ADDENDUM TO THE CERTIFICATION REPORT FOR AREA 1, PHASE II

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

JANUARY 22, 2002

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

20710-RP-0016
REVISION 0
ADDENDUM 1

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LIST OF ACRONYMS AND ABBREVIATIONS

A1PI	Area 1, Phase I
A1PII	Area 1, Phase II
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
CU	certification unit
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
EWF	Equipment Wash Facility
FEMP	Fernald Environmental Management Project
FRL	final remediation level
ICY	in-place cubic yards
mg/kg	milligrams per kilogram
OEPA	Ohio Environmental Protection Agency
OSDF	On-Site Disposal Facility
pCi/g	picoCuries per gram
ppm	parts per million
SCQ	Sitewide CERCLA Quality Assurance Project Plan
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
UCL	upper confidence level

EXECUTIVE SUMMARY

This addendum to the Area 1, Phase II (A1PII) Certification Report (DOE 2000a) presents the information and data used by the U.S. Department of Energy (DOE) to determine that existing soil concentrations do not exceed the final remediation levels (FRLs) in the Equipment Wash Facility (EWF) footprint and its associated drainage line, located in Sector 2. On the basis of this reported information and supporting project files, DOE has determined that no additional remedial actions are required in this area of the site. Upon approval from the regulatory agencies, DOE intends to proceed with future land use activities.

A discussion of previous A1PII certification efforts and certification criteria are provided in the main report. This addendum focuses on the EWF and its associated drainage line. Both of these certification units are now remediated and will be considered certified when the U.S. Environmental Protection Agency (EPA) and the Ohio Environmental Protection Agency (OEPA) agree that the certification criteria have been met.

The certification samples were analyzed at laboratories on the Fernald Environmental Management Project (FEMP) Approved Laboratories List per the Sitewide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Quality Assurance Project Plan (SCQ, DOE 1998a). All these samples 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.

DOE has restricted access to certified areas in order to maintain their integrity prior to final land use development. A FEMP procedure (EP-0008) has been developed to implement a process to protect certified areas from becoming recontaminated.

1.0 INTRODUCTION

1.1 PURPOSE

This addendum to the Area 1, Phase II (A1PII) Certification Report presents the information and data used by the U.S. Department of Energy (DOE) to determine that existing soil contamination does not exceed the final remediation levels (FRLs) within the footprint of the Equipment Wash Facility (EWF) and its associated drainage line. This addendum presents certification results for those certification units (CUs) identified in the addendum to the A1PII Certified for Reuse Areas, Trap Range, Sector 2C, and Sector 3 Certification Design Letter (CDL, DOE 2001).

1.2 SCOPE

This document addresses two CUs that were added in Sector 2 to address the EWF and drainage line.

1.3 AREA DESCRIPTION

A detailed area description is provided in the main report. Figure 1-1 shows the A1PII certification unit boundary and sector locations, including the EWF and drainage line included in Sector 2. It should be noted that the area north of and adjacent to the EWF footprint is currently being used to support OSDF placement activities and is therefore not included in this certification effort. This area will be certified in late 2002 after the Debris Haul Road is no longer in operation. A CDL for additional A1PII areas will be provided prior to certification.

1.4 OBJECTIVES

The objectives of this Certification Report addendum are:

- Describe the certification approach, field activities and data analyses used to support the certification process for the areas covered in this addendum
- Describe access controls implemented to prevent recontamination.

1.5 REPORT FORMAT

A summary of pertinent information from the three previous certification reports and previous CDLs is provided in the main CDL (DOE 2000b), along with supporting data. This addendum focuses on information pertaining to the EWF and drainage line; refer to the main document for additional A1PII certification details (DOE 2000a).

1.6 FEMP CERTIFICATION MASTER MAP

In order to track certification and characterization for reuse areas at the FEMP, DOE has included a controlled map (Figure 1-2) showing the status of the soil remediation areas and phased areas with all Certification Reports and CDLs. Note that this figure has been revised to show the certification status of the North Access Road in Area 1, Phase I (A1PI) and A1PI certification status. This map also shows the areas that have not yet been certified, including the Dissolved Oxygen Facility area, the Interim Leachate Line and the area north of and adjacent to the EWF footprint.

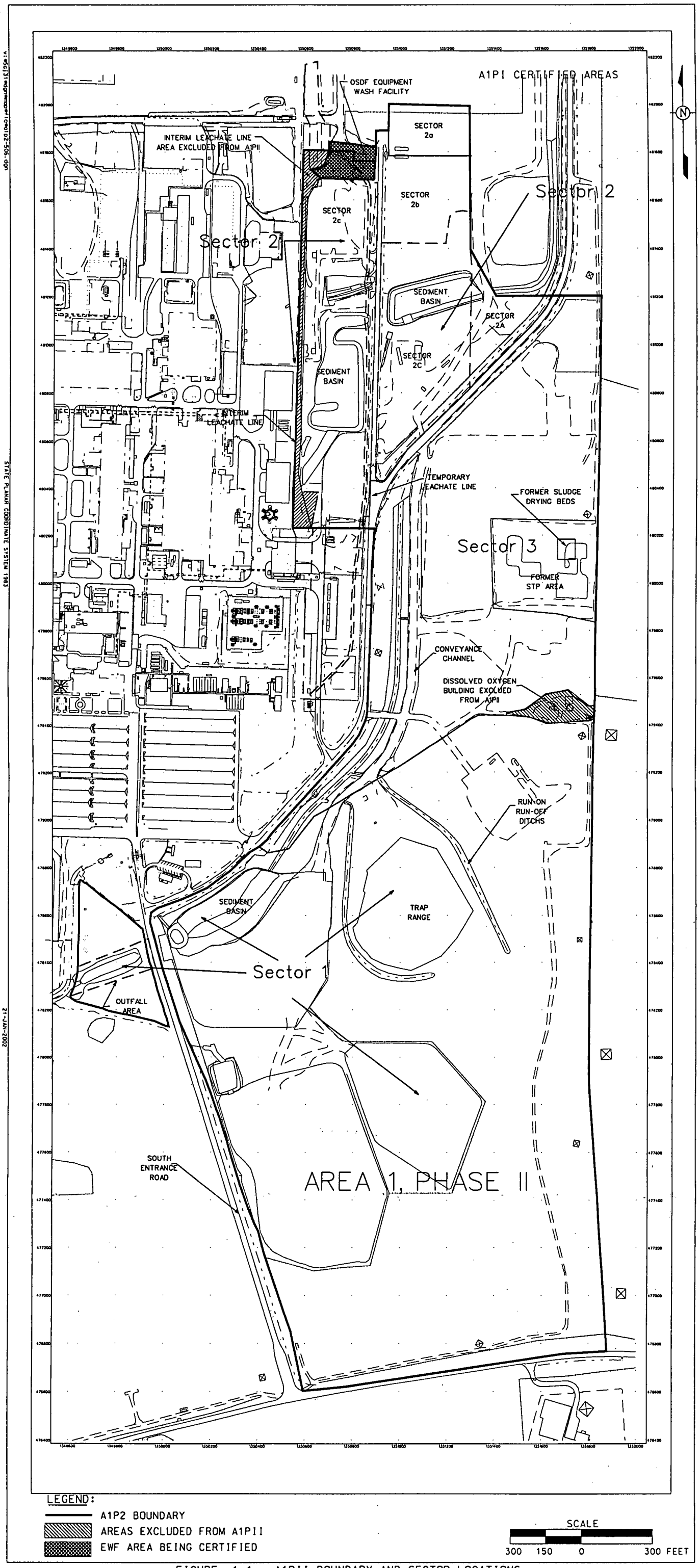

FIGURE 1-1. A1PII BOUNDARY AND SECTOR LOCATIONS

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STATE PLANAR COORDINATE SYSTEM 1983
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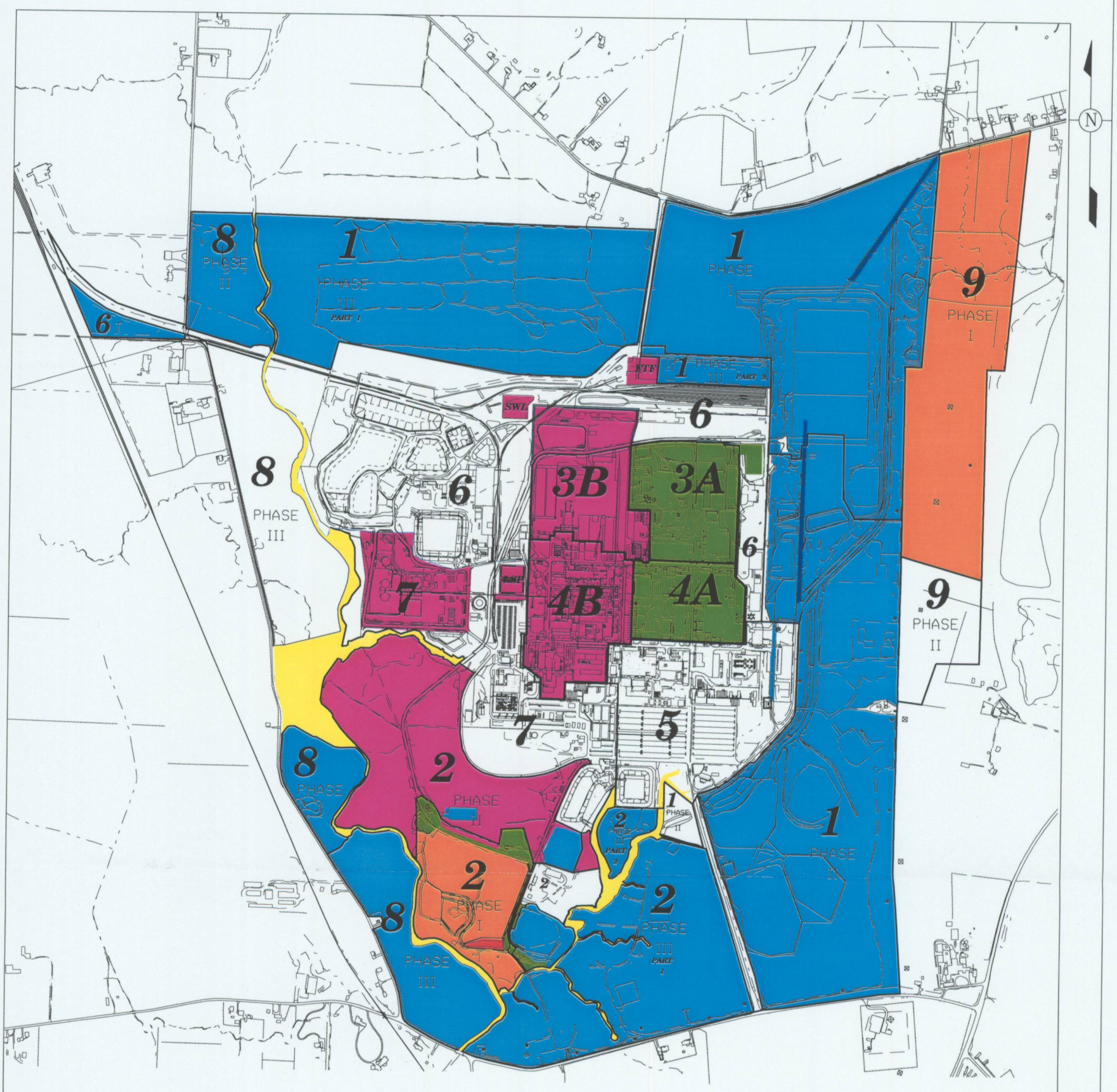

AREAS	TOTAL ACRES	APPROVED CERT. ACRES	CERT. ACRES IN PROGRESS	REMEDIATION ACRES IN PROGRESS	PREDESIGN ACRES IN PROGRESS	REMAINING ACRES
AREA 1	389.9	389.1	0	0	0	* 0.8
AREA 2	176.0	82.6	22.8	5.5	57.9	**7.2
AREA 3A/4A	42.8	0	0	42.8	0	0
AREA 3B/4B	56.9	0	0	0	56.9	0
AREA 5	53.2	0	0	0	0	53.2
AREA 6	134.6	4.4	0	0	2.9	127.3
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	1049.7	536.3	22.8	48.3	138.9	303.4
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 0.8 ACRES OF CHARACTERIZED FOR REUSE AREAS (BASIN 2), THE CONSTRUCTION SUPORT AREA, AND SUBSURFACE SOIL FOR THE UTILITY CORRIDORS/TRANSFER LINES WITHIN THE AFP CERTIFICATION AREA.

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

AIPI ROADS EXCLUDED FROM CERTIFICATION.

SCALE

1100 550 0 1100 FEET

FIGURE 1-2. FEMP CONTROLLED CERTIFICATION MAP

STATE PLANAR COORDINATE SYSTEM 1983

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2.0 CERTIFICATION APPROACH

2.1 CERTIFICATION DESIGN

The certification design for the CDLs, the area-specific constituent of concern (ASCOC) selection process, and statistical analyses are summarized in the main Certification Report. The general certification strategy is described in Section 3.4 of the Sitewide Excavation Plan (SEP, DOE 1998b).

2.1.1 Certification Design for A1PII Equipment Wash Facility and Drainage Line

The certification design followed the general approach outlined in Section 3.4 of the SEP. The footprint of the excavation and the surrounding area were considered in the CU design. A description of each CU and the basis for its design follows.

2.1.1.1 Certification Units

The following CUs are located in eastern portion of Sector 2:

- A1P2-S2EWF – Excavated footprint of the EWF and surrounding area. This CU is being certified for construction of On-Site Disposal Facility (OSDF) Cell 4 and to install a horizontal well. Figure 2-1 shows the CU boundary and sample point locations, while Figure 2-2 shows the sub-CUs and sample locations.

- A1P2-S2DL – width and length of the drainage line. This CU is being certified for placement of a horizontal well. Figure 2-3 shows the sample locations; the CU boundary is the width and length of the drainage line.

2.2 ASCOCs

The ASCOC selection process for these two CUs is described in the CDL. The ASCOCs are listed in Tables 2-1 and 2-2. Both CUs passed for all constituents.

2.3 STATISTICAL ANALYSIS

The statistical analysis of certification samples is discussed in Appendix G of the SEP, and specific statistical analyses pertinent to A1PII are provided in the main Certification Report. When the given upper confidence limit (UCL) on the mean for each constituent of concern (COC) is less than its FRL, and the hot spot criterion is met, the CU has met both criteria and will be considered certified.

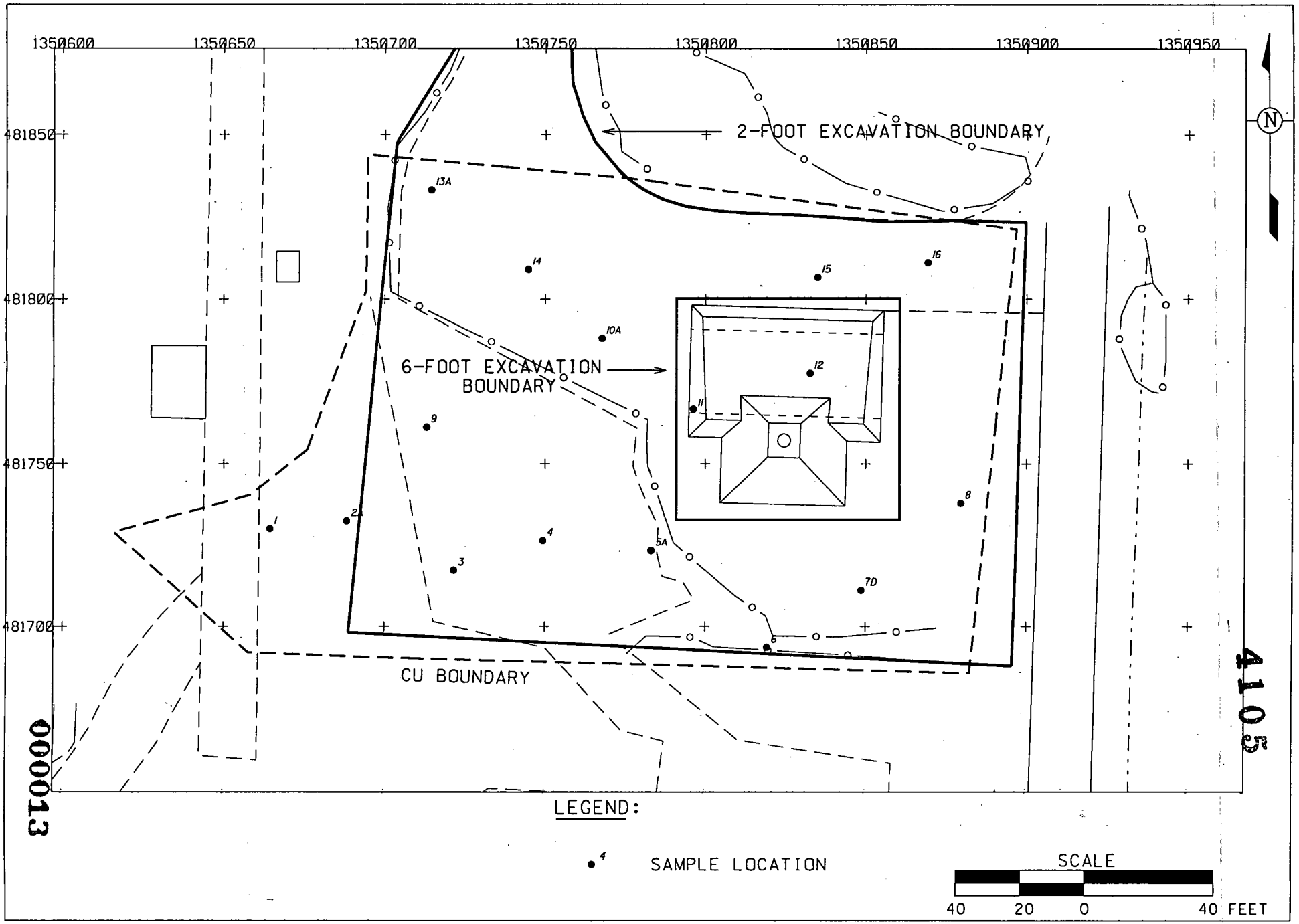
TABLE 2-1
ASCOC LIST FOR ALL CUs IN THE CERTIFIED FOR REUSE AREAS, TRAP RANGE, SECTORS 2C AND 3, EQUIPMENT WASH FACILITY AND DRAINAGE LINE

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
Arsenic	12 mg/kg	Retained as a secondary ASCOC
Lead	400 mg/kg	Retained as a secondary and ecological ASCOC

TABLE 2-2
ASCOC LIST FOR SPECIFIC CUs IN THE EQUIPMENT WASH FACILITY AND DRAINAGE LINE

ASCOC	FRL	Reason Retained
Total Uranium	82 ppm	Retained due to process knowledge
Thorium-228	1.7 pCi/g	Retained due to process knowledge
Thorium-232	1.5 pCi/g	Retained due to process knowledge
Radium-228	1.8 pCi/g	Retained due to process knowledge
Radium-226	1.7 pCi/g	Retained due to process knowledge
Arsenic	12 mg/kg	Retained as a secondary ASCOC
Beryllium	1.5 mg/kg	Retained as a secondary ASCOC
Lead	400 mg/kg	Retained as a secondary ASCOC

mg/kg – milligrams/kilogram
pCi/g – picoCuries per gram
ppm – parts per million



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STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2-1. A1P2-S2 EWF CU BOUNDARY

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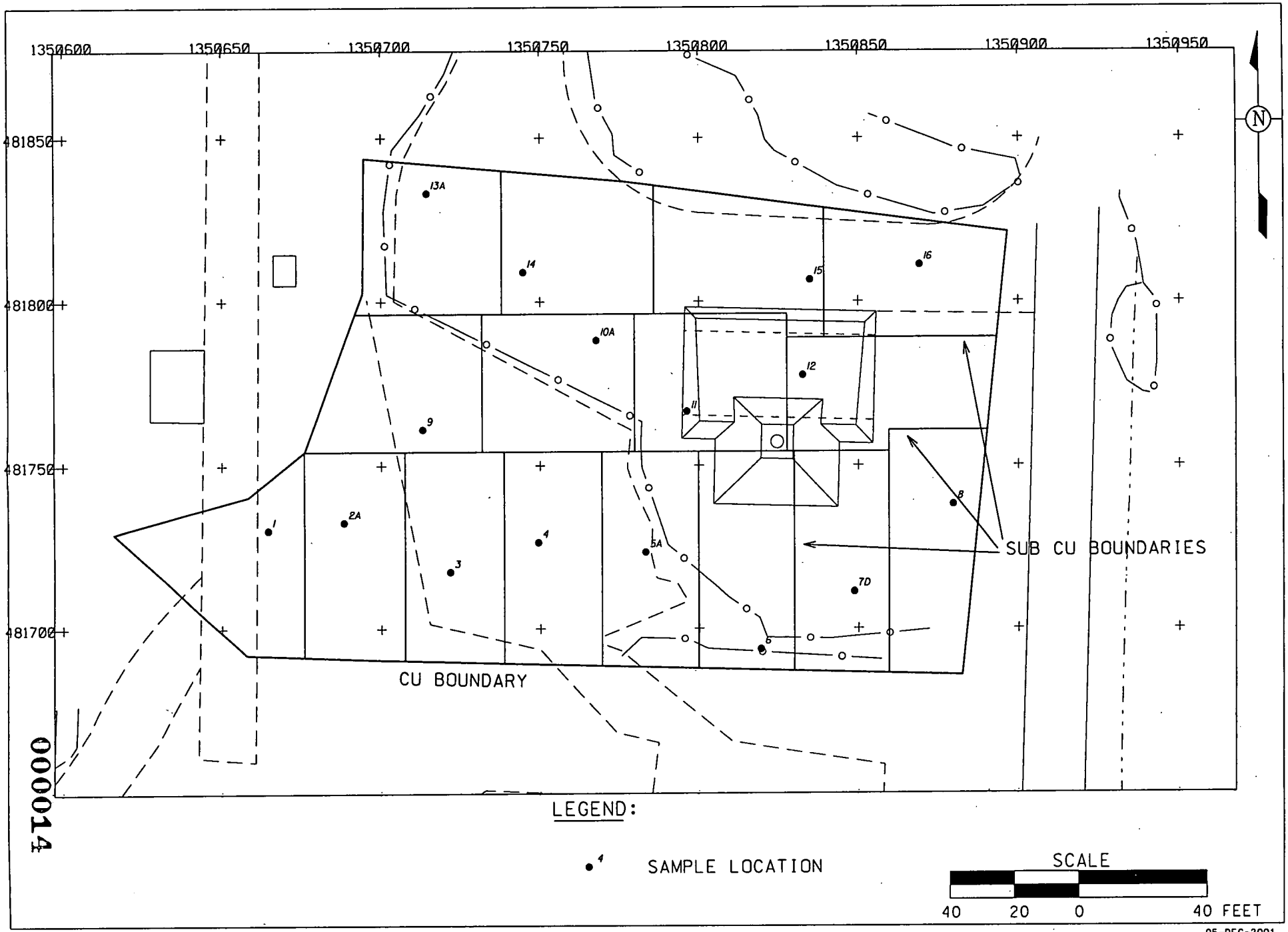

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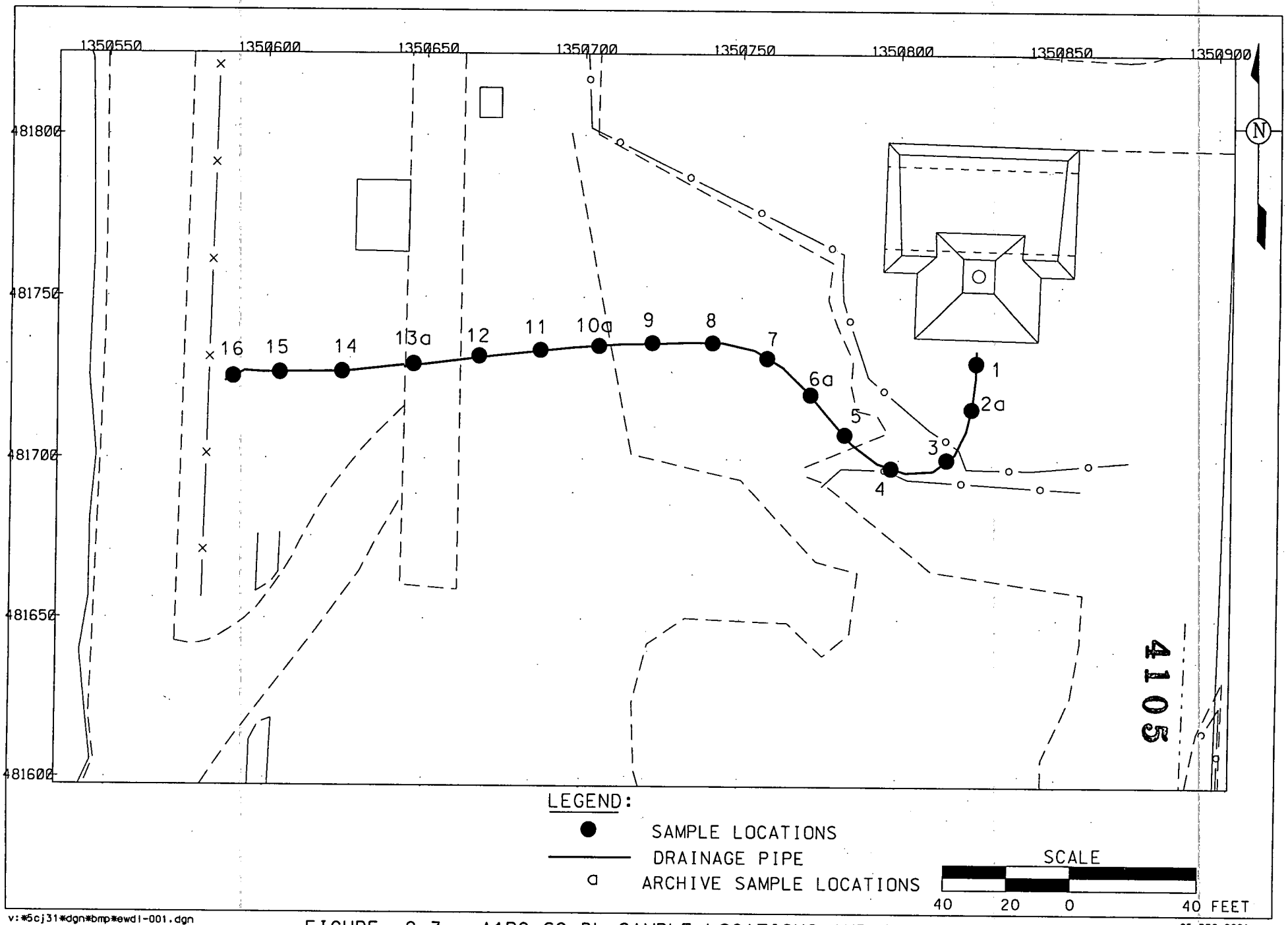
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2-2. A1P2-S2 EWF SAMPLE LOCATIONS

05-DEC-2001



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STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2-3. A1P2-S2 DL SAMPLE LOCATIONS AND CU BOUNDARY

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3.0 OVERVIEW OF FIELD ACTIVITIES

This section is limited to information not presented in previous certification reports. The section specifically presents information related to the EWF and drainage line, as discussed in the addendum to the CDL for Certification Sampling of A1PII Certified for Reuse Areas, Trap Range, Sector 2C, and Sector 3.

3.1 EXCAVATION ACTIVITIES

The EWF and drainage line excavation was completed in Sector 2 in November 2001. Table 3-1 summarizes the major excavation activities, the quantities, and the final disposition. A more detailed description of remedial actions can be found in the A1PII Integrated Remedial Design Package (DOE 1998c) and Supplemental Characterization Package (DOE 1999).

The EWF was excavated to a depth of 6 feet, and the surrounding excavation boundary to a depth of 2 feet (refer to Figure 2-1). The drainage line was excavated down to natural soil; the excavation depth was determined by subtracting the known, as-built drain line elevation, the pipe thickness and the known bedding thickness from the current elevation.

3.1.1 CU Sampling

Certification sampling was conducted in two phases, pre- and post-excavation.

Phase I – EWF pre-excavation: The EWF was excavated to a depth of 6 feet, and the surrounding excavation boundary to a depth of 2 feet. The CU boundary extends to the west, past the 2-foot excavation boundary; therefore, any of the 16 randomly sampled locations that fell within the EWF footprint were collected at the 6 to 6.5-foot interval, while samples within the 2-foot excavation boundary were collected at the 2 to 2.5-foot interval. Those samples that were within the EWF CU, but outside the planned excavation, were collected at the surface interval of 0 to 6 inches.

Phase I – Drainage Line pre-excavation: Sixteen sample locations were established at even spacing along the drainage line. The samples were collected at varying depths due to the existing topography. The actual sampling depth at each location was determined by subtracting the known, as-built drain line elevation, the pipe thickness and the known bedding thickness from the current elevation.

Phase II – EWF post-excavation: Thirteen samples and four archive samples, from the same locations used for pre-excavation sampling, were collected and analyzed for total uranium. All Phase II samples were collected from the surface (0 to 6-inch interval) and analyzed as described in Section 4 of the Project Specific Plan (DOE 2000c).

Phase II – Drainage Line post-excavation: The drainage line was excavated to design depths. Soil was removed using a trackhoe. Samples were collected from the trackhoe bucket at the same locations identified for pre-excavation sampling except for sample locations 1, 2a and 3. The trench was then backfilled for safety reasons. For sample locations 1, 2a and 3, samples were collected at the original depths, in the same manner discussed in Phase I above, using a Geoprobe.

TABLE 3-1
EQUIPMENT WASH FACILITY AND DRAINAGE LINE EXCAVATION QUANTITIES AND DISPOSITION

Description	CU	Estimated ICY	Actual ICY	Disposal Option
Equipment Wash Facility	A1P2-S2-EWF	3,000	3,401	OSDF
Drainage Line	A1P2-S2-DL	300	373	OSDF

ICY – in-place cubic yards

4.0 ANALYTICAL METHODOLOGIES, DATA VALIDATION PROCESSES AND DATA REDUCTION

4.1 ANALYTICAL METHODOLOGIES

The analytical methodologies used for A1PII samples are described in the main Certification Report.

4.2 DATA VERIFICATION AND VALIDATION

For this project, all the radiological data were reviewed and validated for all criteria noted in the main Certification Report. Per project requirements, a minimum of 10 percent of the certification data were validated to validation level D. This validation included the same review process as for Analytical Support Level (ASL) B, but included a systematic review of the raw data and recalculations.

The verification and validation of this data set did not identify any significant problems with the data set.

4.3 DATA REDUCTION

Each sample used to support the certification decision was entered in the FEMP Sitewide Environmental Database (SED) with field, laboratory and validation information as described in the main Certification Report. Based on this information, the following actions were taken for data reduction of each CU data set.

1. All the data for each CU were queried from the SED. All the data were used even if the CU had more than the minimum required data points
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 were used in the statistical calculations.

5.0 CERTIFICATION EVALUATION AND CONCLUSIONS

Certification success or failure was based on a review of certification sample data from each CU against criteria discussed in Section 2.0 of the main Certification Report. All CUs were evaluated against these criteria, and the final certification statistics are presented in Appendix A. A statistical analysis of the sampling results indicates that the excavations were adequate for removal of above-FRL surface contamination and, therefore, certification criteria have been met.

5.1 CERTIFICATION CONCLUSIONS AND FUTURE LAND USE

DOE has determined that the remedial objectives in the Operable Unit 5 Record of Decision (DOE 1996) have been achieved for the A1PII certification units addressed in this addendum, and no further remedial actions are required. Those areas of A1PII considered certified will be released for final land use upon approval of the regulatory agencies.

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 has been developed to implement a process to protect certified areas from becoming recontaminated.

The procedure is summarized as follows:

- At the initiation of certification sampling activities for a remediation area, temporary fencing will be installed to delineate the perimeter of the "certified" area
- Signs will be posted upon the temporary perimeter fencing to require access approval for entry into the "certified" area
- To gain access to the "certified" area, the individual(s) or project desiring admittance will submit a written request to the responsible project manager
- Any equipment to be used within the "certified" area must have been clean in accordance with FEMP certified area access procedure subsequent to any use in a uncertified areas; or for any work, before entry into a "certified" area
- FEMP management team representatives must instruct general employees/operators on the entry and exit requirements for a "certified" area.

After DOE certifies the remediated area, it will be transferred for final land use. At that time, best management practices and administrative controls will be used to protect the area from contamination, and other controls will be implemented as needed.

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APPENDIX A

CERTIFICATION SAMPLES, ANALYTICAL RESULTS AND STATISTICS TABLES

CERTIFICATION STATISTICS FOR THE CERTIFICATION DESIGN LETTER FOR AREA 1, PHASE II EQUIPMENT WASH FACILITY AND DRAINAGE LINE

CU A1P2-S2EWF-01
CU A1P2-S2DL-01

PRE-EXCAVATION CERTIFICATION STATISTICS FOR A1P2-S2EWF

	PRIMARY COCs					SECONDARY COCs		
	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Arsenic	Beryllium	Lead
A1P2-S2EWF-1-RM	0.99 J	0.87 J	0.87 J	0.87 J	6.37 J	9.85 J	0.34 -	14.20 -
A1P2-S2EWF-3B-RM	1.13 J	0.84 J	0.81 J	0.84 J	7.43 J	8.93 J	0.26 -	31.50 -
A1P2-S2EWF-4B-RM	1.14 J	0.84 J	0.84 J	0.84 J	5.13 J	10.00 J	0.37 -	32.70 -
A1P2-S2EWF-6B-RM	0.82 J	0.62 J	0.59 J	0.62 J	5.63 J	7.95 J	0.14 -	14.80 -
A1P2-S2EWF-7B-RM	0.91 J	0.72 J	0.70 J	0.72 J	6.33 J	7.38 J	0.12 -	11.50 -
A1P2-S2EWF-7B-RM-D	0.87 J	0.74 J	0.73 J	0.74 J	5.82 J	7.95 J	0.25 -	17.30 -
A1P2-S2EWF-8B-RM	0.80 J	0.59 J	0.58 J	0.59 J	4.93 J	6.50 J	0.15 -	11.30 -
A1P2-S2EWF-9B-RM	1.17 J	0.90 J	0.89 J	0.90 J	3.92 J	11.20 J	0.19 -	35.60 -
A1P2-S2EWF-11B-RM	1.20 J	1.06 J	1.02 J	1.06 J	5.54 J	5.96 J	0.15 -	19.00 -
A1P2-S2EWF-12B-RM	0.74 J	0.62 J	0.61 J	0.62 J	3.40 UJ	6.34 J	0.22 -	11.20 -
A1P2-S2EWF-14B-RM	1.07 J	0.85 J	0.85 J	0.85 J	6.56 J	8.92 J	0.38 -	19.60 -
A1P2-S2EWF-15B-RM	0.83 J	0.70 J	0.69 J	0.70 J	2.71 UJ	9.36 J	0.04 -	3.89 -
A1P2-S2EWF-16B-RM	0.67 J	0.42 J	0.41 J	0.42 J	2.95 UJ	7.72 J	0.34 -	14.40 -
Limit	1.70	1.80	1.70	1.50	82.00	12.00	1.50	400.00
Units	pCi/g	pCi/g	pCi/g	pCi/g	mg/kg	mg/kg	mg/kg	mg/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%
Max. Result	1.20	1.06	1.02	1.06	7.43	11.20	1.06	35.60
Max. > = Limit	No	No	No	No	No	No	No	No
W-statistic Prob. #	- -	- -	- -	- -	- -	- -	- -	- -
Test Procedure	- -	- -	- -	- -	- -	- -	- -	- -
Sample Size	12	12	12	12	12	12	12	12
Nondetects	0	0	0	0	3	0	0	0
% Nondetects	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%
Est. Mean*	- -	- -	- -	- -	- -	- -	- -	- -
UCL	- -	- -	- -	- -	- -	- -	- -	- -
Prob. > Limit	- -	- -	- -	- -	- -	- -	- -	- -
Pass / Fail	- -	- -	- -	- -	- -	- -	- -	- -
a posteriori Sample	- -	- -	- -	- -	- -	- -	- -	- -
Size calculation	- -	- -	- -	- -	- -	- -	- -	- -

PRE-EXCAVATION CERTIFICATION STATISTICS FOR A1P2-S2DL

	PRIMARY COCs					SECONDARY COCs		
	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Arsenic	Beryllium	Lead
A1P2-S2DL-1B-RM	0.68 J	0.68 J	0.65 J	0.68 J	2.68 UJ	2.38 UJ	0.37 J	11.70 J
A1P2-S2DL-3B-RM	0.79 J	0.68 J	0.68 J	0.68 J	4.39 J	3.22 UJ	0.10 J	16.60 J
A1P2-S2DL-4B-RM	0.98 J	0.91 J	0.90 J	0.91 J	5.31 J	4.22 UJ	0.09 J	15.30 J
A1P2-S2DL-5B-RM	1.13 J	1.04 J	1.00 J	1.04 J	3.16 UJ	2.04 UJ	0.01 UJ	16.60 J
A1P2-S2DL-7B-RM	1.24 J	1.12 J	1.11 J	1.12 J	3.73 UJ	2.62 UJ	0.27 J	20.50 J
A1P2-S2DL-8B-RM	1.09 J	1.00 J	0.97 J	1.00 J	2.75 UJ	2.92 UJ	0.10 J	18.00 J
A1P2-S2DL-9B-RM	1.08 J	0.99 J	0.98 J	0.99 J	3.03 J	2.43 UJ	0.01 UJ	19.20 J
A1P2-S2DL-11B-RM	1.18 J	1.08 J	1.08 J	1.08 J	3.86 J	3.41 UJ	0.20 J	17.50 J
A1P2-S2DL-12B-RM	1.31 J	1.09 J	1.06 J	1.09 J	2.97 UJ	5.00 UJ	0.42 J	18.70 J
A1P2-S2DL-14B-RM	0.39 J	0.29 J	0.28 J	0.29 J	2.99 J	4.08 UJ	0.61 J	20.40 J
A1P2-S2DL-14B-RM-D	1.30 J	1.10 J	1.10 J	1.10 J	7.32 J	3.38 UJ	0.50 J	20.20 J
A1P2-S2DL-15B-RM	1.36 J	1.12 J	1.09 J	1.12 J	33.77 J	6.05 UJ	0.23 J	27.20 J
A1P2-S2DL-16B-RM	1.40 J	1.13 J	1.11 J	1.13 J	8.86 J	8.60 J	0.47 J	22.30 J
Limit	1.70	1.80	1.70	1.50	82.00	12.00	1.50	400.00
Units	pCi/g	pCi/g	pCi/g	pCi/g	mg/kg	mg/kg	mg/kg	mg/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%
Max. Result	1.40	1.13	1.11	1.13	33.77	8.60	0.61	27.20
Max. > = Limit	No	No	No	No	No	No	No	No
W-statistic Prob. #	- -	- -	- -	- -	- -	- -	- -	- -
Test Procedure	- -	- -	- -	- -	- -	- -	- -	- -
Sample Size	12	12	12	12	12	12	12	12
Nondetects	0	0	0	0	5	11	2	0
% Nondetects	0.0%	0.0%	0.0%	0.0%	41.7%	91.7%	16.7%	0.0%
Est. Mean*	- -	- -	- -	- -	- -	- -	- -	- -
UCL	- -	- -	- -	- -	- -	- -	- -	- -
Prob. > Limit	- -	- -	- -	- -	- -	- -	- -	- -
Pass / Fail	- -	- -	- -	- -	- -	- -	- -	- -
a posteriori Sample	- -	- -	- -	- -	- -	- -	- -	- -
Size calculation	- -	- -	- -	- -	- -	- -	- -	- -

POST-EXCAVATION CERTIFICATION STATISTICS FOR A1P2-S2EWF & A1P2-S2DL

ID	DATA
A1P2-S2EWF-1S-R	3.40 -
A1P2-S2EWF-3S-R	4.64 -
A1P2-S2EWF-4S-R	5.08 -
A1P2-S2EWF-6S-R	18.61 -
A1P2-S2EWF-7S-R	2.04 -
A1P2-S2EWF-7S-R-D	2.12 -
A1P2-S2EWF-8S-R	1.15 -
A1P2-S2EWF-9S-R	3.36 -
A1P2-S2EWF-11S-R	1.60 -
A1P2-S2EWF-12S-R	1.28 -
A1P2-S2EWF-14S-R	1.57 -
A1P2-S2EWF-15S-R	1.37 -
A1P2-S2EWF-16S-R	1.27 J
Limit	82.00
Units	mg/kg
Conf. Level	95%
Max. Result	18.61
Max. >= Limit	No
W-statistic Prob. #	- -
Test Procedure	- -
Sample Size	12
Nondetects	0
% Nondetects	0.0%
Est. Mean*	- -
UCL	- -
Prob. > Limit	- -
Pass / Fail	- -

a posteriori Sample	- -
Size calculation	- -

ID	DATA
A1P2-S2DL-1S-R	1.40 -
A1P2-S2DL-3S-R	2.35 -
A1P2-S2DL-4S-R	2.19 -
A1P2-S2DL-5S-R	2.54 -
A1P2-S2DL-7S-R	1.66 -
A1P2-S2DL-8S-R	1.77 -
A1P2-S2DL-9S-R	2.33 -
A1P2-S2DL-11S-R	2.29 -
A1P2-S2DL-12S-R	1.63 -
A1P2-S2DL-14S-R	1.96 -
A1P2-S2DL-14S-R-D	2.72 -
A1P2-S2DL-15S-R	9.03 -
A1P2-S2DL-16S-R	13.70 -
Limit	82.00
Units	mg/kg
Conf. Level	95%
Max. Result	13.7
Max. >= Limit	No
W-statistic Prob. #	- -
Test Procedure	- -
Sample Size	12
Nondetects	0
% Nondetects	0.0%
Est. Mean*	- -
UCL	- -
Prob. > Limit	- -
Pass / Fail	- -

a posteriori Sample	- -
Size calculation	- -