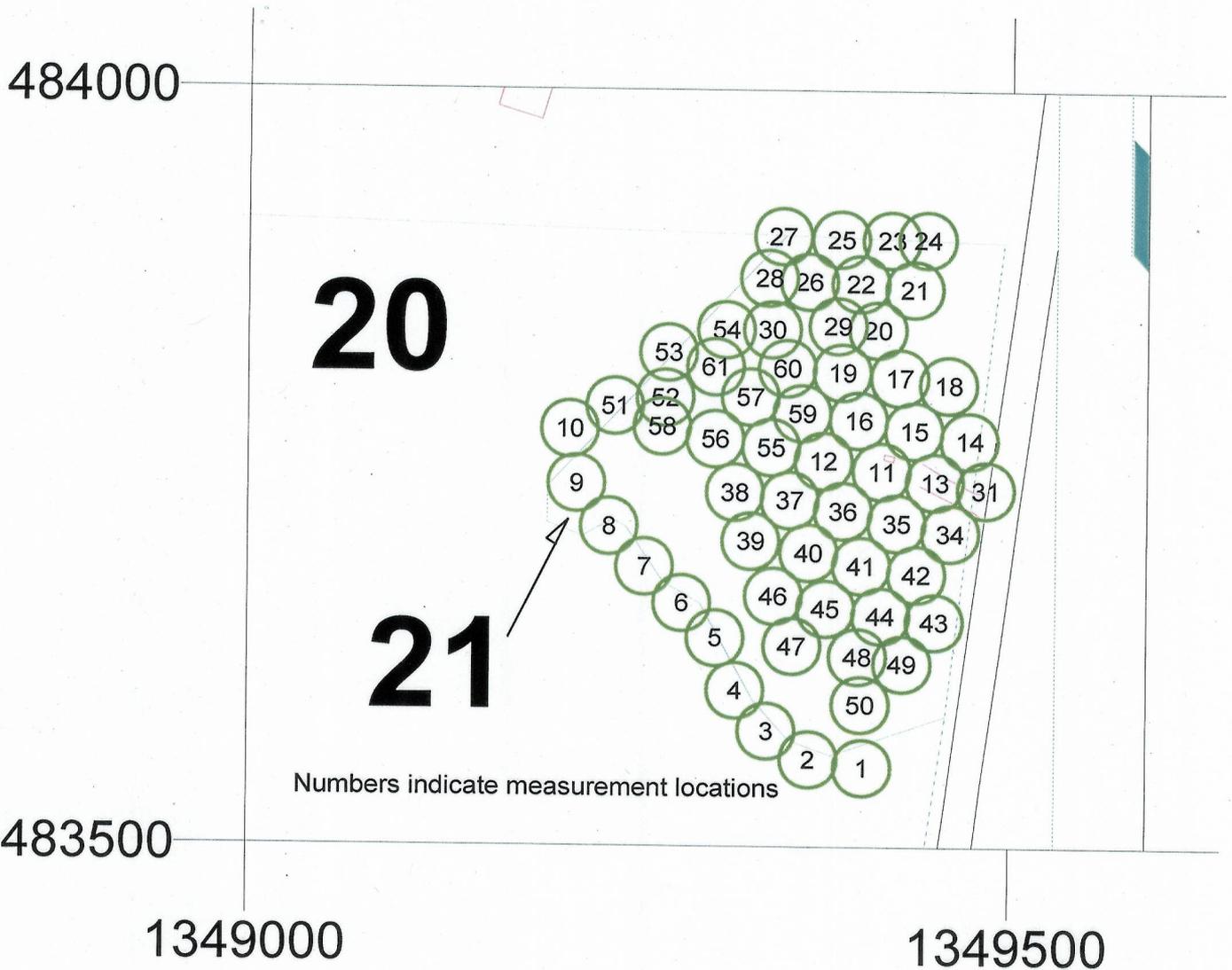


RTIMP DWG Title: A1P3-NE-TH-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_NE_TH_1PT_MC.srf
Date Prepared: 10/2/00

A1P3 Northeast Fill Area

Moisture corrected Total Uranium

HPGE
Field of View to scale
Measurement Dates between: 9-15-2000 through 9-19-2000



Numbers indicate measurement locations

| Total Uranium (ppm) | |
|---------------------|--------------------|
| ○ (Green) | 0.00 to 82.00 |
| ○ (White) | 82.00 to 164.00 |
| ○ (Blue) | 164.00 to 246.00 |
| ○ (Red) | 246.00 to 10000.00 |

RTIMP DWG Title: A1P3-NE-TU-1PT-MC
 Project: 20720-PSP-0001
 Name: Area 1, Phase III Certification Sampling
 Prepared by: David Allen
 File: A1P3_NE_TU_1PT_MC.srf
 Date Prepared: 10/2/00

A1P3III SOUTHWEST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 1 | A1P3-P1-SW-1-1G | 482572.97 | 1346477.63 | 100cm | 0.908 | 0.756 | 9.21 |
| 2 | A1P3-P1-SW-2-1G | 482582.64 | 1346443.19 | 100cm | 0.861 | 0.712 | 8.32 |
| 3 | A1P3-P1-SW-3-1G | 482591.48 | 1346409.28 | 100cm | 0.724 | 0.547 | 7.39 |
| 4 | A1P3-P1-SW-4-1G | 482602.1 | 1346374.77 | 100cm | 0.864 | 0.614 | 9.45 |
| 5 | A1P3-P1-SW-5-1G | 482612.07 | 1346340.63 | 100cm | 0.802 | 0.586 | 7.52 |
| 6 | A1P3-P1-SW-6-1G | 482621.46 | 1346301.12 | 100cm | 0.848 | 0.627 | 5.89 |
| 7 | A1P3-P1-SW-7-1G | 482630.61 | 1346267.8 | 100cm | 0.897 | 0.649 | 10 |
| 8 | A1P3-P1-SW-8-1G | 482640.35 | 1346232.83 | 100cm | 0.891 | 0.663 | 3.82E-02 |
| 9 | A1P3-P1-SW-9-1G | 482665.89 | 1346256.4 | 100cm | 1.047 | 0.861 | 14.7 |
| 10 | A1P3-P1-SW-10-1G | 482653.78 | 1346291.02 | 100cm | 0.998 | 0.784 | 8.51 |
| 11 | A1P3-P1-SW-11-1G | 482645.83 | 1346328.16 | 100cm | 0.871 | 0.675 | 2.88E-02 |
| 12 | A1P3-P1-SW-12-1G | 482649.56 | 1346197.59 | 100cm | 0.755 | 0.647 | 6.89 |
| 13 | A1P3-P1-SW-13-1G | 482600.33 | 1346469.27 | 100cm | 0.961 | 0.72 | 9.83 |
| 14 | A1P3-P1-SW-14-1G | 482616.02 | 1346434.22 | 100cm | 0.9 | 0.701 | 7.42 |
| 15 | A1P3-P1-SW-15-1G | 482625.28 | 1346400.34 | 100cm | 0.82 | 0.634 | 10.8 |
| 16 | A1P3-P1-SW-16-1G | 482633.06 | 1346366.22 | 100cm | 0.902 | 0.633 | 7.17 |
| 17 | A1P3-P1-SW-17-1G | 482659.87 | 1346160.44 | 100cm | 0.743 | 0.583 | 9.54 |
| 18 | A1P3-P1-SW-18-1G | 482667.5 | 1346128.62 | 100cm | 0.75 | 0.693 | 8.48 |
| 19 | A1P3-P1-SW-19-1G | 482677.92 | 1346093.29 | 100cm | 0.716 | 0.606 | 9.4 |
| 20 | A1P3-P1-SW-20-1G | 482689.01 | 1346052.5 | 100cm | 0.685 | 0.582 | 9.77 |
| 21 | A1P3-P1-SW-21-1G | 482696.14 | 1346023.62 | 100cm | 0.722 | 0.507 | 6.94 |
| 22 | A1P3-P1-SW-22-1G | 482705.03 | 1345989.56 | 100cm | 0.673 | 0.528 | 7.67 |
| 23 | A1P3-P1-SW-23-1G | 482719.32 | 1345986.01 | 100cm | 0.961 | 0.597 | 5.05 |
| 24 | A1P3-P1-SW-24-1G | 482674.85 | 1346221.68 | 100cm | 1.113 | 0.882 | 15.5 |
| 25 | A1P3-P1-SW-25-1G | 482684.67 | 1346188.07 | 100cm | 0.967 | 0.842 | 15 |
| 26 | A1P3-P1-SW-26-1G | 482693.21 | 1346152.79 | 100cm | 1.14 | 0.865 | 13.4 |
| 27 | A1P3-P1-SW-27-1G | 482703.34 | 1346117.56 | 100cm | 0.961 | 0.735 | 12 |
| 28 | A1P3-P1-SW-28-1G | 482712.27 | 1346083.97 | 100cm | 1.028 | 0.892 | 13.3 |
| 29 | A1P3-P1-SW-29-1G | 482718.78 | 1346050.3 | 100cm | 0.929 | 0.688 | 11.8 |
| 30 | A1P3-P1-SW-30-1G | 482731.52 | 1346016.72 | 100cm | 0.918 | 0.732 | 12.1 |
| 31 | A1P3-P1-SW-31-1G | 482762.95 | 1346041.02 | 100cm | 0.637 | 0.763 | 12.6 |
| 31 | A1P3-P1-SW-31-1G-D | 482762.95 | 1346041.02 | 100cm | 1.026 | 0.818 | 15.1 |
| 32 | A1P3-P1-SW-32-1G | 482744.71 | 1346073.94 | 100cm | 0.29 | 0.349 | 6.15 |
| 33 | A1P3-P1-SW-33-1G | 482734.93 | 1346113.11 | 100cm | 0.681 | 0.644 | 14.4 |
| 34 | A1P3-P1-SW-34-1G | 482717.96 | 1346180.09 | 100cm | 0.735 | 0.717 | 9.68 |

000049

3830

A1PIII SOUTHWEST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 35 | A1P3-P1-SW-35-1G | 482727.66 | 1346142.92 | 100cm | 0.818 | 0.768 | 12.4 |
| 36 | A1P3-P1-SW-36-1G | 482709.26 | 1346214.2 | 100cm | 0.811 | 0.847 | 11.1 |
| 37 | A1P3-P1-SW-37-1G | 482700.78 | 1346246.78 | 100cm | 0.837 | 0.877 | 12.7 |
| 38 | A1P3-P1-SW-38-1G | 482690.83 | 1346281.81 | 100cm | 0.887 | 0.746 | 13.7 |
| 38 | A1P3-P1-SW-38-1G-D | 482690.83 | 1346281.81 | 100cm | 0.72 | 0.731 | 11.5 |
| 39 | A1P3-P1-SW-39-1G | 482682.23 | 1346316.87 | 100cm | 0.872 | 0.782 | 15.1 |
| 40 | A1P3-P1-SW-40-1G | 482671.89 | 1346350.66 | 100cm | 0.878 | 0.791 | 15.9 |
| 41 | A1P3-P1-SW-41-1G | 482661.95 | 1346386.72 | 100cm | 0.761 | 0.646 | 9.22 |
| 42 | A1P3-P1-SW-42-1G | 482652.29 | 1346422.08 | 100cm | 0.891 | 0.679 | 7.36 |
| 43 | A1P3-P1-SW-43-1G | 482642.57 | 1346456.98 | 100cm | 0.949 | 0.899 | 15.7 |
| 44 | A1P3-P1-SW-44-1G | 482633.09 | 1346492.22 | 100cm | 1.028 | 0.767 | 10.7 |
| 45 | A1P3-P1-SW-45-1G | 482766.99 | 1346007.74 | 100cm | 1.018 | 0.953 | 12 |
| 46 | A1P3-P1-SW-46-1G | 482677.4 | 1346447.13 | 100cm | 1.098 | 0.742 | 9.76 |
| 47 | A1P3-P1-SW-47-1G | 482667.15 | 1346483.9 | 100cm | 0.896 | 0.663 | 10.3 |
| 48 | A1P3-P1-SW-48-1G | 482705.74 | 1346342.35 | 100cm | 0.887 | 0.802 | 12.7 |
| 49 | A1P3-P1-SW-49-1G | 482687.56 | 1346412.47 | 100cm | 0.949 | 0.773 | 10 |
| 50 | A1P3-P1-SW-50-1G | 482716.4 | 1346300.66 | 100cm | 0.667 | 0.777 | 11.7 |
| 51 | A1P3-P1-SW-51-1G | 482726.26 | 1346272.32 | 100cm | 0.958 | 0.985 | 14.4 |
| 51 | A1P3-P1-SW-51-1G-D | 482726.26 | 1346272.32 | 100cm | 0.887 | 0.903 | 14.3 |
| 52 | A1P3-P1-SW-52-1G | 482734.97 | 1346238.62 | 100cm | 0.769 | 0.821 | 8.86 |
| 53 | A1P3-P1-SW-53-1G | 482743.99 | 1346203.18 | 100cm | 0.857 | 0.876 | 12.7 |
| 54 | A1P3-P1-SW-54-1G | 482752.5 | 1346169.3 | 100cm | 0.844 | 0.802 | 13.6 |
| 55 | A1P3-P1-SW-55-1G | 482760.3 | 1346133.78 | 100cm | 1.016 | 0.891 | 13.3 |
| 56 | A1P3-P1-SW-56-1G | 482765.25 | 1346094.1 | 100cm | 0.704 | 0.832 | 12.3 |
| 57 | A1P3-P1-SW-57-1G | 482688.31 | 1346371.66 | 100cm | 0.9 | 0.848 | 11.3 |
| 58 | A1P3-P1-SW-58-1G | 482777.43 | 1346062.83 | 100cm | 0.747 | 0.807 | 17.4 |
| 59 | A1P3-P1-SW-59-1G | 482795.1 | 1346024.76 | 100cm | 0.57 | 0.688 | 14.3 |
| 59 | A1P3-P1-SW-59-1G-D | 482795.1 | 1346024.76 | 100cm | 0.792 | 0.669 | 12.6 |
| 60 | A1P3-P1-SW-60-1G | 482818.8 | 1346061.62 | 100cm | 0.943 | 0.809 | 11.6 |
| 61 | A1P3-P1-SW-61-1G | 482808.99 | 1346089.57 | 100cm | 0.593 | 0.811 | 9.01 |
| 62 | A1P3-P1-SW-62-1G | 482797.78 | 1346124.02 | 100cm | 0.588 | 0.832 | 13.7 |
| 63 | A1P3-P1-SW-63-1G | 482788.6 | 1346158 | 100cm | 0.666 | 0.806 | 13.1 |
| 64 | A1P3-P1-SW-64-1G | 482780.28 | 1346192.07 | 100cm | 0.603 | 0.746 | 13.3 |
| 65 | A1P3-P1-SW-65-1G | 482769.47 | 1346228.26 | 100cm | 0.673 | 0.874 | 13.1 |
| 66 | A1P3-P1-SW-66-1G | 482759.44 | 1346262.04 | 100cm | 0.678 | 1.01 | 11.6 |

000050

A1PIII SOUTHWEST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 67 | A1P3-P1-SW-67-1G | 482823.65 | 1346149.16 | 100cm | 0.572 | 0.716 | 9.46 |
| 68 | A1P3-P1-SW-68-1G | 482833.53 | 1346113.89 | 100cm | 0.588 | 0.767 | 10.1 |
| 68 | A1P3-P1-SW-68-1G-D | 482833.53 | 1346113.89 | 100cm | 0.597 | 0.813 | 13.5 |
| 69 | A1P3-P1-SW-69-1G | 482814.38 | 1346184.24 | 100cm | 0.609 | 0.736 | 11.2 |
| 70 | A1P3-P1-SW-70-1G | 482805.51 | 1346219.31 | 100cm | 0.69 | 0.781 | 14 |
| 70 | A1P3-P1-SW-70-1G-D | 482805.51 | 1346219.31 | 100cm | 0.634 | 0.785 | 12.4 |
| 71 | A1P3-P1-SW-71-1G | 482796 | 1346252.83 | 100cm | 0.95 | 0.743 | 13.7 |
| 72 | A1P3-P1-SW-72-1G | 482786.38 | 1346286.97 | 100cm | 1.043 | 0.825 | 12.1 |
| 73 | A1P3-P1-SW-73-1G | 482775.45 | 1346321.62 | 100cm | 0.816 | 0.751 | 12.3 |
| 73 | A1P3-P1-SW-73-1G-D | 482775.45 | 1346321.62 | 100cm | 0.834 | 0.703 | 12.5 |
| 74 | A1P3-P1-SW-74-1G | 482764.87 | 1346355.86 | 100cm | 0.961 | 0.933 | 11.1 |
| 74 | A1P3-P1-SW-74-1G-D | 482764.87 | 1346355.86 | 100cm | 0.947 | 0.914 | 12.1 |
| 75 | A1P3-P1-SW-75-1G | 482754.53 | 1346390.46 | 100cm | 0.766 | 0.779 | 13.6 |
| 76 | A1P3-P1-SW-76-1G | 482744.76 | 1346425.24 | 100cm | 0.939 | 0.814 | 13.4 |
| 77 | A1P3-P1-SW-77-1G | 482733.47 | 1346461.3 | 100cm | 0.934 | 0.924 | 16.4 |
| 78 | A1P3-P1-SW-78-1G | 482727.66 | 1346494.48 | 100cm | 0.786 | 0.789 | 10.8 |
| 79 | A1P3-P1-SW-79-1G | 482761.85 | 1346484.95 | 100cm | 1.045 | 0.881 | 12 |
| 80 | A1P3-P1-SW-80-1G | 482767.82 | 1346451.07 | 100cm | 0.956 | 0.851 | 15 |
| 81 | A1P3-P1-SW-81-1G | 482702.11 | 1346469.03 | 100cm | 0.935 | 0.731 | 11.3 |
| 82 | A1P3-P1-SW-82-1G | 482708 | 1346432.98 | 100cm | 1.046 | 0.842 | 12.2 |
| 83 | A1P3-P1-SW-83-1G | 482716.32 | 1346398.78 | 100cm | 1.07 | 0.836 | 12.4 |
| 84 | A1P3-P1-SW-84-1G | 482722.92 | 1346366.51 | 100cm | 0.986 | 0.789 | 13.4 |
| 85 | A1P3-P1-SW-85-1G | 482736.49 | 1346329.88 | 100cm | 1.052 | 0.894 | 11.9 |
| 86 | A1P3-P1-SW-86-1G | 482743.27 | 1346295.96 | 100cm | 1.086 | 0.74 | 10.7 |
| 87 | A1P3-P1-SW-87-1G | 482778.35 | 1346414.3 | 100cm | 0.968 | 0.832 | 13.3 |
| 88 | A1P3-P1-SW-88-1G | 482789.71 | 1346382.86 | 100cm | 0.86 | 0.861 | 14.1 |
| 89 | A1P3-P1-SW-89-1G | 482802.82 | 1346345.42 | 100cm | 0.869 | 0.82 | 12.9 |
| 90 | A1P3-P1-SW-90-1G | 482814.49 | 1346312.45 | 100cm | 0.941 | 0.777 | 9.9 |
| 91 | A1P3-P1-SW-91-1G | 482825.24 | 1346275.77 | 100cm | 0.867 | 0.758 | 10.8 |
| 92 | A1P3-P1-SW-92-1G | 482831.65 | 1346244.91 | 100cm | 0.905 | 0.757 | 11.1 |
| 93 | A1P3-P1-SW-93-1G | 482839.9 | 1346208.89 | 100cm | 0.89 | 0.795 | 11.5 |
| 94 | A1P3-P1-SW-94-1G | 482846.94 | 1346172.12 | 100cm | 0.863 | 0.791 | 14.2 |
| 95 | A1P3-P1-SW-95-1G | 482855.07 | 1346136.13 | 100cm | 0.897 | 0.806 | 12.7 |
| 96 | A1P3-P1-SW-96-1G | 482883.6 | 1346164.67 | 100cm | 0.852 | 0.785 | 11.1 |
| 97 | A1P3-P1-SW-97-1G | 482874.88 | 1346200.09 | 100cm | 0.891 | 0.742 | 13.7 |

000051

3830

A1P1111 SOUTHWEST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|---------------------|-----------|------------|-------------|----------------|----------------|--------------|
| 98 | A1P3-P1-SW-98-1G | 482864.4 | 1346234.37 | 100cm | 0.992 | 0.699 | 12.8 |
| 99 | A1P3-P1-SW-99-1G | 482854.86 | 1346270.37 | 100cm | 1.036 | 0.712 | 12.2 |
| 100 | A1P3-P1-SW-100-1G | 482845.5 | 1346304.1 | 100cm | 0.916 | 0.796 | 12.7 |
| 101 | A1P3-P1-SW-101-1G | 482835.03 | 1346339.37 | 100cm | 0.925 | 0.739 | 8.98 |
| 102 | A1P3-P1-SW-102-1G | 482824.83 | 1346373.87 | 100cm | 0.938 | 0.89 | 10.7 |
| 103 | A1P3-P1-SW-103-1G | 482814.92 | 1346408.06 | 100cm | 0.84 | 0.673 | 9.29 |
| 104 | A1P3-P1-SW-104-1G | 482805.37 | 1346444.31 | 100cm | 0.834 | 0.754 | 10.6 |
| 105 | A1P3-P1-SW-105-1G | 482799.13 | 1346476.26 | 100cm | 0.859 | 0.745 | 13.6 |
| 105 | A1P3-P1-SW-105-1G-D | 482799.13 | 1346476.26 | 100cm | 0.942 | 0.738 | 10.5 |
| 106 | A1P3-P1-SW-106-1G | 482783.48 | 1346511.53 | 100cm | 0.978 | 0.814 | 10 |
| 107 | A1P3-P1-SW-107-1G | 482819.7 | 1346503.86 | 100cm | 1.093 | 0.86 | 11.9 |
| 108 | A1P3-P1-SW-108-1G | 482827.52 | 1346470.11 | 100cm | 1.161 | 0.92 | 12.9 |
| 109 | A1P3-P1-SW-109-1G | 482838.7 | 1346434.75 | 100cm | 0.985 | 0.835 | 11.5 |
| 110 | A1P3-P1-SW-110-1G | 482849.44 | 1346399.34 | 100cm | 1.008 | 0.848 | 13.1 |
| 111 | A1P3-P1-SW-111-1G | 482859.97 | 1346364.72 | 100cm | 0.948 | 0.842 | 9.93 |
| 112 | A1P3-P1-SW-112-1G | 482869.69 | 1346330.07 | 100cm | 0.92 | 0.742 | 12.3 |
| 113 | A1P3-P1-SW-113-1G | 482880.5 | 1346294.13 | 100cm | 0.893 | 0.873 | 13.5 |
| 114 | A1P3-P1-SW-114-1G | 482889.93 | 1346261.24 | 100cm | 0.749 | 0.694 | 12.9 |
| 115 | A1P3-P1-SW-115-1G | 482899.5 | 1346225.13 | 100cm | 0.8 | 0.744 | 12.4 |
| 116 | A1P3-P1-SW-116-1G | 482925.97 | 1346259.83 | 100cm | 0.776 | 0.722 | 13.8 |
| 117 | A1P3-P1-SW-117-1G | 482915.01 | 1346286.14 | 100cm | 0.909 | 0.811 | 15.9 |
| 117 | A1P3-P1-SW-117-1G-D | 482915.01 | 1346286.14 | 100cm | 0.927 | 0.812 | 15.8 |
| 118 | A1P3-P1-SW-118-1G | 482904.59 | 1346320.16 | 100cm | 0.555 | 0.869 | 12.1 |
| 119 | A1P3-P1-SW-119-1G | 482892.78 | 1346359.84 | 100cm | 0.522 | 0.861 | 13.1 |
| 120 | A1P3-P1-SW-120-1G | 482885.05 | 1346390.9 | 100cm | 0.514 | 0.787 | 9.07 |
| 121 | A1P3-P1-SW-121-1G | 482874.42 | 1346426.8 | 100cm | 1.149 | 0.907 | 13.8 |
| 122 | A1P3-P1-SW-122-1G | 482865.29 | 1346460.01 | 100cm | 1.032 | 0.897 | 13.3 |
| 123 | A1P3-P1-SW-123-1G | 482854.26 | 1346495.12 | 100cm | 1.178 | 0.865 | 10.7 |
| 124 | A1P3-P1-SW-124-1G | 482843.35 | 1346529.54 | 100cm | 1.102 | 0.85 | 13.8 |
| 125 | A1P3-P1-SW-125-1G | 482948 | 1346280.87 | 100cm | 0.452 | 0.744 | 14.1 |
| 126 | A1P3-P1-SW-126-1G | 482940.38 | 1346312 | 100cm | 0.507 | 0.846 | 13.1 |
| 127 | A1P3-P1-SW-127-1G | 482930.94 | 1346345.92 | 100cm | 0.435 | 0.924 | 14.7 |
| 128 | A1P3-P1-SW-128-1G | 482921.25 | 1346381.14 | 100cm | 0.464 | 0.833 | 14.3 |
| 129 | A1P3-P1-SW-129-1G | 482912.24 | 1346418.22 | 100cm | 0.487 | 0.752 | 13.5 |
| 130 | A1P3-P1-SW-130-1G | 482902.92 | 1346448.39 | 100cm | 1.07 | 0.876 | 11.6 |

000052

A1PIII SOUTHWEST FILL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|---------------|-------------------|-----------------|----------------|--------------------|-----------------------|-----------------------|---------------------|
| 131 | A1P3-P1-SW-131-1G | 482881.48 | 1346488.64 | 100cm | 1.053 | 0.816 | 12.9 |
| 132 | A1P3-P1-SW-132-1G | 482809.52 | 1346535.48 | 100cm | 0.573 | 0.876 | 13.1 |
| 133 | A1P3-P1-SW-133-1G | 482751.53 | 1346518.51 | 100cm | 0.657 | 0.876 | 14.1 |
| 134 | A1P3-P1-SW-134-1G | 482684.34 | 1346505.11 | 100cm | 0.548 | 0.726 | 11.5 |
| 135 | A1P3-P1-SW-135-1G | 482634.41 | 1346487.24 | 100cm | 0.558 | 0.805 | 12.5 |

000053

3830

A1P3

Southwest Fill Area

Moisture & Radon corrected Radium-226

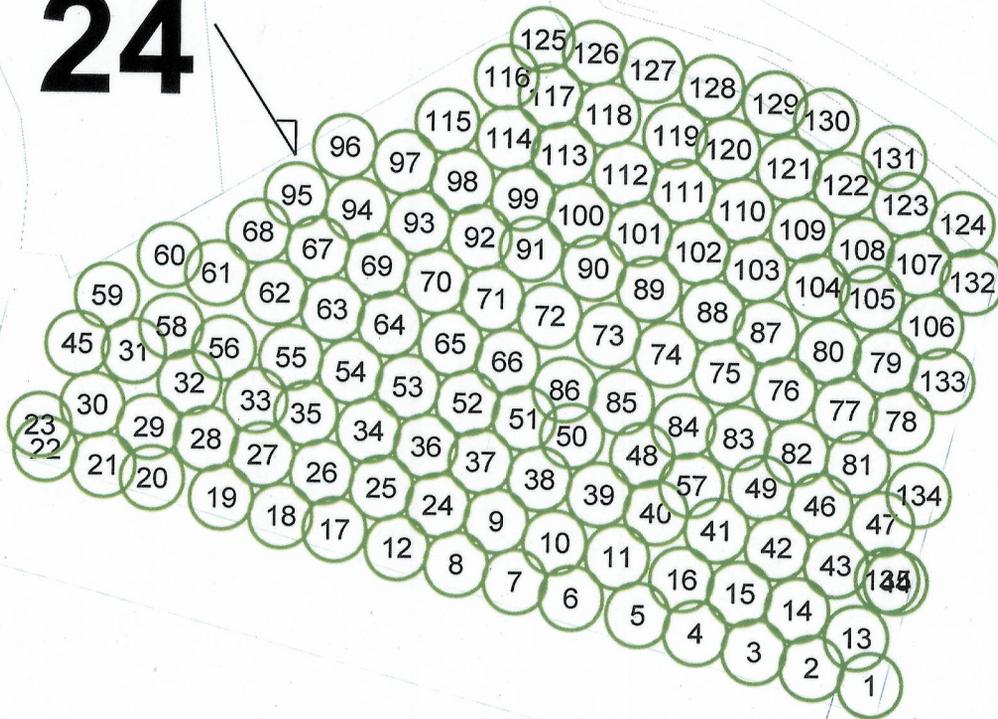
HPGE

Field of View to scale

Measurement Dates between: 3-9-2000 through 9-27-2000

483000

24

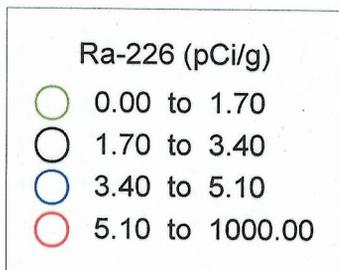


Numbers indicate measurement locations

482500

1346000

1346500



RTIMP DWG Title: A1P3-SW-RA-1PT-MC
 Project: 20720-PSP-0001
 Name: Area 1, Phase III Certification Sampling
 Prepared by: David Allen
 File: A1P3_SW_RA_1PT_MC.srf
 Date Prepared: 10/2/00

A1P3

3830

Southwest Fill Area

Moisture corrected Thorium-232

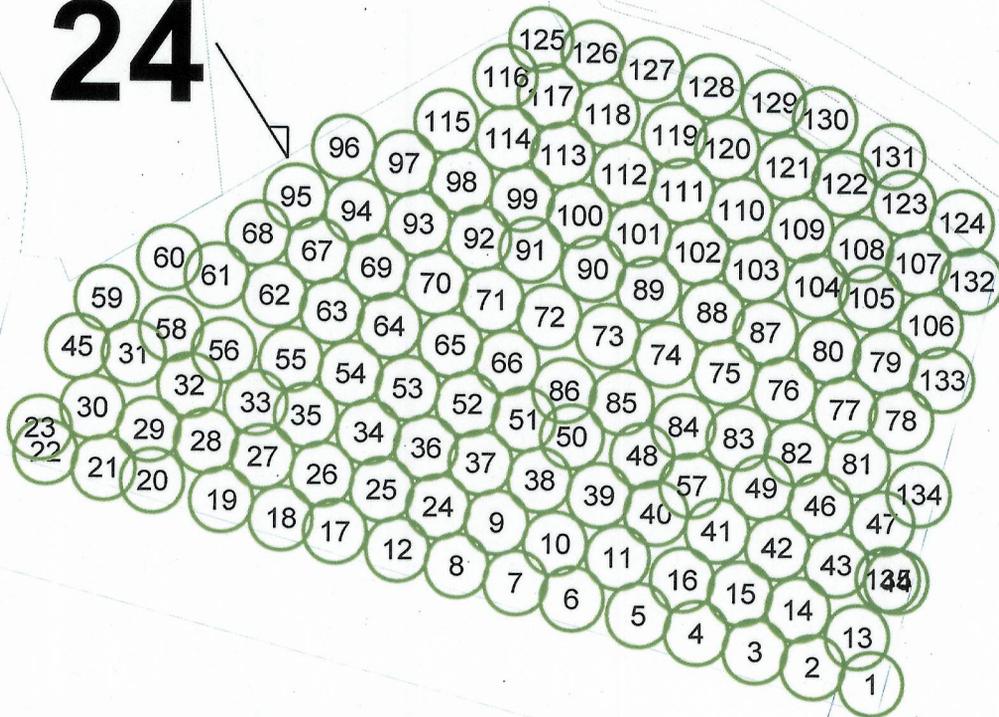
HPGE

Field of View to scale

Measurement Dates between: 3-9-2000 through 9-27-2000

483000

24



Numbers indicate measurement locations

482500

1346000

1346500

Th-232 (pCi/g)

- 0.00 to 1.50
- 1.50 to 3.00
- 3.00 to 4.50
- 4.50 to 1000.00

RTIMP DWG Title: A1P3-SW-TH-1PT-MC

Project: 20720-PSP-0001

Name: Area 1, Phase III Certification Sampling

Prepared by: David Allen

File: A1P3_SW_TH_1PT_MC.srf

Date Prepared: 10/2/00

000055

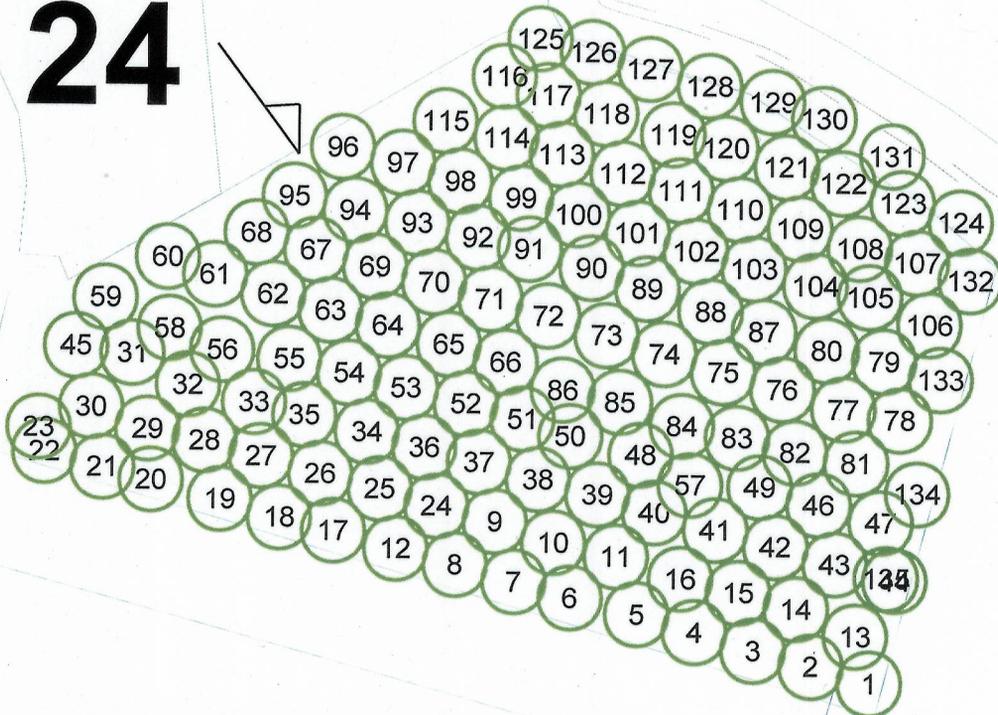
A1P3 Southwest Fill Area

Moisture corrected Total Uranium

HPGE
Field of View to scale
Measurement Dates between: 3-9-2000 through 9-27-2000

483000

24

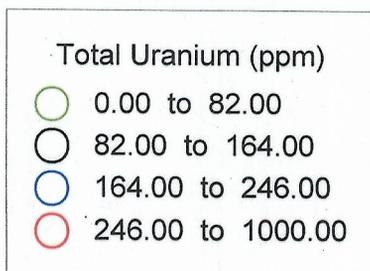


Numbers indicate measurement locations

482500

1346000

1346500



RTIMP DWG Title: A1P3-SW-TU-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SW_TU_1PT_MC.srf
Date Prepared: 10/2/00

A1PIII SOIL PILES HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|----------|-----------|-------------|----------------|----------------|--------------|
| 1 | A1P3PILE1-P2-1G | 482849.3 | 1349338 | 100cm | 0.418 | 0.349 | 18 |
| 1 | A1P3PILE1-P2-2G | 482849.3 | 1349338 | 31cm | 0.449 | 0.33 | 18.8 |
| 2 | A1P3PILE2-P2-1G | 482809.1 | 1349203.9 | 100cm | 0.675 | 0.684 | 22.3 |
| 2 | A1P3PILE2-P2-2G | 482809.1 | 1349203.9 | 31cm | 0.943 | 0.746 | 24 |
| 3 | A1P3PILE3-P2-1G | 482829.2 | 1349200.5 | 100cm | 0.659 | 0.651 | 19 |
| 3 | A1P3PILE3-P2-2G | 482829.2 | 1349200.5 | 31cm | 0.775 | 0.478 | 18.9 |
| 4 | A1P3PILE4-P2-1G | 482815.5 | 1349176.7 | 100cm | 0.371 | 0.42 | 13.5 |
| 4 | A1P3PILE4-P2-2G | 482815.5 | 1349176.7 | 31cm | 0.585 | 0.424 | 13.4 |
| 5 | A1P3PILE5-P2-1G | 482790.5 | 1349159 | 100cm | 0.667 | 0.704 | 24.5 |
| 5 | A1P3PILE5-P2-2G | 482790.5 | 1349159 | 31cm | 0.779 | 0.833 | 24.4 |
| 6 | A1P3PILE6-P2-1G | 482640.9 | 1348996 | 100cm | 0.548 | 0.763 | 32.3 |
| 6 | A1P3PILE6-P2-2G | 482640.9 | 1348996 | 31cm | 0.66 | 0.683 | 29.7 |
| 7 | A1P3PILE7-P2-1G | 482622.2 | 1348977.3 | 100cm | 0.553 | 1.12 | 40.1 |
| 7 | A1P3PILE7-P2-2G | 482622.2 | 1348977.3 | 31cm | 0.77 | 0.746 | 35.6 |
| 8 | A1P3PILE8-P2-1G | 482533.2 | 1348823.4 | 100cm | 0.778 | 0.783 | 15.7 |
| 8 | A1P3PILE8-P2-2G | 482533.2 | 1348823.4 | 31cm | 0.764 | 0.75 | 19.7 |
| 8 | A1P3PILE8-P2-2G-D | 482533.2 | 1348823.4 | 31cm | 0.803 | 0.741 | 15.1 |
| 9 | A1P3PILE9-P2-1G | 482540.3 | 1348626.7 | 100cm | 0.715 | 0.671 | 20.1 |
| 9 | A1P3PILE9-P2-2G | 482540.3 | 1348626.7 | 31cm | 0.765 | 0.677 | 15.8 |
| 10 | A1P3PILE10-P2-1G | 482539.6 | 1348492.6 | 100cm | 0.84 | 0.784 | 25.7 |
| 10 | A1P3PILE10-P2-2G | 482539.6 | 1348492.6 | 31cm | 0.87 | 0.87 | 26.7 |
| 11 | A1P3PILE11-P2-1G | 482545.4 | 1348408.3 | 100cm | 0.969 | 0.713 | 24 |
| 11 | A1P3PILE11-P2-2G | 482545.4 | 1348408.3 | 31cm | 0.834 | 0.758 | 27.7 |
| 12 | A1P3PILE12-P2-1G | 482547.3 | 1348367 | 100cm | 1.007 | 0.761 | 18.9 |
| 12 | A1P3PILE12-P2-1G-D | 482547.3 | 1348367 | 100cm | 0.953 | 0.742 | 19.7 |
| 12 | A1P3PILE12-P2-2G | 482547.3 | 1348367 | 31cm | 1.137 | 0.781 | 18.2 |
| 13 | A1P3PILE13-P2-1G | 482613.7 | 1347838.4 | 100cm | 1.154 | 0.965 | 25.9 |
| 13 | A1P3PILE13-P2-2G | 482613.7 | 1347838.4 | 31cm | 1.172 | 1.06 | 21.8 |
| 14 | A1P3PILE14-P2-1G | 482623.7 | 1347814.5 | 100cm | 0.985 | 0.863 | 28.9 |
| 14 | A1P3PILE14-P2-2G | 482623.7 | 1347814.5 | 31cm | 1.014 | 0.961 | 26.3 |

250000

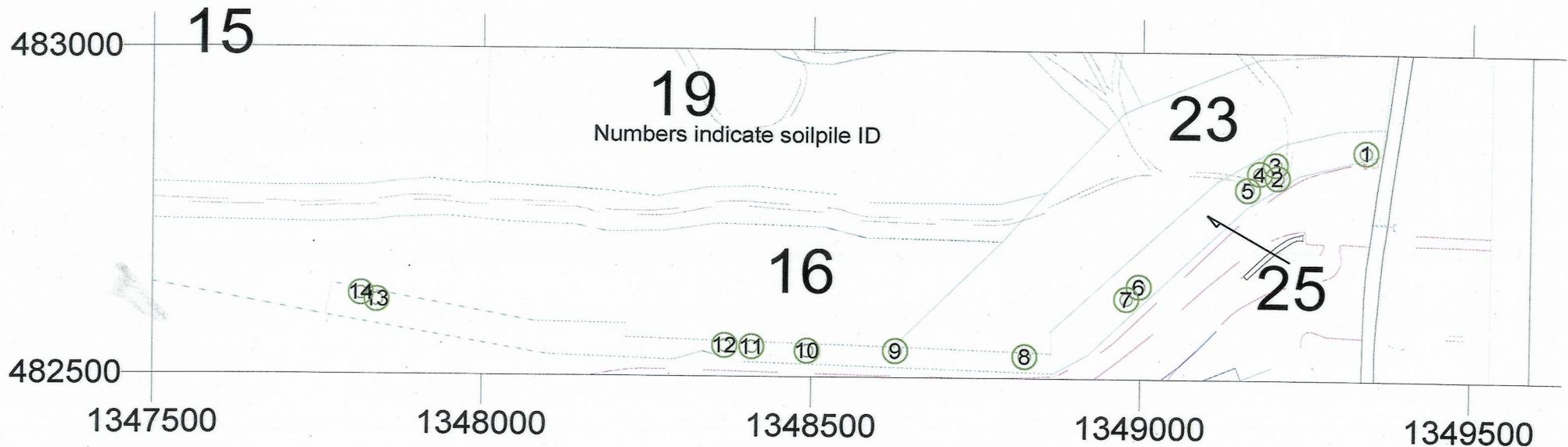
3830

A1P3 Soil Piles

Moisture & Radon corrected Radium-226



HPGE measurements at 31cm and 100 cm heights
Field of View to scale
Measurement Dates: 3/6/00 & 3/8/00



Ra-226 (pCi/g)

- 0.00 to 1.70
- 1.70 to 3.40
- 3.40 to 5.10
- 5.10 to 10000.00

RTIMP DWG Title: A1P3-SOILPILES-RA-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SOILPILES_RA_1PT_MC.srf
Date Prepared: 10/2/00

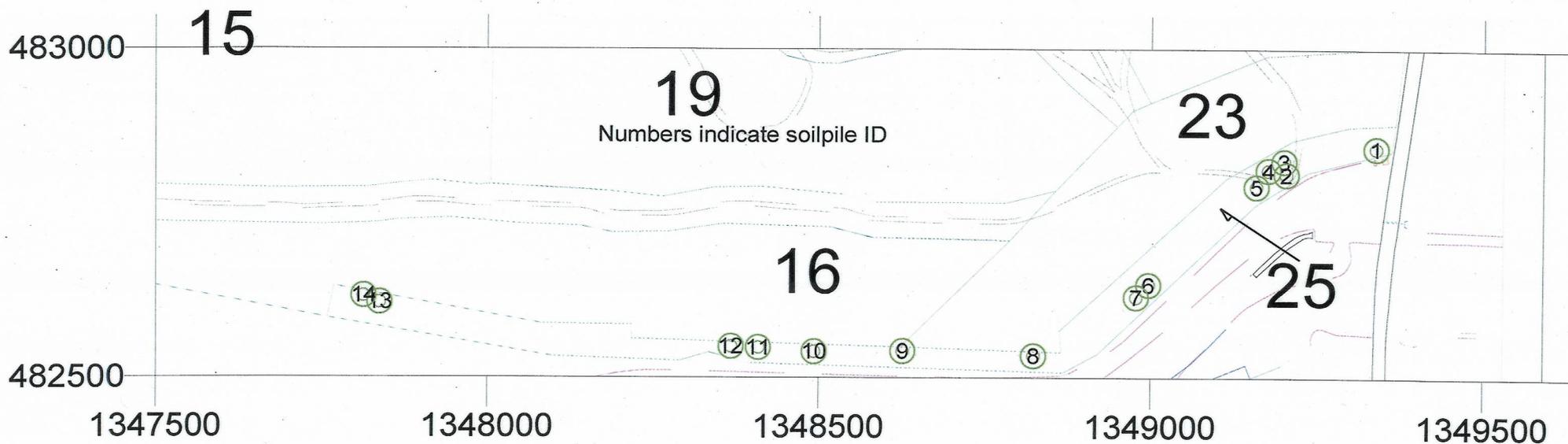
3830

000058

A1P3 Soil Piles

Moisture corrected Thorium-232

HPGE measurements at 31cm and 100 cm heights
Field of View to scale
Measurement Dates: 3/6/00 & 3/8/00



Th-232 (pCi/g)

- 0.00 to 1.50
- 1.50 to 3.00
- 3.00 to 4.50
- 4.50 to 10000.00

RTIMP DWG Title: A1P3-SOILPILES-TH-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SOILPILES_TH_1PT_MC.srf
Date Prepared: 10/2/00

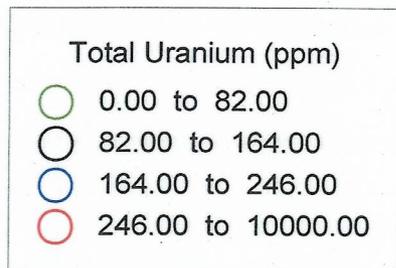
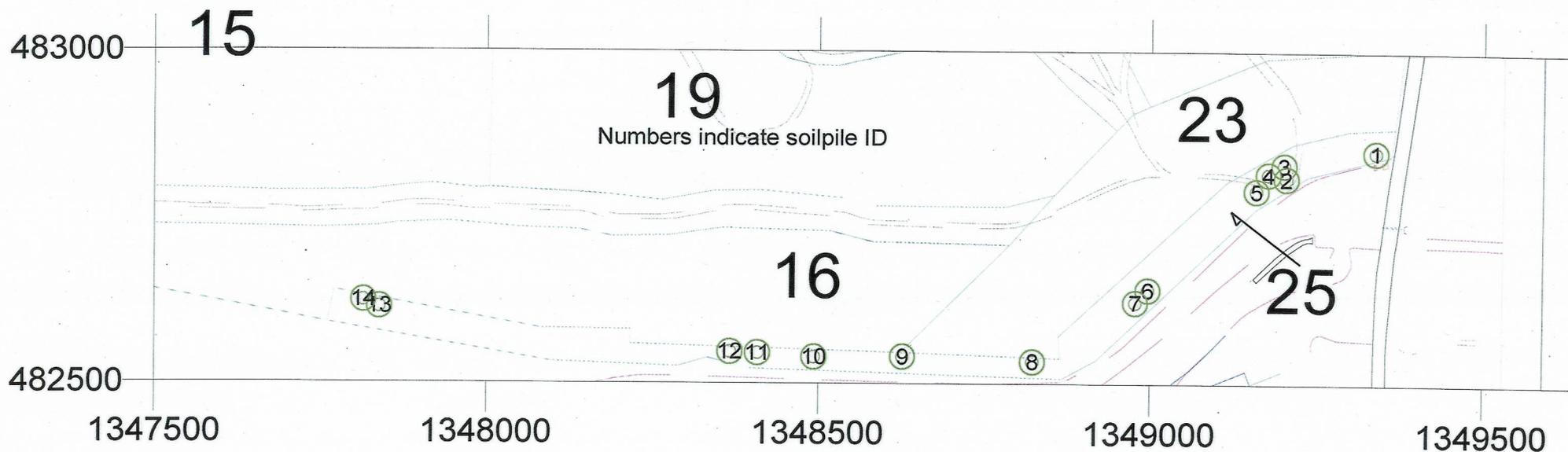
000059

3830

A1P3 Soil Piles

Moisture corrected Total Uranium

HPGE measurements at 31cm and 100 cm heights
Field of View to scale
Measurement Dates: 3/6/00 & 3/8/00



RTIMP DWG Title: A1P3-SOILPILES-TU-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SOILPILES_TU_1PT_MC.srf
Date Prepared: 10/2/00

3830

090000

3830

**POST EXCAVATION
DEBRIS REMOVAL AREA
HPGe DATA
COLLECTED FEBRUARY 2001**

000061

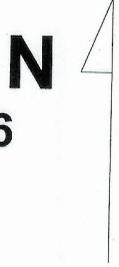
A1PIII DEBRIS REMOVAL AREA HPGe DATA

| Map ID | Sample ID | Northing | Easting | Det. Height | Ra-226 (pCi/g) | Th-232 (pCi/g) | Tot. U (ppm) |
|--------|--------------------|----------|---------|-------------|----------------|----------------|--------------|
| 1 | A1P3-P1-SW3-1-G | 482756 | 1346180 | 100cm | 1.124 | 0.897 | 14.5 |
| 2 | A1P3-P1-SW3-2-G | 482720 | 1346177 | 100cm | 1.044 | 0.819 | 11.8 |
| 3 | A1P3-P1-SW3-3-G | 482685 | 1346173 | 100cm | 1.083 | 0.872 | 9.66 |
| 4 | A1P3-P1-SW3-4-G | 482680 | 1346143 | 100cm | 0.804 | 0.749 | 9.27 |
| 5 | A1P3-P1-SW3-5-G | 482713 | 1346143 | 100cm | 0.887 | 0.728 | 13.1 |
| 6 | A1P3-P1-SW3-6-G | 482746 | 1346147 | 100cm | 0.934 | 0.81 | 10.1 |
| 7 | A1P3-P1-SW3-7-G | 482780 | 1346149 | 100cm | 0.932 | 0.891 | 16.1 |
| 8 | A1P3-P1-SW3-8-G | 482761 | 1346119 | 100cm | 1.038 | 0.824 | 14.4 |
| 9 | A1P3-P1-SW3-9-G | 482728 | 1346118 | 100cm | 1.233 | 0.756 | 6.12 |
| 10 | A1P3-P1-SW3-10-G | 482696 | 1346116 | 100cm | 1.079 | 0.791 | 10.2 |
| 11 | A1P3-P1-SW3-11-G | 482778 | 1346095 | 100cm | 0.804 | 0.716 | 12.5 |
| 12 | A1P3-P1-SW3-12-G | 482745 | 1346094 | 100cm | 0.989 | 0.757 | 7.66 |
| 13 | A1P3-P1-SW3-13-G | 482718 | 1346093 | 100cm | 0.82 | 0.602 | 8.15 |
| 14 | A1P3-P1-SW3-14-G | 482707 | 1346063 | 100cm | 0.817 | 0.675 | 14.1 |
| 15 | A1P3-P1-SW3-15-G | 482778 | 1346064 | 100cm | 0.721 | 0.662 | 13 |
| 16 | A1P3-P1-SW3-16-G | 482740 | 1346067 | 100cm | 0.825 | 0.738 | 9.42 |
| 16 | A1P3-P1-SW3-16-G-D | 482740 | 1346067 | 100cm | 0.862 | 0.704 | 7.08 |
| 17 | A1P3-P1-SW3-17-G | 482730 | 1346038 | 100cm | 0.801 | 0.638 | 10.6 |
| 18 | A1P3-P1-SW3-18-G | 482721 | 1346001 | 100cm | 0.799 | 0.53 | 9.34 |
| 19 | A1P3-P1-SW3-19-G | 482758 | 1346009 | 100cm | 0.886 | 0.66 | 14.7 |
| 20 | A1P3-P1-SW3-20-G | 482782 | 1345982 | 100cm | 1.021 | 0.615 | 9.99 |
| 21 | A1P3-P1-SW3-21-G | 482795 | 1346016 | 100cm | 0.952 | 0.592 | 9.5 |
| 22 | A1P3-P1-SW3-22-G | 482813 | 1346050 | 100cm | 1.231 | 0.728 | 10 |
| 22 | A1P3-P1-SW3-22-G-D | 482813 | 1346050 | 100cm | 1.193 | 0.764 | 8.2 |

000062

3830

A1P3 Excavation Area 3



Radon & Moisture Corrected Radium-226

HPGe Det #: 30716, 31144, & 31265

Field of View to scale

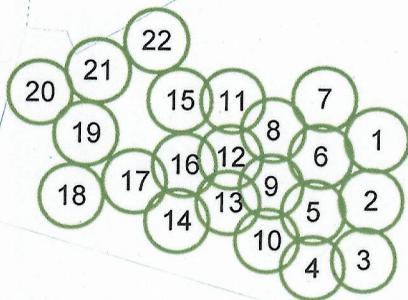
Measurement Dates: 02/8/01 through 02/20/01

483000

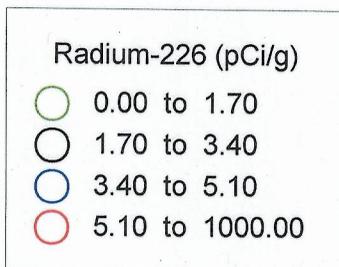
482500

1346000

1346500



Numbers indicate measurement locations



RTIMP DWG Title: A1P3-SW-RA-EXCAV-1PT-MC
Project: 20720-PSP-0001
Name: Area 1, Phase III Certification Sampling
Prepared by: David Allen
File: A1P3_SW_RA_EXCAV_1PT_MC.srf
Date Prepared: 05/8/01

A1P3

3830

Excavation Area 3

N

Moisture Corrected Thorium-232

HPGe Det #: 30716, 31144, & 31265

Field of View to scale

Measurement Dates: 02/8/01 through 02/20/01

483000



482500

1346000

1346500

Thorium-232 (pCi/g)

- 0.00 to 1.50
- 1.50 to 3.00
- 3.00 to 4.50
- 4.50 to 1000.00

RTIMP DWG Title: A1P3-SW-TH-EXCAV-1PT-MC

Project: 20720-PSP-0001

Name: Area 1, Phase III Certification Sampling

Prepared by: David Allen

File: A1P3_SW_TH_EXCAV_1PT_MC.srf

Date Prepared: 05/8/01

000064

A1P3

3830

Excavation Area 3

N

Moisture Corrected Total Uranium

HPGe Det #: 30716, 31144, & 31265

Field of View to scale

Measurement Dates: 02/8/01 through 02/20/01

483000



Numbers indicate measurement locations

482500

1346000

1346500

Total Uranium (ppm)

- 0.00 to 82.00
- 82.00 to 164.00
- 164.00 to 246.00
- 246.00 to 1000.00

RTIMP DWG Title: A1P3-SW-TU-EXCAV-1PT-MC

Project: 20720-PSP-0001

Name: Area 1, Phase III Certification Sampling

Prepared by: David Allen

File: A1P3_SW_TU_EXCAV_1PT_MC.srf

Date Prepared: 05/8/01

000065

APPENDIX B

**VARIANCES/FIELD CHANGE NOTICES FOR
A1PIII CERTIFICATION SAMPLING PSP**

**VARIANCE LOG FOR PROJECT SPECIFIC PLAN
FOR CERTIFICATION SAMPLING OF AREA 1, PHASE III**

| Variance No. | Variance Date | Variance Description | Significant? (Y or N) | Date Signed | Date Distributed | EPA/OEPA Approval |
|------------------|---------------|---|--------------------------|-------------|------------------|-------------------|
| 20720-PSP-0001-1 | 10/28/99 | <ol style="list-style-type: none"> 1. Add the area along the southern boundary of A1PIII to the scope of the supplemental mobile NaI scan. 2. Add the two suspected fill area (NE and SW corners of A1PIII) to the scope of the supplemental scan - will be scanned by HPGe due to dense vegetation. 3. Collect HPGe readings at each of the small soil/concrete debris piles along the southern boundary of A1PIII. | Y | 11/15/99 | 11/16/99 | 11/19/99 |
| 20720-PSP-0001-2 | 3-29-00 | Rinsates and container blanks will be listed on a separate chain of custody form. Also, the rinsates should include the CU number in the ID. | N | 3-30-00 | 4-3-00 | NA |
| 20720-PSP-0001-3 | 4-25-00 | Added remediation areas A1P4 and A1P5 to the scope of the real-time scanning effort. | Y | 4-25-00 | 4-28-00 | 5-9-00 |
| 20720-PSP-0001-4 | 1-8-01 | <ol style="list-style-type: none"> 1. Directs real-time monitoring and PID measurements for excavation locations in the southwest fill area. 2. Defines the boundaries of CU A1P3-C-26 and directs sampling and analysis of samples collected in the CU and other excavation locations. | Y | 1-9-01 | 1-17-01 | 1-18-01 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

000067

3830

VARIANCE / FIELD CHANGE NOTICE

V/F 20720-PSP-0001-2

WBS NO.: 20720-PSP-0001, Revision 1

Page 1 of 1

PROJECT TITLE: Project Specific Plan for Area 1, Phase III Certification Sampling

Date 3/29/00

VARIANCE / FIELD CHANGE NOTICE (Include justification):

3830

Field Change Notice:

Rinsates/container blanks will be listed on a separate chain-of-custody form. Also, the rinsates/container blanks will include the CU number in the identification number. They will be identified as A1P3-C-CU-X#-analyte. For instance, the rinsate collected for CU 06 will be identified as A1P3-C-06-X1-R.

Justification:

Listing the rinsates/container blanks on a separate chain-of-custody form will simplify the analyses by keeping each media (soil and water) together. Including the CU number in the ID scheme of rinsates/container blanks will tie those samples back to the CU that they represent.

REQUESTED BY: Audrey Hannum

Date: March 29, 2000

| X IF REQD | VARIANCE/FCN APPROVAL | DATE | X IF REQD | VARIANCE/FCN APPROVAL | DATE |
|--------------------------------------|---|-----------------|-----------------------------------|---|----------------|
| X <i>PK</i> | QUALITY ASSURANCE <i>Frank Thompson</i> | <i>4-3-00</i> | X | PROJECT MANAGER <i>W. J. Edwards</i> | <i>3-29-00</i> |
| | DATA QUALITY MANAGEMENT | | X | Characterization Lead <i>Eric J. Kroger</i> | <i>3-29-00</i> |
| X | <i>Coordinating Support</i> | <i>03/30/00</i> | | RTIMP Manager | |
| | OTHER | | X | Sampling Manager <i>Tom Buhlge</i> | <i>3/30/00</i> |
| VARIANCE/FCN APPROVED [X] YES [] NO | | | REVISION REQUIRED: [] YES [x] NO | | |

DISTRIBUTION

| | | |
|--------------------|-------------------|--------|
| PROJECT MANAGER: | DOCUMENT CONTROL: | OTHER: |
| QUALITY ASSURANCE: | OTHER: | OTHER: |
| FIELD MANAGER: | OTHER: | OTHER: |

ORIGINAL

000068

VARIANCE / FIELD CHANGE NOTICE

V/F 20720-PSP-0009-3 ²⁹

WBS NO.: ECDC# 20720-PSP-0001, Rev. 1

Page 1 of 2 ²⁵

PROJECT TITLE: PSP for Area 1, Phase III Certification Sampling, Rev. 1. Feb. 2000.

Date 04/25/2000

VARIANCE / FIELD CHANGE NOTICE (Include justification):

3830

Field Change Notice:

The purpose of this variance is document the addition of two areas to be scanned. This scanning will occur in the areas designated as A1PIV and A1PV as shown on the attached Figure. The real-time scanning will be conducted according to the traditional precertification scan protocol. Detectors should be used as described in Section 2.0 of the PSP. Additional measures for scanning the cleared paths, as discussed in the PSP, will not apply to this V/FCN.

JUSTIFICATION:

These areas are now available for precertification.

ORIGINAL

Requested By: Alex Duarte

Date: 04/25/2000

| X IF REQD | VARIANCE/FCN APPROVAL | DATE | X IF REQD | VARIANCE/FCN APPROVAL | DATE |
|-----------|---------------------------------------|---------|-----------|--|----------|
| X | QUALITY ASSURANCE <i>Frank Dreyer</i> | 4/25/00 | X | PROJECT MANAGER <i>W.D. Ewing</i> | 4/25/00 |
| | DATA QUALITY MANAGEMENT | | X | CHARACTERIZATION LEAD <i>Jenay Vance for Alex Duarte</i> | 04/25/00 |
| | ANALYTICAL CUSTOMER SUPPORT | | X | REAL TIME MANAGER <i>John H. White</i> | 4/25/00 |
| | OTHER | | | WASTE ACCEPTANCE ORGANIZATION | |

VARIANCE/FCN APPROVED YES NO REVISION REQUIRED: YES NO

DISTRIBUTION

| | | |
|--------------------|----------------------------------|--------|
| PROJECT MANAGER: | DOCUMENT CONTROL: Esther Ditzner | OTHER: |
| QUALITY ASSURANCE: | OTHER: | OTHER: |
| FIELD MANAGER: | OTHER: | OTHER: |

000069



State of Ohio Environmental Protection Agency

Southwest District Office

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

| | | | |
|-------------------|------------|---------|--------------|
| Post-it® Fax Note | 7671 | Date | # of pages ▶ |
| To: | J.D. Chiou | From | |
| Co /Dept. | | Co | |
| Phone # | | Phone # | |
| Fax # | 5131 | Fax # | |

3830

MEMO

TO: J.D. Chiou

FROM: Michelle Waller *MW*

DATE: January 17, 2001

SUBJECT: V/FCN 20720-PSP-0001-4 for *Project Specific Plan for Certification Sampling of Area1 Phase III*

This V/FCN directs monitoring in the southwest excavation location. It also defines CU A1P3-C-26 and directs the sampling and analysis of this and two other excavation areas. Ohio EPA approves this V/FCN.

VARIANCE / FIELD CHANGE NOTICE

V/F 20720-PSP-0001-84
JV 01/08/01

WBS NO.: ECDC# 20720-PSP-0001, Rev. 1

Page 1 of 5

PROJECT TITLE: Project Specific Plan for Area 1, Phase III Certification Sampling, Rev. 1. Feb. 2000.

Date 01/08/01

3830

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Field Change Notice:

As discussed in section 2.0 of the CDL, non-native debris will be removed prior to final certification of Area 1, Phase III, Part One. Details of the remedial actions are described in the Implementation Plan for Paddys Run Debris Removal/Bank Stabilization Area 1, Phase III (20720-PL-0001). Within A1PIII, some concrete debris is present at several locations. The majority of the concrete debris is located on the southwest corner of A1PIII along the Paddys Run stream bank, however, additional debris is found in the northeast corner and along the southern boundary.

Further sampling and real-time monitoring will be performed in the southwest fill area after excavation but will not be required within the northeast fill area and along the southern fence line since the debris is at surface and the surface soil has passed certification.

In the southwest fill area (Figure 1), HPGe monitoring will be conducted over the debris excavation footprints (excavation locations 1, 2, 3, 4 and 5) once debris is removed. Real-time monitoring activities will be performed in accordance with guidelines discussed in Section 2.0 of the PSP. If HPGe monitoring identifies soil above FRL, post excavation samples will be collected prior to backfill and grading.

Once the debris in the southwest fill area is removed and the area backfilled and graded, the contiguous excavation area (encompassing excavation locations 1, 2 and 3) will be considered one CU designated as A1P3-C-26. The CU is divided into 16 sub-CUs, with sample locations selected per the SEP. Twelve of the sixteen locations will be sampled at the surface (0"-6"). The four archive locations will be located in the field and not sampled unless deemed necessary at a later date. In addition, one surface sample will be collected from excavation location 4 and 5. The samples will be collected and analyzed for the same constituents as the certification samples. The results of these excavation location 4 and 5 samples will not be used for statistical analysis to determine the passing or failure of CU A1P3-C-26. However, if any of the analytes exceed FRL in excavation area 4 and/or 5, additional excavation will be performed along with a post-excavation sample. The CU boundary and the excavation areas are depicted in Figure 2. The sample locations are depicted in the attached Figure 3.

Soil samples will be collected in accordance with Section 3.3 of the PSP. Sampling and analytical requirements are listed in Table 4-1 of the PSP. Samples will be identified according to the scheme detailed in Section 3.3.3 of the PSP and will be analyzed for TAL A1P3PRECERT-B (Table 4-3 of the PSP) which includes beryllium, radium-226, radium-228, thorium-228, thorium, 232, and total uranium. The attached Table 1 lists the pertinent information for the physical samples to be collected.

If further excavations are necessary to facilitate sub-grade debris removal, HPGe monitoring, and post-excavation sampling will occur. The post-excavation samples will be collected and processed in the same manner as those collected from excavations locations 4 and 5.

JUSTIFICATION:

Post excavation real-time monitoring and sample analysis will ensure that the certification criteria are met.

Requested By: Mike Rolfes

Date: 01/08/01

| X IF REQD | VARIANCE/FCN APPROVAL | DATE | X IF REQD | VARIANCE/FCN APPROVAL | DATE |
|-----------|--|--------|-----------|--|--------|
| X | QUALITY ASSURANCE <i>P. Spurge For F. Thompson</i> | 1/9/01 | X | PROJECT MANAGER <i>Tom L. G. H.</i> | 1-8-01 |
| | DATA QUALITY MANAGEMENT | | X | CHARACTERIZATION LEAD <i>Jenny Vance For M. Rolfes</i> | 1/8/01 |
| X | ANALYTICAL CUSTOMER SUPPORT <i>Denise Arica</i> | 1/8/01 | X | REAL TIME MANAGER <i>Joan White</i> | 1/8/01 |
| X | FIELD MANAGER <i>Tom B. H. L. G.</i> | 1/8/01 | | WASTE ACCEPTANCE ORGANIZATION | |

VARIANCE/FCN APPROVED YES NO

REVISION REQUIRED: YES NO

DISTRIBUTION

| | | |
|--------------------|-------------------|--------|
| PROJECT MANAGER: | DOCUMENT CONTROL: | OTHER: |
| QUALITY ASSURANCE: | OTHER: | OTHER: |
| FIELD MANAGER | OTHER: | OTHER: |

000072

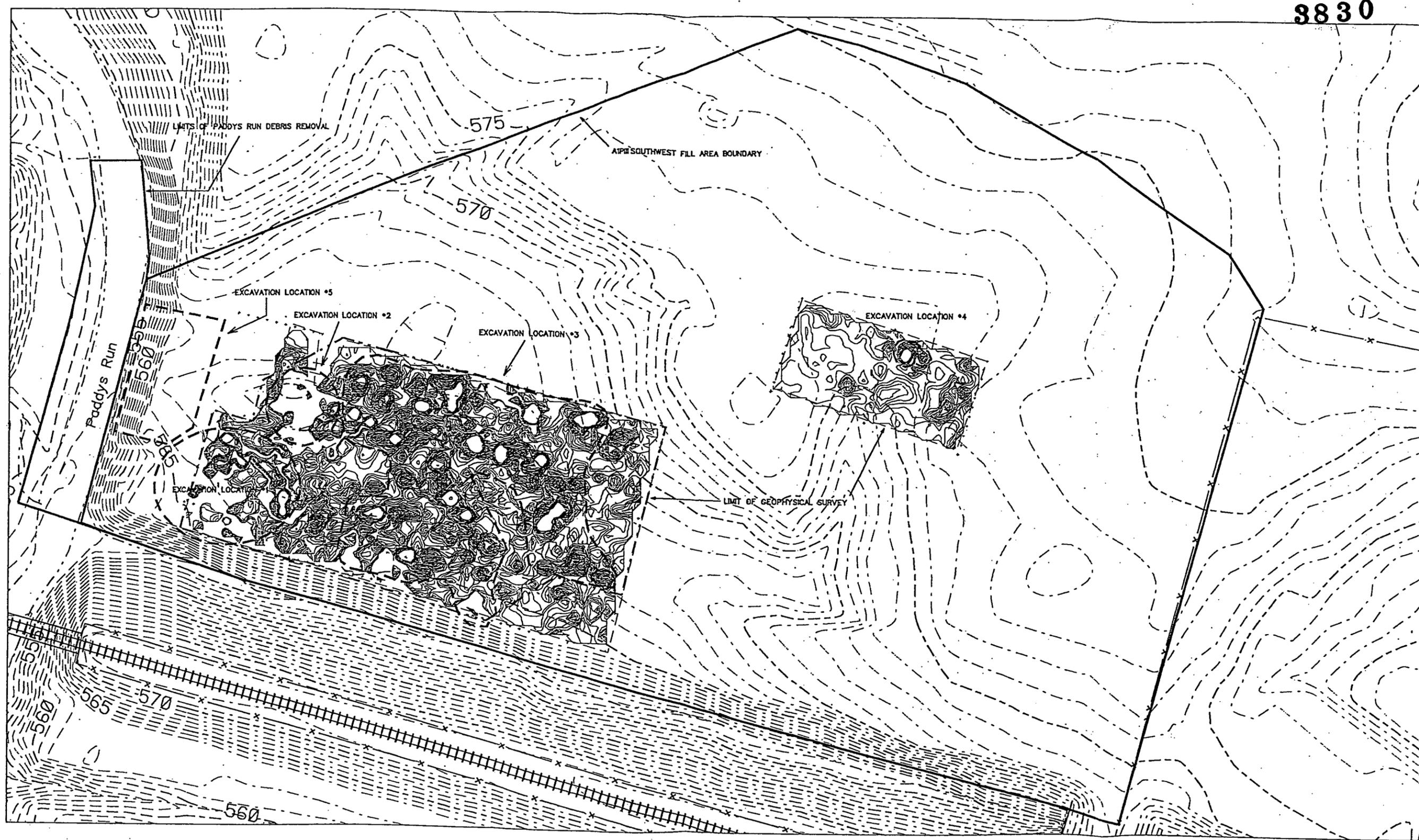
ORIGINAL

TABLE 1

SAMPLE IDENTIFICATION AND LOCATION

| CU or Excavation Area | Sub-CU | Sample ID | Easting | Northing | Analysis |
|-----------------------|--------|-----------------|---------|----------|----------|
| A1P3-C-26 | 1 | A1P3-C-26-1RM | 482698 | 1346025 | TAL B |
| A1P3-C-26 | 2 | A1P3-C-26-2RM | 482713 | 1346064 | TAL B |
| A1P3-C-26 | 3 | A1P3-C-26-3RM | 482706 | 1346110 | TAL B |
| A1P3-C-26 | 3 | A1P3-C-26-3RM-D | 482706 | 1346110 | TAL B |
| A1P3-C-26 | 4 | A1P3-C-26-4RM | 482692 | 1346146 | TAL B |
| A1P3-C-26 | 5 | A1P3-C-26-5RM | 482680 | 1346181 | TAL B |
| A1P3-C-26 | 6A | A1P3-C-26-6V | 482741 | 1346044 | Archive |
| A1P3-C-26 | 7 | A1P3-C-26-7RM | 482746 | 1346083 | TAL B |
| A1P3-C-26 | 8 | A1P3-C-26-8RM | 482730 | 1346104 | TAL B |
| A1P3-C-26 | 9A | A1P3-C-26-9V | 482721 | 1346142 | Archive |
| A1P3-C-26 | 10 | A1P3-C-26-10RM | 482728 | 1346184 | TAL B |
| A1P3-C-26 | 11A | A1P3-C-26-11V | 482690 | 1346210 | Archive |
| A1P3-C-26 | 12 | A1P3-C-26-12RM | 482789 | 1346091 | TAL B |
| A1P3-C-26 | 13 | A1P3-C-26-13RM | 482778 | 1346127 | TAL B |
| A1P3-C-26 | 14 | A1P3-C-26-14RM | 482769 | 1346156 | TAL B |
| A1P3-C-26 | 15A | A1P3-C-26-15V | 482753 | 1346177 | Archive |
| A1P3-C-26 | 16 | A1P3-C-26-16RM | 482738 | 1346218 | TAL B |
| | | | | | |
| Excavation Area 4 | 1 | A1P3-EX4-1RM | 482797 | 1346372 | TAL B |
| Excavation Area 5 | 1 | A1P3-EX5-1RM | 482790 | 1345996 | TAL B |

8830



LEGEND:

- CU A1P3-C-26 BOUNDARY
- EXCAVATION BOUNDARIES
- PROJECT AREA BOUNDARIES

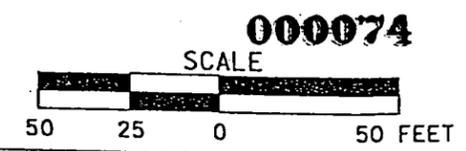
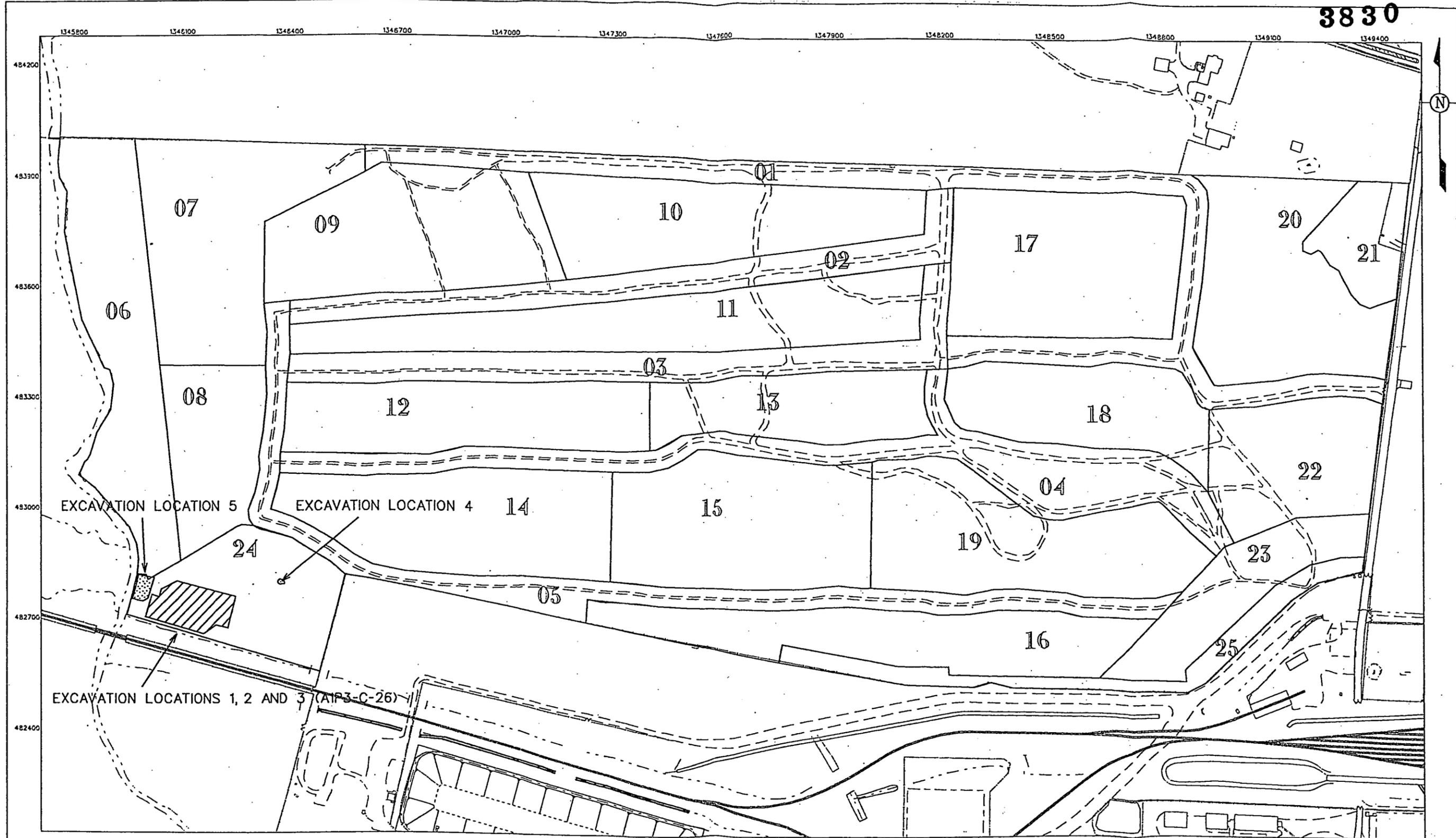
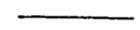


FIGURE 1. PADDYS RUN AND A1P3 SOUTHWEST FILL AREAS

3830



LEGEND:

-  POST EXCAVATION A1P3-C-26
-  ADDITIONAL EXCAVATION
-  CU BOUNDARY

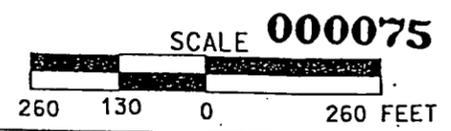


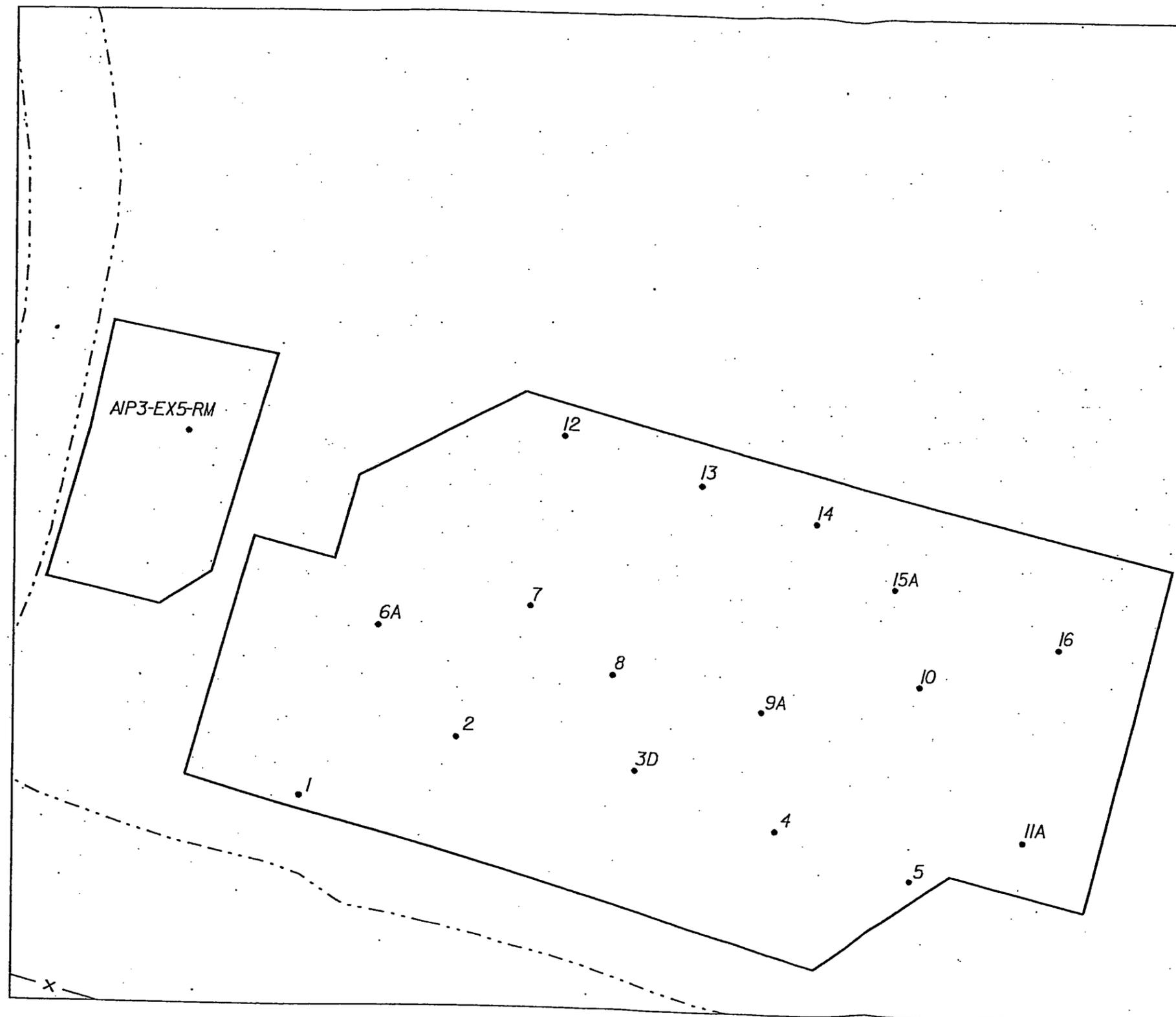
FIGURE 2. CU A1P3-C-26 BOUNDARY

3830

N

A1P3-EX5-RM

A1P3-EX4-RM



LEGEND:

- CU OR EXCAVATION LOCATION BOUNDARY
- 5 SAMPLE LOCATION

000076

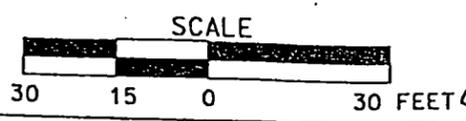


FIGURE 3. CU SAMPLE POINTS FOR A1P3-C-26 AND EXCAVATION LOCATIONS 4 AND 5

APPENDIX C

**CERTIFICATION SAMPLES, ANALYTICAL RESULTS
AND STATISTICS TABLES**

LIST OF TABLES

| | |
|------------|---|
| Table C-1 | Area 1, Phase III Certification Data |
| Table C-2 | Certification Statistics for CU 01 |
| Table C-3 | Certification Statistics for CU 02 |
| Table C-4 | Certification Statistics for CU 03 |
| Table C-5 | Certification Statistics for CU 04 |
| Table C-6 | Certification Statistics for CU 05 |
| Table C-7 | Certification Statistics for CU 06 |
| Table C-8 | Certification Statistics for CU 07 |
| Table C-9 | Certification Statistics for CU 08 |
| Table C-10 | Certification Statistics for CU 09 |
| Table C-11 | Certification Statistics for CU 10 |
| Table C-12 | Certification Statistics for CU 11 |
| Table C-13 | Certification Statistics for CU 12 |
| Table C-14 | Certification Statistics for CU 13 |
| Table C-15 | Certification Statistics for CU 14 |
| Table C-16 | Certification Statistics for CU 15 |
| Table C-17 | Certification Statistics for CU 16 |
| Table C-18 | Certification Statistics for CU 17 |
| Table C-19 | Certification Statistics for CU 18 |
| Table C-20 | Certification Statistics for CU 19 |
| Table C-21 | Certification Statistics for CU 20 |
| Table C-22 | Certification Statistics for CU 21 |
| Table C-23 | Certification Statistics for CU 22 |
| Table C-24 | Certification Statistics for CU 23 |
| Table C-25 | Certification Statistics for CU 24 |
| Table C-26 | Certification Statistics for CU 25 |
| Table C-27 | Certification Statistics for CU 26 |
| Table C-28 | Area 1, Phase III Debris Excavation Samples |

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Moisture Content | 28 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Radium-226 | 1.221 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Radium-228 | 1.009 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Thorium-228 | 1.008 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Uranium, Total | 17.268 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-11R | 05/08/2000 | 0 | 0.5 | 1348262 | 483472.9 | Thorium-232 | 1.009 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Moisture Content | 20.9 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Radium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Thorium-228 | 1.006 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Uranium, Total | 13.459 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Thorium-232 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-12R | 05/08/2000 | 0 | 0.5 | 1348548 | 483447.5 | Radium-226 | 1.242 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Uranium, Total | 13.113 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Thorium-232 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Radium-226 | 1.343 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Thorium-228 | 1.028 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-13R | 05/08/2000 | 0 | 0.5 | 1348761 | 483421.3 | Radium-228 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Moisture Content | 23.3 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Thorium-228 | 1.067 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Uranium, Total | 3.697 | ug/g dry | J | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Thorium-232 | 1.117 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Radium-226 | 1.167 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-14R | 05/08/2000 | 0 | 0.5 | 1348923 | 483328.4 | Radium-228 | 1.117 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Moisture Content | 22.6 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Thorium-228 | 1.111 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Thorium-232 | 1.12 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Uranium, Total | 9.687 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Radium-228 | 1.12 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-16R | 05/08/2000 | 0 | 0.5 | 1349254 | 483344.9 | Radium-226 | 1.325 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Moisture Content | 14.9 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Radium-226 | 1.238 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Radium-228 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Thorium-228 | 0.739 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Uranium, Total | 3.717 | ug/g dry | J | NORMAL |
| A1P3-C-01 | A1P3-C-01-2R | 05/08/2000 | 0 | 0.5 | 1347149 | 483929.1 | Thorium-232 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Moisture Content | 22.8 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Radium-228 | 0.921 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Thorium-228 | 0.891 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Uranium, Total | 5.448 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Thorium-232 | 0.921 | pCi/g dry | - | NORMAL |

000079

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-01 | A1P3-C-01-3R | 05/08/2000 | 0 | 0.5 | 1347255 | 483914.4 | Radium-226 | 1.2 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Moisture Content | 17.8 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Uranium, Total | 8.356 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Thorium-232 | 1.05 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Radium-226 | 1.306 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Thorium-228 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Radium-228 | 1.05 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-4R | 05/08/2000 | 0 | 0.5 | 1347668 | 483901.6 | Moisture Content | 17.9 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Thorium-228 | 0.991 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Uranium, Total | 6.921 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Thorium-232 | 1.016 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Radium-226 | 1.236 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Radium-228 | 1.016 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-5R | 05/08/2000 | 0 | 0.5 | 1347819 | 483931.1 | Moisture Content | 22.9 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Thorium-228 | 0.832 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Thorium-232 | 0.867 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Uranium, Total | 11.562 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Radium-228 | 0.867 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Radium-226 | 1.061 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-7R | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Moisture Content | 25.6 | PERCENT | NV | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Radium-228 | 0.918 | pCi/g dry | - | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Thorium-228 | 0.903 | pCi/g dry | - | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Uranium, Total | 9.319 | ug/g dry | - | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Thorium-232 | 0.918 | pCi/g dry | - | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Radium-226 | 1.001 | pCi/g dry | - | DUPLICATE |
| A1P3-C-01 | A1P3-C-01-7R-D | 05/08/2000 | 0 | 0.5 | 1348329 | 483889.2 | Moisture Content | 21.1 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Uranium, Total | 7.021 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Thorium-232 | 1.092 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Radium-226 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Thorium-228 | 1.102 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Radium-228 | 1.092 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-8R | 05/08/2000 | 0 | 0.5 | 1348750 | 483872.7 | Moisture Content | 28.1 | PERCENT | NV | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Thorium-228 | 0.994 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Uranium, Total | 7.794 | ug/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Thorium-232 | 1.015 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Radium-226 | 1.257 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Radium-228 | 1.015 | pCi/g dry | - | NORMAL |
| A1P3-C-01 | A1P3-C-01-9R | 05/08/2000 | 0 | 0.5 | 1348906 | 483704.5 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Thorium-228 | 1.034 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Thorium-232 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Uranium, Total | 10.682 | ug/g dry | J | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | | | | | |

080000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Radium-228 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Radium-226 | 1.319 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Moisture Content | 25.5 | PERCENT | NV | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Radium-228 | 1.067 | pCi/g dry | - | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Thorium-228 | 1.058 | pCi/g dry | - | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Uranium, Total | 6.496 | ug/g dry | J | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Thorium-232 | 1.067 | pCi/g dry | - | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-10R-D | 05/03/2000 | 0 | 0.5 | 1347591 | 483629 | Radium-226 | 1.274 | pCi/g dry | - | DUPLICATE |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Moisture Content | 22.3 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Uranium, Total | 7.233 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Thorium-232 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Radium-226 | 1.184 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Thorium-228 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-11R | 05/03/2000 | 0 | 0.5 | 1347742 | 483676.8 | Radium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Moisture Content | 22 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Thorium-228 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Thorium-232 | 0.957 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Radium-228 | 0.957 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Radium-226 | 1.124 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-12R | 05/03/2000 | 0 | 0.5 | 1347818 | 483679 | Uranium, Total | 8.436 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Moisture Content | 22.7 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Uranium, Total | 7.225 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Thorium-232 | 0.856 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Thorium-228 | 0.832 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Radium-228 | 0.856 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-13R | 05/03/2000 | 0 | 0.5 | 1347979 | 483659.6 | Radium-226 | 1.217 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Moisture Content | 24.1 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Radium-226 | 1.096 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Thorium-228 | 0.954 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Uranium, Total | 7.869 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Thorium-232 | 0.973 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-15R | 05/03/2000 | 0 | 0.5 | 1348220 | 483717 | Radium-228 | 0.973 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Moisture Content | 19.4 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Radium-226 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Radium-228 | 1.082 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Thorium-228 | 1.065 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Uranium, Total | 6.447 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-16R | 05/03/2000 | 0 | 0.5 | 1348187 | 483842.1 | Thorium-232 | 1.082 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Moisture Content | 19.4 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Thorium-228 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Uranium, Total | 6.001 | ug/g dry | - | NORMAL |

000081

3830

TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Thorium-232 | 1.02 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Radium-226 | 1.174 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-1R | 05/03/2000 | 0 | 0.5 | 1346453 | 483528 | Radium-228 | 1.02 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Thorium-228 | 0.899 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Thorium-232 | 0.923 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Uranium, Total | 5.714 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Radium-228 | 0.923 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-2R | 05/03/2000 | 0 | 0.5 | 1346616 | 483532.7 | Radium-226 | 1.134 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Moisture Content | 20.6 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Radium-228 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Thorium-228 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Uranium, Total | 8.991 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Thorium-232 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-3R | 05/03/2000 | 0 | 0.5 | 1346740 | 483533.3 | Radium-226 | 1.316 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Moisture Content | 24.9 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Uranium, Total | 5.109 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Thorium-232 | 1.063 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Radium-226 | 1.164 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Thorium-228 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Radium-228 | 1.063 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-5R | 05/03/2000 | 0 | 0.5 | 1347012 | 483546 | Radium-226 | 1.063 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Moisture Content | 17.6 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Thorium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Uranium, Total | 7.645 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Thorium-232 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Radium-226 | 1.195 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-6R | 05/03/2000 | 0 | 0.5 | 1347180 | 483590.4 | Radium-228 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Moisture Content | 19.2 | PERCENT | NV | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Thorium-228 | 0.858 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Thorium-232 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Uranium, Total | 7.589 | ug/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Radium-228 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Radium-226 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347303 | 483612.7 | Radium-226 | 1.053 | pCi/g dry | - | NORMAL |
| A1P3-C-02 | A1P3-C-02-7R | 05/03/2000 | 0 | 0.5 | 1347560 | 483426 | Moisture Content | 25.8 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-10R | 05/09/2000 | 0 | 0.5 | 1347560 | 483426 | Radium-226 | 1.242 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-10R | 05/09/2000 | 0 | 0.5 | 1347560 | 483426 | Radium-228 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-10R | 05/09/2000 | 0 | 0.5 | 1347560 | 483426 | Thorium-228 | 0.986 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-10R | 05/09/2000 | 0 | 0.5 | 1347560 | 483426 | Uranium, Total | 10.118 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-10R | 05/09/2000 | 0 | 0.5 | 1347560 | 483426 | Thorium-232 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Moisture Content | 25.1 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Radium-228 | 0.999 | pCi/g dry | - | NORMAL |

000082

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Thorium-228 | 0.984 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Uranium, Total | 6.309 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Thorium-232 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-11R | 05/09/2000 | 0 | 0.5 | 1347679 | 483428.1 | Radium-226 | 1.127 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Uranium, Total | 9.963 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Thorium-232 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Radium-226 | 1.169 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Thorium-228 | 1.042 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-13R | 05/09/2000 | 0 | 0.5 | 1347959 | 483444.3 | Radium-228 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Moisture Content | 18.5 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Thorium-228 | 1.071 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Uranium, Total | 7.437 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Thorium-232 | 1.09 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Radium-226 | 1.177 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-15R | 05/09/2000 | 0 | 0.5 | 1348163 | 483503.6 | Radium-228 | 1.09 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Thorium-228 | 0.878 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Thorium-232 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Uranium, Total | 9.805 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Radium-228 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-16R | 05/09/2000 | 0 | 0.5 | 1348192 | 483657.3 | Radium-226 | 1.123 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Moisture Content | 22.9 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Radium-226 | 1.223 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Radium-228 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Uranium, Total | 6.049 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Thorium-232 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-2R | 05/09/2000 | 0 | 0.5 | 1346532 | 483352.1 | Thorium-228 | 1 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Moisture Content | 21.7 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Radium-226 | 1.128 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Thorium-228 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Uranium, Total | 6.138 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Thorium-232 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-3R | 05/09/2000 | 0 | 0.5 | 1346674 | 483355.4 | Radium-228 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Moisture Content | 21.7 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Radium-226 | 1.203 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Thorium-228 | 0.923 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Uranium, Total | 5.489 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Thorium-232 | 0.921 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Radium-228 | 0.921 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Moisture Content | 22 | PERCENT | NV | DUPLICATE |

000055

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Radium-228 | 0.982 | pCi/g dry | - | DUPLICATE |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Radium-226 | 1.108 | pCi/g dry | - | DUPLICATE |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Thorium-228 | 0.966 | pCi/g dry | - | DUPLICATE |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Uranium, Total | 7.247 | ug/g dry | - | DUPLICATE |
| A1P3-C-03 | A1P3-C-03-4R-D | 05/09/2000 | 0 | 0.5 | 1346802 | 483355.4 | Thorium-232 | 0.982 | pCi/g dry | - | DUPLICATE |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Moisture Content | 25.5 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Radium-226 | 1.268 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Radium-228 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Thorium-228 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Uranium, Total | 7.023 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1346998 | 483407.2 | Thorium-232 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-5R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-7R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Thorium-228 | 1.037 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-7R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Thorium-232 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-7R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Radium-228 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-7R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Radium-226 | 1.248 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-7R | 05/09/2000 | 0 | 0.5 | 1347163 | 483373.3 | Uranium, Total | 7.388 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Moisture Content | 20.6 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Uranium, Total | 7.127 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Thorium-232 | 0.978 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Thorium-228 | 0.969 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Radium-228 | 0.978 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-8R | 05/09/2000 | 0 | 0.5 | 1347322 | 483401 | Radium-226 | 1.198 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Moisture Content | 22.1 | PERCENT | NV | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Radium-226 | 1.328 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Thorium-228 | 1.008 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Uranium, Total | 15.464 | ug/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Thorium-232 | 1.015 | pCi/g dry | - | NORMAL |
| A1P3-C-03 | A1P3-C-03-9R | 05/09/2000 | 0 | 0.5 | 1347492 | 483402.6 | Radium-228 | 1.015 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Beryllium | 0.2 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Radium-228 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Thorium-232 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Uranium, Total | 13.16 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Thorium-228 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-10RM | 05/01/2000 | 0 | 0.5 | 1348441 | 483090.2 | Radium-226 | 1.2 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Beryllium | 0.38 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Moisture Content | 27.1 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Radium-226 | 1.357 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Thorium-228 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Uranium, Total | 5.78 | ug/g dry | - | NORMAL |

000084

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Thorium-232 | 1.121 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-11RM | 05/01/2000 | 0 | 0.5 | 1348507 | 483004.9 | Radium-228 | 1.121 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Beryllium | 0.21 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Radium-226 | 1.175 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Moisture Content | 25.9 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Radium-228 | 1.054 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Thorium-232 | 1.054 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Uranium, Total | 7.951 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-14RM | 05/01/2000 | 0 | 0.5 | 1348710 | 483024.3 | Thorium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Beryllium | 0.26 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Radium-226 | 1.298 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Radium-228 | 0.952 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Moisture Content | 23.7 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Thorium-228 | 0.939 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Uranium, Total | 10.972 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-15RM | 05/01/2000 | 0 | 0.5 | 1348858 | 483061.3 | Thorium-232 | 0.952 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Beryllium | 0.35 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Uranium, Total | 3.546 | ug/g dry | UJ | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Thorium-232 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Thorium-228 | 0.948 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Moisture Content | 25.4 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Radium-228 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-16RM | 05/01/2000 | 0 | 0.5 | 1348942 | 482958.4 | Radium-226 | 1.336 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Beryllium | 0.43 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Moisture Content | 17.6 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Radium-228 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Thorium-232 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Uranium, Total | 6.817 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Thorium-228 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-2RM | 05/01/2000 | 0 | 0.5 | 1346781 | 483123 | Radium-226 | 1.288 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Beryllium | 0.26 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Radium-226 | 1.192 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Thorium-228 | 0.956 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Uranium, Total | 3.909 | ug/g dry | U | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Thorium-232 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-3RM | 05/01/2000 | 0 | 0.5 | 1347017 | 483128 | Radium-228 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Beryllium | 0.08 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Radium-226 | 1.053 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Moisture Content | 21.2 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Radium-228 | 0.92 | pCi/g dry | - | NORMAL |

3830

000085

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Thorium-232 | 0.92 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Uranium, Total | 7.48 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-4RM | 05/01/2000 | 0 | 0.5 | 1347208 | 483154.4 | Thorium-228 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Beryllium | 0.42 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Radium-226 | 1.199 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Radium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Thorium-228 | 0.994 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Uranium, Total | 10.41 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Thorium-232 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Beryllium | 0.48 | mg/kg dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Radium-228 | 1.035 | pCi/g dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Thorium-228 | 1.042 | pCi/g dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Thorium-232 | 1.035 | pCi/g dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Uranium, Total | 6.948 | ug/g dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Radium-226 | 1.225 | pCi/g dry | - | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-5RM-D | 05/01/2000 | 0 | 0.5 | 1347362 | 483114.7 | Moisture Content | 20 | PERCENT | NV | DUPLICATE |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Beryllium | 0.34 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Radium-226 | 1.096 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Thorium-228 | 0.866 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Thorium-232 | 0.864 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Uranium, Total | 10.194 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Radium-228 | 0.864 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-6RM | 05/01/2000 | 0 | 0.5 | 1347665 | 483162.4 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Beryllium | 0.33 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Uranium, Total | 9.945 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Thorium-232 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Thorium-228 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Moisture Content | 24.7 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Radium-228 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-8RM | 05/01/2000 | 0 | 0.5 | 1348193 | 483293.5 | Radium-226 | 1.215 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Beryllium | 0.18 | mg/kg dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Thorium-228 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Uranium, Total | 9.152 | ug/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Thorium-232 | 1.108 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Radium-228 | 1.108 | pCi/g dry | - | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Moisture Content | 24.4 | PERCENT | NV | NORMAL |
| A1P3-C-04 | A1P3-C-04-9RM | 05/01/2000 | 0 | 0.5 | 1348304 | 483153.4 | Radium-226 | 1.176 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1ORM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Beryllium | 0.031 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-1ORM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Thorium-232 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1ORM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Uranium, Total | 15.555 | ug/g dry | - | NORMAL |

980000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|------------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-05 | A1P3-C-05-10RM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Thorium-228 | 1.002 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-10RM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-10RM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Radium-226 | 1.207 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-10RM | 05/02/2000 | 0 | 0.5 | 1347539 | 482751.3 | Radium-228 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Beryllium | 0.108 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Thorium-228 | 0.844 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Uranium, Total | 14.394 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Thorium-232 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Radium-228 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Moisture Content | 17.9 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-11RM | 05/02/2000 | 0 | 0.5 | 1347700 | 482760.5 | Radium-226 | 1.173 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Beryllium | 0.183 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Radium-228 | 0.784 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Thorium-232 | 0.784 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Uranium, Total | 7.089 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Thorium-228 | 0.801 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Radium-226 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-14RM | 05/02/2000 | 0 | 0.5 | 1348333 | 482738.3 | Moisture Content | 14 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Beryllium | 0.031 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Radium-228 | 0.857 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Thorium-232 | 0.857 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Uranium, Total | 13.528 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Thorium-228 | 0.844 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Radium-226 | 0.947 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-15RM | 05/02/2000 | 0 | 0.5 | 1348593 | 482758 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Beryllium | 0.18 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Radium-226 | 1.123 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Thorium-228 | 0.976 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Uranium, Total | 11.889 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Thorium-232 | 1 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Radium-228 | 1 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Beryllium | 0.119 | mg/kg dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Moisture Content | 18.9 | PERCENT | NV | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Radium-228 | 0.901 | pCi/g dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Thorium-232 | 0.901 | pCi/g dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Uranium, Total | 10.303 | ug/g dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Thorium-228 | 0.857 | pCi/g dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-16RM-D | 05/02/2000 | 0 | 0.5 | 1348683 | 482741.2 | Radium-226 | 1.065 | pCi/g dry | - | DUPLICATE |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Beryllium | 0.048 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Moisture Content | 19.7 | PERCENT | NV | NORMAL |

000087

3830

TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Radium-226 | 1.083 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Thorium-228 | 0.884 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Uranium, Total | 6.058 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Thorium-232 | 0.893 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346378 | 483487.3 | Radium-228 | 0.893 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-1RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Radium-226 | 1.149 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Moisture Content | 20 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Radium-228 | 0.981 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Thorium-232 | 0.981 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Uranium, Total | 5.363 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346350 | 483352.1 | Thorium-228 | 0.946 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-2RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Beryllium | 0.031 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Radium-226 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Radium-228 | 0.804 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Moisture Content | 19.2 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Thorium-228 | 0.796 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Uranium, Total | 5.103 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346320 | 483032.9 | Thorium-232 | 0.804 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-3RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Beryllium | 0.027 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Uranium, Total | 5.413 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Thorium-232 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Thorium-228 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Moisture Content | 15.7 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Radium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346684 | 482802.9 | Radium-226 | 1.141 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-5RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Beryllium | 0.092 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Thorium-228 | 0.878 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Uranium, Total | 11.609 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Thorium-232 | 0.879 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Radium-228 | 0.879 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1346827 | 482806.3 | Radium-226 | 1.153 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-6RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Beryllium | 0.033 | mg/kg dry | U | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Radium-228 | 0.94 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Thorium-232 | 0.94 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Uranium, Total | 13.302 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Thorium-228 | 0.926 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Radium-226 | 1.12 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347055 | 482752.3 | Moisture Content | 24.3 | PERCENT | NV | NORMAL |
| A1P3-C-05 | A1P3-C-05-7RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Beryllium | 0.047 | mg/kg dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | | | | | | | |

880000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Radium-226 | 1.229 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Thorium-228 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Uranium, Total | 8.05 | ug/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Thorium-232 | 1.056 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Radium-228 | 1.056 | pCi/g dry | - | NORMAL |
| A1P3-C-05 | A1P3-C-05-9RM | 05/02/2000 | 0 | 0.5 | 1347238 | 482790 | Moisture Content | 17.9 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Moisture Content | 28 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Radium-226 | 1.143 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Thorium-228 | 0.876 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Uranium, Total | 0.972 | ug/g dry | UJ | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Thorium-232 | 0.918 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-11R | 05/15/2000 | 0 | 0.5 | 1345897 | 483709.8 | Radium-228 | 0.918 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Radium-228 | 0.873 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Radium-226 | 0.906 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Thorium-228 | 0.866 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Uranium, Total | 5.337 | ug/g dry | J | NORMAL |
| A1P3-C-06 | A1P3-C-06-12R | 05/15/2000 | 0 | 0.5 | 1345931 | 483603.4 | Thorium-232 | 0.873 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Moisture Content | 13.9 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Radium-226 | 0.549 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Thorium-228 | 0.409 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Uranium, Total | 2.558 | ug/g dry | U | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Thorium-232 | 0.399 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-13R | 05/15/2000 | 0 | 0.5 | 1345787 | 483765 | Radium-228 | 0.399 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Moisture Content | 21.5 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Radium-228 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Radium-226 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Thorium-228 | 0.855 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Uranium, Total | 5.929 | ug/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-14R | 05/15/2000 | 0 | 0.5 | 1345953 | 483822.2 | Thorium-232 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Uranium, Total | 1.196 | ug/g dry | U | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Thorium-232 | 0.852 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Radium-226 | 0.967 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Thorium-228 | 0.835 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Radium-228 | 0.852 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Moisture Content | 20.8 | PERCENT | NV | DUPLICATE |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Thorium-228 | 0.895 | pCi/g dry | - | DUPLICATE |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Uranium, Total | 3.427 | ug/g dry | J | DUPLICATE |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Thorium-232 | 0.91 | pCi/g dry | - | DUPLICATE |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Radium-228 | 0.91 | pCi/g dry | - | DUPLICATE |

680000

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-06 | A1P3-C-06-16R-D | 05/15/2000 | 0 | 0.5 | 1345893 | 483916 | Radium-226 | 1.101 | pCi/g dry | - | DUPLICATE |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Moisture Content | 20.6 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Radium-226 | 1.138 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Thorium-228 | 0.831 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Uranium, Total | 9.309 | ug/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Thorium-232 | 0.855 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-1R | 05/15/2000 | 0 | 0.5 | 1345999 | 482878.7 | Radium-228 | 0.855 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Moisture Content | 6.8 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Radium-228 | 0.42 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Radium-226 | 0.639 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Thorium-228 | 0.423 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Uranium, Total | 1.466 | ug/g dry | U | NORMAL |
| A1P3-C-06 | A1P3-C-06-3R | 05/17/2000 | 0 | 0.5 | 1345861 | 483111.4 | Thorium-232 | 0.42 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Moisture Content | 24.2 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Uranium, Total | 5.183 | ug/g dry | J | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Thorium-232 | 0.723 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Radium-226 | 0.962 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Thorium-228 | 0.667 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-4R | 05/15/2000 | 0 | 0.5 | 1346042 | 483040.9 | Radium-228 | 0.723 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Moisture Content | 18.3 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Thorium-228 | 0.802 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Uranium, Total | 4.493 | ug/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Thorium-232 | 0.822 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Radium-228 | 0.822 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-5R | 05/17/2000 | 0 | 0.5 | 1345891 | 483205 | Radium-226 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Moisture Content | 16.4 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Radium-226 | 0.957 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Thorium-228 | 0.74 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Uranium, Total | 1.567 | ug/g dry | U | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Thorium-232 | 0.78 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-6R | 05/15/2000 | 0 | 0.5 | 1345967 | 483171.4 | Radium-228 | 0.78 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Moisture Content | 18.1 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Radium-228 | 0.846 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Radium-226 | 1.048 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Thorium-228 | 0.827 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Uranium, Total | 2.547 | ug/g dry | J | NORMAL |
| A1P3-C-06 | A1P3-C-06-8R | 05/15/2000 | 0 | 0.5 | 1345914 | 483360.1 | Thorium-232 | 0.846 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Moisture Content | 15.1 | PERCENT | NV | NORMAL |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Uranium, Total | 0.849 | ug/g dry | U | NORMAL |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Thorium-232 | 0.6 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Radium-226 | 0.694 | pCi/g dry | - | NORMAL |

060000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Thorium-228 | 0.595 | pCi/g dry | - | NORMAL |
| A1P3-C-06 | A1P3-C-06-9R | 05/15/2000 | 0 | 0.5 | 1345852 | 483490.3 | Radium-228 | 0.6 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Moisture Content | 21.7 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Radium-226 | 1.192 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Radium-228 | 0.879 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Thorium-228 | 0.868 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Thorium-232 | 0.879 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-11R | 05/15/2000 | 0 | 0.5 | 1346013 | 483903.9 | Uranium, Total | 6.341 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Moisture Content | 24.4 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Uranium, Total | 7.279 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Thorium-232 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Radium-226 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Radium-228 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-12R | 05/15/2000 | 0 | 0.5 | 1346195 | 483930.5 | Thorium-228 | 0.887 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Moisture Content | 19.9 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Thorium-228 | 1.029 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Uranium, Total | 3.742 | ug/g dry | U | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Thorium-232 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Radium-228 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-13R | 05/15/2000 | 0 | 0.5 | 1346322 | 483829.1 | Radium-226 | 1.285 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Moisture Content | 26.4 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Radium-226 | 1.118 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Thorium-228 | 0.89 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Uranium, Total | 2.591 | ug/g dry | J | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Thorium-232 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-14R | 05/15/2000 | 0 | 0.5 | 1346286 | 483959.4 | Radium-228 | 0.897 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Moisture Content | 25.2 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Radium-226 | 1.38 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Radium-228 | 1.125 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Thorium-228 | 1.127 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Uranium, Total | 3.769 | ug/g dry | J | NORMAL |
| A1P3-C-07 | A1P3-C-07-15R | 05/15/2000 | 0 | 0.5 | 1346413 | 483833 | Thorium-232 | 1.125 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Moisture Content | 25.9 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Radium-228 | 1.005 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Thorium-232 | 1.005 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Uranium, Total | 8.394 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Thorium-228 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-1R | 05/15/2000 | 0 | 0.5 | 1346068 | 483443.7 | Radium-226 | 1.219 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Moisture Content | 25.8 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Radium-228 | 0.843 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Thorium-228 | 0.817 | pCi/g dry | - | NORMAL |

000091

8830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Thorium-232 | 0.843 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Uranium, Total | 10.52 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-2R | 05/15/2000 | 0 | 0.5 | 1346215 | 483430.3 | Radium-226 | 1.095 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Moisture Content | 22.8 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Uranium, Total | 4.646 | ug/g dry | J | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Radium-226 | 1.242 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Radium-228 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Thorium-232 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-3R | 05/15/2000 | 0 | 0.5 | 1346046 | 483517 | Thorium-228 | 1.067 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Thorium-232 | 1.033 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Uranium, Total | 5.222 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Thorium-228 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Radium-226 | 1.2 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-6R | 05/15/2000 | 0 | 0.5 | 1346252 | 483597.5 | Radium-228 | 1.033 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Moisture Content | 23 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Radium-228 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Thorium-232 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Uranium, Total | 8.263 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Thorium-228 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-7R | 05/15/2000 | 0 | 0.5 | 1346095 | 483744.5 | Radium-226 | 1.224 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Moisture Content | 19.9 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Radium-228 | 1.269 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Thorium-228 | 1.257 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Thorium-232 | 1.269 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Uranium, Total | 4.31 | ug/g dry | J | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Radium-226 | 1.507 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Moisture Content | 22.4 | PERCENT | NV | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Uranium, Total | 10.6 | ug/g dry | J | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Radium-226 | 1.467 | pCi/g dry | - | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Radium-228 | 1.239 | pCi/g dry | - | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Thorium-232 | 1.239 | pCi/g dry | - | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-8R-D | 05/15/2000 | 0 | 0.5 | 1346178 | 483726 | Thorium-228 | 1.218 | pCi/g dry | - | DUPLICATE |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Moisture Content | 25.4 | PERCENT | NV | NORMAL |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Uranium, Total | 7.677 | ug/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Thorium-232 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Radium-226 | 1.218 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Radium-228 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-07 | A1P3-C-07-9R | 05/15/2000 | 0 | 0.5 | 1346007 | 473830.9 | Thorium-228 | 1 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Uranium, Total | 7.739 | ug/g dry | - | NORMAL |

000092

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Thorium-232 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Radium-226 | 1.162 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Radium-228 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-11R | 05/18/2000 | 0 | 0.5 | 1346222 | 483204.9 | Thorium-228 | 0.931 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Moisture Content | 28.8 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Thorium-228 | 0.957 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Uranium, Total | 8.978 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Thorium-232 | 0.964 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Radium-228 | 0.964 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-12R | 05/18/2000 | 0 | 0.5 | 1346294 | 483228 | Radium-226 | 1.189 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Moisture Content | 23.5 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Uranium, Total | 9.672 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Thorium-232 | 0.866 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Radium-226 | 1.089 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Radium-228 | 0.866 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-13R | 05/17/2000 | 0 | 0.5 | 1346060 | 483327.3 | Thorium-228 | 0.86 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Moisture Content | 22.7 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Thorium-228 | 0.861 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Uranium, Total | 9.661 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Thorium-232 | 0.869 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Radium-228 | 0.869 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-14R | 05/18/2000 | 0 | 0.5 | 1346127 | 483355.3 | Radium-226 | 1.128 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Moisture Content | 22 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Radium-226 | 1.355 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Thorium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Uranium, Total | 9.262 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Thorium-232 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Radium-228 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Moisture Content | 21.2 | PERCENT | NV | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Radium-226 | 1.278 | pCi/g dry | - | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Radium-228 | 1.033 | pCi/g dry | - | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Thorium-228 | 1.028 | pCi/g dry | - | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Uranium, Total | 7.271 | ug/g dry | - | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-16R-D | 05/18/2000 | 0 | 0.5 | 1346286 | 483367.7 | Thorium-232 | 1.033 | pCi/g dry | - | DUPLICATE |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Moisture Content | 25.6 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Thorium-228 | 0.893 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Uranium, Total | 5.692 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Thorium-232 | 0.913 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Radium-228 | 0.913 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-1R | 05/17/2000 | 0 | 0.5 | 1346104 | 482901.7 | Radium-226 | 1.221 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Moisture Content | 27.6 | PERCENT | NV | NORMAL |

000093

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Radium-226 | 1.258 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Thorium-228 | 0.92 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Uranium, Total | 10.112 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Thorium-232 | 0.974 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-3R | 05/17/2000 | 0 | 0.5 | 1346119 | 482966.8 | Radium-228 | 0.974 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Moisture Content | 26.4 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Radium-228 | 0.791 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Radium-226 | 1.064 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Thorium-228 | 0.802 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Uranium, Total | 12.582 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-4R | 05/18/2000 | 0 | 0.5 | 1346268 | 483028.2 | Thorium-232 | 0.791 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Moisture Content | 26.9 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Uranium, Total | 7.618 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Thorium-232 | 0.718 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Radium-226 | 0.945 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Thorium-228 | 0.704 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-5R | 05/17/2000 | 0 | 0.5 | 1346076 | 483085.2 | Radium-228 | 0.718 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Moisture Content | 30.2 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Thorium-228 | 0.83 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Uranium, Total | 10.902 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Thorium-232 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Radium-228 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-6R | 05/17/2000 | 0 | 0.5 | 1346110 | 483129 | Radium-226 | 1.139 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Moisture Content | 17.7 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Radium-226 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Thorium-228 | 0.707 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Uranium, Total | 8.041 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Thorium-232 | 0.731 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-8R | 05/18/2000 | 0 | 0.5 | 1346250 | 483124.8 | Radium-228 | 0.731 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Moisture Content | 27.1 | PERCENT | NV | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Radium-228 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Radium-226 | 1.311 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Thorium-228 | 1.04 | pCi/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Uranium, Total | 8.282 | ug/g dry | - | NORMAL |
| A1P3-C-08 | A1P3-C-08-9R | 05/17/2000 | 0 | 0.5 | 1346081 | 483243.9 | Thorium-232 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Moisture Content | 24.5 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Thorium-228 | 1.081 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Uranium, Total | 7.781 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Thorium-232 | 1.101 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Radium-228 | 1.101 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-11R | 05/08/2000 | 0 | 0.5 | 1346781 | 483900.2 | Radium-226 | 1.257 | pCi/g dry | - | NORMAL |

000094

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Moisture Content | 24.7 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Radium-226 | 1.251 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Thorium-228 | 0.975 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Uranium, Total | 4.981 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Thorium-232 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-12R | 05/08/2000 | 0 | 0.5 | 1346847 | 483862.7 | Radium-228 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Moisture Content | 22.6 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Radium-226 | 1.159 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Radium-228 | 0.985 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Thorium-228 | 0.968 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Uranium, Total | 7.162 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-13R | 05/08/2000 | 0 | 0.5 | 1346958 | 483660.9 | Thorium-232 | 0.985 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Moisture Content | 23.4 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Uranium, Total | 5.111 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Thorium-232 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Radium-226 | 1.231 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Radium-228 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-14R | 05/08/2000 | 0 | 0.5 | 1347079 | 483628 | Thorium-228 | 1.02 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Moisture Content | 21.5 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Thorium-228 | 1.048 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Uranium, Total | 7.675 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Thorium-232 | 1.053 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Radium-228 | 1.053 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-16R | 05/08/2000 | 0 | 0.5 | 1346967 | 483873.2 | Radium-226 | 1.316 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Radium-226 | 1.183 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Thorium-228 | 0.827 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Uranium, Total | 4.988 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Thorium-232 | 0.839 | pCi/g dry | J | NORMAL |
| A1P3-C-09 | A1P3-C-09-1R | 05/08/2000 | 0 | 0.5 | 1346373 | 483616 | Radium-228 | 0.839 | pCi/g dry | J | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Moisture Content | 23.5 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Thorium-228 | 0.902 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Uranium, Total | 7.329 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Thorium-232 | 0.912 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Radium-228 | 0.912 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-2R | 05/08/2000 | 0 | 0.5 | 1346482 | 483638.7 | Radium-226 | 1.059 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Moisture Content | 20.7 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Radium-226 | 1.173 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Thorium-228 | 0.98 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Uranium, Total | 7.858 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Thorium-232 | 0.992 | pCi/g dry | - | NORMAL |

3830

000095

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-09 | A1P3-C-09-3R | 05/08/2000 | 0 | 0.5 | 1346365 | 483702.5 | Radium-228 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Moisture Content | 23.1 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Radium-226 | 1.287 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Radium-228 | 1.119 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Thorium-228 | 1.109 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Uranium, Total | 6.011 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Thorium-232 | 1.119 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Moisture Content | 24.6 | PERCENT | NV | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Uranium, Total | 8.276 | ug/g dry | - | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Thorium-232 | 0.968 | pCi/g dry | - | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Radium-226 | 1.324 | pCi/g dry | - | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Radium-228 | 0.968 | pCi/g dry | - | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-5R-D | 05/08/2000 | 0 | 0.5 | 1346592 | 483718.6 | Thorium-228 | 0.955 | pCi/g dry | - | DUPLICATE |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Thorium-228 | 1.091 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Uranium, Total | 6.951 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Thorium-232 | 1.11 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Radium-228 | 1.11 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-6R | 05/08/2000 | 0 | 0.5 | 1346697 | 483670.7 | Radium-226 | 1.338 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Moisture Content | 28.5 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Radium-226 | 1.364 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Thorium-228 | 1.107 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Uranium, Total | 2.849 | ug/g dry | U | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Thorium-232 | 1.125 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-7R | 05/08/2000 | 0 | 0.5 | 1346640 | 483789.8 | Radium-228 | 1.125 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Moisture Content | 16.8 | PERCENT | NV | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Radium-226 | 1.146 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Radium-228 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Thorium-228 | 0.956 | pCi/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Uranium, Total | 6.338 | ug/g dry | - | NORMAL |
| A1P3-C-09 | A1P3-C-09-9R | 05/08/2000 | 0 | 0.5 | 1346818 | 483750.3 | Thorium-232 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Moisture Content | 18.6 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Uranium, Total | 9.199 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Thorium-232 | 1.076 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Radium-226 | 1.279 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Radium-228 | 1.076 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-11R | 05/03/2000 | 0 | 0.5 | 1347599 | 483807.7 | Thorium-228 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Moisture Content | 24.1 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Thorium-228 | 1.042 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Uranium, Total | 6.905 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Thorium-232 | 1.058 | pCi/g dry | - | NORMAL |

960000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Radium-228 | 1.058 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-12R | 05/03/2000 | 0 | 0.5 | 1347733 | 483819.2 | Radium-226 | 1.216 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Moisture Content | 17.9 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Radium-226 | 0.95 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Thorium-228 | 0.929 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Uranium, Total | 7.739 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Thorium-232 | 0.966 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-13R | 05/03/2000 | 0 | 0.5 | 1347853 | 483814.8 | Radium-228 | 0.966 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Moisture Content | 20.7 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Uranium, Total | 8.232 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Thorium-232 | 0.905 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Radium-226 | 1.091 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Radium-228 | 0.905 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-14R | 05/03/2000 | 0 | 0.5 | 1347902 | 483763.4 | Thorium-228 | 0.869 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Moisture Content | 22.2 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Thorium-228 | 1.032 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Uranium, Total | 8.473 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Thorium-232 | 1.036 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Radium-228 | 1.036 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-16R | 05/03/2000 | 0 | 0.5 | 1348132 | 483761.4 | Radium-226 | 1.286 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Thorium-228 | 0.974 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Thorium-232 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Radium-228 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Radium-226 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-2R | 05/03/2000 | 0 | 0.5 | 1347261 | 483671.5 | Uranium, Total | 7.421 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Moisture Content | 16.4 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Radium-226 | 1.313 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Thorium-228 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Uranium, Total | 5.395 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Thorium-232 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-3R | 05/09/2000 | 0 | 0.5 | 1347177 | 483900.5 | Radium-228 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Moisture Content | 16.7 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Radium-228 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Thorium-228 | 0.945 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Uranium, Total | 7.87 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Thorium-232 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-4R | 05/03/2000 | 0 | 0.5 | 1347213 | 483834.5 | Radium-226 | 1.193 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Moisture Content | 25.4 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Radium-226 | 1.243 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Radium-228 | 1.01 | pCi/g dry | - | NORMAL |

46000

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Thorium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Uranium, Total | 14.037 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-6R | 05/03/2000 | 0 | 0.5 | 1347487 | 483711.2 | Thorium-232 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Moisture Content | 19.8 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Uranium, Total | 9.668 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Thorium-232 | 0.978 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Radium-226 | 1.081 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Radium-228 | 0.978 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-7R | 05/03/2000 | 0 | 0.5 | 1347326 | 483819.7 | Thorium-228 | 0.963 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Moisture Content | 19.5 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Thorium-228 | 0.997 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Uranium, Total | 4.955 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Thorium-232 | 1.024 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Radium-228 | 1.024 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Radium-226 | 1.224 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Moisture Content | 17.1 | PERCENT | NV | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Radium-226 | 1.278 | pCi/g dry | - | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Thorium-228 | 1.115 | pCi/g dry | - | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Uranium, Total | 4.837 | ug/g dry | J | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Thorium-232 | 1.129 | pCi/g dry | - | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-8R-D | 05/03/2000 | 0 | 0.5 | 1347457 | 483869.2 | Radium-228 | 1.129 | pCi/g dry | - | DUPLICATE |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Moisture Content | 16.8 | PERCENT | NV | NORMAL |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Radium-226 | 1.334 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Radium-228 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Thorium-228 | 1.08 | pCi/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Uranium, Total | 6.173 | ug/g dry | - | NORMAL |
| A1P3-C-10 | A1P3-C-10-9R | 05/03/2000 | 0 | 0.5 | 1347575 | 483720.2 | Thorium-232 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Moisture Content | 22 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Radium-226 | 1.28 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Thorium-228 | 0.981 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Uranium, Total | 9.712 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Thorium-232 | 1.001 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-10R | 05/08/2000 | 0 | 0.5 | 1347563 | 483456.2 | Radium-228 | 1.001 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Moisture Content | 19 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Radium-226 | 1.388 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Radium-228 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Thorium-228 | 1.032 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Uranium, Total | 8.631 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-12R | 05/08/2000 | 0 | 0.5 | 1347738 | 483567.7 | Thorium-232 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Moisture Content | 21.4 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Thorium-228 | 0.978 | pCi/g dry | - | NORMAL |

860000

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Thorium-232 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Radium-228 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Radium-226 | 1.1 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-14R | 05/08/2000 | 0 | 0.5 | 1348031 | 483505.5 | Uranium, Total | 7.812 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Moisture Content | 20.6 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Uranium, Total | 8.126 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Thorium-232 | 0.896 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Thorium-228 | 0.874 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Radium-228 | 0.896 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-15R | 05/08/2000 | 0 | 0.5 | 1347942 | 483631.7 | Radium-226 | 1.055 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Moisture Content | 18.7 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Radium-226 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Thorium-228 | 0.949 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Uranium, Total | 9.243 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Thorium-232 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-16R | 05/08/2000 | 0 | 0.5 | 1348049 | 483637.6 | Radium-228 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Moisture Content | 20.7 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Radium-226 | 1.17 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Thorium-228 | 0.928 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Uranium, Total | 5.961 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Thorium-232 | 0.964 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-1R | 05/08/2000 | 0 | 0.5 | 1346499 | 483438 | Radium-228 | 0.964 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Moisture Content | 25.7 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Radium-228 | 1.079 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Radium-226 | 1.301 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Thorium-228 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Uranium, Total | 6.428 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-2R | 05/08/2000 | 0 | 0.5 | 1346658 | 483448.3 | Thorium-232 | 1.079 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Uranium, Total | 8.962 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Thorium-232 | 1.061 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Radium-226 | 1.248 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Thorium-228 | 1.121 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-4R | 05/08/2000 | 0 | 0.5 | 1346981 | 483497.7 | Radium-228 | 1.061 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Moisture Content | 21.4 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Thorium-228 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Uranium, Total | 7.08 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Thorium-232 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Radium-228 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-6R | 05/08/2000 | 0 | 0.5 | 1347213 | 483513.3 | Radium-226 | 1.118 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Moisture Content | 24.3 | PERCENT | NV | NORMAL |

3830

000099

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Radium-226 | 1.374 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Thorium-228 | 1.151 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Uranium, Total | 7.385 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Thorium-232 | 1.166 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-7R | 05/08/2000 | 0 | 0.5 | 1347334 | 483506.2 | Radium-228 | 1.166 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Moisture Content | 27.6 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Radium-228 | 1.03 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Radium-226 | 1.233 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Thorium-228 | 1.046 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Uranium, Total | 12.288 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-8R | 05/08/2000 | 0 | 0.5 | 1347404 | 483478.6 | Thorium-232 | 1.03 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Moisture Content | 22.5 | PERCENT | NV | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Radium-226 | 1.298 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Radium-228 | 1.085 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Thorium-228 | 1.095 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Uranium, Total | 11.365 | ug/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Thorium-232 | 1.085 | pCi/g dry | - | NORMAL |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Moisture Content | 17.3 | PERCENT | NV | DUPLICATE |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Thorium-228 | 0.998 | pCi/g dry | - | DUPLICATE |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Thorium-232 | 1.017 | pCi/g dry | - | DUPLICATE |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Radium-228 | 1.017 | pCi/g dry | - | DUPLICATE |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Radium-226 | 1.33 | pCi/g dry | - | DUPLICATE |
| A1P3-C-11 | A1P3-C-11-9R-D | 05/08/2000 | 0 | 0.5 | 1347471 | 483505.6 | Uranium, Total | 8.154 | ug/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Moisture Content | 26.1 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Thorium-228 | 0.951 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Uranium, Total | 7.749 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Thorium-232 | 0.981 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Radium-228 | 0.981 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-10R | 05/17/2000 | 0 | 0.5 | 1347061 | 483207.2 | Radium-226 | 1.266 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Moisture Content | 21.2 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Radium-226 | 1.145 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Thorium-228 | 0.904 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Uranium, Total | 6.555 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Thorium-232 | 0.924 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-12R | 05/17/2000 | 0 | 0.5 | 1346026 | 483311.3 | Radium-228 | 0.924 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Moisture Content | 18 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Radium-226 | 1.145 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Thorium-228 | 1.021 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Uranium, Total | 11.355 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Thorium-232 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-13R | 05/17/2000 | 0 | 0.5 | 1347246 | 483219.9 | Radium-228 | 1.047 | pCi/g dry | - | NORMAL |

000100

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Radium-228 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Radium-226 | 1.116 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Thorium-228 | 1.014 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Uranium, Total | 9.85 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-14R | 05/17/2000 | 0 | 0.5 | 1347356 | 483204.7 | Thorium-232 | 1.039 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Moisture Content | 22.4 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Uranium, Total | 9.352 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Thorium-232 | 1.038 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Radium-226 | 1.137 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Thorium-228 | 1 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-16R | 05/17/2000 | 0 | 0.5 | 1347358 | 483317.2 | Radium-228 | 1.038 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Moisture Content | 22.6 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Radium-226 | 1.235 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Thorium-228 | 0.901 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Uranium, Total | 8.644 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Thorium-232 | 0.899 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Radium-228 | 0.899 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Moisture Content | 21 | PERCENT | NV | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Radium-228 | 1.003 | pCi/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Radium-226 | 1.215 | pCi/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Thorium-228 | 0.952 | pCi/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Uranium, Total | 6.093 | ug/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-2R-D | 05/16/2000 | 0 | 0.5 | 1346625 | 483206.2 | Thorium-232 | 1.003 | pCi/g dry | - | DUPLICATE |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Moisture Content | 23.3 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Thorium-232 | 0.991 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Uranium, Total | 7.626 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Thorium-228 | 0.975 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Radium-226 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-3R | 05/17/2000 | 0 | 0.5 | 1346484 | 483288.3 | Radium-228 | 0.991 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Moisture Content | 18.1 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Radium-228 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Thorium-232 | 0.927 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Uranium, Total | 5.414 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Thorium-228 | 0.912 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-4R | 05/16/2000 | 0 | 0.5 | 1346548 | 483252.8 | Radium-226 | 1.172 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Moisture Content | 20.4 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Radium-228 | 0.85 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Thorium-228 | 0.836 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Thorium-232 | 0.85 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Uranium, Total | 5.993 | ug/g dry | - | NORMAL |

000101

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-12 | A1P3-C-12-5R | 05/16/2000 | 0 | 0.5 | 1346743 | 483224.3 | Radium-226 | 0.993 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Moisture Content | 25.1 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Uranium, Total | 8.297 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Radium-226 | 1.273 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Radium-228 | 1.064 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Thorium-232 | 1.064 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-7R | 05/16/2000 | 0 | 0.5 | 1346670 | 483303.5 | Thorium-228 | 1.027 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Moisture Content | 19.9 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Radium-226 | 1.071 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Thorium-228 | 1.001 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Radium-228 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Thorium-232 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-8R | 05/16/2000 | 0 | 0.5 | 1346795 | 483283.1 | Uranium, Total | 4.592 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Moisture Content | 23.5 | PERCENT | NV | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Thorium-232 | 0.807 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Uranium, Total | 7.653 | ug/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Thorium-228 | 0.787 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Radium-226 | 1.072 | pCi/g dry | - | NORMAL |
| A1P3-C-12 | A1P3-C-12-9R | 05/17/2000 | 0 | 0.5 | 1347001 | 483203.1 | Radium-228 | 0.807 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Moisture Content | 23.4 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Thorium-228 | 1.016 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Thorium-232 | 1.06 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Uranium, Total | 11.329 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Radium-228 | 1.06 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-11R | 05/10/2000 | 0 | 0.5 | 1347848 | 483297.8 | Radium-226 | 1.177 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Moisture Content | 21.4 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Radium-228 | 1.104 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Thorium-228 | 1.089 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Uranium, Total | 11.512 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Thorium-232 | 1.104 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-12R | 05/10/2000 | 0 | 0.5 | 1347934 | 483297 | Radium-226 | 1.3 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Moisture Content | 22.2 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Uranium, Total | 12.671 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Thorium-232 | 1.145 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Radium-226 | 1.223 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Thorium-228 | 1.123 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-14R | 05/10/2000 | 0 | 0.5 | 1348107 | 483223.3 | Radium-228 | 1.145 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Moisture Content | 26.6 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Thorium-228 | 1.012 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Uranium, Total | 16.118 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Thorium-232 | 1.034 | pCi/g dry | - | NORMAL |

000102

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Radium-226 | 1.171 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-15R | 05/10/2000 | 0 | 0.5 | 1348007 | 483345.9 | Radium-228 | 1.034 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Moisture Content | 19.5 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Thorium-228 | 1.169 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Thorium-232 | 1.159 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Uranium, Total | 9.804 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Radium-228 | 1.159 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-16R | 05/10/2000 | 0 | 0.5 | 1348129 | 483362.2 | Radium-226 | 1.232 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Moisture Content | 22.8 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Uranium, Total | 8.831 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Thorium-232 | 1.139 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Thorium-228 | 1.114 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Radium-228 | 1.139 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-1R | 05/11/2000 | 0 | 0.5 | 1347458 | 483212.8 | Radium-226 | 1.299 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Moisture Content | 17.5 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Radium-226 | 1.306 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Radium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Uranium, Total | 10.521 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Thorium-232 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-2R | 05/11/2000 | 0 | 0.5 | 1347523 | 483235.1 | Thorium-228 | 1.009 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Moisture Content | 19 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Radium-226 | 1.202 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Thorium-228 | 1.019 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Radium-228 | 1.05 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Thorium-232 | 1.05 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-4R | 05/11/2000 | 0 | 0.5 | 1347587 | 483320.2 | Uranium, Total | 9.52 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Radium-228 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Uranium, Total | 12.139 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Thorium-232 | 0.938 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Thorium-228 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-5R | 05/11/2000 | 0 | 0.5 | 1347661 | 483239 | Radium-226 | 1.074 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Moisture Content | 23.9 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Uranium, Total | 10.594 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Thorium-232 | 1.068 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Thorium-228 | 1.005 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Radium-228 | 1.068 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-6R | 05/10/2000 | 0 | 0.5 | 1347799 | 483225.3 | Radium-226 | 1.106 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Moisture Content | 23.8 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Radium-226 | 1.14 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Radium-228 | 1.018 | pCi/g dry | - | NORMAL |

000103

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Uranium, Total | 10.017 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Thorium-232 | 1.018 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-8R | 05/10/2000 | 0 | 0.5 | 1347807 | 483338.7 | Thorium-228 | 0.998 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Moisture Content | 22 | PERCENT | NV | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Radium-226 | 1.187 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Thorium-228 | 1.009 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Radium-228 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Thorium-232 | 1.017 | pCi/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Uranium, Total | 11.722 | ug/g dry | - | NORMAL |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Moisture Content | 21.6 | PERCENT | NV | DUPLICATE |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Radium-228 | 1.005 | pCi/g dry | - | DUPLICATE |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Uranium, Total | 12.956 | ug/g dry | - | DUPLICATE |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Thorium-232 | 1.005 | pCi/g dry | - | DUPLICATE |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Thorium-228 | 1.002 | pCi/g dry | - | DUPLICATE |
| A1P3-C-13 | A1P3-C-13-9R-D | 05/10/2000 | 0 | 0.5 | 1347847 | 483196.6 | Radium-226 | 1.171 | pCi/g dry | - | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Beryllium | 0.41 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Radium-228 | 1.063 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Thorium-228 | 1.056 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Thorium-232 | 1.063 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Uranium, Total | 2.273 | ug/g dry | U | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Radium-226 | 1.368 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-10RM | 05/17/2000 | 0 | 0.5 | 1347017 | 482917.5 | Moisture Content | 22.3 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Radium-228 | 0.949 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Thorium-228 | 0.917 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Thorium-232 | 0.949 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Uranium, Total | 6.9 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Radium-226 | 1.174 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-11RM | 05/17/2000 | 0 | 0.5 | 1346952 | 483040 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Beryllium | 0.41 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Radium-226 | 1.192 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Thorium-228 | 1.139 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Thorium-232 | 1.134 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Uranium, Total | 12.636 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Radium-228 | 1.134 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-13RM | 05/17/2000 | 0 | 0.5 | 1347130 | 482897.2 | Moisture Content | 26.6 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Beryllium | 0.37 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Uranium, Total | 15.562 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Radium-226 | 1.306 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Radium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Thorium-232 | 1.044 | pCi/g dry | - | NORMAL |

000104

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Thorium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-15RM | 05/17/2000 | 0 | 0.5 | 1347161 | 483048.5 | Moisture Content | 25.8 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Beryllium | 0.22 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Uranium, Total | 10.792 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Thorium-232 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Radium-226 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Radium-228 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Thorium-228 | 0.819 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-16RM | 05/17/2000 | 0 | 0.5 | 1347274 | 483027.4 | Moisture Content | 24.8 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Beryllium | 0.23 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Radium-228 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Thorium-232 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Uranium, Total | 7.823 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Thorium-228 | 1.009 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-2RM | 05/17/2000 | 0 | 0.5 | 1346481 | 482981 | Radium-226 | 1.128 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Radium-226 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Thorium-228 | 0.874 | pCi/g dry | J | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Uranium, Total | 8.417 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Thorium-232 | 0.881 | pCi/g dry | J | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Radium-228 | 0.881 | pCi/g dry | J | NORMAL |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Beryllium | 0.03 | mg/kg dry | U | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Radium-226 | 1.18 | pCi/g dry | - | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Moisture Content | 21.7 | PERCENT | NV | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Radium-228 | 1.08 | pCi/g dry | J | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Thorium-232 | 1.08 | pCi/g dry | J | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Uranium, Total | 8.338 | ug/g dry | - | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-3RM-D | 05/17/2000 | 0 | 0.5 | 1346638 | 482887.2 | Thorium-228 | 1.075 | pCi/g dry | J | DUPLICATE |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Beryllium | 0.26 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Radium-226 | 1.081 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Radium-228 | 0.984 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Moisture Content | 21.9 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Thorium-228 | 0.971 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Uranium, Total | 9.351 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-4RM | 05/17/2000 | 0 | 0.5 | 1346628 | 483051.9 | Thorium-232 | 0.984 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Beryllium | 0.22 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Uranium, Total | 10.476 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Thorium-232 | 0.958 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Thorium-228 | 0.89 | pCi/g dry | - | NORMAL |

000105

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Moisture Content | 20.1 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Radium-228 | 0.958 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-6RM | 05/17/2000 | 0 | 0.5 | 1346871 | 482898.2 | Radium-226 | 1.184 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Beryllium | 0.53 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Thorium-232 | 0.987 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Uranium, Total | 8.801 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Thorium-228 | 0.967 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Moisture Content | 24.5 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Radium-228 | 0.987 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-7RM | 05/17/2000 | 0 | 0.5 | 1346722 | 483053 | Radium-226 | 1.331 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Beryllium | 0.66 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Thorium-228 | 0.933 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Uranium, Total | 11.608 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Thorium-232 | 0.954 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Radium-228 | 0.954 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Moisture Content | 24.9 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-8RM | 05/17/2000 | 0 | 0.5 | 1346815 | 482985 | Radium-226 | 1.368 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Beryllium | 0.23 | mg/kg dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Radium-228 | 0.971 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Thorium-232 | 0.971 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Uranium, Total | 8.426 | ug/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Thorium-228 | 0.97 | pCi/g dry | - | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Moisture Content | 21.6 | PERCENT | NV | NORMAL |
| A1P3-C-14 | A1P3-C-14-9RM | 05/17/2000 | 0 | 0.5 | 1346932 | 482946 | Radium-226 | 1.188 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Beryllium | 0.36 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Radium-228 | 1.144 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Thorium-228 | 1.136 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Uranium, Total | 16.845 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Thorium-232 | 1.144 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Moisture Content | 22.7 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-10RM | 05/18/2000 | 0 | 0.5 | 1347919 | 482859.6 | Radium-226 | 1.375 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Beryllium | 0.04 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Radium-228 | 0.989 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Thorium-228 | 0.977 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Thorium-232 | 0.989 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Uranium, Total | 11.601 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Radium-226 | 1.151 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-11RM | 05/18/2000 | 0 | 0.5 | 1347930 | 482699.6 | Moisture Content | 22.1 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Beryllium | 0.16 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Radium-226 | 1.288 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Thorium-228 | 1.027 | pCi/g dry | - | NORMAL |

000106

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|------------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Thorium-232 | 1.089 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Uranium, Total | 20.668 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Radium-228 | 1.089 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-12RM | 05/18/2000 | 0 | 0.5 | 1347866 | 482920 | Moisture Content | 29.4 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Uranium, Total | 15.238 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Radium-226 | 1.173 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Radium-228 | 0.963 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Thorium-232 | 0.963 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Thorium-228 | 0.951 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-14RM | 05/18/2000 | 0 | 0.5 | 1347832 | 483023.9 | Moisture Content | 27.5 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Beryllium | 0.36 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Uranium, Total | 12.395 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Thorium-232 | 1.138 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Radium-226 | 1.495 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Radium-228 | 1.138 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Thorium-228 | 1.104 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-15RM | 05/18/2000 | 0 | 0.5 | 1347804 | 483110 | Moisture Content | 23.3 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Beryllium | 0.5 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Thorium-232 | 1.205 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Uranium, Total | 16.924 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Thorium-228 | 1.196 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Moisture Content | 23.4 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Radium-228 | 1.205 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Radium-226 | 1.362 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Beryllium | 0.47 | mg/kg dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Thorium-228 | 1.102 | pCi/g dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Uranium, Total | 15.384 | ug/g dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Thorium-232 | 1.131 | pCi/g dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Radium-228 | 1.131 | pCi/g dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Moisture Content | 20.2 | PERCENT | NV | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-16RM-D | 05/18/2000 | 0 | 0.5 | 1347941 | 483054 | Radium-226 | 1.28 | pCi/g dry | - | DUPLICATE |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Radium-228 | 1.083 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Thorium-228 | 1.091 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Thorium-232 | 1.083 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Uranium, Total | 17.509 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Radium-226 | 1.233 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-1RM | 05/18/2000 | 0 | 0.5 | 1347299 | 482855.7 | Moisture Content | 25.2 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Radium-226 | 1.146 | pCi/g dry | - | NORMAL |

3830

000107

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Thorium-228 | 0.939 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Thorium-232 | 0.941 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Uranium, Total | 15.295 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Radium-228 | 0.941 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-3RM | 05/18/2000 | 0 | 0.5 | 1347495 | 482848.5 | Moisture Content | 25.2 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Beryllium | 0.37 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Uranium, Total | 14.625 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Radium-226 | 1.447 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Radium-228 | 1.058 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Thorium-232 | 1.058 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Thorium-228 | 1.046 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-4RM | 05/18/2000 | 0 | 0.5 | 1347635 | 482866.6 | Moisture Content | 21.7 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Beryllium | 0.15 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Uranium, Total | 12.404 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Thorium-232 | 0.962 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Radium-226 | 1.266 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Radium-228 | 0.962 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Thorium-228 | 0.937 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-5RM | 05/18/2000 | 0 | 0.5 | 1347331 | 482981.4 | Moisture Content | 22.7 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Beryllium | 0.23 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Thorium-232 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Uranium, Total | 13.911 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Thorium-228 | 0.934 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Moisture Content | 25.9 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Radium-228 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-7RM | 05/18/2000 | 0 | 0.5 | 1347646 | 482980 | Radium-226 | 1.176 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Beryllium | 0.22 | mg/kg dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Thorium-228 | 1.016 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Uranium, Total | 7.996 | ug/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Thorium-232 | 1.049 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Radium-228 | 1.049 | pCi/g dry | - | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Moisture Content | 17.1 | PERCENT | NV | NORMAL |
| A1P3-C-15 | A1P3-C-15-8RM | 05/18/2000 | 0 | 0.5 | 1347583 | 483139.3 | Radium-226 | 1.249 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Beryllium | 0.31 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Radium-228 | 0.941 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Thorium-228 | 0.936 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Thorium-232 | 0.941 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Uranium, Total | 25.126 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Radium-226 | 1.191 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-10RM | 05/10/2000 | 0 | 0.5 | 1348294 | 482619.7 | Moisture Content | 24 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Beryllium | 0.3 | mg/kg dry | - | NORMAL |

000108

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|------------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Radium-226 | 1.255 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Thorium-228 | 1.025 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Thorium-232 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Uranium, Total | 15.824 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Radium-228 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Moisture Content | 17.8 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-12RM | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Beryllium | 0.26 | mg/kg dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Uranium, Total | 14.974 | ug/g dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Radium-226 | 1.344 | pCi/g dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Radium-228 | 1.064 | pCi/g dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Thorium-232 | 1.064 | pCi/g dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Thorium-228 | 1.045 | pCi/g dry | - | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-12RM-D | 05/10/2000 | 0 | 0.5 | 1348343 | 482691.5 | Moisture Content | 18 | PERCENT | NV | DUPLICATE |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Beryllium | 0.17 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Uranium, Total | 24.24 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Thorium-232 | 0.67 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Thorium-228 | 0.615 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Radium-228 | 0.67 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Radium-226 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348464 | 482558.5 | Moisture Content | 17.2 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-13RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Beryllium | 0.19 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Radium-226 | 1.041 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Uranium, Total | 19.397 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Thorium-232 | 0.803 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Thorium-228 | 0.794 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Radium-228 | 0.803 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482621.3 | Moisture Content | 15.6 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-14RM | 05/10/2000 | 0 | 0.5 | 1348664 | 482683.9 | Beryllium | 0.3 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Moisture Content | 17 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Radium-228 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Uranium, Total | 30.474 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Thorium-232 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Thorium-228 | 0.762 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Radium-226 | 0.919 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-16RM | 05/10/2000 | 0 | 0.5 | 1348634 | 482683.9 | Beryllium | 0.32 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Moisture Content | 15.3 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Radium-226 | 1.26 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Thorium-228 | 0.972 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Uranium, Total | 9.701 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Thorium-232 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Radium-228 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-1RM | 05/10/2000 | 0 | 0.5 | 1347298 | 482703 | Radium-228 | 0.982 | pCi/g dry | - | NORMAL |

000109

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Beryllium | 0.16 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Moisture Content | 20.2 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Radium-226 | 1.23 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Radium-228 | 1.17 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Thorium-232 | 1.17 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Uranium, Total | 9.711 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-2RM | 05/10/2000 | 0 | 0.5 | 1347443 | 482723.2 | Thorium-228 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Beryllium | 0.18 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Radium-228 | 0.684 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Radium-226 | 1.094 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Thorium-228 | 0.676 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Uranium, Total | 6.676 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-3RM | 05/10/2000 | 0 | 0.5 | 1347555 | 482665.6 | Thorium-232 | 0.684 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Beryllium | 0.29 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Radium-228 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Thorium-228 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Radium-226 | 1.172 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Moisture Content | 21.1 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Thorium-232 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-5RM | 05/10/2000 | 0 | 0.5 | 1347756 | 482633.6 | Uranium, Total | 24.896 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Beryllium | 0.05 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Moisture Content | 22.8 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Thorium-228 | 0.934 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Thorium-232 | 0.947 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Radium-228 | 0.947 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Radium-226 | 1.136 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-6RM | 05/10/2000 | 0 | 0.5 | 1347897 | 482635.4 | Uranium, Total | 47.489 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Beryllium | 0.31 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Uranium, Total | 22.854 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Thorium-232 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Thorium-228 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Radium-228 | 1.022 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Radium-226 | 1.289 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-8RM | 05/10/2000 | 0 | 0.5 | 1348006 | 482687.6 | Moisture Content | 23 | PERCENT | NV | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Beryllium | 0.09 | mg/kg dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Radium-226 | 1.308 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Uranium, Total | 14.741 | ug/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Thorium-232 | 1.062 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Thorium-228 | 1.04 | pCi/g dry | - | NORMAL |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Radium-228 | 1.062 | pCi/g dry | - | NORMAL |

000110

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-16 | A1P3-C-16-9RM | 05/10/2000 | 0 | 0.5 | 1348164 | 482592.4 | Moisture Content | 22.1 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Moisture Content | 23.1 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Uranium, Total | 7.756 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Thorium-232 | 1.112 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Radium-226 | 1.287 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Radium-228 | 1.112 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-10R | 05/09/2000 | 0 | 0.5 | 1348487 | 483688.9 | Thorium-228 | 1.12 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Moisture Content | 23.3 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Thorium-228 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Uranium, Total | 2.536 | ug/g dry | U | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Thorium-232 | 1.067 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Radium-226 | 1.067 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-12R | 05/09/2000 | 0 | 0.5 | 1348525 | 483773.8 | Radium-226 | 1.186 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Moisture Content | 33 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Radium-226 | 1.208 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Thorium-228 | 0.887 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Uranium, Total | 5.338 | ug/g dry | J | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Thorium-232 | 0.921 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-14R | 05/09/2000 | 0 | 0.5 | 1348848 | 483735.1 | Radium-228 | 0.921 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Moisture Content | 26.4 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Radium-226 | 1.237 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Radium-228 | 1.007 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Thorium-228 | 0.976 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Uranium, Total | 17.24 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-15R | 05/09/2000 | 0 | 0.5 | 1348683 | 483847.7 | Thorium-232 | 1.007 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Uranium, Total | 12.378 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Thorium-232 | 1.142 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Radium-226 | 1.293 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Radium-228 | 1.142 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Thorium-228 | 1.129 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Moisture Content | 24.7 | PERCENT | NV | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Thorium-228 | 1.161 | pCi/g dry | - | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Uranium, Total | 9.289 | ug/g dry | - | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Thorium-232 | 1.164 | pCi/g dry | - | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Radium-228 | 1.164 | pCi/g dry | - | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-16R-D | 05/09/2000 | 0 | 0.5 | 1348764 | 483820.6 | Radium-226 | 1.216 | pCi/g dry | - | DUPLICATE |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Moisture Content | 16.2 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Uranium, Total | 11.902 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Thorium-232 | 0.95 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Radium-226 | 1.098 | pCi/g dry | - | NORMAL |

000111

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Radium-228 | 0.95 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-1R | 05/09/2000 | 0 | 0.5 | 1348349 | 483535.2 | Thorium-228 | 0.933 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Moisture Content | 27.9 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Thorium-228 | 1.019 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Uranium, Total | 12.007 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Thorium-232 | 1.041 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Radium-228 | 1.041 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-2R | 05/09/2000 | 0 | 0.5 | 1348437 | 483511 | Radium-226 | 1.293 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Moisture Content | 22.7 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Radium-226 | 1.211 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Thorium-228 | 0.918 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Uranium, Total | 9.154 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Thorium-232 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-4R | 05/09/2000 | 0 | 0.5 | 1348409 | 483642.6 | Radium-228 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Radium-226 | 1.23 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Thorium-228 | 1.204 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Uranium, Total | 14.014 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Thorium-232 | 1.22 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-6R | 05/09/2000 | 0 | 0.5 | 1348805 | 483544.9 | Radium-228 | 1.22 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Moisture Content | 22.8 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Radium-226 | 1.247 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Radium-228 | 1.093 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Thorium-228 | 1.086 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Uranium, Total | 8.531 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-7R | 05/09/2000 | 0 | 0.5 | 1348580 | 483648 | Thorium-232 | 1.093 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Moisture Content | 22.1 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Thorium-228 | 1.134 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Thorium-232 | 1.141 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Radium-228 | 1.141 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Radium-226 | 1.171 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-8R | 05/09/2000 | 0 | 0.5 | 1348747 | 483629.2 | Uranium, Total | 11.665 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Moisture Content | 32 | PERCENT | NV | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Uranium, Total | 15.789 | ug/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Thorium-232 | 0.991 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Thorium-228 | 0.966 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Radium-228 | 0.991 | pCi/g dry | - | NORMAL |
| A1P3-C-17 | A1P3-C-17-9R | 05/09/2000 | 0 | 0.5 | 1348284 | 483763.7 | Radium-226 | 1.183 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Moisture Content | 23.4 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Radium-226 | 1.306 | pCi/g dry | J | NORMAL |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Radium-228 | 1.058 | pCi/g dry | - | NORMAL |

0112

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Thorium-228 | 1.042 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Uranium, Total | 10.313 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-11R | 05/09/2000 | 0 | 0.5 | 1348657 | 483380.6 | Thorium-232 | 1.058 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Moisture Content | 26.5 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Radium-226 | 1.24 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Radium-228 | 1.093 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Thorium-228 | 1.075 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Thorium-232 | 1.093 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-12R | 05/09/2000 | 0 | 0.5 | 1348733 | 483373.1 | Uranium, Total | 12.011 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Moisture Content | 26.6 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Radium-226 | 1.239 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Radium-228 | 1.025 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Thorium-228 | 1.045 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Thorium-232 | 1.025 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-13R | 05/09/2000 | 0 | 0.5 | 1348851 | 483140.2 | Uranium, Total | 12.486 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Moisture Content | 24.3 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Radium-226 | 1.272 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Thorium-228 | 1.069 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Uranium, Total | 7.908 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Thorium-232 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-14R | 05/09/2000 | 0 | 0.5 | 1348913 | 483119.9 | Radium-228 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Moisture Content | 25.1 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Radium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Radium-226 | 1.253 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Thorium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Uranium, Total | 14.52 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-16R | 05/09/2000 | 0 | 0.5 | 1348816 | 483354 | Thorium-232 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Moisture Content | 19.9 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Radium-226 | 1.202 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Thorium-228 | 1.08 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Uranium, Total | 15.095 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Thorium-232 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-1R | 05/09/2000 | 0 | 0.5 | 1348317 | 483237.6 | Radium-228 | 1.07 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Moisture Content | 19.7 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Radium-228 | 0.96 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Radium-226 | 1.056 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Thorium-228 | 0.925 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Uranium, Total | 8.026 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-2R | 05/09/2000 | 0 | 0.5 | 1348411 | 483228.2 | Thorium-232 | 0.96 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Moisture Content | 18.4 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Thorium-228 | 1.023 | pCi/g dry | - | NORMAL |

000113

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Thorium-232 | 1.075 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Uranium, Total | 9.586 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Radium-228 | 1.075 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-4R | 05/09/2000 | 0 | 0.5 | 1348404 | 483371.5 | Radium-226 | 1.243 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Moisture Content | 24.1 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Uranium, Total | 4.747 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Thorium-232 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Radium-226 | 1.194 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Thorium-228 | 0.996 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-5R | 05/09/2000 | 0 | 0.5 | 1348468 | 483199.2 | Radium-228 | 1.004 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Moisture Content | 24.2 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Thorium-228 | 1.055 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Uranium, Total | 12.421 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Thorium-232 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Radium-228 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-7R | 05/09/2000 | 0 | 0.5 | 1348465 | 483393.4 | Radium-226 | 1.338 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Radium-226 | 1.206 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Thorium-228 | 0.989 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Uranium, Total | 15.138 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Thorium-232 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-8R | 05/09/2000 | 0 | 0.5 | 1348562 | 483320 | Radium-228 | 1.003 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Moisture Content | 23.1 | PERCENT | NV | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Radium-226 | 1.175 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Radium-228 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Thorium-228 | 1.1 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Thorium-232 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Uranium, Total | 11.971 | ug/g dry | - | NORMAL |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Moisture Content | 24.1 | PERCENT | NV | DUPLICATE |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Radium-226 | 1.053 | pCi/g dry | - | DUPLICATE |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Radium-228 | 1.088 | pCi/g dry | - | DUPLICATE |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Thorium-228 | 1.091 | pCi/g dry | - | DUPLICATE |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Thorium-232 | 1.088 | pCi/g dry | - | DUPLICATE |
| A1P3-C-18 | A1P3-C-18-9R-D | 05/09/2000 | 0 | 0.5 | 1348675 | 483233.2 | Uranium, Total | 8.692 | ug/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Beryllium | 0.04 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Radium-228 | 0.777 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Thorium-228 | 0.777 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Thorium-232 | 0.777 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Uranium, Total | 13.865 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Radium-226 | 0.874 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1ORM | 05/02/2000 | 0 | 0.5 | 1348565 | 482845.3 | Moisture Content | 23.6 | PERCENT | NV | NORMAL |

00114

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|------------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Beryllium | 0.36 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Radium-226 | 1.164 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Thorium-228 | 0.934 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Thorium-232 | 0.954 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Uranium, Total | 6.701 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Radium-228 | 0.954 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-12RM | 05/02/2000 | 0 | 0.5 | 1348581 | 482978.5 | Moisture Content | 25.5 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Beryllium | 0.03 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Uranium, Total | 23.626 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Radium-226 | 1.165 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Radium-228 | 0.947 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Thorium-232 | 0.947 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Thorium-228 | 0.941 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-13RM | 05/02/2000 | 0 | 0.5 | 1348641 | 482777 | Moisture Content | 26.4 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Beryllium | 0.12 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Radium-228 | 0.87 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Thorium-228 | 0.866 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Thorium-232 | 0.87 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Uranium, Total | 14.837 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Radium-226 | 1.055 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Moisture Content | 22.5 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Beryllium | 0.25 | mg/kg dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Radium-226 | 1.002 | pCi/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Thorium-228 | 0.8 | pCi/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Thorium-232 | 0.797 | pCi/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Uranium, Total | 13.586 | ug/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Radium-228 | 0.797 | pCi/g dry | - | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-15RM-D | 05/02/2000 | 0 | 0.5 | 1348705 | 482984.9 | Moisture Content | 22.3 | PERCENT | NV | DUPLICATE |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Thorium-232 | 0.819 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Uranium, Total | 10.122 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Thorium-228 | 0.801 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Moisture Content | 24.7 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Radium-226 | 0.968 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-16RM | 05/02/2000 | 0 | 0.5 | 1348860 | 482927.6 | Radium-228 | 0.819 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Beryllium | 0.54 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Uranium, Total | 13.763 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Radium-226 | 1.214 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Radium-228 | 1.137 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Thorium-232 | 1.137 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Thorium-228 | 1.125 | pCi/g dry | - | NORMAL |

3830

000115

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-19 | A1P3-C-19-1RM | 05/02/2000 | 0 | 0.5 | 1348089 | 482863.1 | Moisture Content | 21.1 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Beryllium | 0.49 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Uranium, Total | 17.946 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Thorium-232 | 1.102 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Radium-226 | 1.28 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Radium-228 | 1.102 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Thorium-228 | 1.08 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-3RM | 05/02/2000 | 0 | 0.5 | 1348137 | 482945.7 | Moisture Content | 25.4 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Beryllium | 0.48 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Thorium-232 | 1.103 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Uranium, Total | 13.776 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Thorium-228 | 1.122 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Moisture Content | 25 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Radium-228 | 1.103 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-4RM | 05/02/2000 | 0 | 0.5 | 1348198 | 482895.6 | Radium-226 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Beryllium | 0.18 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Thorium-228 | 0.879 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Uranium, Total | 15.862 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Thorium-232 | 0.899 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Radium-228 | 0.899 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Moisture Content | 25.4 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-5RM | 05/02/2000 | 0 | 0.5 | 1348117 | 483027.5 | Radium-226 | 1.13 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Beryllium | 0.32 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Radium-228 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Thorium-232 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Uranium, Total | 14.934 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Thorium-228 | 1.028 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Moisture Content | 20 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-6RM | 05/02/2000 | 0 | 0.5 | 1348245 | 483014.9 | Radium-226 | 1.117 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Beryllium | 0.28 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Radium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Thorium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Uranium, Total | 14.427 | ug/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Thorium-232 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Moisture Content | 20.8 | PERCENT | NV | NORMAL |
| A1P3-C-19 | A1P3-C-19-7RM | 05/02/2000 | 0 | 0.5 | 1348053 | 483087 | Radium-226 | 1.132 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Beryllium | 0.24 | mg/kg dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Radium-228 | 0.777 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Thorium-228 | 0.778 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Thorium-232 | 0.777 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Uranium, Total | 5.444 | ug/g dry | - | NORMAL |

000116

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Radium-226 | 0.934 | pCi/g dry | - | NORMAL |
| A1P3-C-19 | A1P3-C-19-9RM | 05/02/2000 | 0 | 0.5 | 1348410 | 482822.8 | Moisture Content | 23.5 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Moisture Content | 20.9 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Thorium-228 | 0.94 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Thorium-232 | 0.935 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Uranium, Total | 5.429 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Radium-228 | 0.935 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-11R | 04/27/2000 | 0 | 0.5 | 1349133 | 483722 | Radium-226 | 1.177 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Moisture Content | 21.8 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Radium-228 | 0.888 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Thorium-228 | 0.885 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Uranium, Total | 4.563 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Thorium-232 | 0.888 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-12R | 04/27/2000 | 0 | 0.5 | 1349230 | 483665 | Radium-226 | 1.044 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Moisture Content | 25.6 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Uranium, Total | 7.415 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Thorium-232 | 0.972 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Thorium-228 | 0.964 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Radium-228 | 0.972 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-13R | 04/27/2000 | 0 | 0.5 | 1349076 | 483810 | Radium-226 | 1.228 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Moisture Content | 17 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Radium-226 | 1.078 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Radium-228 | 0.764 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Uranium, Total | 5.382 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Thorium-232 | 0.764 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-14R | 04/27/2000 | 0 | 0.5 | 1349238 | 483826.7 | Thorium-228 | 0.759 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Moisture Content | 20.3 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Radium-226 | 1.073 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Thorium-228 | 0.904 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Radium-228 | 0.914 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Thorium-232 | 0.914 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Uranium, Total | 6.143 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Moisture Content | 21.7 | PERCENT | NV | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Radium-228 | 0.983 | pCi/g dry | - | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Uranium, Total | 8.026 | ug/g dry | - | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Thorium-232 | 0.983 | pCi/g dry | - | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Thorium-228 | 0.965 | pCi/g dry | - | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-15R-D | 04/27/2000 | 0 | 0.5 | 1349001 | 483875.6 | Radium-226 | 1.098 | pCi/g dry | - | DUPLICATE |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Moisture Content | 36.7 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Uranium, Total | 5.571 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Thorium-232 | 1.089 | pCi/g dry | - | NORMAL |

000117

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|---------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Thorium-228 | 1.088 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Radium-228 | 1.089 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-1R | 04/27/2000 | 0 | 0.5 | 1348957 | 483404.5 | Radium-226 | 1.283 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Moisture Content | 25.2 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Radium-226 | 1.259 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Radium-228 | 1.202 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Uranium, Total | 6.096 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Thorium-232 | 1.202 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-2R | 04/27/2000 | 0 | 0.5 | 1349085 | 483422.2 | Thorium-228 | 1.182 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Moisture Content | 28.2 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Radium-226 | 1.311 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Thorium-228 | 1.121 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Radium-228 | 1.117 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Thorium-232 | 1.117 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-3R | 04/27/2000 | 0 | 0.5 | 1348990 | 483497.8 | Uranium, Total | 11.308 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Moisture Content | 27.4 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Radium-228 | 1.118 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Uranium, Total | 13.986 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Thorium-232 | 1.118 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Thorium-228 | 1.084 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-5R | 04/27/2000 | 0 | 0.5 | 1349271 | 483426.3 | Radium-226 | 1.263 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Moisture Content | 25.7 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Uranium, Total | 7.34 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Thorium-232 | 0.972 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Thorium-228 | 0.933 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Radium-228 | 0.972 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-6R | 04/27/2000 | 0 | 0.5 | 1349368 | 483387.7 | Radium-226 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Moisture Content | 27.4 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Radium-226 | 1.231 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Radium-228 | 1.034 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Uranium, Total | 10.892 | ug/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Thorium-232 | 1.034 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-8R | 04/27/2000 | 0 | 0.5 | 1349397 | 483497 | Thorium-228 | 1.007 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Moisture Content | 23.9 | PERCENT | NV | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Radium-226 | 1.348 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Thorium-228 | 1.066 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Radium-228 | 1.095 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Thorium-232 | 1.095 | pCi/g dry | - | NORMAL |
| A1P3-C-20 | A1P3-C-20-9R | 04/27/2000 | 0 | 0.5 | 1349055 | 483607.1 | Uranium, Total | 9.571 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-10R | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Moisture Content | 12.3 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-10R | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Radium-228 | 0.753 | pCi/g dry | - | NORMAL |

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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 | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Uranium, Total | 5.764 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-10R | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Thorium-232 | 0.753 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-10R | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Thorium-228 | 0.748 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-10R | 05/11/2000 | 0 | 0.5 | 1349275 | 483805.5 | Radium-226 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Moisture Content | 11.5 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Uranium, Total | 5.09 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Thorium-232 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Thorium-228 | 0.849 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Radium-228 | 0.838 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-11R | 05/11/2000 | 0 | 0.5 | 1349337 | 483776.8 | Radium-226 | 0.893 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Moisture Content | 12.5 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Radium-226 | 0.894 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Radium-228 | 0.634 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Uranium, Total | 5.572 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Thorium-232 | 0.634 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-13R | 05/11/2000 | 0 | 0.5 | 1349390 | 483783.2 | Thorium-228 | 0.626 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Radium-226 | 1.162 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Thorium-228 | 1.123 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Radium-228 | 1.136 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Thorium-232 | 1.136 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-15R | 05/11/2000 | 0 | 0.5 | 1349386 | 483881.2 | Uranium, Total | 11.98 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Radium-228 | 1.212 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Uranium, Total | 11.556 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Thorium-232 | 1.212 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Thorium-228 | 1.214 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-16R | 05/11/2000 | 0 | 0.5 | 1349464 | 483867.7 | Radium-226 | 1.356 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Moisture Content | 15.3 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Thorium-228 | 1.178 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Thorium-232 | 1.206 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Uranium, Total | 8.72 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Radium-228 | 1.206 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-1R | 05/11/2000 | 0 | 0.5 | 1349359 | 483589.3 | Radium-226 | 1.007 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Moisture Content | 17.6 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Radium-228 | 1.156 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Thorium-228 | 1.12 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Uranium, Total | 9.677 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Thorium-232 | 1.156 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Radium-226 | 0.982 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-2R-D | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Moisture Content | 17 | PERCENT | NV | DUPLICATE |

00019

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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 | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Uranium, Total | 8.905 | ug/g dry | - | DUPLICATE |
| A1P3-C-21 | A1P3-C-21-2R-D | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Thorium-232 | 1.168 | pCi/g dry | - | DUPLICATE |
| A1P3-C-21 | A1P3-C-21-2R-D | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Radium-226 | 0.99 | pCi/g dry | - | DUPLICATE |
| A1P3-C-21 | A1P3-C-21-2R-D | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Thorium-228 | 1.168 | pCi/g dry | - | DUPLICATE |
| A1P3-C-21 | A1P3-C-21-2R-D | 05/11/2000 | 0 | 0.5 | 1349416 | 483620.2 | Radium-228 | 1.168 | pCi/g dry | - | DUPLICATE |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Moisture Content | 12.9 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Uranium, Total | 5.287 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Thorium-232 | 0.857 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Thorium-228 | 0.847 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Radium-228 | 0.857 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349363 | 483666.6 | Radium-226 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-3R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Moisture Content | 17 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-5R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Radium-226 | 0.773 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-5R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Radium-228 | 0.594 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-5R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Uranium, Total | 9.435 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-5R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Thorium-232 | 0.594 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-5R | 05/11/2000 | 0 | 0.5 | 1349264 | 483694.7 | Thorium-228 | 0.599 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Moisture Content | 10.9 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Radium-226 | 0.824 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Thorium-228 | 0.714 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Radium-228 | 0.745 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Thorium-232 | 0.745 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349392 | 483745.7 | Uranium, Total | 4.828 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-7R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Moisture Content | 12.4 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-8R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Radium-228 | 0.895 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-8R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Uranium, Total | 4.018 | ug/g dry | J | NORMAL |
| A1P3-C-21 | A1P3-C-21-8R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Thorium-232 | 0.895 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-8R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Thorium-228 | 0.868 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-8R | 05/11/2000 | 0 | 0.5 | 1349444 | 483722.9 | Radium-226 | 0.878 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Moisture Content | 15.4 | PERCENT | NV | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Uranium, Total | 9.635 | ug/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Thorium-232 | 0.916 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Thorium-228 | 0.922 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Radium-228 | 0.916 | pCi/g dry | - | NORMAL |
| A1P3-C-21 | A1P3-C-21-9R | 05/11/2000 | 0 | 0.5 | 1349219 | 483745.5 | Radium-226 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Moisture Content | 22 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Uranium, Total | 15.978 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Thorium-232 | 1.1 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Radium-226 | 1.333 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Radium-228 | 1.1 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-11R | 05/01/2000 | 0 | 0.5 | 1348980 | 483219.1 | Thorium-228 | 1.097 | pCi/g dry | - | NORMAL |

000120

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Moisture Content | 21.1 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Thorium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Uranium, Total | 13.754 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Thorium-232 | 1.051 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Radium-228 | 1.051 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Radium-226 | 1.197 | pCi/g dry | J | NORMAL |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Moisture Content | 22.9 | PERCENT | NV | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Radium-226 | 1.393 | pCi/g dry | J | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Thorium-228 | 0.988 | pCi/g dry | - | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Uranium, Total | 13.783 | ug/g dry | - | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Thorium-232 | 1.001 | pCi/g dry | - | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-12R-D | 05/01/2000 | 0 | 0.5 | 1349146 | 483264.8 | Radium-228 | 1.001 | pCi/g dry | - | DUPLICATE |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Moisture Content | 24 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Radium-226 | 1.244 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Radium-228 | 0.986 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Uranium, Total | 6.848 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Thorium-232 | 0.986 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-13R | 05/01/2000 | 0 | 0.5 | 1349181 | 483170.4 | Thorium-228 | 0.953 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Moisture Content | 23 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Radium-226 | 1.244 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Thorium-228 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Radium-228 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Thorium-232 | 0.999 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-15R | 05/01/2000 | 0 | 0.5 | 1349212 | 483274.6 | Uranium, Total | 7.511 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Moisture Content | 21.5 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Radium-228 | 0.984 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Uranium, Total | 14.249 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Thorium-232 | 0.984 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Thorium-228 | 0.985 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-16R | 05/01/2000 | 0 | 0.5 | 1349348 | 483300.4 | Radium-226 | 1.041 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Moisture Content | 20.5 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Thorium-228 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Thorium-232 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Uranium, Total | 18.717 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Radium-228 | 1.031 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-2R | 05/01/2000 | 0 | 0.5 | 1349123 | 482984.2 | Radium-226 | 1.205 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Moisture Content | 27.5 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Radium-228 | 1.147 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Thorium-228 | 1.142 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Uranium, Total | 11.486 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Thorium-232 | 1.147 | pCi/g dry | - | NORMAL |

000121

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-22 | A1P3-C-22-3R | 05/01/2000 | 0 | 0.5 | 1348977 | 483109.8 | Radium-226 | 1.252 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Moisture Content | 24.3 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Uranium, Total | 13.714 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Thorium-232 | 1.008 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Thorium-228 | 1.01 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Radium-228 | 1.008 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-4R | 05/01/2000 | 0 | 0.5 | 1349137 | 483061.6 | Radium-226 | 1.198 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Moisture Content | 23 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Radium-226 | 1.301 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Radium-228 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Uranium, Total | 16.231 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Thorium-232 | 1.052 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-5R | 05/01/2000 | 0 | 0.5 | 1349251 | 483007.2 | Thorium-228 | 1.035 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Moisture Content | 24.7 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Radium-226 | 1.141 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Thorium-228 | 0.915 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Radium-228 | 0.918 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Thorium-232 | 0.918 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-7R | 05/01/2000 | 0 | 0.5 | 1349266 | 483091.5 | Uranium, Total | 17.244 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Moisture Content | 12.3 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Radium-228 | 0.484 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Uranium, Total | 7.19 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Thorium-232 | 0.484 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Thorium-228 | 0.47 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-8R | 05/01/2000 | 0 | 0.5 | 1349369 | 483102.3 | Radium-226 | 0.8 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Moisture Content | 26.3 | PERCENT | NV | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Uranium, Total | 9.05 | ug/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Thorium-232 | 1.051 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Thorium-228 | 0.997 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Radium-228 | 1.051 | pCi/g dry | - | NORMAL |
| A1P3-C-22 | A1P3-C-22-9R | 05/01/2000 | 0 | 0.5 | 1349004 | 483166.9 | Radium-226 | 1.356 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Beryllium | 0.55 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Radium-228 | 1.183 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Thorium-228 | 1.165 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Thorium-232 | 1.183 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Uranium, Total | 14.934 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Radium-226 | 1.292 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-10RM | 05/10/2000 | 0 | 0.5 | 1348967 | 482870.2 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Radium-228 | 0.492 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Thorium-228 | 0.485 | pCi/g dry | - | NORMAL |

000122

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|---------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Thorium-232 | 0.492 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Uranium, Total | 6.151 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Radium-226 | 0.799 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Moisture Content | 18.2 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-11RM | 05/10/2000 | 0 | 0.5 | 1349144 | 482851.1 | Beryllium | 0.43 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Radium-226 | 1.326 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Thorium-228 | 1.135 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Thorium-232 | 1.151 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Uranium, Total | 16.466 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Radium-228 | 1.151 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-13RM | 05/10/2000 | 0 | 0.5 | 1349201 | 482869.8 | Beryllium | 0.08 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Uranium, Total | 24.47 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Radium-226 | 0.973 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Radium-228 | 0.64 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Thorium-232 | 0.64 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Thorium-228 | 0.63 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349335 | 482939.9 | Moisture Content | 24.6 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-15RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Beryllium | 0.23 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Uranium, Total | 13.986 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Thorium-232 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Radium-226 | 1.29 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Radium-228 | 0.93 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Thorium-228 | 0.887 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1349271 | 482984.6 | Moisture Content | 26 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-16RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Beryllium | 0.5 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Thorium-232 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Uranium, Total | 17.569 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Thorium-228 | 0.957 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Moisture Content | 20.3 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Radium-228 | 0.988 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-1RM | 05/10/2000 | 0 | 0.5 | 1348713 | 482595.8 | Radium-226 | 1.215 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Beryllium | 0.4 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Thorium-228 | 0.849 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Uranium, Total | 16.872 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Thorium-232 | 0.885 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Radium-228 | 0.885 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Moisture Content | 18.4 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348810 | 482576.6 | Radium-226 | 1.288 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-2RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Beryllium | 0.51 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Radium-228 | 1.107 | pCi/g dry | - | NORMAL |

000123

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|------------------|--------|-----------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Thorium-232 | 1.107 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Uranium, Total | 12.707 | ug/g dry | J | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Thorium-228 | 1.115 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Moisture Content | 20.5 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Radium-226 | 1.254 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Beryllium | 0.49 | mg/kg dry | - | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Radium-228 | 1.094 | pCi/g dry | - | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Thorium-228 | 1.078 | pCi/g dry | - | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Uranium, Total | 24.167 | ug/g dry | J | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Thorium-232 | 1.094 | pCi/g dry | - | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Moisture Content | 25 | PERCENT | NV | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-3RM-D | 05/10/2000 | 0 | 0.5 | 1348860 | 482639.8 | Radium-226 | 1.343 | pCi/g dry | - | DUPLICATE |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Beryllium | 0.05 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Radium-228 | 0.426 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Thorium-228 | 0.412 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Thorium-232 | 0.426 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Uranium, Total | 30.596 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Radium-226 | 0.665 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-5RM | 05/10/2000 | 0 | 0.5 | 1348941 | 482676 | Moisture Content | 24.2 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Beryllium | 0.32 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Radium-226 | 1.142 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Thorium-228 | 0.908 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Thorium-232 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Uranium, Total | 15.61 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Radium-228 | 0.911 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-6RM | 05/10/2000 | 0 | 0.5 | 1348859 | 482785.9 | Moisture Content | 23.7 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Beryllium | 0.39 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Uranium, Total | 12.332 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Radium-226 | 1.361 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Radium-228 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Thorium-232 | 1.077 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Thorium-228 | 1.051 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-7RM | 05/10/2000 | 0 | 0.5 | 1349006 | 482721.1 | Moisture Content | 16.6 | PERCENT | NV | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Beryllium | 0.22 | mg/kg dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Uranium, Total | 19.505 | ug/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Thorium-232 | 1.072 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Radium-226 | 1.285 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Radium-228 | 1.072 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Thorium-228 | 1.033 | pCi/g dry | - | NORMAL |
| A1P3-C-23 | A1P3-C-23-9RM | 05/10/2000 | 0 | 0.5 | 1349046 | 482777.1 | Moisture Content | 19.2 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Moisture Content | 15.3 | PERCENT | NV | NORMAL |

000124

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Thorium-228 | 0.579 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Thorium-232 | 0.609 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Uranium, Total | 3.724 | ug/g dry | J | NORMAL |
| A1P3-C-24 | A1P3-C-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Radium-228 | 0.609 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-10R | 05/15/2000 | 0 | 0.5 | 1346376 | 482604.8 | Radium-226 | 0.799 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Moisture Content | 23.2 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Radium-228 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Thorium-228 | 1.034 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Uranium, Total | 8.61 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Thorium-232 | 1.047 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Radium-226 | 1.179 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Moisture Content | 22.6 | PERCENT | NV | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Uranium, Total | 7.291 | ug/g dry | - | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Thorium-232 | 0.947 | pCi/g dry | - | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Radium-226 | 1.058 | pCi/g dry | - | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Thorium-228 | 0.909 | pCi/g dry | - | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-11R-D | 05/15/2000 | 0 | 0.5 | 1346332 | 482735.4 | Radium-228 | 0.947 | pCi/g dry | - | DUPLICATE |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Moisture Content | 21.2 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Radium-228 | 0.887 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Thorium-228 | 0.839 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Thorium-232 | 0.887 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Uranium, Total | 8.829 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-14R | 05/11/2000 | 0 | 0.5 | 1346465 | 482767.7 | Radium-226 | 1.029 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Moisture Content | 23 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Uranium, Total | 6.906 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Radium-226 | 1.15 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Radium-228 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Thorium-232 | 0.961 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-15R | 05/11/2000 | 0 | 0.5 | 1346387 | 482902.6 | Thorium-228 | 0.963 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Thorium-232 | 0.896 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Uranium, Total | 8.428 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Thorium-228 | 0.889 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Radium-226 | 1.026 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-16R | 05/11/2000 | 0 | 0.5 | 1346528 | 482795.5 | Radium-228 | 0.896 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Moisture Content | 13.2 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Radium-228 | 0.51 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Thorium-232 | 0.51 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Uranium, Total | 1.722 | ug/g dry | U | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Thorium-228 | 0.503 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-1R | 05/15/2000 | 0 | 0.5 | 1346021 | 482701.4 | Radium-226 | 0.625 | pCi/g dry | - | NORMAL |

000125

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Moisture Content | 21.5 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Radium-228 | 1.087 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Thorium-228 | 1.062 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Thorium-232 | 1.087 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Uranium, Total | 14.227 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-2R | 05/15/2000 | 0 | 0.5 | 1346140 | 482741.8 | Radium-226 | 1.17 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Moisture Content | 19.8 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Uranium, Total | 13.41 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Radium-226 | 1.108 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Radium-228 | 0.839 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Thorium-232 | 0.839 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-3R | 05/15/2000 | 0 | 0.5 | 1345975 | 482790.3 | Thorium-228 | 0.828 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Moisture Content | 13.7 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Thorium-232 | 0.6 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Uranium, Total | 2.608 | ug/g dry | U | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Thorium-228 | 0.576 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Radium-226 | 0.859 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-5R | 05/15/2000 | 0 | 0.5 | 1346182 | 482667.8 | Radium-228 | 0.6 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Moisture Content | 33.6 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Radium-228 | 0.892 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Thorium-232 | 0.892 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Uranium, Total | 7.719 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Thorium-228 | 0.9 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-6R | 05/15/2000 | 0 | 0.5 | 1346209 | 482773.9 | Radium-226 | 1.165 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Moisture Content | 24 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Radium-228 | 0.973 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Thorium-228 | 0.99 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Thorium-232 | 0.973 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Uranium, Total | 7.454 | ug/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-7R | 05/15/2000 | 0 | 0.5 | 1346272 | 482788.2 | Radium-226 | 1.097 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Moisture Content | 13.3 | PERCENT | NV | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Uranium, Total | 0.884 | ug/g dry | U | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Radium-226 | 0.922 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Radium-228 | 0.683 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Thorium-232 | 0.683 | pCi/g dry | - | NORMAL |
| A1P3-C-24 | A1P3-C-24-9R | 05/15/2000 | 0 | 0.5 | 1346314 | 482649.1 | Thorium-228 | 0.671 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1ORM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Beryllium | 0.31 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1ORM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Radium-228 | 0.951 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1ORM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Thorium-228 | 0.96 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1ORM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Thorium-232 | 0.951 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1ORM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Uranium, Total | 11.07 | ug/g dry | - | NORMAL |

000126

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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-25-10RM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Radium-226 | 1.16 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-10RM | 05/09/2000 | 0 | 0.5 | 1348822 | 482519.8 | Moisture Content | 7.9 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Uranium, Total | 36.608 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Moisture Content | 8.4 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Radium-228 | 0.444 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Thorium-228 | 0.433 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Thorium-232 | 0.444 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-12RM | 05/10/2000 | 0 | 0.5 | 1348969 | 482619.1 | Radium-226 | 0.618 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Beryllium | 0.19 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Uranium, Total | 10.646 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Thorium-232 | 0.55 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Moisture Content | 7.3 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Radium-226 | 0.785 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Thorium-228 | 0.545 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-13RM | 05/10/2000 | 0 | 0.5 | 1349065 | 482691.3 | Radium-228 | 0.55 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Beryllium | 0.31 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Thorium-232 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Uranium, Total | 16.878 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Thorium-228 | 0.737 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Moisture Content | 16.6 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Radium-226 | 0.906 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-15RM | 05/10/2000 | 0 | 0.5 | 1349230 | 482847.3 | Radium-228 | 0.77 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Thorium-228 | 0.493 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Uranium, Total | 17.838 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Thorium-232 | 0.502 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Radium-228 | 0.502 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Moisture Content | 18.9 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-16RM | 05/10/2000 | 0 | 0.5 | 1349296 | 482833.9 | Radium-226 | 0.815 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Beryllium | 0.09 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Radium-226 | 1.177 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Thorium-228 | 0.917 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Thorium-232 | 0.936 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Uranium, Total | 12.058 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Radium-228 | 0.936 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-1RM | 05/09/2000 | 0 | 0.5 | 1347796 | 482611.7 | Moisture Content | 14.6 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Uranium, Total | 20.98 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Radium-226 | 0.99 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Radium-228 | 0.959 | pCi/g dry | - | NORMAL |

3830

000127

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Thorium-232 | 0.959 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Thorium-228 | 0.949 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-2RM | 05/09/2000 | 0 | 0.5 | 1347923 | 482602.7 | Moisture Content | 16.4 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Beryllium | 0.31 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Uranium, Total | 17.062 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Thorium-232 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Radium-226 | 1.242 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Radium-228 | 0.992 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Thorium-228 | 0.985 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Moisture Content | 13.2 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Beryllium | 0.4 | mg/kg dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Thorium-232 | 1.089 | pCi/g dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Uranium, Total | 17.041 | ug/g dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Thorium-228 | 1.061 | pCi/g dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Moisture Content | 13 | PERCENT | NV | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Radium-228 | 1.089 | pCi/g dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-3RM-D | 05/09/2000 | 0 | 0.5 | 1348049 | 482554.9 | Radium-226 | 1.274 | pCi/g dry | - | DUPLICATE |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Beryllium | 0.03 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Thorium-228 | 0.995 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Uranium, Total | 82.686 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Thorium-232 | 1.002 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Radium-228 | 1.002 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Moisture Content | 21 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-5RM | 05/09/2000 | 0 | 0.5 | 1348256 | 482549 | Radium-226 | 1.167 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Beryllium | 0.03 | mg/kg dry | U | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Moisture Content | 11.3 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Radium-226 | 1.042 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Radium-228 | 0.891 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Thorium-228 | 0.875 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Thorium-232 | 0.891 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-7RM | 05/09/2000 | 0 | 0.5 | 1348412 | 482541.5 | Uranium, Total | 5.13 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Beryllium | 0.04 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Moisture Content | 13.5 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Radium-226 | 1.09 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Radium-228 | 0.976 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Thorium-228 | 0.949 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Thorium-232 | 0.976 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-8RM | 05/09/2000 | 0 | 0.5 | 1348584 | 482537.1 | Uranium, Total | 23.758 | ug/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Beryllium | 0.34 | mg/kg dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Moisture Content | 13.9 | PERCENT | NV | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Radium-226 | 1.175 | pCi/g dry | - | NORMAL |

000128

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION 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-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Radium-228 | 0.826 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Thorium-228 | 0.805 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Thorium-232 | 0.826 | pCi/g dry | - | NORMAL |
| A1P3-C-25 | A1P3-C-25-9RM | 05/09/2000 | 0 | 0.5 | 1348679 | 482528 | Uranium, Total | 15.795 | ug/g dry | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Beryllium | 0.01 | mg/kg | U | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Radium-226 | 1.164 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Radium-228 | 0.933 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Thorium-228 | 0.867 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Thorium-232 | 0.933 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-10RM | 04/04/2001 | 0 | 0.5 | 482728 | 1346184 | Uranium, Total | 11.565 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Beryllium | 0.18 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Radium-226 | 1.256 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Radium-228 | 0.968 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Thorium-228 | 0.931 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Thorium-232 | 0.968 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-12RM | 04/04/2001 | 0 | 0.5 | 482789 | 1346091 | Uranium, Total | 12.092 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Beryllium | 0.07 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Radium-226 | 1.343 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Radium-228 | 0.856 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Thorium-228 | 0.851 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Thorium-232 | 0.856 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-13RM | 04/04/2001 | 0 | 0.5 | 482778 | 1346127 | Uranium, Total | 15.73 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Beryllium | 0.13 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Radium-226 | 1.257 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Radium-228 | 0.717 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Thorium-228 | 0.664 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Thorium-232 | 0.717 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-14RM | 04/04/2001 | 0 | 0.5 | 482769 | 1346156 | Uranium, Total | 7.501 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Beryllium | 0.01 | mg/kg | U | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Radium-226 | 1.114 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Radium-228 | 0.802 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Thorium-228 | 0.767 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Thorium-232 | 0.802 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-16RM | 04/04/2001 | 0 | 0.5 | 482738 | 1346218 | Uranium, Total | 12.924 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Beryllium | 0.06 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Radium-226 | 0.801 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Radium-228 | 0.614 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Thorium-228 | 0.601 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Thorium-232 | 0.614 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-1RM | 04/04/2001 | 0 | 0.5 | 482698 | 1346025 | Uranium, Total | 3.828 | ug/g | U | NORMAL |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Beryllium | 0.15 | mg/kg | - | NORMAL |

000129

000129

3830

**TABLE C-1
AREA 1, PHASE III, PART ONE CERTIFICATION DATA**

| CU | Sample ID | Sample Date | Depth | | East 83 | North 83 | Parameter | Result | Units | Val. Qual. | QA Type |
|-----------|-----------------|-------------|-------|--------|---------|----------|----------------|--------|-------|------------|-----------|
| | | | Top | Bottom | | | | | | | |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Radium-226 | 0.899 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Radium-228 | 0.686 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Thorium-228 | 0.707 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Thorium-232 | 0.686 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-2RM | 04/04/2001 | 0 | 0.5 | 482713 | 1346064 | Uranium, Total | 6.571 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Beryllium | 0.04 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Radium-226 | 0.972 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Radium-228 | 0.718 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Thorium-228 | 0.71 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Thorium-232 | 0.718 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Uranium, Total | 7.723 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Beryllium | 0.01 | mg/kg | U | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Radium-226 | 1.018 | pCi/g | J | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Radium-228 | 0.758 | pCi/g | J | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Thorium-228 | 0.724 | pCi/g | J | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Thorium-232 | 0.758 | pCi/g | J | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-3RM-D | 04/04/2001 | 0 | 0.5 | 482706 | 1346110 | Uranium, Total | 6.899 | ug/g | - | DUPLICATE |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Beryllium | 0.04 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Radium-226 | 0.931 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Radium-228 | 0.733 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Thorium-228 | 0.741 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Thorium-232 | 0.733 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-4RM | 04/04/2001 | 0 | 0.5 | 482692 | 1346146 | Uranium, Total | 9.537 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Beryllium | 0.05 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Radium-226 | 0.895 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Radium-228 | 0.651 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Thorium-228 | 0.638 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Thorium-232 | 0.651 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-5RM | 04/04/2001 | 0 | 0.5 | 482680 | 1346146 | Uranium, Total | 3.12 | ug/g | U | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Beryllium | 0.12 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Radium-226 | 0.854 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Radium-228 | 0.706 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Thorium-228 | 0.671 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Thorium-232 | 0.706 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-7RM | 04/04/2001 | 0 | 0.5 | 482746 | 1346083 | Uranium, Total | 4.268 | ug/g | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Beryllium | 0.05 | mg/kg | - | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Radium-226 | 0.88 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Radium-228 | 0.64 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Thorium-228 | 0.623 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Thorium-232 | 0.64 | pCi/g | J | NORMAL |
| A1P3-C-26 | A1P3-C-26-8RM | 04/04/2001 | 0 | 0.5 | 482730 | 1346104 | Uranium, Total | 10.201 | ug/g | - | NORMAL |

000130

TABLE C-2: Certification Statistics for A1P3-C-01

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-01-02RM | 1.24 - | 0.77 - | 0.74 - | 0.77 - | 3.72 J |
| A1P3-C-01-03RM | 1.20 - | 0.92 - | 0.89 - | 0.92 - | 5.45 - |
| A1P3-C-01-04RM | 1.31 - | 1.05 - | 1.04 - | 1.05 - | 8.36 - |
| A1P3-C-01-05RM | 1.24 - | 1.02 - | 0.99 - | 1.02 - | 6.92 - |
| A1P3-C-01-07RM | 1.06 - | 0.87 - | 0.83 - | 0.87 - | 11.56 - |
| A1P3-C-01-07RM-D | 1.00 - | 0.92 - | 0.90 - | 0.92 - | 9.32 - |
| A1P3-C-01-08RM | 1.09 - | 1.09 - | 1.10 - | 1.09 - | 7.02 - |
| A1P3-C-01-09RM | 1.26 - | 1.02 - | 0.99 - | 1.02 - | 7.79 - |
| A1P3-C-01-11RM | 1.22 - | 1.01 - | 1.01 - | 1.01 - | 17.27 - |
| A1P3-C-01-12RM | 1.24 - | 1.04 - | 1.01 - | 1.04 - | 13.46 - |
| A1P3-C-01-13RM | 1.34 - | 1.04 - | 1.03 - | 1.04 - | 13.11 - |
| A1P3-C-01-14RM | 1.17 - | 1.12 - | 1.07 - | 1.12 - | 3.70 J |
| A1P3-C-01-16RM | 1.33 - | 1.12 - | 1.11 - | 1.12 - | 9.69 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.33 @ | 1.12 @ | 1.11 @ | 1.12 @ | 17.27 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000131

3830

TABLE C-3: Certification Statistics for A1P3-C-02

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-02-01RM | 1.17 - | 1.02 - | 1.00 - | 1.02 - | 6.00 - |
| A1P3-C-02-02RM | 1.13 - | 0.92 - | 0.90 - | 0.92 - | 5.71 - |
| A1P3-C-02-03RM | 1.32 - | 0.99 - | 1.00 - | 0.99 - | 8.99 - |
| A1P3-C-02-05RM | 1.16 - | 1.06 - | 1.07 - | 1.06 - | 5.11 - |
| A1P3-C-02-06RM | 1.20 - | 1.02 - | 1.04 - | 1.02 - | 7.65 - |
| A1P3-C-02-07RM | 1.05 - | 0.91 - | 0.86 - | 0.91 - | 7.59 - |
| A1P3-C-02-10RM | 1.32 - | 1.06 - | 1.03 - | 1.06 - | 10.68 J |
| A1P3-C-02-10RM-D | 1.27 - | 1.07 - | 1.06 - | 1.07 - | 6.50 J |
| A1P3-C-02-11RM | 1.18 - | 1.04 - | 1.02 - | 1.04 - | 7.23 - |
| A1P3-C-02-12RM | 1.12 - | 0.96 - | 0.93 - | 0.96 - | 8.44 - |
| A1P3-C-02-13RM | 1.22 - | 0.86 - | 0.83 - | 0.86 - | 7.23 - |
| A1P3-C-02-15RM | 1.10 - | 0.97 - | 0.95 - | 0.97 - | 7.87 - |
| A1P3-C-02-16RM | 1.15 - | 1.08 - | 1.07 - | 1.08 - | 6.45 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.32 @ | 1.08 @ | 1.07 @ | 1.08 @ | 10.68 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000132

TABLE C-4: Certification Statistics for A1P3-C-03

| Sample ID | PRIMARY COCs | | | | |
|--------------------------|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-03-02RM | 1.22 - | 1.00 - | 1.00 - | 1.00 - | 6.05 - |
| A1P3-C-03-03RM | 1.13 - | 1.03 - | 1.00 - | 1.03 - | 6.14 - |
| A1P3-C-03-04RM | 1.20 - | 0.92 - | 0.92 - | 0.92 - | 5.49 - |
| A1P3-C-03-04RM-D | 1.11 - | 0.98 - | 0.97 - | 0.98 - | 7.25 - |
| A1P3-C-03-05RM | 1.27 - | 0.96 - | 0.96 - | 0.96 - | 7.02 - |
| A1P3-C-03-07RM | 1.25 - | 1.03 - | 1.04 - | 1.03 - | 7.39 - |
| A1P3-C-03-08RM | 1.20 - | 0.98 - | 0.97 - | 0.98 - | 7.13 - |
| A1P3-C-03-09RM | 1.33 - | 1.02 - | 1.01 - | 1.02 - | 15.46 - |
| A1P3-C-03-10RM | 1.24 - | 1.02 - | 0.99 - | 1.02 - | 10.12 - |
| A1P3-C-03-11RM | 1.13 - | 1.00 - | 0.98 - | 1.00 - | 6.31 - |
| A1P3-C-03-13RM | 1.17 - | 1.07 - | 1.04 - | 1.07 - | 9.96 - |
| A1P3-C-03-15RM | 1.18 - | 1.09 - | 1.07 - | 1.09 - | 7.44 - |
| A1P3-C-03-16RM | 1.12 - | 0.90 - | 0.88 - | 0.90 - | 9.81 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.33 @ | 1.09 @ | 1.07 @ | 1.09 @ | 15.46 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

| | | | | | |
|---|----|----|----|----|----|
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |
|---|----|----|----|----|----|

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000133

3830

TABLE C-5: Certification Statistics for A1P3-C-04

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|----------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-04-02RM | 1.29 - | 1.04 - | 1.02 - | 1.04 - | 6.82 - | 0.43 - |
| A1P3-C-04-03RM | 1.19 - | 0.98 - | 0.96 - | 0.98 - | 4.00 U | 0.26 - |
| A1P3-C-04-04RM | 1.05 - | 0.92 - | 0.91 - | 0.92 - | 7.48 - | 0.08 - |
| A1P3-C-04-05RM | 1.20 - | 1.01 - | 0.99 - | 1.01 - | 10.41 - | 0.42 - |
| A1P3-C-04-05RM-D | 1.23 - | 1.04 - | 1.04 - | 1.04 - | 6.95 - | 0.48 - |
| A1P3-C-04-06RM | 1.10 - | 0.86 - | 0.87 - | 0.86 - | 10.19 - | 0.34 - |
| A1P3-C-04-08RM | 1.22 - | 1.08 - | 1.06 - | 1.08 - | 9.95 - | 0.33 - |
| A1P3-C-04-09RM | 1.18 - | 1.11 - | 1.10 - | 1.11 - | 9.15 - | 0.18 - |
| A1P3-C-04-10RM | 1.20 - | 0.96 - | 0.96 - | 0.96 - | 13.16 - | 0.20 - |
| A1P3-C-04-11RM | 1.36 - | 1.12 - | 1.09 - | 1.12 - | 5.78 - | 0.38 - |
| A1P3-C-04-14RM | 1.18 - | 1.05 - | 1.01 - | 1.05 - | 7.95 - | 0.21 - |
| A1P3-C-04-15RM | 1.30 - | 0.95 - | 0.94 - | 0.95 - | 10.97 - | 0.26 - |
| A1P3-C-04-16RM | 1.34 - | 0.98 - | 0.95 - | 0.98 - | 9.50 UJ | 0.35 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.36 @ | 1.12 @ | 1.10 @ | 1.12 @ | 13.16 @ | 0.48 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000134

TABLE C-6: Certification Statistics for A1P3-C-05

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|---|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-05-01RM | 1.08 - | 0.89 - | 0.88 - | 0.89 - | 6.06 - | 0.05 - |
| A1P3-C-05-02RM | 1.15 - | 0.98 - | 0.95 - | 0.98 - | 5.36 - | 0.03 U |
| A1P3-C-05-03RM | 1.04 - | 0.80 - | 0.80 - | 0.80 - | 5.10 - | 0.03 U |
| A1P3-C-05-05RM | 1.14 - | 1.01 - | 0.99 - | 1.01 - | 5.41 - | 0.03 U |
| A1P3-C-05-06RM | 1.15 - | 0.88 - | 0.88 - | 0.88 - | 11.61 - | 0.09 - |
| A1P3-C-05-07RM | 1.12 - | 0.94 - | 0.93 - | 0.94 - | 13.30 - | 0.03 U |
| A1P3-C-05-09RM | 1.23 - | 1.06 - | 1.05 - | 1.06 - | 8.05 - | 0.05 - |
| A1P3-C-05-10RM | 1.21 - | 0.99 - | 1.00 - | 0.99 - | 15.56 - | 0.03 U |
| A1P3-C-05-11RM | 1.17 - | 0.89 - | 0.84 - | 0.89 - | 14.39 - | 0.11 - |
| A1P3-C-05-14RM | 1.00 - | 0.78 - | 0.80 - | 0.78 - | 7.09 - | 0.18 - |
| A1P3-C-05-15RM | 0.95 - | 0.86 - | 0.84 - | 0.86 - | 13.53 - | 0.03 U |
| A1P3-C-05-16RM | 1.12 - | 1.00 - | 0.98 - | 1.00 - | 11.89 - | 0.18 - |
| A1P3-C-05-16RM-D | 1.07 - | 0.90 - | 0.86 - | 0.90 - | 10.30 - | 0.12 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.23 @ | 1.06 @ | 1.05 @ | 1.06 @ | 15.56 @ | 0.18 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption. The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000135

3830

TABLE C-7: Certification Statistics for A1P3-C-06

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-06-01RM | 1.14 - | 0.86 - | 0.83 - | 0.86 - | 9.31 - |
| A1P3-C-06-03RM | 0.64 - | 0.42 - | 0.42 - | 0.42 - | 2.60 U |
| A1P3-C-06-04RM | 0.96 - | 0.72 - | 0.67 - | 0.72 - | 5.18 J |
| A1P3-C-06-05RM | 0.99 - | 0.82 - | 0.80 - | 0.82 - | 4.49 - |
| A1P3-C-06-06RM | 0.96 - | 0.78 - | 0.74 - | 0.78 - | 2.53 U |
| A1P3-C-06-08RM | 1.05 - | 0.85 - | 0.83 - | 0.85 - | 2.55 J |
| A1P3-C-06-09RM | 0.69 - | 0.60 - | 0.60 - | 0.60 - | 2.22 U |
| A1P3-C-06-11RM | 1.14 - | 0.92 - | 0.88 - | 0.92 - | 10.69 UJ |
| A1P3-C-06-12RM | 0.91 - | 0.87 - | 0.87 - | 0.87 - | 5.34 J |
| A1P3-C-06-13RM | 0.55 - | 0.40 - | 0.41 - | 0.40 - | 2.88 U |
| A1P3-C-06-14RM | 1.05 - | 0.89 - | 0.86 - | 0.89 - | 5.93 - |
| A1P3-C-06-16RM | 0.97 - | 0.85 - | 0.84 - | 0.85 - | 3.03 U |
| A1P3-C-06-16RM-D | 1.10 - | 0.91 - | 0.90 - | 0.91 - | 3.43 J |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.14 @ | 0.92 @ | 0.90 @ | 0.92 @ | 10.69 UJ @ + |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).
- (5) + 9.31 is the maximum detected concentration.

000136

TABLE C-8: Certification Statistics for A1P3-C-07

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-07-01RM | 1.22 - | 1.01 - | 0.99 - | 1.01 - | 8.39 - |
| A1P3-C-07-02RM | 1.10 - | 0.84 - | 0.82 - | 0.84 - | 10.52 - |
| A1P3-C-07-03RM | 1.24 - | 1.05 - | 1.07 - | 1.05 - | 4.65 J |
| A1P3-C-07-06RM | 1.20 - | 1.03 - | 1.04 - | 1.03 - | 5.22 - |
| A1P3-C-07-07RM | 1.22 - | 0.98 - | 0.96 - | 0.98 - | 8.26 - |
| A1P3-C-07-08RM | 1.51 - | 1.27 - | 1.26 - | 1.27 - | 4.31 J |
| A1P3-C-07-08RM-D | 1.47 - | 1.24 - | 1.22 - | 1.24 - | 10.60 J |
| A1P3-C-07-09RM | 1.22 - | 0.98 - | 1.00 - | 0.98 - | 7.68 - |
| A1P3-C-07-11RM | 1.19 - | 0.88 - | 0.87 - | 0.88 - | 6.34 - |
| A1P3-C-07-12RM | 0.99 - | 0.90 - | 0.89 - | 0.90 - | 7.28 - |
| A1P3-C-07-13RM | 1.29 - | 1.06 - | 1.03 - | 1.06 - | 3.81 U |
| A1P3-C-07-14RM | 1.12 - | 0.90 - | 0.89 - | 0.90 - | 2.59 J |
| A1P3-C-07-15RM | 1.38 - | 1.13 - | 1.13 - | 1.13 - | 3.77 J |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.51 @ | 1.27 @ | 1.26 @ | 1.27 @ | 10.60 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption. The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000137

3830

TABLE C-9: Certification Statistics for A1P3-C-08

| Sample ID | PRIMARY COCs | | | | |
|---|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-08-01RM | 1.22 - | 0.91 - | 0.89 - | 0.91 - | 5.69 - |
| A1P3-C-08-03RM | 1.26 - | 0.97 - | 0.92 - | 0.97 - | 10.11 - |
| A1P3-C-08-04RM | 1.06 - | 0.79 - | 0.80 - | 0.79 - | 12.58 - |
| A1P3-C-08-05RM | 0.95 - | 0.72 - | 0.70 - | 0.72 - | 7.62 - |
| A1P3-C-08-06RM | 1.14 - | 0.84 - | 0.83 - | 0.84 - | 10.90 - |
| A1P3-C-08-08RM | 1.03 - | 0.73 - | 0.71 - | 0.73 - | 8.04 - |
| A1P3-C-08-09RM | 1.31 - | 1.05 - | 1.04 - | 1.05 - | 8.28 - |
| A1P3-C-08-11RM | 1.16 - | 0.93 - | 0.93 - | 0.93 - | 7.74 - |
| A1P3-C-08-12RM | 1.19 - | 0.96 - | 0.96 - | 0.96 - | 8.98 - |
| A1P3-C-08-13RM | 1.09 - | 0.87 - | 0.86 - | 0.87 - | 9.67 - |
| A1P3-C-08-14RM | 1.13 - | 0.87 - | 0.86 - | 0.87 - | 9.66 - |
| A1P3-C-08-16RM | 1.36 - | 1.04 - | 1.04 - | 1.04 - | 9.26 - |
| A1P3-C-08-16RM-D | 1.28 - | 1.03 - | 1.03 - | 1.03 - | 7.27 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.36 @ | 1.05 @ | 1.04 @ | 1.05 @ | 12.58 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000138

000138

TABLE C-10: Certification Statistics for A1P3-C-09

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-09-01RM | 1.18 - | 0.84 J | 0.83 - | 0.84 J | 4.99 - |
| A1P3-C-09-02RM | 1.06 - | 0.91 - | 0.90 - | 0.91 - | 7.33 - |
| A1P3-C-09-03RM | 1.17 - | 0.99 - | 0.98 - | 0.99 - | 7.86 - |
| A1P3-C-09-05RM | 1.29 - | 1.12 - | 1.11 - | 1.12 - | 6.01 - |
| A1P3-C-09-05RM-D | 1.32 - | 0.97 - | 0.96 - | 0.97 - | 8.28 - |
| A1P3-C-09-06RM | 1.34 - | 1.11 - | 1.09 - | 1.11 - | 6.95 - |
| A1P3-C-09-07RM | 1.36 - | 1.13 - | 1.11 - | 1.13 - | 3.00 U |
| A1P3-C-09-09RM | 1.15 - | 1.00 - | 0.96 - | 1.00 - | 6.34 - |
| A1P3-C-09-11RM | 1.26 - | 1.10 - | 1.08 - | 1.10 - | 7.78 - |
| A1P3-C-09-12RM | 1.25 - | 1.00 - | 0.98 - | 1.00 - | 4.98 - |
| A1P3-C-09-13RM | 1.16 - | 0.99 - | 0.97 - | 0.99 - | 7.16 - |
| A1P3-C-09-14RM | 1.23 - | 1.06 - | 1.02 - | 1.06 - | 5.11 - |
| A1P3-C-09-16RM | 1.32 - | 1.05 - | 1.05 - | 1.05 - | 7.68 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.36 @ | 1.13 @ | 1.11 @ | 1.13 @ | 8.28 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000139

3830

TABLE C-11: Certification Statistics for A1P3-C-10

| Sample ID | PRIMARY COCs | | | | |
|---|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-10-02RM | 1.04 - | 1.02 - | 0.97 - | 1.02 - | 7.42 - |
| A1P3-C-10-03RM | 1.31 - | 0.93 - | 0.93 - | 0.93 - | 5.40 - |
| A1P3-C-10-04RM | 1.19 - | 0.98 - | 0.95 - | 0.98 - | 7.87 - |
| A1P3-C-10-06RM | 1.24 - | 1.01 - | 1.01 - | 1.01 - | 14.04 - |
| A1P3-C-10-07RM | 1.08 - | 0.98 - | 0.96 - | 0.98 - | 9.67 - |
| A1P3-C-10-08RM | 1.22 - | 1.02 - | 1.00 - | 1.02 - | 4.96 - |
| A1P3-C-10-08RM-D | 1.28 - | 1.13 - | 1.12 - | 1.13 - | 4.84 J |
| A1P3-C-10-09RM | 1.33 - | 1.09 - | 1.08 - | 1.09 - | 6.17 - |
| A1P3-C-10-11RM | 1.28 - | 1.08 - | 1.05 - | 1.08 - | 9.20 - |
| A1P3-C-10-12RM | 1.22 - | 1.06 - | 1.04 - | 1.06 - | 6.91 - |
| A1P3-C-10-13RM | 0.95 - | 0.97 - | 0.93 - | 0.97 - | 7.74 - |
| A1P3-C-10-14RM | 1.09 - | 0.91 - | 0.87 - | 0.91 - | 8.23 - |
| A1P3-C-10-16RM | 1.29 - | 1.04 - | 1.03 - | 1.04 - | 8.47 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.33 @ | 1.13 @ | 1.12 @ | 1.13 @ | 14.04 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000140

TABLE C-12: Certification Statistics for A1P3-C-11

| Sample ID | PRIMARY COCs | | | | |
|--------------------------|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-11-01RM | 1.17 - | 0.96 - | 0.93 - | 0.96 - | 5.96 - |
| A1P3-C-11-02RM | 1.30 - | 1.08 - | 1.07 - | 1.08 - | 6.43 - |
| A1P3-C-11-04RM | 1.25 - | 1.06 - | 1.12 - | 1.06 - | 8.96 - |
| A1P3-C-11-06RM | 1.12 - | 0.94 - | 0.93 - | 0.94 - | 7.08 - |
| A1P3-C-11-07RM | 1.37 - | 1.17 - | 1.15 - | 1.17 - | 7.39 - |
| A1P3-C-11-08RM | 1.23 - | 1.03 - | 1.05 - | 1.03 - | 12.29 - |
| A1P3-C-11-09RM | 1.30 - | 1.09 - | 1.10 - | 1.09 - | 11.37 - |
| A1P3-C-11-09RM-D | 1.33 - | 1.02 - | 1.00 - | 1.02 - | 8.15 - |
| A1P3-C-11-10RM | 1.28 - | 1.00 - | 0.98 - | 1.00 - | 9.71 - |
| A1P3-C-11-12RM | 1.39 - | 1.07 - | 1.03 - | 1.07 - | 8.63 - |
| A1P3-C-11-14RM | 1.10 - | 0.98 - | 0.98 - | 0.98 - | 7.81 - |
| A1P3-C-11-15RM | 1.06 - | 0.90 - | 0.87 - | 0.90 - | 8.13 - |
| A1P3-C-11-16RM | 1.01 - | 0.94 - | 0.95 - | 0.94 - | 9.24 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.39 @ | 1.17 @ | 1.15 @ | 1.17 @ | 12.29 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

| | | | | | |
|---|----|----|----|----|----|
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption. The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000141

3830

TABLE C-13: Certification Statistics for A1P3-C-12

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-12-02RM | 1.24 - | 0.90 - | 0.90 - | 0.90 - | 8.64 - |
| A1P3-C-12-02RM-D | 1.22 - | 1.00 - | 0.95 - | 1.00 - | 6.09 - |
| A1P3-C-12-03RM | 1.09 - | 0.99 - | 0.98 - | 0.99 - | 7.63 - |
| A1P3-C-12-04RM | 1.17 - | 0.93 - | 0.91 - | 0.93 - | 5.41 - |
| A1P3-C-12-05RM | 0.99 - | 0.85 - | 0.84 - | 0.85 - | 5.99 - |
| A1P3-C-12-07RM | 1.27 - | 1.06 - | 1.03 - | 1.06 - | 8.30 - |
| A1P3-C-12-08RM | 1.07 - | 1.02 - | 1.00 - | 1.02 - | 4.59 - |
| A1P3-C-12-09RM | 1.07 - | 0.81 - | 0.79 - | 0.81 - | 7.65 - |
| A1P3-C-12-10RM | 1.27 - | 0.98 - | 0.95 - | 0.98 - | 7.75 - |
| A1P3-C-12-12RM | 1.15 - | 0.92 - | 0.90 - | 0.92 - | 6.56 - |
| A1P3-C-12-13RM | 1.15 - | 1.05 - | 1.02 - | 1.05 - | 11.36 - |
| A1P3-C-12-14RM | 1.12 - | 1.04 - | 1.01 - | 1.04 - | 9.85 - |
| A1P3-C-12-16RM | 1.14 - | 1.04 - | 1.00 - | 1.04 - | 9.35 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.27 @ | 1.06 @ | 1.03 @ | 1.06 @ | 11.36 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

000142

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption. The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

TABLE C-14: Certification Statistics for A1P3-C-13

| PRIMARY COCs | | | | | |
|----------------------------|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-13-01RM | 1.30 - | 1.14 - | 1.11 - | 1.14 - | 8.83 - |
| A1P3-C-13-02RM | 1.31 - | 1.04 - | 1.01 - | 1.04 - | 10.52 - |
| A1P3-C-13-04RM | 1.20 - | 1.05 - | 1.02 - | 1.05 - | 9.52 - |
| A1P3-C-13-05RM | 1.07 - | 0.94 - | 0.93 - | 0.94 - | 12.14 - |
| A1P3-C-13-06RM | 1.11 - | 1.07 - | 1.01 - | 1.07 - | 10.59 - |
| A1P3-C-13-08RM | 1.14 - | 1.02 - | 1.00 - | 1.02 - | 10.02 - |
| A1P3-C-13-09RM | 1.19 - | 1.02 - | 1.01 - | 1.02 - | 11.72 - |
| A1P3-C-13-09RM-D | 1.17 - | 1.01 - | 1.00 - | 1.01 - | 12.96 - |
| A1P3-C-13-11RM | 1.18 - | 1.06 - | 1.02 - | 1.06 - | 11.33 - |
| A1P3-C-13-12RM | 1.30 - | 1.10 - | 1.09 - | 1.10 - | 11.51 - |
| A1P3-C-13-14RM | 1.22 - | 1.15 - | 1.12 - | 1.15 - | 12.67 - |
| A1P3-C-13-15RM | 1.17 - | 1.03 - | 1.01 - | 1.03 - | 16.12 - |
| A1P3-C-13-16RM | 1.23 - | 1.16 - | 1.17 - | 1.16 - | 9.80 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.31 @ | 1.16 @ | 1.17 @ | 1.16 @ | 16.12 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000143

3830

TABLE C-15: Certification Statistics for A1P3-C-14

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|---|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-14-02RM | 1.13 - | 1.00 - | 1.01 - | 1.00 - | 7.82 - | 0.23 - |
| A1P3-C-14-03RM | 1.15 - | 0.88 J | 0.87 J | 0.88 J | 8.42 - | 0.03 U |
| A1P3-C-14-03RM-D | 1.18 - | 1.08 J | 1.08 J | 1.08 J | 8.34 - | 0.03 U |
| A1P3-C-14-04RM | 1.08 - | 0.98 - | 0.97 - | 0.98 - | 9.35 - | 0.26 - |
| A1P3-C-14-06RM | 1.18 - | 0.96 - | 0.89 - | 0.96 - | 10.48 - | 0.22 - |
| A1P3-C-14-07RM | 1.33 - | 0.99 - | 0.97 - | 0.99 - | 8.80 - | 0.53 - |
| A1P3-C-14-08RM | 1.37 - | 0.95 - | 0.93 - | 0.95 - | 11.61 - | 0.66 - |
| A1P3-C-14-09RM | 1.19 - | 0.97 - | 0.97 - | 0.97 - | 8.43 - | 0.23 - |
| A1P3-C-14-10RM | 1.37 - | 1.06 - | 1.06 - | 1.06 - | 3.38 U | 0.41 - |
| A1P3-C-14-11RM | 1.17 - | 0.95 - | 0.92 - | 0.95 - | 6.90 - | 0.03 U |
| A1P3-C-14-13RM | 1.19 - | 1.13 - | 1.14 - | 1.13 - | 12.64 - | 0.41 - |
| A1P3-C-14-15RM | 1.31 - | 1.04 - | 1.01 - | 1.04 - | 15.56 - | 0.37 - |
| A1P3-C-14-16RM | 1.07 - | 0.84 - | 0.82 - | 0.84 - | 10.79 - | 0.22 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.37 @ | 1.13 @ | 1.14 @ | 1.13 @ | 15.56 @ | 0.66 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000144

TABLE C-16: Certification Statistics for A1P3-C-15

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|----------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-15-01RM | 1.23 - | 1.08 - | 1.09 - | 1.08 - | 17.51 - | 0.03 U |
| A1P3-C-15-03RM | 1.15 - | 0.94 - | 0.94 - | 0.94 - | 15.30 - | 0.03 U |
| A1P3-C-15-04RM | 1.45 - | 1.06 - | 1.05 - | 1.06 - | 14.63 - | 0.37 - |
| A1P3-C-15-05RM | 1.27 - | 0.96 - | 0.94 - | 0.96 - | 12.40 - | 0.15 - |
| A1P3-C-15-07RM | 1.18 - | 0.96 - | 0.93 - | 0.96 - | 13.91 - | 0.23 - |
| A1P3-C-15-08RM | 1.25 - | 1.05 - | 1.02 - | 1.05 - | 8.00 - | 0.22 - |
| A1P3-C-15-10RM | 1.38 - | 1.14 - | 1.14 - | 1.14 - | 16.85 - | 0.36 - |
| A1P3-C-15-11RM | 1.15 - | 0.99 - | 0.98 - | 0.99 - | 11.60 - | 0.04 - |
| A1P3-C-15-12RM | 1.29 - | 1.09 - | 1.03 - | 1.09 - | 20.67 - | 0.16 - |
| A1P3-C-15-14RM | 1.17 - | 0.96 - | 0.95 - | 0.96 - | 15.24 - | 0.03 U |
| A1P3-C-15-15RM | 1.50 - | 1.14 - | 1.10 - | 1.14 - | 12.40 - | 0.36 - |
| A1P3-C-15-16RM | 1.36 - | 1.21 - | 1.20 - | 1.21 - | 16.92 - | 0.50 - |
| A1P3-C-15-16RM-D | 1.28 - | 1.13 - | 1.10 - | 1.13 - | 15.38 - | 0.47 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.50 @ | 1.21 @ | 1.20 @ | 1.21 @ | 20.67 @ | 0.50 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

000145

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

3830

TABLE C-17: Certification Statistics for A1P3-C-16

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|----------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-16-01RM | 1.26 - | 0.98 - | 0.97 - | 0.98 - | 9.70 - | 0.32 - |
| A1P3-C-16-02RM | 1.23 - | 1.17 - | 1.15 - | 1.17 - | 9.71 - | 0.16 - |
| A1P3-C-16-03RM | 1.09 - | 0.68 - | 0.68 - | 0.68 - | 6.68 - | 0.18 - |
| A1P3-C-16-05RM | 1.17 - | 1.00 - | 0.99 - | 1.00 - | 24.90 - | 0.29 - |
| A1P3-C-16-06RM | 1.14 - | 0.95 - | 0.93 - | 0.95 - | 47.49 - | 0.05 - |
| A1P3-C-16-08RM | 1.29 - | 1.02 - | 1.00 - | 1.02 - | 22.85 - | 0.31 - |
| A1P3-C-16-09RM | 1.31 - | 1.06 - | 1.04 - | 1.06 - | 14.74 - | 0.09 - |
| A1P3-C-16-10RM | 1.19 - | 0.94 - | 0.94 - | 0.94 - | 25.13 - | 0.31 - |
| A1P3-C-16-12RM | 1.26 - | 1.05 - | 1.03 - | 1.05 - | 15.82 - | 0.30 - |
| A1P3-C-16-12RM-D | 1.34 - | 1.06 - | 1.05 - | 1.06 - | 14.97 - | 0.26 - |
| A1P3-C-16-13RM | 1.00 - | 0.67 - | 0.62 - | 0.67 - | 24.24 - | 0.17 - |
| A1P3-C-16-14RM | 1.04 - | 0.80 - | 0.79 - | 0.80 - | 19.40 - | 0.19 - |
| A1P3-C-16-16RM | 0.92 - | 0.77 - | 0.76 - | 0.77 - | 30.47 - | 0.30 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.34 @ | 1.17 @ | 1.15 @ | 1.17 @ | 47.49 @ | 0.32 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000146

TABLE C-18: Certification Statistics for A1P3-C-17

| Sample ID | PRIMARY COCs | | | | |
|--------------------------|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-17-01RM | 1.10 - | 0.95 - | 0.93 - | 0.95 - | 11.90 - |
| A1P3-C-17-02RM | 1.29 - | 1.04 - | 1.02 - | 1.04 - | 12.01 - |
| A1P3-C-17-04RM | 1.21 - | 0.93 - | 0.92 - | 0.93 - | 9.15 - |
| A1P3-C-17-06RM | 1.23 - | 1.22 - | 1.20 - | 1.22 - | 14.01 - |
| A1P3-C-17-07RM | 1.25 - | 1.09 - | 1.09 - | 1.09 - | 8.53 - |
| A1P3-C-17-08RM | 1.17 - | 1.14 - | 1.13 - | 1.14 - | 11.67 - |
| A1P3-C-17-09RM | 1.18 - | 0.99 - | 0.97 - | 0.99 - | 15.79 - |
| A1P3-C-17-10RM | 1.29 - | 1.11 - | 1.12 - | 1.11 - | 7.76 - |
| A1P3-C-17-12RM | 1.19 - | 1.07 - | 1.04 - | 1.07 - | 3.82 U |
| A1P3-C-17-14RM | 1.21 - | 0.92 - | 0.89 - | 0.92 - | 5.34 J |
| A1P3-C-17-15RM | 1.24 - | 1.01 - | 0.98 - | 1.01 - | 17.24 - |
| A1P3-C-17-16RM | 1.29 - | 1.14 - | 1.13 - | 1.14 - | 12.38 - |
| A1P3-C-17-16RM-D | 1.22 - | 1.16 - | 1.16 - | 1.16 - | 9.29 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.29 @ | 1.22 @ | 1.20 @ | 1.22 @ | 17.24 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

| | | | | | |
|----------------------------|----|----|----|----|----|
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000147

3830

TABLE C-19: Certification Statistics for A1P3-C-18

| PRIMARY COCs | | | | | |
|--------------------------|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-18-01RM | 1.20 - | 1.07 - | 1.08 - | 1.07 - | 15.10 - |
| A1P3-C-18-02RM | 1.06 - | 0.96 - | 0.93 - | 0.96 - | 8.03 - |
| A1P3-C-18-04RM | 1.24 - | 1.08 - | 1.02 - | 1.08 - | 9.59 - |
| A1P3-C-18-05RM | 1.19 - | 1.00 - | 1.00 - | 1.00 - | 4.75 - |
| A1P3-C-18-07RM | 1.34 - | 1.08 - | 1.06 - | 1.08 - | 12.42 - |
| A1P3-C-18-08RM | 1.21 - | 1.00 - | 0.99 - | 1.00 - | 15.14 - |
| A1P3-C-18-09RM | 1.18 - | 1.10 - | 1.10 - | 1.10 - | 11.97 - |
| A1P3-C-18-09RM-D | 1.05 - | 1.09 - | 1.09 - | 1.09 - | 8.69 - |
| A1P3-C-18-11RM | 1.31 J | 1.06 - | 1.04 - | 1.06 - | 10.31 - |
| A1P3-C-18-12RM | 1.24 - | 1.09 - | 1.08 - | 1.09 - | 12.01 - |
| A1P3-C-18-13RM | 1.24 - | 1.03 - | 1.05 - | 1.03 - | 12.49 - |
| A1P3-C-18-14RM | 1.27 - | 1.10 - | 1.07 - | 1.10 - | 7.91 - |
| A1P3-C-18-16RM | 1.25 - | 1.03 - | 1.03 - | 1.03 - | 14.52 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.34 @ | 1.10 @ | 1.10 @ | 1.10 @ | 15.14 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

| | | | | | |
|----------------------------|----|----|----|----|----|
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000148

TABLE C-20: Certification Statistics for A1P3-C-19

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|---|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-19-01RM | 1.21 - | 1.14 - | 1.13 - | 1.14 - | 13.76 - | 0.54 - |
| A1P3-C-19-03RM | 1.28 - | 1.10 - | 1.08 - | 1.10 - | 17.95 - | 0.49 - |
| A1P3-C-19-04RM | 1.15 - | 1.10 - | 1.12 - | 1.10 - | 13.78 - | 0.48 - |
| A1P3-C-19-05RM | 1.13 - | 0.90 - | 0.88 - | 0.90 - | 15.86 - | 0.18 - |
| A1P3-C-19-06RM | 1.12 - | 1.04 - | 1.03 - | 1.04 - | 14.93 - | 0.32 - |
| A1P3-C-19-07RM | 1.13 - | 1.03 - | 1.03 - | 1.03 - | 14.43 - | 0.28 - |
| A1P3-C-19-09RM | 0.93 - | 0.78 - | 0.78 - | 0.78 - | 5.44 - | 0.24 - |
| A1P3-C-19-10RM | 0.87 - | 0.78 - | 0.78 - | 0.78 - | 13.87 - | 0.04 - |
| A1P3-C-19-12RM | 1.16 - | 0.95 - | 0.93 - | 0.95 - | 6.70 - | 0.36 - |
| A1P3-C-19-13RM | 1.17 - | 0.95 - | 0.94 - | 0.95 - | 23.63 - | 0.03 - |
| A1P3-C-19-15RM | 1.06 - | 0.87 - | 0.87 - | 0.87 - | 14.84 - | 0.12 - |
| A1P3-C-19-15RM-D | 1.00 - | 0.80 - | 0.80 - | 0.80 - | 13.59 - | 0.25 - |
| A1P3-C-19-16RM | 0.97 - | 0.82 - | 0.80 - | 0.82 - | 10.12 - | 0.03 U |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.28 @ | 1.14 @ | 1.13 @ | 1.14 @ | 23.63 @ | 0.54 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000149

3830

TABLE C-21: Certification Statistics for A1P3-C-20

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-20-01RM | 1.28 - | 1.09 - | 1.09 - | 1.09 - | 5.57 - |
| A1P3-C-20-02RM | 1.26 - | 1.20 - | 1.18 - | 1.20 - | 6.10 - |
| A1P3-C-20-03RM | 1.31 - | 1.12 - | 1.12 - | 1.12 - | 11.31 - |
| A1P3-C-20-05RM | 1.26 - | 1.12 - | 1.08 - | 1.12 - | 13.99 - |
| A1P3-C-20-06RM | 1.15 - | 0.97 - | 0.93 - | 0.97 - | 7.34 - |
| A1P3-C-20-08RM | 1.23 - | 1.03 - | 1.01 - | 1.03 - | 10.89 - |
| A1P3-C-20-09RM | 1.35 - | 1.10 - | 1.07 - | 1.10 - | 9.57 - |
| A1P3-C-20-11RM | 1.18 - | 0.94 - | 0.94 - | 0.94 - | 5.43 - |
| A1P3-C-20-12RM | 1.04 - | 0.89 - | 0.89 - | 0.89 - | 4.56 - |
| A1P3-C-20-13RM | 1.23 - | 0.97 - | 0.96 - | 0.97 - | 7.42 - |
| A1P3-C-20-14RM | 1.08 - | 0.76 - | 0.76 - | 0.76 - | 5.38 - |
| A1P3-C-20-15RM | 1.07 - | 0.91 - | 0.90 - | 0.91 - | 6.14 - |
| A1P3-C-20-15RM-D | 1.10 - | 0.98 - | 0.97 - | 0.98 - | 8.03 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.35 @ | 1.20 @ | 1.18 @ | 1.20 @ | 13.99 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000150

TABLE C-22: Certification Statistics for A1P3-C-21

| Sample ID | PRIMARY COCs | | | | |
|---|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-21-01RM | 1.01 - | 1.21 - | 1.18 - | 1.21 - | 8.72 - |
| A1P3-C-21-02RM | 0.98 - | 1.16 - | 1.12 - | 1.16 - | 9.68 - |
| A1P3-C-21-02RM-D | 0.99 - | 1.17 - | 1.17 - | 1.17 - | 8.91 - |
| A1P3-C-21-03RM | 0.91 - | 0.86 - | 0.85 - | 0.86 - | 5.29 - |
| A1P3-C-21-05RM | 0.77 - | 0.59 - | 0.60 - | 0.59 - | 9.44 - |
| A1P3-C-21-07RM | 0.82 - | 0.75 - | 0.71 - | 0.75 - | 4.83 - |
| A1P3-C-21-08RM | 0.88 - | 0.90 - | 0.87 - | 0.90 - | 4.02 J |
| A1P3-C-21-09RM | 0.99 - | 0.92 - | 0.92 - | 0.92 - | 9.64 - |
| A1P3-C-21-10RM | 0.89 - | 0.75 - | 0.75 - | 0.75 - | 5.76 - |
| A1P3-C-21-11RM | 0.89 - | 0.84 - | 0.85 - | 0.84 - | 5.09 - |
| A1P3-C-21-13RM | 0.89 - | 0.63 - | 0.63 - | 0.63 - | 5.57 - |
| A1P3-C-21-15RM | 1.16 - | 1.14 - | 1.12 - | 1.14 - | 11.98 - |
| A1P3-C-21-16RM | 1.36 - | 1.21 - | 1.21 - | 1.21 - | 11.56 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.36 @ | 1.21 @ | 1.21 @ | 1.21 @ | 11.98 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption. The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000151

3830

TABLE C-23: Certification Statistics for A1P3-C-22

| Sample ID | PRIMARY COCs | | | | |
|---|--------------|------------|-------------|-------------|----------------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-22-02RM | 1.21 - | 1.03 - | 1.04 - | 1.03 - | 18.72 - |
| A1P3-C-22-03RM | 1.25 - | 1.15 - | 1.14 - | 1.15 - | 11.49 - |
| A1P3-C-22-04RM | 1.20 - | 1.01 - | 1.01 - | 1.01 - | 13.71 - |
| A1P3-C-22-05RM | 1.30 - | 1.05 - | 1.04 - | 1.05 - | 16.23 - |
| A1P3-C-22-07RM | 1.14 - | 0.92 - | 0.92 - | 0.92 - | 17.24 - |
| A1P3-C-22-08RM | 0.80 - | 0.48 - | 0.47 - | 0.48 - | 7.19 - |
| A1P3-C-22-09RM | 1.36 - | 1.05 - | 1.00 - | 1.05 - | 9.05 - |
| A1P3-C-22-11RM | 1.33 - | 1.10 - | 1.10 - | 1.10 - | 15.98 - |
| A1P3-C-22-12RM | 1.20 J | 1.05 - | 1.03 - | 1.05 - | 13.75 - |
| A1P3-C-22-12RM-D | 1.39 J | 1.00 - | 0.99 - | 1.00 - | 13.78 - |
| A1P3-C-22-13RM | 1.24 - | 0.99 - | 0.95 - | 0.99 - | 6.85 - |
| A1P3-C-22-15RM | 1.24 - | 1.00 - | 1.00 - | 1.00 - | 7.51 - |
| A1P3-C-22-16RM | 1.04 - | 0.98 - | 0.99 - | 0.98 - | 14.25 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.39 @ | 1.15 @ | 1.14 @ | 1.15 @ | 18.72 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000152

TABLE C-24: Certification Statistics for A1P3-C-23

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|--------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-23-01RM | 1.22 - | 0.99 - | 0.96 - | 0.99 - | 17.57 - | 0.50 - |
| A1P3-C-23-02RM | 1.29 - | 0.89 - | 0.85 - | 0.89 - | 16.87 - | 0.40 - |
| A1P3-C-23-03RM | 1.25 - | 1.11 - | 1.12 - | 1.11 - | 12.71 J | 0.51 - |
| A1P3-C-23-03RM-D | 1.34 - | 1.09 - | 1.08 - | 1.09 - | 24.17 J | 0.49 - |
| A1P3-C-23-05RM | 0.67 - | 0.43 - | 0.41 - | 0.43 - | 30.60 - | 0.05 - |
| A1P3-C-23-06RM | 1.14 - | 0.91 - | 0.91 - | 0.91 - | 15.61 - | 0.32 - |
| A1P3-C-23-07RM | 1.36 - | 1.08 - | 1.05 - | 1.08 - | 12.33 - | 0.39 - |
| A1P3-C-23-09RM | 1.29 - | 1.07 - | 1.03 - | 1.07 - | 19.51 - | 0.22 - |
| A1P3-C-23-10RM | 1.29 - | 1.18 - | 1.17 - | 1.18 - | 14.93 - | 0.55 - |
| A1P3-C-23-11RM | 0.80 - | 0.49 - | 0.49 - | 0.49 - | 6.15 - | 0.03 U |
| A1P3-C-23-13RM | 1.33 - | 1.15 - | 1.14 - | 1.15 - | 16.47 - | 0.43 - |
| A1P3-C-23-15RM | 0.97 - | 0.64 - | 0.63 - | 0.64 - | 24.47 - | 0.08 - |
| A1P3-C-23-16RM | 1.29 - | 0.93 - | 0.89 - | 0.93 - | 13.99 - | 0.23 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.36 @ | 1.18 @ | 1.17 @ | 1.18 @ | 30.60 @ | 0.55 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass | Pass |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

| | | | | | | |
|---------------------|----|----|----|----|----|----|
| a posteriori Sample | -- | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- | -- |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000153

3830

TABLE C-25: Certification Statistics for A1P3-C-24

| PRIMARY COCs | | | | | |
|---|------------|------------|-------------|-------------|----------------|
| Sample ID | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total |
| A1P3-C-24-01RM | 0.63 - | 0.51 - | 0.50 - | 0.51 - | 2.57 U |
| A1P3-C-24-02RM | 1.17 - | 1.09 - | 1.06 - | 1.09 - | 14.23 - |
| A1P3-C-24-03RM | 1.11 - | 0.84 - | 0.83 - | 0.84 - | 13.41 - |
| A1P3-C-24-05RM | 0.86 - | 0.60 - | 0.58 - | 0.60 - | 2.79 U |
| A1P3-C-24-06RM | 1.17 - | 0.89 - | 0.90 - | 0.89 - | 7.72 - |
| A1P3-C-24-07RM | 1.10 - | 0.97 - | 0.99 - | 0.97 - | 7.45 - |
| A1P3-C-24-09RM | 0.92 - | 0.68 - | 0.67 - | 0.68 - | 1.96 U |
| A1P3-C-24-10RM | 0.80 - | 0.61 - | 0.58 - | 0.61 - | 3.72 J |
| A1P3-C-24-11RM | 1.18 - | 1.05 - | 1.03 - | 1.05 - | 8.61 - |
| A1P3-C-24-11RM-D | 1.06 - | 0.95 - | 0.91 - | 0.95 - | 7.29 - |
| A1P3-C-24-14RM | 1.03 - | 0.89 - | 0.84 - | 0.89 - | 8.83 - |
| A1P3-C-24-15RM | 1.15 - | 0.96 - | 0.96 - | 0.96 - | 6.91 - |
| A1P3-C-24-16RM | 1.03 - | 0.90 - | 0.89 - | 0.90 - | 8.43 - |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% |
| Max Result | 1.18 @ | 1.09 @ | 1.06 @ | 1.09 @ | 14.23 @ |
| W-Statistic Probability* | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | -- |
| UCL on the Mean** | -- | -- | -- | -- | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | Pass |
| <i>a posteriori</i> Sample Size calculation | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000154

TABLE C-26: Certification Statistics for A1P3-C-25

| Sample ID | PRIMARY COCs | | | | | Beryllium |
|----------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | |
| A1P3-C-25-01RM | 1.18 - | 0.94 - | 0.92 - | 0.94 - | 12.06 - | 0.09 - |
| A1P3-C-25-02RM | 0.99 - | 0.96 - | 0.95 - | 0.96 - | 20.98 - | 0.03 U |
| A1P3-C-25-03RM | 1.24 - | 0.99 - | 0.99 - | 0.99 - | 17.06 - | 0.31 - |
| A1P3-C-25-03RM-D | 1.27 - | 1.09 - | 1.06 - | 1.09 - | 17.04 - | 0.40 - |
| A1P3-C-25-05RM | 1.17 - | 1.00 - | 1.00 - | 1.00 - | 82.69 - | 0.03 - |
| A1P3-C-25-07RM | 1.04 - | 0.89 - | 0.88 - | 0.89 - | 5.13 - | 0.03 U |
| A1P3-C-25-08RM | 1.09 - | 0.98 - | 0.95 - | 0.98 - | 23.76 - | 0.04 - |
| A1P3-C-25-09RM | 1.18 - | 0.83 - | 0.81 - | 0.83 - | 15.80 - | 0.34 - |
| A1P3-C-25-10RM | 1.16 - | 0.95 - | 0.96 - | 0.95 - | 11.07 - | 0.31 - |
| A1P3-C-25-12RM | 0.62 - | 0.44 - | 0.43 - | 0.44 - | 36.61 - | 0.03 U |
| A1P3-C-25-13RM | 0.79 - | 0.55 - | 0.55 - | 0.55 - | 10.65 - | 0.19 - |
| A1P3-C-25-15RM | 0.91 - | 0.77 - | 0.74 - | 0.77 - | 16.88 - | 0.31 - |
| A1P3-C-25-16RM | 0.82 - | 0.50 - | 0.49 - | 0.50 - | 17.84 - | 0.03 U |
| FRL | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.50 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | ug/g | ug/g |
| Confidence Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max Result | 1.27 @ | 1.09 @ | 1.06 @ | 1.09 @ | 82.69 | 0.40 @ |
| W-Statistic Probability* | -- | -- | -- | -- | 48.7% (LN) | -- |
| Test Procedure | -- | -- | -- | -- | t-Test (LN) | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Estimated Mean | -- | -- | -- | -- | 22.31 | -- |
| UCL on the Mean** | -- | -- | -- | -- | 36.65 | -- |
| Non-Parametric Prob. | -- | -- | -- | -- | -- | -- |
| Est. Mean - Pass / Fail | -- | -- | -- | -- | pass | -- |
| 2x Rule Pass / Fail | Pass | Pass | Pass | Pass | pass | Pass |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | 3 | -- |
| Size calculation | -- | -- | -- | -- | pass | -- |

| Definition of Qualifiers |
|------------------------------------|
| J" = estimated result |
| UJ" = not detected, estimated |
| U" = not detected |
| - " = no data qualifier |
| NV" = not validated |
| UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000155

3830

Table C-27: Certification Statistics for A1P3-C-26

| Sample ID | PRIMARY COCs | | | | | Secondary |
|----------------------------|--------------|------------|-------------|-------------|----------------|-----------|
| | Radium-226 | Radium-228 | Thorium-228 | Thorium-232 | Uranium, Total | Beryllium |
| A1P3-C-26-1RM | 0.80 J | 0.61 J | 0.60 J | 0.61 J | 3.83 U | 0.06 - |
| A1P3-C-26-2RM | 0.90 J | 0.69 J | 0.71 J | 0.69 J | 6.57 - | 0.15 - |
| A1P3-C-26-3RM-D | 1.02 J | 0.76 J | 0.72 J | 0.76 J | 6.90 - | 0.01 U |
| A1P3-C-26-3RM | 0.97 J | 0.72 J | 0.71 J | 0.72 J | 7.72 - | 0.04 - |
| A1P3-C-26-4RM | 0.93 J | 0.73 J | 0.74 J | 0.73 J | 9.54 - | 0.04 - |
| A1P3-C-26-5RM | 0.90 J | 0.65 J | 0.64 J | 0.65 J | 3.12 U | 0.05 - |
| A1P3-C-26-7RM | 0.85 J | 0.71 J | 0.67 J | 0.71 J | 4.27 - | 0.12 - |
| A1P3-C-26-8RM | 0.88 J | 0.64 J | 0.62 J | 0.64 J | 10.20 - | 0.05 - |
| A1P3-C-26-10RM | 1.16 J | 0.93 J | 0.87 J | 0.93 J | 11.57 - | 0.01 U |
| A1P3-C-26-12RM | 1.26 J | 0.97 J | 0.93 J | 0.97 J | 12.09 - | 0.18 - |
| A1P3-C-26-13RM | 1.34 J | 0.86 J | 0.85 J | 0.86 J | 15.73 - | 0.07 - |
| A1P3-C-26-14RM | 1.26 J | 0.72 J | 0.66 J | 0.72 J | 7.50 - | 0.13 - |
| A1P3-C-26-16RM | 1.11 J | 0.80 J | 0.77 J | 0.80 J | 12.92 - | 0.01 U |
| Limit | 1.70 | 1.80 | 1.70 | 1.50 | 82 | 1.5 |
| Units | pCi/g | pCi/g | pCi/g | pCi/g | mg/kg | mg/kg |
| Conf. Level | 95% | 95% | 95% | 95% | 95% | 90% |
| Max. Result | 1.34 | 0.97 | 0.93 | 0.97 | 15.73 | 0.18 |
| Max. >= Limit | No | No | No | No | No | No |
| W-statistic Prob. # | -- | -- | -- | -- | -- | -- |
| Test Procedure | -- | -- | -- | -- | -- | -- |
| Sample Size | 12 | 12 | 12 | 12 | 12 | 12 |
| Nondetects | -- | -- | -- | -- | -- | -- |
| % Nondetects | -- | -- | -- | -- | -- | -- |
| Est. Mean* | -- | -- | -- | -- | -- | -- |
| UCL | -- | -- | -- | -- | -- | -- |
| Prob. > Limit | -- | -- | -- | -- | -- | -- |
| Pass / Fail | -- | -- | -- | -- | -- | -- |
| <i>a posteriori</i> Sample | -- | -- | -- | -- | -- | -- |
| Size calculation | -- | -- | -- | -- | -- | -- |

| Definition of Qualifiers |
|-------------------------------------|
| "J" = estimated result |
| "UJ" = not detected, estimated |
| "U" = not detected |
| "-" = no data qualifier |
| "NV" = not validated |
| "UNV" = not detected, not validated |

NOTES:

- (1) Maximum result did not exceed the FRL, therefore no statistics were generated and no other tests performed.
- (2) The maximum value of the two duplicates was used in all statistical equations.
- (3) * W-Statistic Probability is the highest calculated probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (Normal) and the log-transformed data (LogNormal) to test for lognormality.
- (4) ** Estimated Mean = Estimated measure of central tendency (Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median).

000156

TABLE C-28
AREA 1, PHASE III DEBRIS EXCAVATION SAMPLES FROM VARIANCE 20720-PSP-0001-4

| Sample ID | Sample Date | Depth | | Easting | Northing | Parameter | Result | Units | Val. Qual. | QA Type |
|--------------|-------------|-------|--------|---------|----------|------------------|--------|---------|------------|---------|
| | | Top | Bottom | | | | | | | |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Beryllium | 0.03 | MG/KG | - | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Radium-226 | 1.416 | PCI/G | J | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Radium-228 | 0.986 | PCI/G | J | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Thorium-228 | 0.954 | PCI/G | J | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Thorium-232 | 0.986 | PCI/G | J | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Uranium, Total | 4.146 | MG/KG | U | Normal |
| A1P3-EX4-1RM | 04/04/2001 | 0 | 0.5 | 1346372 | 482797 | Moisture Content | 20.5 | PERCENT | NV | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Beryllium | 0.01 | MG/KG | U | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Thorium-232 | 0.662 | PCI/G | J | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Thorium-228 | 0.654 | PCI/G | J | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Radium-228 | 0.662 | PCI/G | J | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Radium-226 | 0.886 | PCI/G | J | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Uranium, Total | 3.445 | MG/KG | U | Normal |
| A1P3-EX5-1RM | 04/04/2001 | 0 | 0.5 | 1345996 | 482790 | Moisture Content | 10.7 | PERCENT | NV | Normal |

000157

8830